CHILD PORNOGRAPHY AND SEXUAL EXPLOITATION OF CHILDREN ONLINE





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Submitted by ECPAT International

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Executive Summary

- ➡ This thematic paper on *Child Pornography and Sexual Exploitation of Children Online* recognises that since 2001 there have been many positive changes. Specifically:
 - More countries developing definitions and laws related to child abuse through the new technologies.
 - A substantial advance in the capacity of law enforcement to respond both nationally and internationally.
 - An increasing acknowledgment that tackling the problems requires a multi-agency, multi-sector approach.
 - An increase in the number of hotlines available for the reporting of illegal content to non-law-enforcement bodies.
 - Increased education, particularly of children, and inclusive of children.
- ➔ However, unresolved challenges include:
 - The differentiation of the sexual abuse of children in online settings from sexual exploitation in the same environment.
 - The relationship between commercial and non-commercial sexual exploitation online.
 - Lack of a critical understanding of the harms posed by the new technologies.
 - Lack of training, expertise and capacity to investigate crimes against children, to protect them from harm and assist their recovery.
- The paper attempts to examine the changes that have taken place since the Second World Congress and in particular it moves away from examining harm solely in the context of the production and distribution of child pornography to consider the range of potential harms inflicted on children through the new technologies.
- There has been a significant change in the terminology used to describe sexualised materials relating to children, and the term 'abusive images' is now widely used by those who advocate for children's rights in relation to sexual abuse through photography. However, the paper acknowledges that in most jurisdictions the term 'child pornography' is used, and that attempts to challenge this are thought by some to be both confusing and not to adequately capture the complex nature of the material. Objective measures of victimisation within the images are explored, but it is concluded that not all sexualised depictions of children are visual and that the term 'abusive materials' might both capture this and lead to further definition in international law.

- ➤ The challenge of virtual child pornography is considered in the light of increasing concern about technical ease of production and potential sophistication of image production. This is considered in the context of manga and the bid by some countries (for example the UK) to criminalise the possession of non-photographic depictions of child sexual abuse (ie, cartoons). We argue that the crime of possession, making or distribution of child pornography, whether virtual or not, is a crime not only against a particular child, but against all children.
- The paper examines the potential harms posed to children by the new technologies and how we might differentiate between sexual abuse, sexual exploitation and commercial sexual exploitation in the online environment. We argue that the new media blur the boundaries between these and provide a context that affords opportunities for both the abuse and the exploitation of children and by children. We consider what is known about adult offending activity online and those who engage in it, and the technologies used. Some of these have changed since 2001 but others, such as newsgroups, have not and still provide a context for sharing of information and ideas that promote the abuse and exploitation of children. The section concludes by examining the, at times, conflicting research about the relationship between viewing abusive images and the commission of further offences against children in both the online and offline environments.
- Our lack of knowledge about children who are victimised is explored, initially in the context of the few children who are identified in images, but also in relation to the paucity of research on the impact of Internet related sexual abuse. Sweden is one of the few countries that has systematically examined the disclosure process and the therapeutic needs of such children, and this research may inform future good practice. However, as with work in Germany and in the UK, we do not know whether such approaches will translate into other therapeutic contexts. It is also clear that in the majority of countries practitioners do not explore such abuse and feel that they do not have the skills to deal with such problems. We also note that there is marked lack of service provision for such children.
- The paper examines what we know about young people's behaviour online and how this might expose them to sexualised materials in a potentially harmful way. This highlights how research has typically examined exposure to pornography without differentiating between the different types of material that this might include and the different social and familial contexts that might offer protection. We acknowledge the difficulties in this area in balancing the rights of the child to explore their sexuality and the right to be protected from that which might cause harm. This would seem to be of particular

importance for children who are same-sex attracted. We also emphasise that creation of new technologies affords opportunities for young people to harm other youth, as well as themselves, and consider the tensions between staying safe online and exploring new territories.

- There are cultural and geographical differences, both in relation to constructions of childhood and appropriate or acceptable practices. This is a difficult challenge in relation to the new technologies and serves to highlight the need to understand the complexity of living circumstances for many of the world's children and the agency that we afford to older children in the choices that they make.
- Since the Second World Congress we have seen the development of four policy documents: the European Union's Framework Decision on combating the sexual exploitation of children and child pornography (2004); the Council of Europe's Cybercrime Convention (2001); the United Nation's Optional Protocol on the Convention on the Rights of the Child on the sale of children, child prostitution and child pornography (2002), and the Council of Europe Convention on the Protection of children against sexual exploitation and sexual abuse, which is yet to come into force. However, not all instruments necessarily define the intentional viewing of Internet child pornography as criminal, and while possession is criminalised this is sometimes subject to certain limitations. There are still unresolved issues about how child pornography should be judged , and ultimately while the Optional Protocol places duties on States to protect the rights and interests of child victims at all stages of the criminal justice process, its central thrust is as an instrument of international criminalisation rather than a comprehensive package of welfare protection.
- ➤ The paper acknowledges the considerable work that has been done in generating information and educational materials for young people, teachers and parents, along with the development of helplines. However, few information tools or education tools have been evaluated for their impact on the behaviour of the target groups. We might conclude that in spite of considerable investment in this area, there is little evidence that such strategies influence behaviour, as opposed to attitudes or level of knowledge.
- Since 2001 there has been an increase in the number of Association of Internet Hotline Providers (INHOPE) hotlines from 15 to 28, and in the last three months of 2006 there were approximately 6400 reports per month made to law enforcement agencies. However, INHOPE hotlines rarely received any structured feedback from law enforcement agencies, and this is a cause for concern as it is difficult to understand how the effectiveness of hotlines can be evaluated without this. An example is also

given of the work of one hotline, the UK-based Internet Watch Foundation, which has developed a blocking list of URLs ascertained to contain child abuse content. This list is updated daily and has been used by law enforcement, associated hotlines, Internet service providers, mobile phone operators, search providers and filtering companies. Similar actions are being taken within other countries. The Internet industry has also responded in a positive way to educating users and providing tools to enhance online safety. There are still opposing viewpoints as to whether industry activity should be voluntary or mandated, and there is clearly a need for industry to share its information to facilitate the development of better research and outcomes for young people. The paper also acknowledges the welcome actions by the Financial Coalition Against Child Pornography.

The paper concludes with six recommendations for actions to be taken within the next five years. These are:

Actions to be achieved in the immediate future

Together with all relevant stakeholders, including children and adolescents, each State should:

- Effect an evaluation of national educational and information programmes to determine their impact on the behaviour of youth Internet users, and ensure that this information enters the public domain, and addresses the deficiencies identified. As they are citizens of this technologically mediated world, such evaluation should be supported by children's participation, building on their expertise and good practices.
- 2. Determine current provision and practices for children victimised through the new technologies and ensure that systems are in place, involving both law enforcement and child protection, to allow for effective investigation, assessment, intervention, support and follow-up. Building on the rights of the child, this should be based on developmental needs and with reference to good practice. At a minimum this would require the development of at least one administrative hub within each country that would draw upon national and local skills, resources and practices, and would provide training for dedicated child protection staff.
- 3. Work at a national level with children and young people of different age groups to determine factors that protect children in relation to the new technologies and which promote resilience.

Actions to be achieved by 2013

Together with all relevant stakeholders, each State should:

- 1. Amend existing legislation to reflect objective, and internationally acceptable, measures against all sexually abusive and sexually exploitative behaviours and materials related to the new technologies (including virtual and cartoon imagery and text), and make obtaining for self or others, intentional viewing and possession, criminal activities. Such legislation should also protect all victims of sexually abusive and sexually exploitative practices and ensure that law enforcement and judicial processes adopt child sensitive procedures in accordance with the *Guidelines on Justice for Child Victims and Witnesses*. This should include children and adolescents who have engaged in sexually abusive behaviours towards others through the medium of the new technologies.
- 2. Demonstrate investment in prioritising children by allocating increased child protection and law enforcement resources to the identification of children whose images are circulating on the Internet and enable greater co-operation at national and international levels.
- 3. Initiate a programme of research across States to address:
 - a. inherent aspects of the new technologies that appear to increase the likelihood of sexually exploitative and sexually abusive practices towards children in relation to the new technologies;
 - b. the impact of technological expansion on the demographic characteristics of children sexually abused and sexually exploited through the new technologies;
 - c. the impact, on the family and wider social networks, of increasing criminalisation of Internet related activity
 - d. the role of the IT sector in the risk assessment and analysis of current and upcoming products, in the use and adaptability of age-verification methods and online access systems and in image detection systems.

All States should set targets and indicators of progress to determine the results of this programme and report on these by 2013.

1. Introduction

Thematic papers were presented at both the First and Second World Congresses that critically analysed the subject of child pornography. While the World Congress website points out that the information contained in the papers arising from the Stockholm meeting are now 'out-of-date', a reading of this first thematic paper addressing child pornography would suggest that many of the concerns raised in 1996 are still pertinent today. Specifically, that paper acknowledged that there were major challenges due to the lack of uniform definitions of what child pornography was; lack of data regarding the production and distribution of child pornography in many parts of the world, particularly Africa and Latin America; and shifting global patterns of production and consumption of child pornography. This in part was linked to the rapid development of camera and computer technology, which was providing expanding access and allowing for the creation of digitally generated or modified images. This first World Congress paper also was notable because it sought to identify some of the major centres of global production of child pornography and located specific types of images to named countries. Victims were thought to be equally distributed between genders, but with more female children exploited in Japan; street children, poor children, juveniles from broken homes and disabled minors were vulnerable to exploitation; and those exploiting children were seen to be largely, but not exclusively, paedophiles. Within this paper is a lengthy discussion of the introduction of computer technology, which today serves as a reminder as to the rapid growth over the last 15 years of technologically enabled communication and the extended availability of the same. Many of the studies used by the first paper relied on data that pre-dated the Internet, both in terms of victims and also in relation to offenders.

The second thematic paper, produced in 2001 for the Congress in Yokahama, noted that the Internet was becoming a highly pervasive technology and that it presented the entire community with a major new global challenge in the ongoing fight against child pornography. In particular, this second paper discussed the lack of specific legislation globally which explicitly outlaws child pornography; the damage to children where sexual abuse is captured via a pornographic image; the links between child prostitution, child-sex tourism and child pornography; the role of the Internet acting as a mechanism for the creation and distribution of child pornography and also in offering opportunity for contact with children; and the growth of commercial child pornography and the blurring of distinctions between commercial and non-commercial availability. The paper also detailed the increasing use of encryption software, making detection more difficult, and highlighted the possibility that the Internet was generating a new class of users of child pornography and allowing for the development of organised, technologically sophisticated rings of child sexual abusers.

Positive advances were also noted, particularly in relation to increased international police co-operation, the development of dedicated law enforcement initiatives, as well as community-based initiatives, such as hotlines and industry-based codes of practice, along with public-awareness campaigns designed to alert children and parents about potential online dangers. A series of recommendations were made by this thematic paper which related to specific targets for consolidation or change. These included another call for the harmonisation of definitions and laws related to the problem, including issues relating to age of majority, and the need to develop expertise and resources within law enforcement agencies and the establishment of standardised procedures, protocols and databases, along with multilateral and bilateral working relationships within law enforcement. The judiciary were identified as needing to develop greater understanding of technological crime, which would be reflected in sentencing policies and both industry, and law enforcement agencies were called upon to work with the challenges of encryption, anonymity, identification and removal of image availability. At a community level, recommendations were made to increase assistance to the development of hotlines and to enable more effective education about staying safe online. In addition, a challenge was made at a political level to 'confront and confound any argument which seeks to link the protection of children with attacks on free speech'.

As already noted, when the first paper was written there was very little empirical data relating to the new technologies that could inform our understanding of the problems posed, and while this had changed somewhat by 2001 the data that was drawn on related largely to that obtained through police operations and anecdotal information, or case studies, from several countries. In fact, one of the constraints noted in this paper related to the absence of reliable data from many parts of the non-industrialised world, which made generalisations from existing published studies more difficult. As we will see, this situation has not substantially changed and is a cause for considerable concern, as is the continued paucity of recovery programmes for children and young people abused and/or exploited through the new technologies. However, there have been some very positive changes, with more countries developing definitions and laws related to child abuse through the new technologies, a substantial advance in the capacity of law enforcement agencies to respond both nationally and internationally, and an increasing acknowledgement that tackling these problems requires a multi-agency, multi-sector approach. Few countries have, however, responded with more stringent legislation in relation to the use of Information and communication technology (ICT) to exploit children sexually. There has also been an increase in the number of countries that have hotlines, which have received substantial

funding from both the European Commission and industry; and education, particularly of children, has received considerable support. This has been reflected in the number of online and offline materials available, produced by government and non-government agencies, which have drawn upon the resources of children themselves.

However, one issue that has still to be resolved is what differentiates the sexual abuse of children in online settings from the sexual exploitation of children in the same environment. A further challenge is the relationship between commercial and non-commercial sexual exploitation, where the abusive materials are themselves a form of currency which moderate trading activity, rather than an exchange of monies. These are complex and, at times, controversial issues which require our consideration.

This paper will attempt to examine the changes that have taken place since the Second World Congress and will build on the previous thematic papers to allow for a critical analysis of the harms posed by the new technologies to enable a more differentiated understanding of sexually abusive and exploitative practices towards children. In particular, it will move away from examining harms solely in the context of the production and distribution of child pornography, to consider the range of potential harms inflicted on children and by children through the new technologies.

2. Adult perpetrators of abuse

2.1 Child pornography and abusive images

One of the most obvious changes since the Second World Congress has related to the terminology used to describe sexualised material (images, text and audio files) relating to children. Both of the earlier thematic papers referred consistently to child pornography, but, more recently, questions have been raised as to whether this term both reflects the content of what is produced and whether the term implicitly implies consensual activity (Taylor and Quayle, 2003). In fact as early as 2000 one dedicated police unit within the UK was named the Greater Manchester Abusive Images Unit, in part a bid to reflect that the images examined were forensic evidence of the sexual abuse of children. The term 'abusive images' is now widely used by those who advocate for children's rights in relation to sexual abuse through photography (Jones and Skogrand, 2005), but this change is not straightforward. The term 'child pornography' is consistently used in the majority of laws and policy documents internationally (Akdeniz, 2008), and attempts to change terminology are thought by some to be both confusing and to not adequately capture the complex nature of the material (Lanning, 2008). This is worth further consideration, as concerns about the language used are not simply a question of semantics. Rather, the term used will have implications for all stakeholders involved in eradicating the continued exploitation of children via use of the new technologies.

In relation to this we also see the terms 'sexual abuse' and 'sexual exploitation' used synonymously. While both *may* refer to the same criminal act committed towards a specific child this will not always be the case. The exploiter of the child may be another person. Making a distinction between sexual abuse and sexual exploitation may also allow us to combat the demand side of the production, distribution and possession of child abusive images more effectively through criminalising that which is not sexual abuse but the sexual exploitation of the abuse. This is an issue that has been the source of considerable debate. A recent publication by Asquith and Turner (2008) suggests that sexual exploitation encompasses various forms of sexual abuse including sexual exploitation, prostitution, child pornography and child marriage, and is used variously to mean any one or all of these. In their study of the recovery and reintegration of children from the effects of sexual exploitation and related trafficking Asquith and Turner (2008) noted that the terms 'sexual exploitation' and 'sexual abuse' were used interchangeably, even though choosing 'exploitation' over 'abuse' may suggest a lack of agency on the part of the victim. Article 34 of the United Nations *Convention on the Rights of the Child* calls upon parties to,

"undertake to protect the child from all forms of sexual exploitation and sexual abuse". This is further confounded when we examine the term 'commercial sexual exploitation' (the International Labour Organization's Convention No. 182 on the Worst Forms of Child Labour treats commercial sexual exploitation and the abuse of children in pornography as the worst forms of child labour). Kane (2006) defines commercial sexual exploitation as including the prostitution of children, trafficking for sexual purposes, the production, sale distribution and use of child pornography, and child-sex tourism. She concludes that, "The key difference between sexual abuse and sexual exploitation of children is generally considered to be the commercial transaction/motive. People who sexually abuse children do not normally make a profit from it... The people who sexually exploit children for profit are a very diverse group... It is clear that sexual abuse and sexual exploitation work in very different ways and involve quite different motivations, modus operandi and profiles. Understanding these differences is a key to acting to prevent abuse and exploitation" (p. 11). This is an important distinction; however, in the context of the new technologies it can become much more difficult to differentiate between the activities, the motives underlying them, and the consequences for the child. As we will see, while abuse images are produced within a commercial setting (where the photographer is not the agent of the abuse) many children are abused and photographed within domestic environments. These images in and of themselves become a form of currency as, within the online community, they buy status and act as a commodity for exchange. Once circulating on the Internet they may end up on a pay-to-view site, where money does change hands. This may also be the case where a child has been exploited through someone's having adventitiously taken photographs, for example on a beach or at a swimming pool. Here the child may never know that her/his images have been used either commercially or simply as a means to procure further images. What we see in the context of the new technologies is an overlap of sexually abusive practices, sexual exploitation and commercial exploitation. The lack of differentiation between the terms has been acknowledged over the years. For example in the final report from the Council of Europe Expert Group on Sexual Exploitation, acknowledgement is made of the fact that the terms are used interchangeably. We believe that it is important to attempt to differentiate between 'sexual abuse' and 'sexual exploitation' because it has significance not only for the impact on the child as is shown in Section 3, but also for the wider criminal justice and child protection responses. In this paper the term 'sexual exploitation' refers to activities that may include sexual abuse of children but may also refer to activities where no such abuse has taken place but where the very nature of the activities violates the very essence of childhood.

The first international definition of child pornography was that of the *Optional Protocol* (OP) to the *Convention on the Rights of the Child* (CRC) on the sale of children, child prostitution and child pornography, which entered into force on 18 January 2002. Article

2 (c) defined child pornography as, "any representation, by whatever means, of a child engaged in real or simulated explicit sexual activities or any representation of the sexual parts of a child primarily for sexual purposes". This definition is not restricted to visual representations, but, upon signature, some States have indicated that they would interpret the definition as restricted to visual materials, again reflecting a lack of consensus over what constitutes child pornography. As we will see, subsequent definitions in international instruments have followed the trend of defining child pornography as limited to visual images, and excluding other materials. The report of the Special Rapporteur (Petit, 2005) noted that a more comprehensive definition addressing computer-generated images was contained in the 2001 Council of Europe Convention on Cybercrime, "For the purpose of paragraph 1 above, the term "child pornography" shall include pornographic material that visually depicts: (a) a minor engaged in sexually explicit conduct; (b) a person appearing to be a minor engaged in sexually explicit conduct; (c) realistic images representing a minor engaged in sexually explicit conduct". The explanatory report on the Convention on Cybercrime further clarifies this definition by stating that "visual depiction includes data stored on a computer diskette or on other electronic means of storage, which are capable of conversion into a visual image". In addition, 'sexually explicit conduct' covers at least real or simulated (a) sexual intercourse, including genital-genital, oral-genital, analgenital or oral-anal, between minors, or between an adult and a minor, of the same or opposite sex; (b) bestiality; (c) masturbation; (d) sadistic or masochistic abuse in a sexual context; or (e) lascivious exhibition of the genitals or the pubic area of a minor. Also, it is not relevant whether the conduct depicted is real or simulated. A more recent definition comes from the Council of Europe Convention on the Protection of Children against Sexual Exploitation and Sexual Abuse, which was opened for signing in October 2007. Article 20 defines child pornography as, "any material that visually depicts a child engaged in real or simulated sexually explicit conduct or any depiction of a child's sexual organs for primarily sexual purposes". As can be seen, all of these definitions of child pornography relate to visual representations of children and focus on either sexually explicit behaviour or the exhibition of a child's genitals or genito-anal area. These definitions do not consider the large volume of sexualised material (both visual and text based) that is circulating via the new technologies.

In an earlier publication, Lanning (1992, pp. 24-26) introduced an important distinction between child pornography ("the sexually explicit reproduction of a child's image") and child erotica ("any material, relating to children, that serves a sexual purpose for a given individual"). In the debate about language this distinction was an important one, and emphasised the potential sexual qualities of a wide range of photographic and other material, much of which will not depict the sexual abuse of a child. As suggested by Taylor and Quayle (2003) the operational implications for law enforcement agencies of that distinction are significant, however, and can be seen in the way in which investigative agencies frequently divide evidential material into three categories:

- **Indicative** material depicting clothed children, which suggests a sexual interest in children;
- **Indecent** material depicting naked children which suggests a sexual interest in children;
- **Obscene** material that depicts children in explicit sexual acts.

In a similar fashion, Tate (1990), commented on how the material ranged from, "posed pictures of naked and semi-naked children, through more explicit shots of their genitalia thumbed apart to still, film and video recordings of oral, vaginal and anal sex" (pp. 203–217). As we will see, legal definitions of child pornography have to be objective and expressed in terms that allow for the proper application of due process. However, it becomes apparent that not all of the material that is currently circulating on the Internet would meet any legal definition of child pornography, and the definition of such images as 'abusive' is a largely subjective one. Svedin and Back (1996) defined child pornography as, "a text or an image – i.e. photo, slide, film, video or computer program – that is intended to evoke a sexual feeling, fantasy or response in adults" (p. 9). However, expressing criteria in terms of a capacity to generate fantasy may be problematic when objective definitions are required, as the range of materials that might evoke fantasy includes photographs that can be found in any family album or clothes catalogue.

If we look at the kind of material found in the collections of offenders, the kinds of pictures that can be identified range from pictures of clothed children, through nakedness and explicit erotic posing to pictures of a sexual assault of the child photographed. We can make some objective sense of this by thinking of them in terms of a continuum of increased deliberate sexual victimisation (Taylor *et al.*, 2001). This continuum ranges from everyday and perhaps accidental pictures involving either no overt erotic content, or minimal content (such as showing a child's underwear) at one extreme, to pictures showing actual rape and penetration of a child, or other gross acts of obscenity at the other. Taking this perspective focuses attention not on just illegality as a significant quality of pictures, but on the preferred type of pictures selected by the collector, and the value and meaning pictures have to collectors (Taylor and Quayle, 2003). The images then are seen as not only reflecting the ways in which children are victimised but also how such victimisation is mediated by the use to which the images are put. Such a perspective does not require that the picture depicts an actual assault on a child for it to be used in an abusive way.

Outside of high-tech crime units, the majority of people working in the area of Internet offending will have never seen child pornographic images from the Internet (Quayle and

Taylor, 2002). In part, this relates to the legislation in many countries, which criminalises possession. However, this leaves a difficult situation where communication between professionals (for example the police, child protection workers and the judiciary) becomes problematic, and highly subjective terms are used to describe the content of the images held by an individual. Even when attempts are made to understand the content of the pictures in terms of what is happening to the people within the images, frameworks are often used that follow a generic model of sexual representations. An example of this can be seen from King (2008) in his discussion on the ethical issues relating to child pornography. His framework for analysis included the following:

Rape-type material: A record of actual rape or other non-consensual sexual activity (included in this category is material in which the subject is clearly coerced, even when no actual sexual activity occurs);

Consensual-type material: A record of actual consensual sexual activity;

Fake-type material: The representation of sexual activity by actors, whether professional or amateur;

Nudity-type material: Images, etc, of naked people;

Pin-up-type material: Images of scantily-clad or suggestively-clad people.

The use by King (2008) of the category 'consensual-type material' may be thought to be problematic. While it would be wrong to dismiss the concept of 'agency' in relation to the production of images, when considering the impact on, and therapeutic needs, of the child, this type of approach may contribute to what has been described as the enforced silence of these children. Consent should never be regarded as indicative of the harm and the crime. It might also be argued that at some levels discussion of the ethics of child pornography is unnecessary: it is simply wrong. However, this links with the larger discussion of the role of pornography in sexual offending which will be discussed later in this paper. Within this context, Bensimon (2007) has argued, "However, even though the viewer commits no crime, the victims are very much alive. They have mouths and other orifices, but they have no voice. Pornography does not need whole human beings; all it needs are objectified bodies, and it is the very nature of objectification that gives pornography its strength and appeal, and virtually any kind of demand can be met" (p. 105).

In trying to understand the ways in which children are victimised within the images, the following was an attempt to provide a typology (Taylor *et al.*, 2001), based on an analysis of publicly available images obtained from newsgroups and websites.

Table 1: COPINE scale (Taylor et al., 2001)

Level 1: Indicative.	Non-erotic and non-sexualized pictures showing children in their underwear, swimming costumes, etc. from either commercial sources or family albums; pictures of children playing in normal settings, in which the context or organization of pictures by the collector indicates inappropriateness.
Level 2: Nudist.	Pictures of naked or semi-naked children in appropriate nudist settings, and from legitimate sources.
Level 3: Erotica.	Surreptitiously taken photographs of children in play areas or other safe environments showing either underwear or varying degrees of nakedness.
Level 4: Posing.	Deliberately posed pictures of children fully, partially clothed or naked (where the amount, context and organization suggest sexual interest).
Level 5: Erotic Posing.	Deliberately posed pictures of fully, partially clothed or naked children in sexualized or provocative poses.
Level 6: Explicit Erotic Posing.	Emphasizing genital areas where the child is either naked, partially or fully clothed.

Level 7: Explicit Sexual Activity.	Involves touching, mutual and self- masturbation, oral sex and intercourse by child, not involving an adult.
Level 8: Assault.	Pictures of children being subject to a sexual assault, involving digital touching, involving an adult.
Level 9: Gross Assault.	Grossly obscene pictures of sexual assault, involving penetrative sex, masturbation or oral sex involving an adult.
Level 10: Sadistic/Bestiality.	a. pictures showing a child being tied, bound, beaten, whipped or otherwise subject to something that implies pain; b. pictures where an animal is involved in some form of sexual behaviour with a child.

In 2002, in England and Wales the Sentencing Advisory Panel (SAP) published its advice to the Court of Appeal on offences involving child pornography. The SAP believed that the nature of the material should be the key factor in deciding the level of sentence, and adapted the Combating Paedophile Information Networks in Europe (COPINE) scale (above) to five levels. SAP dropped levels 1 to 3 completely, arguing that nakedness alone was not indicative of indecency. The proposed structure was therefore that COPINE levels 5 to 6 constitute sentencing level 1, and that COPINE levels 7 onwards each constitute an individual sentencing stage (Gillespie, 2003). Technically the SAP suggested that COPINE levels 4 and 5 should be included, but the Court of Appeal rejected this and stated it should be level 5. However, there have been English cases where 'naturist' images have been the subject of criminal charges. The Court of Appeal rejected the suggestion that an image under COPINE level 5 could not be indecent (Gillespie, personal communication). These levels have been further revised. It would appear that most jurisdictions (for example, Australia) rely on case law rather than objective measures or scales to categorise these images. The use of such an objective measure increases the likelihood of consistency across sentencing without necessitating that all involved should have had to view the images, and is increasingly being used in countries outside of England and Wales (Cooper, 2006). There is understandable concern that repeated viewing of images may be problematic for the well-being of professionals (largely but not exclusively police) who work in this area, but a further consideration relates to the repeated viewing of images and further victimisation of the children depicted. As Adam (2002) has suggested, "Clearly the gaze is used to terrible effect in Internet child pornography cases where the difficulty of finally removing all copies of the images from computer networks means that others may continue to gaze upon the images long after the original perpetrator has been brought to justice" (p. 135). One difficulty, however, is that while the COPINE typology was created as an indicator of how children are victimised through Internet child pornography, it is increasingly being used by the courts as an indicator of the seriousness of the offence, or even the dangerousness of the offender. The latter is problematic, in that there is little evidence to indicate whether, for example, viewing images of children sexually engaged with animals is more likely to increase the risk of a contact offence than viewing images of children who are clothed (Quayle, 2008). However, Gillespie (personal communication) argues that the difficulty may lie in the way that the law is phrased, rather than the use of the scale, as the SAP suggested that the photographs are 'worse' as they progress through the levels, because they show more graphic imagery, and thus the punishment should be more severe.

The discussion is an important one as underpinning the proposed change of terminology is a belief that the creation, distribution and collection of such images causes harm. However, the abuse might not involve direct harm against a given child, for example where a photograph is taken without the child's or the carer's knowledge, but that it contributes towards harms that seek to make sexual objects of children, and that the very trade of such images creates a marketplace that values the further creation of images. This is where the distinction between sexual abuse, on the one hand, and sexual exploitation, on the other, becomes important. The exploiter of the abuse suffered by the child will commit an offence against the child in the image whether or not the child is aware of the fact that s/he has been photographed. The legal framework where image possession is deemed an offence and where viewing of an image is likewise seen as a crime builds on the criminalisation not only of contact sexual abuse but also of the continued exploitation that follows. One considerable challenge posed by such a debate is, in the context of the huge volume of legal but sexualised material relating to children on the Internet, is how we might define these images, and whether we should be attempting to control their distribution. Clearly we cannot legislate against fantasy, but King (2008) has argued that, "It is not clear... that the consumer (or the rest of society) can always (or ever) be sure what category a particular image falls into, how much harm to the subject it represents, for however happy

and carefree the child seems to be, we cannot know what later effects she suffered (or, indeed, what she was subjected to after or as a result of that photograph). In fact it's clear that some degree of harm is almost always done to the subject in the production and distribution of child pornography of all kinds..." (p. 332). King (2008) goes on to suggest that child pornography not only harms its immediate victims, the children whose abuse is at its centre, but also harms other children through the actions and attitudes of its consumers. Throughout this paper we will move interchangeably between the terms 'child pornography' and 'abuse images', as this reflects the current literature and legislation in this area. However, it is important to note that not all sexualised depictions of children are visual, and that the term 'abusive materials' might both capture this and lend itself to further definition in international law.

This section emphasises the importance of attempting to distinguish between sexual abuse and sexual exploitation in this technological context as it has significance not only for the impact on the child but also for the wider criminal-justice and childprotection responses. We also note the use of the terms 'child pornography' and 'child abuse images' that is reflected in the current literature and legislation, and suggest that not all sexualised depictions of children are visual and that the term 'abusive' materials, when objectively defined, might both capture this and lend itself to further definition in international law.

2.2 Virtual child pornography

One further forensic issue of concern relates to pseudo (digitally altered) images and virtual child pornography. The Council of Europe's *Convention on the Protection of Children against Sexual Exploitation and Sexual Abuse*, states that, "Each Party may reserve the right not to apply, in whole or in part, paragraph 1a. and e. to the production and possession of pornographic material: consisting exclusively of simulated representations or realistic images of a non-existent child". It appears that the issue of 'virtual child pornography' is left largely unaddressed within the international framework, and there is little consensus around the necessity to make such materials criminal. We will examine this in more detail when we consider Internet child pornography and the law.

In relation to digitally altered images, Gillespie (2003) has raised important issues about how different an image has to be for it to constitute a pseudo-image, possession of which in England and Wales is likely to attract a lower sentence. In the US, the constitutionality of virtual child pornography remains a critical issue. In Ashcroft v. Free Speech Coalition (2002) a majority of the Supreme Court struck down portions of the *Child Pornography* *Prevention Act* of 1996, stating that virtual child pornography created without real or identifiable minors was unconstitutionally overbroad (Quayle, 2008). The US Court stated that, "Virtual child pornography is not 'intrinsically related' to the sexual abuse of children. While the Government asserts that the images can lead to actual instances of child abuse, the causal link is contingent and indirect. The harm does not necessarily follow from the speech, but depends upon some quantified potential for subsequent criminal acts". It might be thought that these 'pseudo-photographs' complicate our understanding of the problem and challenge our understanding of harm. Harm, however, need not always be harm towards a specific child. This is where concerns about sexual exploitation arise. Most legislation against the distribution and possession of child abuse images builds on the fact that even unaware victims somehow come to harm, much in the way described by King (2008), and the increased number of abusive images in circulation may add to the likelihood that children are seen as possible objects of real abuse.

In 2003, Taylor and Quayle wrote that, "Pseudo-photographs are constructed photographs, often very cleverly done with great technical sophistication, using digital reconstruction techniques to create an image that is not a photograph of a real person, or of real events. Thus the head of a child might be placed onto the body of a woman, where the body features are manipulated to make it appear to be that of a child (breast reduced in size or eliminated, and pubic hair eliminated)...". However, while the production of such material might have been a technological challenge a few years ago, this would not be the case today. With the advent of software packages such as Adobe Photoshop, the majority of us would be able to create quite complex digitally altered images. The prediction that as computer-aided animation and 3D computer graphics become easier and more accessible there will be a growth in animated child pornography, wholly constructed as computer images, has become a reality, although it is unclear what impact this might have on the availability of such image distribution.

One of the primary producers of such imagery is Japan where there is a huge market in manga, and other forms of animation, that many believe are sexually exploitative. A report in the UK's *Guardian* newspaper (*Guardian*, 2008) suggested that sexually explicit comics account for a large proportion of Japan's Yen 500 bn *manga* market, with many featuring schoolgirls or childlike adults being raped or engaged in sadomasochism. However, the article suggested that *manga* belonging to the popular '*lolicon'* – Japanese slang for Lolita complex – genre are likely to escape the proposed ban in Japan on the possession of child pornography, "as MPs are concerned that outlawing them could infringe on freedom of expression and drive men who use them as an outlet for their sexual urges to commit more serious sexual offences". In the final report of the Japanese National Police Agency External Experts Study Group on Protection of Children from Harmful Effects of Virtual

Society (External Experts Study Group on Protection of Children from Harmful Effects of Virtual Society, 2006) it was stated that there are comics, PC games and animation in circulation with sexual abuse images of children who appeared to be under 18 and some as young as primary school age. While some show images of children engaged in sexual intercourse, there are also those which appear to contain children being gang-raped by many adult men, forced into violent and demeaning sexual activities, and in which it is suggested that the children are enjoying these sexual acts. Further, some of these publications have such images on their front covers.

The report suggested that while there is some self-censorship imposed by bodies such as the Nihon Ethics of Video Association and Ethics Organisation of Computer Software, this does not apply to all products, and amongst them there are animated films with child sexual abuse images. What is also troubling is that this report suggested that the Internet has become a conduit for the sale of hard-copy comics (over which there is little control). "According to a sampling survey conducted by the National Police Agency in November 2006, at one of the famous internet book sales sites which sell adult comic books and the likes comprehensively, 30% of some 9000 adult comic books are suspected to be those with child sexual abuse images, and judging from the cover sheet containing such images as school bags unique to primary school children, it can be expected that a good number depicting children below the primary school ages as the objects of sexual acts are in the market. Further, the volume of comic books with child sexual abuse images is believed to be larger than those in the forms of PC games and animation films... Besides, the survey also confirmed that the same five comic books depicting a child appeared to be at below primary school age as an object of sexual acts are sold at the 6 famous internet book-sales sites". In a report appearing in the magazine Shukan Bunshun, (Shukan Bunshun, 2005), an interview with staff from a game shop indicated that, "There are two major streams of games showing little girls; one is a love story with an innocent girl, and the other is extremely violent one that a player can sexually control and train a girl. One of the popular games is one that has 'an ejaculation button' a player can push to put their sperm over a girl". However, it is apparent that while such materials are produced in countries such as Japan, they are consumed by people from over the world. In the report by Baartz (2008) of Australian offenders, investigators gave detailed responses to the child exploitation material found in 10 of the 50 cases identified. One such investigator reported, "A vast majority of the collection were cartoon drawings from Japan. The drawings were very graphic in nature depicting children involved in sex acts with adults and other children. Some of the cartoons were violent in nature showing children in bondage and also children who appeared to be distressed by the situation. Some of the cartoons also depicted incest with both the mother and the father" (p. 24).

As we have seen, in countries outside of Japan there has been a bid to criminalise the possession of non-photographic visual depictions of child sexual abuse. In the UK a formal period of consultation began in relation to this in April 2007 and concluded in June of that year. Prior to this, the Criminal Law Sub Group of the Home Secretary's Task Force on Child Protection on the Internet had been considering the issues raised by computer generated images (CGIs), drawings and cartoons which show graphic depictions of sexual abuse of children or child-like characters. The Consultation document recognised that these images do not involve harm to real children in their creation, but that the possession of such material was a cause for concern, particularly as technological advances have increased the availability of such material. In the summary of the responses to the Consultation, it was noted that many people viewed the definition of what would constitute 'pornographic' as both troublesome and opaque. There was also concern that, "stylisations of animations freely mix aspects typifying different ages", which would make the allocation of age subjective and therefore an impossible assessment of legality. The UK government plans to bring forward legislation to introduce this new offence. Opponents of criminalising pseudochild pornography and virtual child pornography have argued that this material, because no child is harmed in its production, should not be drawn within the framework of child pornography. They argue that because the historic purpose of criminalising production of child pornography is to prevent children from being sexually abused, and because pseudoimages do not involve actual abuse, they should not be criminalised. Indeed, opponents of these measures, such as the American Civil Liberties Union, have argued that people's thoughts are their private thoughts, and that prohibition of pseudo-child pornography is a violation of free speech rights (Taylor and Quayle, 2003). However, Oswell (2006) has presented an important argument against this stating that, "Although the evidential value of the virtual image is different from an actual image (and hence the forms of police investigation and legal prosecution are different), until an image can be said to correspond to an actual case of child sexual abuse, all Internet child pornography can be viewed as real. In this sense, the primary concern is not one of the effects of the image on others or one of the relations of power encoded in the image, but one of the virtual evidentiality of the image (ie, on the image's capacity to refer to an objective reality that is both internal and external to the image). The ethical intensity of the virtual image lies precisely in its capacity to refer to a scene beyond itself" (p. 258). Oswell (2006) goes on to state that the crime of possession, making or distribution of child pornography (whether virtual or not) is a crime not only against a particular child, but against all children. "It is a crime against childhood as a universal" (p. 252).

We argue that the crime of possession, and making or distribution of child pornography, whether virtual or not, are crimes not only against a particular child, but against all children.

2.3 The Internet sex offender, the Internet sex exploiter and harms facilitated by the new technologies

We can think about the potential harms posed by the new technologies in a variety of ways. Some of them clearly are identical to pre-Internet harms and are difficult to disentangle from other sexually abusive practices (Renold and Creighton, 2003). Abuse through the production and dissemination of images might fall within this group, along with online solicitation or grooming. The exploitation of the material has however grown exponentially due to the propensities of the medium itself allowing for numerous sexual abusers to turn into sexual exploiters. Exposure to materials that might facilitate harm to the child is also not new, although we shall see that the Internet may have exacerbated this problem. However, exposure to a medium that may afford opportunity to harm both self and others is somewhat different, and may need to be considered not only in terms of the current position but also by what might happen as technology, or its availability, changes. As we will see, a lot of what we know about the harms posed by the new technologies is drawn from work on offenders, rather than victims, although this is something that we will seek to address. The particular ways in which harm might arise from the possession of abusive images were summarised by the Supreme Court of Canada R v Sharpe (Clough, 2008):

- 1. Child pornography promotes cognitive distortions such that it may normalise sexual activity with children in the mind of the possessor, weakening inhibitions and potentially leading to actual abuse.
- 2. Child pornography fuels fantasies that incite offenders.
- 3. Prohibiting the possession of child pornography assists law enforcement efforts to reduce the production, distribution and use that result in direct harm to children.
- 4. There is 'clear and uncontradicted' evidence that child pornography is used for grooming and seducing victims.
- 5. To the extent that most child pornography is produced using real children, the viewer is in a sense an accessory after the fact to an act of child abuse by providing a market for it.

However, the sexual abuse of a child is often, but not always, the prerequisite for the ensuing sexual exploitation of the child through the production, distribution, downloading and possession of materials that document the sexual abuse. Where images are taken of an unknowing child, for example playing naked on the beach, the exploitation may be there without the abuse. The offender may be the same person that later will sexually exploit the child, thus further gaining from the initial abuse. The exploitation may be commercial as the offender may sell the images of the initial abuse. It may also be a non-commercial act of exploitation where the offender will share the images of his abuse within a circle of likeminded individuals. He may do this since he in turn will receive images from others in

his network, or he may do this without any such exchange. As we will go on to discuss, sexual abuse of children in the online setting should predominantly be seen as connected to sexual exploitation but is not synonymous with commercial sexual exploitation. Images of sexual abuse of children sold online are clearly commercial sexual exploitation, however, many recent findings seem to indicate that the non-commercial side of child sexual exploitation online is increasing.⁴ When talking about the grooming of children for offline meetings, the exploitation is obvious: the child's position as younger and less experienced is exploited for the gain of the offender through the coercion and the persuasion of the child. The same is true for online abusive practices where the direct online sexual exploitation may be part of a more concerted online exploitation in which images or films may be sent on to others or given to others in a commercial transaction.

If we start by thinking about the offending population, it is apparent that the terminology most commonly used, but which fails to capture the differences between abuse and exploitation, is that of Internet sex offenders. Unlike other paraphilias, it is argued that Internet sexual offenders cannot be easily diagnosed according to criteria set out in categorical models such as the Diagnostic and Statistical Manual of Mental Disorders (DSM) (American Psychiatric Association, 2000), and we are largely limited by what people are observed to do in relation to the Internet. What is also clear is that the term 'Internet sex offender' may at times be used to describe the Internet sex abuser and at other times an Internet sex exploiter. Most case histories in which the police manage to identify a child abused and exploited by an offender sexually assaulting the child and taking photographs of the abuse will encompass a sex offender who is both sexually abusing and sexually exploiting his victim. Distinguishing between these activities is important, and is reflected in the different forms that offending behaviours take, which include: downloading illegal images from the Internet (which largely, but not exclusively relates to pictures of children and is thus a crime of sexual exploitation); trading or exchanging such images with others (which is also exploitative); producing images through photographing children or modifying existing images, and engaging in what has variously been called grooming, solicitation or seduction of children. The relationship between the producer of images and the child may be sexually abusive (where the images are taken by the one abusing the child), sexually exploitative (where production is by someone other than the person abusing the child), or both. Hidden, or surreptitiously taken, images are clearly exploitative but not abusive, except where the camera is hidden by the abuser.

As the law changes to try to keep pace with the opportunities that the Internet affords for offending activities, so do the definitions of behaviours and content that constitute what is illegal. For example, in the UK the *Sexual Offences Act* 2003 created an offence that included grooming, the purpose of which was to identify preparatory behaviour that could

be criminalised before the offender had the opportunity to sexually abuse a child. The offence requires an offender to have met or communicated with a child on two or more occasions and subsequently to meet or travel to meet a child with the intention in either case of having sexual contact with a child (Gillespie, 2006). The legislation in part grew out of a series of high-profile cases where an adult had used the Internet to 'groom' children for 'offline abuse'. This legislation aims at limiting the use of the Internet to exploit the child's inferior position and can thus in this respect be seen as an illustration of distinguishing the sexual exploitation from the sexual abuse, where the exploitation in these cases is a precursor to the sexual abuse.

However, the harms posed by the new technologies do not only relate to adult use of child pornography or the solicitation of children. There is increasing anxiety about possible harms posed by exposure to online materials along with the opportunities that the new technologies offer to young people to generate content that might be deemed to be legally, or psychologically, problematic. As we explore these issues, we need to be mindful of the fact that we do not know how much we can generalise across various studies to other cultural or geographical contexts. It is also inevitable that when talking about abusive images of children the discussion has a wider focus. In the context of ethical concerns about images, King (2008) has suggested that, "... we distinguish between four possible foci: the subjects of pornography... the producers... the consumers... and the product" (p. 327). A major challenge is how to judge the harm that online sexual exploitation may cause to children, and how wide our definition of exploitative practices should be. A further important issue, that has not been resolved since the Second World Congress, relates to the difficulties experienced in keeping the subjects, the children, at the forefront of the debate. This is made more complex as we talk interchangeably about a specific child victim, and the harm that they suffer, and about harm inflicted on children in general.

There have been several attempts to generate a more differentiated view of the kinds of activities engaged in on the Internet that are sexual in their orientation and which might cause harm to children. These have been largely conceptualised as typologies of offending behaviour, as they describe not only the activities themselves but suggest underlying motivations for offending. Several of these typologies built on earlier work that predated the Internet, such as that by Hartman, Burgess and Lanning (1984). Alexy *et al.* (2005) described a typology based on the distinction between those who use the Internet as a way of furthering contact offences against children and those who use the Internet to access abusive images. These authors generated three types of offender: traders, travellers and trader-travellers. Traders were described as people who both collect and trade abusive images of children on the Internet and therefore provide a market for the further abuse of children. Travellers were similar to those we have previously described as 'groomers', in

that they use the Internet to gain access to children whom they coerce into meeting them for sexual purposes. The third category, trader-travellers, are those who do both. However, as Beech, Elliot, Birgden and Findlater (2008) have indicated, "Although intuitively simple and appealing, there are also a number of problems with this system. A trader who travels to commit contact offences with children solicited offline while simultaneously accessing abusive images would only be considered a trader. Conversely, an offender who uses the Internet to arrange sexual meetings with children and simultaneously collects offline 'indicative' images or sexually abusive pseudo-images of children is only considered a traveller". For the discussion on the offending behaviour that would fit into the category of sexual exploitation we can clearly see the trader as contributing to and furthering the sexual abuse of children by committing crimes that would fall in the exploitation category, whereas the traveller and the trader-traveller would both be sexual abusers and sexual exploiters as their offences build on the one to further the other. Krone (2004) generated a more comprehensive typology along a continuum of increasing seriousness of the offence. This included offences that did not directly involve a child to offences involving direct contact with children, and from online engagement to physical abuse. Krone's (2004) typology generated nine types of offender classes. These were:

Table 2: Krone's (2004) typology

Browser: This is a person who may stumble across child pornography unintentionally (for example via spam) but then decide to keep it, rather than delete it.

Private fantasy: Krone differentiates between a private fantasy (which is unlikely to be seen as illegal) and where there is evidence of that fantasy through a permanent product, such as images or text. This is not necessarily shared with others, but may come to light accidentally.

Trawler: This is a person who uses little online security and where there is minimal networking with others. Krone (2004) used the earlier work of Taylor (1999) to explain what might motivate such a person. The sexually omnivorous user is oriented to a range of sexually explicit material of which child pornography is simply a part but not the focus. The sexually curious user has experimented with child pornographic material but has not pursued it. The libertarian is driven to assert a claim to be free to access whatever material they wish.

Non-secure collector: This person purchases, downloads or exchanges child pornography from openly available sources on the Internet or in chatrooms that do not impose security barriers, such as passwords, encryption or the requirement to trade a minimum number of images. This is also associated with a higher degree of networking activity.

Secure collector: This person collects images within a more secure framework, which may include the trading of images in order to join a network. Krone (2004) suggests that what might motivate such an offender is the desire to collect a large number of images, and gives an example of a UK offender, Andrew Tatum, who "was jailed for five years for possessing 495,000 indecent images of children. An indication of the obsessive nature of his collecting is that the images upon which his conviction was based counted for only about five per cent of his personal collection of more than 10 million pornographic images (The Age 2004)".

Online groomer: This is someone who has initiated online contact with a child with the intention of establishing a sexual relationship involving cyber sex or physical sex. In this case, images are often used to desensitize the child to sexual activity – 'groom' the child --- it is shown to the child to lower that child's inhibitions concerning sexual activities.

Physical abuser: Physical abusers are actively involved in the commission of contact offences against children and use images to enhance or supplement their sexual needs. Krone (2004) suggests that the physical abuse may be recorded for the personal use of the abuser but is not intended to be further distributed.

Producer: A producer is involved in the physical abuse of children and records that abuse to distribute to others.

Distributor: The distributor of abusive images may or may not have a sexual interest in children and may be motivated by the desire to sell it to others.

to sexually exploit and sexually abuse children. He suggested that they fall into three broad categories: situational, preferential and miscellaneous.

Situational offenders include:

- Adolescents or impulsive or curious adults with a newly found access to a wide range of pornography or sexual opportunities.
- Morally indiscriminate people motivated by power or anger and who have a history of varied violent offences.
- Profiteer offenders who aim to profit from the lucrative child pornography market by involving children in sexual activity.
- Preferential offenders include
 - Paedophile offenders who have a preference for children
 - Diverse offenders who have a variety of deviant sexual interests, but not a strong sexual preference for children.
 - Latent offenders who typically have potentially illegal preferences but would offend when their inhibitions regarding sexual interest in children are weakened if their arousal patterns are fuelled and validated by interaction with online computer communication.

Miscellaneous offenders include:

- Media reporters individuals who erroneously believe they can go online and traffic in child pornography and arrange meetings with suspected offenders as part of an authorized and valid news exposé.
- Pranksters individuals who disseminate false or incriminating information to embarrass the targets of their "dirty tricks."
- Older "boyfriends" individuals in their late teens or early twenties attempting to sexually interact with adolescent girls or boys.
- Overzealous civilians

Beech *et al.* (2008) have been critical of Lanning's (2001) typology in that while it is extensive and takes into account the many reasons for which an individual might decide to use the Internet for sexual purposes, some of these types appear to overlap and are not discrete categories. Even though Lanning and Krone both refer to 'sexual abusers' and 'sexual exploiters' they make no specific distinction between the groups, which somewhat limits the usability of the proposed typologies. What would be more useful in the move towards legislating against all forms of offending, both sexual abuse and sexual exploitation, would be descriptions of what motivates the sexual exploitation as such and, more specifically, sexual exploitation that is non-commercial. What is also obvious is that Lanning's typology tells us a lot about the motivation of people who offend, and how this information might be used evidentially by law enforcement, but tells us little about the offence from a victim's perspective.

This section examines the potential harms posed to children by the new technologies and how we might differentiate between sexual abuse, sexual exploitation and commercial sexual exploitation in the online environment. We argue that the new media blur the boundaries between these and provide a context that affords opportunities for both the abuse and the exploitation of children and by children.

2.4 Who are these people?

We have no idea of the numbers of people who offend on the Internet. We can examine conviction rates, but these reflect only the countries where possession and distribution of child pornography is both illegal and where there are either the resources or inclination to act upon detection (Quayle, 2008). Wortley and Smallbone (2006) have suggested that, "At any one time there are estimated to be more than one million pornographic images of children on the Internet, with 200 new images posted daily. One offender in the UK possessed 450,000 child pornography images. It has been reported that a single child pornography site received a million hits a month... It has been estimated that there are between 50,000 and 100,000 pedophiles involved in organized pornography rings around the world, and that one-third of these operate from the United States" (p. 13). In the US, Wolak, Mitchell and Finkelhor (2003) reported that law enforcement made an estimated 2,577 arrests during a 12-month period (starting July 1,2000) for Internet sex crimes against minors. These crimes were categorised into three mutually exclusive types: Internet crimes against identified victims (39%); Internet solicitations to undercover law enforcement (25%), and possession, distribution or trading of child pornography with no identified victim (36%). Two-thirds of offenders who committed any of the types of Internet sex crimes against minors possessed child pornography, with 83% of these possessing images of children between the ages of 6 and 12, and 80% having images explicitly showing sexual penetration of minors.

Finkelhor and Ormrod (2004) examined child pornography patterns from the FBI's National Incident-Based Reporting System (NIBRS). The data from 1997–2000 on 2,469 crime incidents involving pornography revealed that over these three years pornography offences increased by 68% and juvenile victim/child exploitation pornography offences increased 200%. But at the time of this report, only a small minority of all pornography offences known to the police were coded as involving a computer.

However, these statistics reflect only those who are caught. Other data, such as that provided by one leading UK Internet Service Provider (ISP) suggested that in July 2004 it blocked

more than 20,000 attempts per day to access child pornography on the Internet. More recent data from Swedish and Norwegian blocking of access to known sites carrying child abusive images reveal as many as 15,000-18,000 daily attempts in Norway. These figures need to be interpreted with caution since they would also include hits by, for example, webcrawling robots which may result in a number of 'false positives', but they do, however, say something of the number of attempts made in a country with a much smaller population than that of the UK. The attempts were easy to block because the material requested was from known sources. More difficult is material that is produced with a perfectly valid reason, but which is used by others in a way that is problematic. A good example of this is provided by Lehmann, Cohen, and Kim (2006) in relation to the detection and management of pornography-seeking in an online clinical dermatology atlas. During the study period, one third of the search queries related to anatomical sites and over half specified children. From unpublished data from the CROGA Internet self help site for people experiencing difficulties in relation to child pornography, there were 8,684 users of the site between June 2004 and April 2006. Similarly, in the UK, statistics from Stop It Now! UK and Ireland suggested that between 2002 and 2005, 45% of calls to its helpline were from people experiencing problems in relation to their own behaviour, a significant number of whom were using, or feeling a compulsion to use, the Internet (Stop It Now! UK and Ireland, 2006). This pattern has continued since the publication of the report and, over the past three years, there has been a proportionate increase in people telephoning about concerns regarding their own or someone else's behaviour online.

While this offending population is largely described as heterogeneous (Taylor and Quayle, 2003), there are some striking demographic consistencies between study samples. The most notable of these relates to gender. Wolak *et al.* (2003, 2005), in their study of Internet crimes against minors, reported that 99% of their sample was male. This is similar to the findings of other studies (Finkelhor and Ormrod, 2004; Seto and Eke, 2005; Sullivan, 2005; Bates and Metcalf, 2007; Webb, Craissati and Keen, 2007; Baartz, 2008). From a different perspective, Mitchell, Becker-Blease and Finkelhor (2005) conducted a national survey of 1,504 US mental health practitioners on social and psychological problems associated with the Internet: 63% of their clients were male.

Ethnicity appears to be another common characteristic, with the majority of offenders being white and westernised (Wolak *et al.*, 2003, 2005; Carr, 2004; Sullivan, 2005; O'Brien and Webster, 2007). Webb *et al.* (2007) indicated that their 90 Internet-related offenders were predominantly white; this appeared to be different from their child molester sample, which came from a more mixed ethnic group. The great majority of Australian Internet sex offenders were identified as Caucasian (86%), with minimal representation in the Asian, Mediterranean and Aboriginal ethnic groups (Baartz, 2008). This raises an interesting issue

about sexually abusive practices and ethnicity, and whether these offender characteristics result from socio-demographic patterns of Internet use, or whether they reflect differences in ethnicity and pornography or abusive image use. Buzzell (2005) reported descriptive data taken from the US General Social Survey from 1973 onwards. They identified three technological contexts (film, theatre or VCR and websites) to describe general pornography use and the demographics of people who use it. Website access to pornography was predominantly male and declined with age, but, "More non-whites than whites have seen an X-rated film in a theatre or on a VCR compared to film or website access... Use of website pornography follows the same pattern except that its use is less likely to be reported by non-white populations. Up to 20% of the non-white portion of the sample reports use pornography" (p. 41). It is unknown whether this is an example of the digital divide and whether this might change in the future.

A further demographic variable of interest relates to age, and here there is less consensus. In Wolak *et al.*'s (2003) study, of the 2,577 arrests made for Internet sex crimes against minors, 14% were aged 25 years or under, 45% between 26 and 39 years and 41% were over 40 years. Wolak *et al.*'s (2005) analysis of those who had possessed child pornography indicated that 45% were 40 or older. This is similar to other reported samples (Middleton, Elliot, Mandeville-Norden and Beech, 2007; O'Brien and Webster, 2007; Webb *et al.*, 2007; Baartz, 2008), although the age range in these samples was quite wide. However, the data gathered by the New Zealand Censorship Compliance Unit appeared very different (Sullivan, 2005). Of the 201 cases in its most recent analysis, the largest single age group was between 15 and 19 years, which accounted for 24.32% of all offenders. Over half were under the age of 30 at the time of the investigation, with an age range of 14–67 years.

Other demographic factors, such as occupation, level of education and experience in Internet use are equally mixed across populations. As would be expected given the age distribution of the New Zealand sample, students were the largest occupational group, with two-thirds of these studying at tertiary level, of which 37.5% were studying subjects related to information technology. Within this sample, the second largest group was those working in information technology. The Australian sample was typically employed in professional or administrative roles (Baartz, 2008), employed a medium level of computer competency and did not employ sophisticated technology or security measures. Wolak *et al.* (2005) indicated that 73% of their population was in full-time employment, with the majority (82%) having an income greater than \$20,000. Similarly, in O'Brien and Webster's (2007) sample, just over a half had received third-level education and 75.5% were in full time occupation. Unlike the New Zealand group, this latter study indicated that 92.6% had not received any formal training in Internet use. Certainly, to date, only gender and ethnic group are common factors across all populations.

There are considerable difficulties in understanding the relationship between the content of the images viewed, the experience for the child, the sexual interest of the offender and the functions of the images themselves. In part this is because there is very little research that has focused on the content of the images collected by offenders. This is a significant problem: as discussed above, we cannot understand whether the images themselves might be an indicator of future risk. There is also a possibility that it helps us all turn our gaze away from the images and the children who are victimised. Let us finish this section by briefly examining just one of the few studies that has included an analysis of these images. Baartz's (2008) study of Australian Internet sex offenders indicated that three-quarters of their sample chose material that depicted children or young people nude or partially nude with a display of their genitals, and explicit sexual acts. Table 3 further examines the preferred content of images chosen by these offenders:

Activity	Number	Percentage
Posed nudity or partial nudity with display of genitals.	38	76
Explicitly sexual acts or actions.	38	76
Naturalist nudity or partial nudity.	23	46
Posed nudity or partial nudity without display of genitals.	22	44
Incest or implied incest.	16	32
Explicitly harmful acts or actions (e.g. physical violence, torture, bondage etc.).	13	26
Dehumanising and degrading activities (e.g. use of urine and excrement, extreme close-ups etc.).	9	18
Bestiality involving children or in the presence of children.	9	18

Table 3: Content of images acquired by offenders (Baartz, 2008)

Activity	Number	Percentage
Physical and/or verbal expression of fear and/or distress.	6	12
Other (e.g. cartoons).	1	2

When we ask who engages in Internet sex offending through the sexual exploitation of children by collecting abusive images of children, we conclude that they are largely male, white, of westernized appearance, and covering a wide range of ages. Some are highly computer literate while others possess only basic skills. They take varying degrees of risk to both acquire and hold onto these images. Some of them have a history of prior offending, while for others this is the first open demonstration of sexual interest in children, or the first time it has come to the attention of law enforcement agencies. What the study by Baartz (2008) forces us to conclude is that what these people are seeking to collect is not simply pictures of children, but images that capture, at least in part, the exploitation, abuse, humiliation and degradation of children and their sexuality – all in the service of the sexual enjoyment of others.

Here we examine what is known about people who commit sexual offences against children and are forced to conclude that current knowledge would indicate that they are largely white, westernised males who come from a variety of socio-demographic backgrounds, are more likely to be educated and are less likely to have a known offending history.

2.5 Technologies used

The thematic paper on Child Pornography from the Second World Congress examined the effects of the new technologies and identified the problems posed by the reducing cost of making and storing images, the increasing ability to create pseudo-pornography and the emergence of commonly available encryption technologies. Since 2001 we have seen considerable technological change, which includes higher bandwidth and higher compression techniques allowing for increased capacity to download both still and moving images; more sophisticated ways to encrypt and anonymise data; better ways of hiding data over the Internet, such as storing data on compromised machines, password-protected filesharing websites, email accounts and less reputable content providers hosted in countries with lax cybercrime legislation; as well as increased use of information-hiding tools to further impede the collection of evidence. Remote image storage is a popular way of enabling Internet users to share pictures. These websites allow easy, free and unlimited and anonymous posting of photographs. The Internet Watch Foundation (IWF) (IWF, 2006) indicated that in 2006 photo-album websites accounted for 10.5% of all URLs reported to law enforcement agencies and other hotlines, apparently containing potentially illegal child abuse images. The IWF also noted a trend whereby commercial websites store the image files on a remote website, some of which contain collections of elements of an image which, when assembled make up the whole image. When a person clicks on the 'parent' commercial website to download images, the site collects the relevant pieces from separately hosted image stores and assembles them. The IWF (2006) noted that, "These image 'jigsaw' stores might be able to evade removal and law enforcement investigation as the images may not constitute potentially illegal content in their pre-assembled state".

Choo, Smith and McCusker (2007) have also suggested we are also likely to see enhanced methods of exploiting wireless vulnerabilities, including drive-by subversion of wireless home routers through unauthorised access by mobile WiFi clients, making it more difficult to identify the downloading of abusive material. However, only home routers that are not protected by access keys and network encryption are the ones most likely to be used in this way. With the growth of WiMax (with much greater reach than WiFi) the same challenges faced by private, unmonitored and anonymous access is compounded. We have also seen an increased use of botmalware that aims to avoid detection by anti-virus software and that allow a child's computer to be controlled. There are also new payment systems in which Internet international funds transfer instructions (IFTIs) and e-currencies continue to grow (eg, prepaid cards and smartcards which avoid some of the traceability of traditional credit-card transactions). In addition live sexual abuse videos can be streamed to Internet chatrooms, with the actual perpetrator responding in real time to commands from other participants who are able to see the images.

Since the Second World Congress we have seen increasing use of distributed networks, such as peer-to-peer (p2p), which facilitate file sharing amongst users. Many studies show that a large amount of paedophile and harmful contents is distributed using p2p file exchange systems, and that the volume of such exchanges is increasing (Taylor and Quayle, 2003; Waters, 2007). Mehta *et al.* (2002) examined 507 video files retrieved from the Gnutella network using key words that were likely to be linked to a search for pornographic material. Their data suggested that while the availability of obscene or illegal video files constituted a relatively small percentage of the overall set, the ease with which the material was accessed and the sheer volume of data flowing through the network was seen as a cause for concern. Video files defined as paedophilic represented 3.7% of the sample, but as millions of files were exchanged this represented a sizeable number. These authors also monitored a website (Gnutellameter) which captures data exchanged in Gnutella and provides summaries of key words most commonly entered by users. They suggested that, "the most commonly searched for files on Gnutella are either copyright protected software, movies encoded in 'divx' format, and pornographic material, with a strong emphasis on both child and hebephilic (sexual attraction to pubescent adolescents) pornography". In a similar vein Grabowski (2003) had noted that in February 2003, Palisade Systems collected 22 million requests and searches conducted on Gnutella over a 3-week period and randomly selected 40,000 of these. They found that 42% of all requests monitored were for adult or child pornography. The presence of such content, and its very easy access, make the current situation particularly worrying for p2p users, in particular children. The MAPAP Project launched a query of the key word 'pthc' (preteen hardcore) on June 10 2006 (MPAP, 2008). It obtained 48,488 file names containing this key word. Of these, 16,913 contained age information (age followed by a number). There were more than 10,000 files claiming content with children 11 years and younger, 2500 with children 6 years and below and more than 500 with children aged 2 years and below. The distribution can be seen in Figure 1 below; these correspond to 64%, 14% and 3.5% of the total. This clearly indicates that the focus was on children aged between 10 and 12 years and some younger, although it was not possible to validate whether files actually contained illegal material.

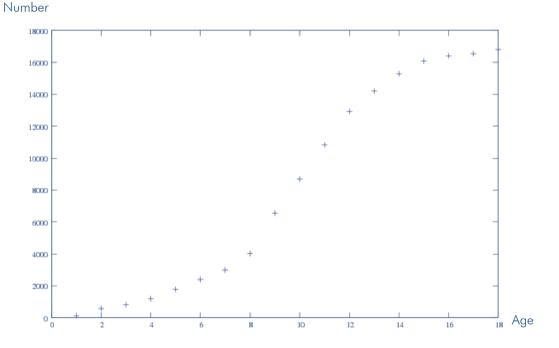


Figure 1. Cumulative distribution of files relating to age of child

Over the last few years we have also seen ready access to social networking sites, which demonstrate the convergence of many aspects of computer mediated communication. Livingstone (2008) has remarked, "In terms of their affordances, social networking sites enable communication among ever-widening circles of contact, inviting convergence among the hitherto separate activities of email, messaging, website creation, diaries, photo albums, and music or video uploading and downloading..." (p. 394). Along with this has come an increasing anxiety that such convergence provides relatively easy access to a wide range of information about a young person, as well as affording the opportunity to create content that may be construed as problematic. While some researchers have construed this as a 'moral panic' (eg, Cassell and Cramer, 2008) for which there is little actual evidence, Brazil has seen a growth in the use of sites such as Orkut as a context for grooming, diffusion and interchange of pornographic material and as a means by which adults can be intimately in contact with children and adolescents (Gonçalves, on behalf of Childhood Brasil, personal communication).

However, it must not be assumed that as technology advances this means that 'old technology' is simply abandoned. Newsgroups provide one example of 'old technology' that is still used by many, including those with a sexual interest in children. A recent study by O'Halloran (2008) can be used to illustrate this. Usenet is an example of a newsgroup and simply stands for 'user's network'. It began in the early 1980s as a means of information and idea exchange for users and programmers of the UNIX operating system (Harmon and Boeringer, 1997). At the time of writing, Harmon and Boeringer (1997) reported the existence of over 15,000 newsgroups on Usenet. A more recent figure offered by Joyce and Kraut (2006) puts the number of public groups at 190,000, which are made up annually of 250 million messages from over 9 million unique users. Usenet, or the 'newsgroups' as it is commonly referred to, is a Bulletin Board System (BBS) that allows users to post messages that can be read and responded to by anyone with access to the group. They are easily accessible, and newsgroups exist for such divergent topics as support for baseball teams, magic, anarchism, sharing recipes and alternative groups of a sexual nature. In 1999 Durkin and Bryant conducted a study analysing the justificatory accounts offered by paedophiles communicating on a Usenet group dedicated to the support of 'boy lovers' (Durkin and Bryant 1999). The study sought to identify exculpatory and justificatory accounts of those with a sexual interest in boys in order to supplement existing knowledge about paedophilia. The online Usenet group 'alt.support-boy.lovers' was identified as a ready pool of people who were not necessarily active as contact offenders, but who could offer insights into how those with a sexual interest in children accounted for their deviant sexual orientation. O'Halloran (2008) repeated the study with a sample made up of contributors to the same Internet support forum. The text of 23 contributors with a self-identified sexual interest in children was analysed. All of the contributors had been members of the support forum

for a minimum of several months, with some holding membership for up to 10 years. On sampling it was found that there were 1570 subscribers to the group, and it was categorised as a medium-level activity group.

One of the most notable findings of this research was the increase in activity on the support forum since Durkin and Bryant studied it in 1999. The number of members on the site had grown significantly, with a current active membership of over 1,500, attracting over 1300 new posts per month on average. These figures represent an almost tenfold increase in the size and activity of the group, which in 1999 received between 150 and 200 unique posts per month. The intensified use of the site raises questions as to why this growth has occurred, given that newsgroups are a relatively basic and outmoded medium for Internet communication. While the Usenet newsgroups were popular in the 1980s and 1990s, their unattractive interface and low signal-to-noise ratio had web users predicting that they would be obsolete by the twenty-first century. Newsgroups, Non-stop (2008) writes that innovations accompanying the rise of Internet technologies should have challenged the existence of the newsgroups as a communication tool, yet their popularity has remained steady. They conclude that the reason why usage of the Newsgroups has not declined is because the forums are mostly uncensored by hosts and thus groups can exist on any topic and host almost any type of content. Because of this, the success of the Usenet forums is the fact that they fit the ideal of Internet communication in that they are uncensored, peermoderated spaces for sharing information. Although the forum studied in this research does not claim to host illegal child abuse imagery, O'Halloran (2008) suggested that the content of its discussions is objectionable to most of the general public and thus it could expect to be censored if located in a different medium on the Internet. Because Usenet is peer-moderated, there is no external individual to regulate its content so members are free to discuss whatever they wish in relative privacy.

The continued proliferation of child abusive images through old and new channels follows the pattern that has emerged on the Internet, where demand for different items will be satisfied by the very existence of a world-wide audience. Demand for child abuse images is one where a local market, which pre-Internet was practically non-existent, functions due to the very nature of the medium itself. In any single community there may be few individuals driving the demand for a specific kind of child abuse image, but on a global level, there will always be likeminded individuals to connect with. In this way, the demand for child abuse images follows the 'Long Tail-theory' (Anderson 2006). The costs of consumption have been lowered drastically by the democratisation of production. However, as Anderson emphasises, content production is only meaningful if others can enjoy it. The link between supply and demand is crucial in all Internet-based exchanges, and in the case of child abuse images is facilitated by different ways of locating content. Here we consider what is known of the technologies used by offenders. Some of these have changed since 2001 but others, such as newsgroups, have not and still provide a context for sharing of information and ideas that promote the abuse and exploitation of children.

2.6 The relationship between viewing and the commission of further sexual offences against children

The need to understand the relationship between viewing illegal images and the risk of further offences against children is driven not only by law enforcement, but also by child protection agencies. Does having a parent who has been accessing abusive images put the child or children within the immediate household at risk? Should the parent or child be asked to leave the family home? Is the risk so low that to do so would further traumatise and victimise the very children we are seeking to protect? Does the fact that the offender is also part of a distribution network increase the risk to children in his immediate surroundings? These are decisions that are made every day in relation to Internet sex offender cases and as yet they are underpinned by a paucity of empirical research. The following is a brief attempt to look at some of the work in this area, keeping at the centre of the concern a bid to protect children rather than simply to apprehend the offender. Much of what we know relates to police operations, case studies and unpublished anecdotal material. Any difficulties in making sense of this are compounded by the different kinds of populations studied (eg, prison versus community), the time frame for the data collection (more recent accounts would suggest a greater availability of illegal images of children, through for example peer-to-peer networks), the ways in which the data are gathered (telephone interviews, self-report questionnaires, re-conviction rates) and the lack of longitudinal data. As researchers we are also confounded by the fact that new technologies move on, and the arena for offending changes. A good example of this relates to the emergence of the mobile Internet.

The risk of the commission of a contact offence against a child is a question that is currently posing immediate concerns for practitioners working in the area of risk assessment (Davidson (2007) provides an excellent review of risk assessment of Internet sex offenders). However, there is very little to inform judgments about which Internet offenders may also pose a risk to children within an offline environment, and much of the research that has examined the relationship between viewing pornography and offending behaviour predates the Internet. Marshall (2000) had argued that there is not a causal link between viewing pornography and sexually offending behaviour, but that it can accelerate psychological processes, enhancing the cognitive distortions of offenders. We need also to differentiate between sexually exploitative behaviour versus sexual abusive behaviours and if possible

develop a risk assessment that will look at possible differences between the two.

Finkelhor and Ormrod (2004) found only a modest association of general pornography crimes with child victimisation. However, Wolak, Finkelhor and Mitchell's (2005) study of child pornography possessors arrested in Internet related crimes indicated that 40% of their sample were 'dual offenders' who sexually victimised children and possessed child pornography. Galbreath, Berlin and Sawyer's (2002) data from 39 Internet offenders indicated that 24% had attempted to meet a minor for sex. In contrast, Baartz (2008) examined the histories of Australian offenders approached by the Australian Federal Police (AFP) between 1 March 2005 and 31 December 2006 (50 in total). There was no evidence within this data set of the production of abusive images, but 14% were apprehended for online grooming; 80% of this sample had never been convicted of any type of criminal offence. A second method, using self-disclosed data, was demonstrated by Hernandez (2000), with a US sample of 62 offenders who were in prison for Internet-related sexual offences. He found that prior to treatment, 42% were known to be contact offenders with a total of 55 victims. However, following treatment, 76% reported previous contact offences against an additional 1,379 victims. In a subsequent analysis, Hernandez examined only those offenders whose behaviour related to abuse images. Of these 55 offenders, 80% reported previous contact offences. Hernandez (2006) went on to examine the data from a second group of 155 adult males convicted of offences relating to abusive images of children, 24% of whom had known previous contact offences. After treatment, 85% of the offenders disclosed having committed contact offences against 1,702 victims. These studies have not been published in peer-reviewed journals and although accepted for publication by the Journal of Family Violence, permission was not given by the US Prison Service to release the data. While criticisms have been made about the methods of data collection, it is of concern that - at least in prison populations - there may be an underestimate of the number of contact offences committed by those who download abusive images.

As can be seen in relation to the research by Hernandez (2006), one of the difficulties in making comparisons between studies relates to the populations themselves. This is aptly illustrated in a study by O'Brien and Webster (2007) that described the construction, and preliminary validation, of a measure of the attitudes and behaviours of convicted men whose offences related to Internet child pornography (Internet Behaviours and Attitudes Questionnaire – IBAQ). The pilot stage of the study involved 40 men who were in prison, whereas Phase 2, the validation of an improved version of the scale, included men who were in prison and those whose offences between the two samples. The men included in Phase 1 were likely to be older, and more likely to have been arrested as part of a 'ring', and were described as possibly a more 'deviant group' than those in Phase 2. It may be that

as the Internet has become more available to a larger group of people, and the ability to access child pornography has become easier, so we are more likely to see the convictions of people who appear similar to the general population. A recent study by Middleton (in press) of 72 Internet sex offenders found that, "It should also be noted that almost half of the coded sample could not be assigned to any of the five aetiological pathways outlined by Ward and Siegert (2002). These individuals recorded no problems with intimacy or dealing with negative emotions, no distortions in their sexual scripts, and no anti-social cognitions, regarding the appropriateness of sexual contact with children, and yet have been prosecuted for using the Internet to access abusive images of children. This appears to suggest that there is a population of Internet offenders". Middleton (in press) concludes that more research is needed, "to develop offence specific assessment tools and in analysing the particular factors that can lead an individual from seeking to view indecent images of children to moving into the commission of contact offences".

Seto *et al.* (2006) suggested that child pornography offending is a stronger diagnostic indicator of paedophilia than is sexual offending against child victims. However, such a conclusion poses problems for us in how we make sense of the many thousands of people who seem to be accessing abusive images of children every day. Those engaged in sexual exploitation through the production, distribution and possession of abuse images may not be driven solely by their paedophilic interest but by other motives: or do we conclude from this that our understanding of the numbers of people who may be classified as paedophiles is a gross underestimate of the prevalence within the general population? Another possible, or at least partial, explanation for the results of this important study may lie in the nature of the stimuli themselves, and that for men who have spent long periods downloading and accessing child pornographic images and masturbating to ejaculation to them, the visual stimuli themselves are highly salient, and perhaps more so than for men who use private fantasies or actual children as the focus of their arousal (Quayle, 2008). A more detailed discussion of the role of fantasy in both contact and Internet offenders can be found in Sheldon and Howitt (2008).

The section concludes by examining the, at times, conflicting research about the relationship between viewing abusive images and the commission of further offences against children in both the online and offline environments. There is a clear need for further research to explore the inherent aspects of the new technologies that appear to increase the likelihood of sexually exploitative and sexually abusive practices towards children in relation to the new technologies.

3. Child victims of abuse via the new technologies

3.1 Identification of the child victim in abusive images

The lack of knowledge about children being abused through photography is reflected in the relatively small numbers who are ever identified. Where identification does take place, there is little consistent empirical data, although the US's National Center for Missing and Exploited Children (NCMEC) suggested that as of September 2008, 1660 children had been identified through distributed and non-distributed images (73% female and 27% male). Table 4 is the most complete data set of identified children available, but is based only on what has been reported to NCMEC by law enforcement (Lee, 2008). The numbers for GENDER represent actual individual children, whereas the numbers for AGE CATEGORY represents the percentage of identified series. There can be more than one child within a series so, for example, a series that has four prepubescent boys will be counted once, as the percentage represents the series, not children. The statistics for ETHNICITY also represent series and include all the identified series in the NCMEC system, as well as some other known child sexual abuse series that are currently being investigated.

Table 4: Identified children reported to NCMEC by law enforcement agencies (Lee,2008)

GENDER OF IDENTIFIED VICTIMS		
Male	450	
Female	1210	

AGE CATEGORY OF IDENTIFIED SERIES	
Infant/Toddler	6%
Prepubescent	49%
Pubescent	45%

ETHNICITY OF KNOWN SERIES (INCL. ALL IDENTIFIED AND OF-INTEREST UNIDENTIFIED SERIES)

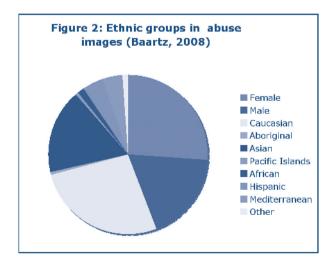
Asian	16
Biracial	0
Black	23
Hispanic	19
Other	5
Unknown	0
White	1186

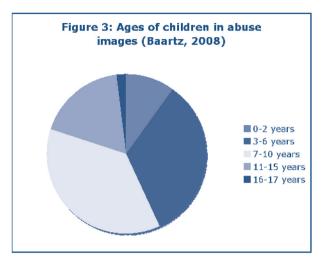
RELATIONSHIP OF OFFENDER TO IDENTIFIED CHILD		
Parent	27.0%	
Other Relative	9.9%	
Family Friend	23.0%	
Babysitter/Coach/Mentor	4.4%	
Guardian's Significant Other	3.5%	
Stranger	3.7%	
Online	12.7%	
Self-produced	8.0%	
Prostitution	1.8%	
(Relationship Unknown or Not Reported to NCMEC)	6.0%	

It is unclear whether the differences between the number of female and male children identified reflects the actual distribution of images currently circulating on the Internet. The reality is that we have little data that helps us make sense of this. Schuijer and Rossen (1992) analysed the content of 'child pornography magazines and videos' that had been in circulation prior to the change of law across a number of European countries. They acknowledged the methodological difficulties in doing this, with the likelihood that some children may have been counted more than once simply due to difficulty in recognition or age change. They suggested that, "On the basis of the estimate of 1,065 published magazines, this implies almost 12,000 children have been associated with child pornography in some way or other. The films have not been counted, however, the number of children appearing in the films is much smaller than in the magazines, usually no more than two per film, and furthermore the film actors are often depicted in the magazines".

that a more conservative estimate would be 6,000 children, as the initial count included images of children who were fully clothed. The division of photographs in the sample suggested that 42% were pictures of boys, with more girls appearing in extreme forms of images. Does this raise the possibility that in terms of investment by law enforcement, girls (and particularly younger children) are more likely to result in a successful identification than are boys? It may also be the case that there are many more girls being abused through photography than boys, but we have no evidence to support this.

This raises important questions about possible gender issues in relation to identification. Outside the context of child abuse per se, Dennis (2008) completed an analysis of 166 recent articles in social science journals that related to youth exploited through prostitution. The majority of these failed to acknowledge the existence of male sex workers at all. When they were discussed they were assigned more agency than female sex workers, and the chief danger ascribed to them was HIV rather than violence, and the question of sexual orientation was always addressed. Dennis (2008) challenges the visibility of these boys and men saying, in relation to the Internet, "Male sex workers... wait in Internet chat rooms for men whose profile contains the key word "generous". They post advertisements as escorts, masseur or models, or openly as sex workers; one Internet directory lists over 5000 in the USA, searchable by physical attributes, services provided, and price" (p. 11). The data from Baartz (2008) describing the gender, ethnicity and age of the victims portrayed in the images examined by investigators would also suggest that they were mostly white, westernised females, aged between 8 and 12 years. Asian children were the next most common ethnic group, and there was a comparative absence of indigenous Australian children. In instances where offenders were in possession of child exploitation material depicting multiple victims, these are recorded as individual occurrences. However, this would still suggest that over 40% of the victims were male children. Figures 2 and 3 give further details.





Outside of the data supplied by NCMEC and Interpol, however, at present we have to rely largely on anecdotal accounts from people working with current law enforcement data bases, and this would suggest that the majority of new images are of white, westernised and Asian children, but there has been no systematic analysis and collation of data. While since 2001 we have seen dramatic changes in access to the new technologies across the world, we have no empirical baseline data to know if there will be a corresponding increase in child pornography production and distribution. The paucity of demographic data, the lack of conceptual understanding of the harms inflicted through photography and the factors that promote both vulnerability and resilience are issues that urgently need addressing through regional as well as international co-operation. A recent agreement with CEOP (Child Exploitation and Online Protection, UK) has initiated research into recent seizures of images, to help with our understanding of the demographics of the children within the images and to provide a baseline against which change might be measured. This is a promising first step in a sadly neglected area.

Identification of the victimised child in the image is a top priority by police forces and by child advocacy groups alike, since such identification will stop ongoing abuse and exploitation and will also decrease the likelihood that the abuser may abuse and exploit other children in his vicinity. Identification will also allow for the exploited child to receive assistance. The fact is, however, that we do not know if identification of the child leads to assistance and rehabilitation. Access to such, sensitive to the cultural context of the child, seems sadly patchy.

This section explores our lack of knowledge about children who are victimised, and draws attention to how few children are identified in the images circulating on the Internet. While there have been considerable changes in this area since the Second World Congress,

States need to demonstrate investment in prioritising children by allocating increased child protection and law enforcement resources to the identification of such children and enable greater co-operation at national and international levels.

3.2 The impact of Internet-related sexual abuse

Harms posed by the new technologies are both complex and diverse. They may involve only one activity or be multi-faceted. A study by Palmer (2004) carried out by Barnardos in 2003 attempted to identify the different ways in which children may be abused via the new technology. All Barnardos' services in the UK (approximately 350 in number) were contacted with a view to establishing the extent that the abuse of children via the Internet and mobile phones was impacting on the work of the organisation

The result of this survey was a report entitled *Just One Click!* (Palmer, 2004). The report outlined the differential ways in which the new technology may be used to abuse children, giving case examples and discussing the implications for practice. Within this study 10 areas of concern were identified and, at the time the report was written (November, 2003) Barnardos was able to confirm that staff in the organisation had worked with 83 cases in the UK. The areas of concern identified are listed below:

- Children viewing adult pornography
- Children sold online for sexual abuse offline
- Children abused through prostitution
- Adults/young people engaging in cybersex with children
- Young people placing images of children online
- · Children of adults who download/distribute abuse images of children
- · Young people who download abuse images of children
- Children groomed online for sexual abuse offline
- Children sold online for sexual abuse online
- Children made the subjects of child abuse images

Children made the subjects of abuse images (28 cases) was the largest category and accounted for 33% of the total sample. However, it is important to be mindful of the fact that abusive activity may take more than one form and that the scenario facing children may frequently be more complex than being victim to only one type of abuse. In addition, those abusing children via the new technologies often made use of dual media (for example chatrooms and mobile phones) simultaneously to control their victims. One difficulty in relation to further elaborating on these additional harms is the paucity of research in this area. The report by ECPAT (2005), *Violence Against Children in Cyberspace*, highlighted

both the diversity of the children involved in online abusive practices and the fact that harm may be inflicted even when the children themselves have limited, or no, access to the new technologies. These will be considered further when we examine the importance of cultural and geographical differences in conceptualising harm. In the following section two of the areas of concern listed in the Barnardos' study – children groomed online for sexual abuse offline and children made the subjects of abusive images – are discussed in more detail. The remainder are addressed in other sections of the paper.

Our understanding of the impacts of child sexual abuse on children's emotional and psychological well-being has grown rapidly over the past 20 years (Sgroi, 1982; Finkelhor, 1986; Bentovim et al., 1988; Jehu, 1988; Briere, 1989). Corresponding knowledge on how children are affected by sexual exploitation is on the other hand very sparse. The effects of sexual abuse are many and far ranging. Children may feel grief, guilt and fear. They may display an inability to trust, cognitive confusion, lack of mastery and control, repressed anger and hostility, blurred boundaries and role confusion, pseudo-maturity and failure to complete developmental tasks, depression and poor social skills (Palmer, 2001). Finkelhor and Berliner (1995) provided a conceptual framework for an understanding of the impact of sexual abuse on children. They described four trauma-causing factors: traumatic sexualisation, betraval, powerlessness and stigmatisation. These authors suggested that, although these factors were present in other experiences which could be described as traumatic, the way they intersected within a given set of circumstances was what made the trauma of sexual abuse unique. Kelly (1992) used this framework and expanded it to include notions of 'shame' and 'enforced silence' that had been derived from previous research. We know that the degree of internalisation of sexually abusive experiences is unique to each child and dependent on factors such as: the nature of the abuse; the circumstances in which it occurred; the modus operandi of the abuser; the nature of the child's previous life experiences; the degree of support within the home environment; and the child's natural 'in-built' resilience. In many parts of the world, child welfare/ protection agencies and criminal justice agencies have jointly drawn up procedures for investigating cases of child sexual abuse with the aim of safeguarding the children concerned and holding the perpetrator responsible. There are assessment and intervention programmes in place to assist children in their recovery and help them make sense of what has happened to them. However there is still an urgent need, as expressed by several authors, to expand the knowledge base when assisting child victims of sexual abuse and sexual exploitation via the new technology. With the introduction of technology, we are faced with both a novel conduit for those intent on harming children and the potential of there being complex impacts on children abused and exploited via this medium, which call for development of new methods of assistance (Palmer, 2005; Nyman, 2006; Söderström, 2006; von Weiller 2008). Such impacts challenge us to review our current practice both with regard to how

we investigate such cases and how we accommodate the recovery needs of the child victims. In particular, the research in Germany by von Weiller has highlighted some of the gaps in our ability to respond therapeutically to these children. These include:

- Lack of experienced professionals
- Lack of specific knowledge and expertise on the psychological impact on the victim
- Limited access to services throughout the world
- A need for sharing of good practice among professionals both regionally and internationally
- An ability to build on existing structures, while acknowledging cultural diversity, to enable both recognition of , and response to, the needs of these children.

Here we acknowledge the paucity of research on the impact of both Internet-related sexual abuse and what should be seen as Internet-related sexual exploitation. It is clear that in the majority of countries practitioners do not explore such abuse nor do they feel that they have the capacity or expertise to address the sexual exploitation children suffer.

3.2.1 Children made the subjects of abuse images

In the context of abuse images, there are four substantial studies (all but one of which predate the Internet), which have sought to examine the impact of 'child pornography'.

- Burgess and Hartman (1987) examined children's involvement in pornography and sex rings;
- Silbert (1989) examined child pornography production in the context of child prostitution;
- Svedin and Back's (1996) sample was drawn from a group of children exposed to both the production of pornography and intra and extra-familial abuse (an enlarged sample was published in 2003 and will be considered separately)
- Scott's (2001) study was in the context of ritual abuse.

All four of these studies are broadly similar in the accounts that they give of the symptoms that the children produced during the abuse. Again it is difficult to disentangle the consequences of the abuse per se (physical symptoms, such as urinary infections and genital soreness, as well as behavioural symptoms such as sexualised behaviours) from the consequences of being photographed, ie, the symptoms of the sexual exploitation. However Svedin and Back (1996) gave details amongst their sample of restlessness, depression, hunger, exhaustion, concentration difficulties and aggressive behaviours. Silbert's (1989) study also suggested that children who were exposed to longer periods of abuse suffered more intense emotional reactions, such as feelings of isolation, fear, anxiety and emotional withdrawal. The studies quoted do not specifically deal with the specific impacts that images have on sexually abused children. Nor do we have more than anecdotal accounts of how children perceive the fact that images of their abuse are distributed. The studies focus on sexual abuse and photography. In fact, only a few attempts are made to discern the impact on the child of the sexual exploitation aspect, and to describe and to study how the new technology becomes a part of the abuse experience. Even when this impact is looked at however, it is mostly done so within the context of the effects of the sexual abuse as such and seen as an aggravating circumstance that deepens some of the symptoms of the sexually abusive experience. Svedin and Back (2003) in their more recent work, attempt to describe the process through which the child's abuse experience is aggravated by the new technology.

There are some key differential impacts on children made the subjects of abusive images that have implications for how we investigate such cases and how we address the therapeutic needs of the child victims. The disclosure process has different facets to it which Söderström (2006) described in his work with children that have had images of their abuse distributed via the new technologies. He stated that the child's cognitive perception of the abuse is made more difficult since the child constantly needs to defend him/herself from facing the fact that images were taken. He suggested that the picture taking in itself is an issue almost separate from the abuse experience. The fact that there are images of the abuse takes away the important aspect of the child's gradual disclosure in the healing process. To tell the abuse story little by little, timed with the child's possible cognitive understanding of the circumstances around the abuse, becomes impossible if there are pictures that depict the entire abuse and, so to speak, tell the whole story in one glance. The fact that the child protection specialist may not have seen the image at all will not be important in this, since the child will be aware of the existence of the pictures.

Söderström (2006) also describes the different ways in which images of the abuse may become part of the disclosure process at different times and thus have diverse impacts on the child:

Table 5: Disclosure of abuse through image production (Söderström, 2006)

When the child discloses abuse and pictures are taken of the abuse

In these cases the disclosure was made by a conscious act of telling. The child's active decision to disclose makes it easier to talk about the abuse in treatment and to address feelings that need to be processed as well as confused thoughts and misunderstandings that need to be clarified.

When a child discloses abuse, but reveals the existence of pictures only later in treatment

The child experiences a strong sense of relief after having disclosed some aspects of the abuse. She or he realises that her/his story is believed and the experience of the ongoing treatment as being helpful, may help the child to risk disclosing and address the picture-taking as well.

When a child is brought to treatment after abuse has been exposed by others

When the child is not the first to tell, there may be very strong factors that prevent the child from talking about the abuse and its consequences; factors that also prevents the child from benefiting from treatment. There may be feelings of shame and guilt or confused thoughts about responsibility and right and wrong. There may be strong feelings of loyalty, fear or other effects of the grooming process that are enhanced by the non-intentional exposure of the abuse.

When a child is brought to treatment after pictures of abuse have been exposed

Such factors may be even stronger when there is a distance in time and place between the abuse and the exposure. The scope of the sexual acts may be immediately obvious in the pictures, but not the grooming and trickery of the child. If the perpetrator and the child are caught in the act, a normal response from a non-offending adult often makes it clear to the child that the rescuer blames the perpetrator but the non-offending adult's immediate reactions to child abuse images tend to be more ambiguous and often perceived as blaming the child..

What is apparent in relation to these studies is a pattern of enforced silence. The children in Svedin and Back's (1996) study were reluctant to disclose the abuse, and these authors suggested that the recording of the abuse exacerbated, and in some cases prevented, disclosure. Even when confronted with the visual evidence of their abuse, children continued to limit disclosure, telling people only what they thought they already knew. Similarly, in 2003 the Swedish authorities were faced with an investigation of a number of children whose images had been traced elsewhere in the world and were eventually identified as coming from Sweden. When interviewing the children the same resistance to acknowledging that they were the subjects of the images was found. A similar phenomenon was observed in England during the investigations of Operation Ore. Some children who were interviewed categorically denied they had been abused and continued to do so even when the interviewing police officers explained that they knew they had been abused because they had seen the recordings of their abuse. Silbert (1989) had earlier coined the phrase 'silent conspiracy' to describe this silence. It is unclear as to whether the sense of shame and humiliation, often reported in these studies, relates to the photography itself or the fact of disclosing it to others. We may well hypothesise that the level of silence is connected to the sexual exploitation and therefore needs to be dealt with within the context of exploitative experiences and how these are cognitively and emotionally worked through by the child. It may also be that children fear being thought to be complicit in the abuse or photography through the evidence of, for example, their smiling faces. Scott (2001) reinforced this idea in the description of how abusers had shown children films they had made of them as a way of demonstrating their level of engagement and enjoyment. Similarly, Palmer (2005) reported that when children are the subject of abusive images, "there seems to be an element of silencing which is over and above that of the perpetrator/ victim dynamic when photography is not involved - another dimension is introduced to the sexually abusive equation". She suggested that the reasons for this may be a matrix which includes that the children feel they are being seen to let it happen: some know they were made to smile and therefore appear to be 'enjoying it', a fact that clearly indicates the specifics of sexual exploitation. Child victims of abusive imagery, as well as children that are abused in other ways, will have been encouraged to introduce other children to the perpetrator and thus feel responsible for letting it happen to them. Some children may have been encouraged to be pro-active in their own sexual abuse or that of other children, and some may have been shown their own abuse images and threatened that if they do not co-operate the perpetrator will show the images to significant people in their lives. She conjectured that "probably the greatest inhibitors to disclosing what has occurred is the humiliation that children feel regarding who may have seen their images and their fear of being recognised. They feel they have literally been 'caught in the act".

Silbert (1989) made reference to the long-term effects of being photographed as being more debilitating than those in the short or medium term, and that these are compounded when children are involved in more than one form of sexual exploitation. This may also be exacerbated by the knowledge that others may see or distribute the films. One account given to the authors of the present paper by a victim of abuse images talked of feeling fearful every time the mail arrived, overwhelmed with anxiety that the photographs would be in the post and that her mother would see them. Silbert (1989) described such feelings as 'psychological paralysis'. This is also accompanied by the knowledge that such photographs may be used to exploit other children (Svedin and Back, 1996).

Söderström (2006) argued, from meeting with children photographed and exploited, that the silence may well be a response to the child's feelings of having been violated in more ways than through the abuse and the production of abusive images. The adults meeting with the child will most often consider that the images portraying the most severe abuse to be those that the child will be most affected by. Söderström argued that in a series of images, the child may often consider images that seem very normal, portraying the child with clothes on but taken by the abuser, as equally or even more disturbing, since these images will form part of the entire abusive process and possibly remind the child of how the perpetrator has violated and built trust and rapport with the child. The professional and the child will then not be able to discuss this in a way that may lend itself to true communication around images that disturb the child. The lack of the professional's understanding will thus increase the child's inability to disclose.

After a famous case in Sweden (the Huddinge ring) was uncovered, Svedin and Back (2003), from the youth-psychiatric clinic at the University Hospital in Linköping, reached an agreement whereby the police would inform the clinic when they were able to identify any child via the seizure of images. This gave unique possibilities for investigating how children are recruited and what children remember of their participation in relation to the actual course of events depicted in pictures/videos as well as shed light upon the psychiatric health of children. The 2003 report included 30 children (Svedin and Back, 2003). One aspiration of the project was to attempt to understand what it is that makes children not disclose the sexual abuse they had gone through. The study highlighted the shame of the children, and that this shame also contributed to the continuation of the relationship with the perpetrator. They actively sought contact with an adult person, and had an emotionally significant relationship that they had invested in. It was not so simple to break this and, instead, to see themselves as abused and betrayed by that adult. Of the interviewed children, "only two of them began to talk spontaneously, and there were five others who eventually gave a fairly complete account without being shown the pictures or the investigator saying that he/she knew what had happened (from the seized material). Five children denied that anything had occurred. All the children's accounts were fragmentary, and the children showed great difficulty in talking about their contact with the suspected perpetrator. They often said that they did not remember what had happened; we do not know whether this meant that they did not have any memory of the incidents or if it was too difficult to put in words. Nevertheless, it became apparent that what the children least "wanted to remember", the most unpleasant or abusive activities, and those that were probably the most shameful and guilt ridden had to do with the photography. It was shown that the more interviews the children took part in, the more they talked. It is as if that they first needed to "sort out the memories which emerged" and only later could put into words what had happened" (Svedin and Back, 2003).

Since the Second World Congress we have continued to see an expansion in the availability of technology and its continued abuse through the production of abuse images and text. While it is difficult to disentangle the harms posed to children by a variety of sexually abusive and exploitative practices, it is important to note that abusive images, once uploaded onto the Internet, cannot be removed. This highlights the consequent needs for specific therapeutic help for these children which addresses the challenges posed by disclosure, the loss of control by the child, and the need for heightened sensitivity with regard to their awareness of image dissemination.

3.2.2 Working with children abused through abusive images on the Internet

This research, and our practice experience to date, clearly has implications for the recovery of children sexually exploited through their involvement in the production of Internet abuse images and for those professionals wishing to assist them. As noted above, to date, there is a general lack of expertise and experience amongst professionals wishing to meet the needs of children abused and exploited in this way. A recent German study suggested that many professionals feel both helpless about their ability to understand the needs of such children and at times are part of a 'conspiracy of silence' in their unwillingness to ask questions (von Weiler, 2008). It is going to be necessary for police officers, social welfare workers and child professionals to re-evaluate their working practices in the light of what we have learnt. Palmer (2005) suggested that there are three key areas which need to be addressed: managing the discovery/disclosure process and the investigative interview of the child, assessment of the recovery needs for the child, and the nature and content of the ensuing intervention programmes. We need to rethink how we approach child victims of abusive images once they have been identified and their whereabouts discovered. Connected to Söderström's work (Söderström, 2006), it is necessary to reiterate that the impact of disclosure on child victims should never be underestimated and that when they are informed that their images have been discovered the children feel impotent because

they will have had no control over the disclosure process – they have not been able to choose when to disclose, what to disclose, how to disclose and to whom they want to disclose. In some cases, the child victims are so acclimatised to their situation that they see what is happening to them as 'normal' and reject any assistance. One implication of this is that more thought needs to be given to the timing and necessity of investigative interviews. In these situations the police have first hand evidence of what has occurred 'objectively' to the child and need to tailor their interviews to specific information they may need to know rather than expecting the child to relate what occurred: the discussion above on the silencing of children who are subjects of abusive images would contend that they would get little information from the child other than that suggested/prompted by the interviewer. Thus, to improve our forensic and investigative practice we need to address the following questions

- Is it always necessary, for evidential purposes, to interview children made the subjects of abusive images?
- In what circumstances might it not be necessary?
- Might we need to interview the child for other purposes?
- When would we do this and why?
- How do we need to change the way we assist children whose abuse has been the subject of photography, disclose what has happened to them?

The traumatic effects of sexual abuse, per se, are mentioned above and may also apply to children made the subjects of abusive images. However, four new significant impacts enter the equation when sexual exploitation in the form of photography and possible distribution of images is part of the victimisation and these should be taken into account when assessing the children's assistance needs: they are the impotence felt by the child because of the disclosure process; the shame and humiliation of 'being seen to let it happen'; the personal responsibility felt by the child, and the serious issue of the non-resolution of the abuse. Children are confronted by the knowledge that the images can never be destroyed and that they may continue to be viewed and used by many thousands of people. The age of the child at the time of the production of the abuse images may have some relevance regarding recovery. Where the child photographed is pubescent, when an adult, she or he would probably still be identifiable from these images. It may be that when images are taken of very young children, the radical physical changes that take place as a result of growth and physical development offer at least some protection from future identification when such children reach adulthood.

Cognitive behavioural therapy is frequently the base of the therapeutic approach used by practitioners when working with children who have been sexually abused. Such an approach may be used together with other therapies such as play, art and behavioural therapies – according to the age, stage of development and the needs of the child victim. Children are helped to make sense of what has happened to them through understanding their thoughts, feelings and actions. Therapists address the child's perception of safety, enable them to express their feelings and become empowered, help them develop assertiveness and communication skills and to disentangle their mixed feelings of guilt, trust and ambivalence. Such issues are also pertinent to children made the subjects of abusive images. However, there is a need to gain a greater understanding of how best to address the four significant impacts on such victims as listed previously. Söderström draws out a number of additional practices called for when assisting children recovering from sexual exploitation through image production: he points to the importance for the child to decipher the exploiter's manoeuvring; the need to empower the child and assist in retrieving agency in being the active part in the disclosure process; and taking care not to overemphasise what is in the images but allowing the child to set the focus, among other things (Söderström 2008). In particular, because of the nature of the silencing of children made the subjects of abusive images, we need thus to be mindful of the fact that disclosure will be a spasmodic process and one that should be at the child's pace and not at a pace that suits, for example, the criminal justice system. One of the most taxing issues facing therapists is how to assist child victims with the non-resolution of their abuse bearing in mind the reality that the images will be available in perpetuity. The empowerment process during therapy can assist victims in 'living with' this reality. One 14-year-old adolescent, when her therapy sessions were coming to a close, reported to one of the authors, "I'm not worried anymore about what people might think of me, nor about the images that are out there, because the people who look for images of me have got the problem, not me". We must never underestimate the resilience of young people to overcome adversity. However, for some, the fact that the images are 'out there' remains a recurring nightmare and one that we must give further thought to. One approach to this problem may be the use of interventions which can be used for victims who have regular 'flashbacks' to their abuse or some traumatic event in their lives. The transfer of this approach to victims of abuse images, though in its infancy, is proving to have some success.

In this section we examine the ethical issues involved in telling children that their images have been disseminated on the Internet or by mobile phone and question whether the need to secure a conviction of the offender should always be prioritised over the needs of the child who has been abused and exploited. This has considerable implications for the criminal justice system.

3.3 Children persuaded and coerced into offline encounters leading to sexual abuse

In the context of sexual solicitation, or grooming, we understand more about the process of victimisation, in part because the research has largely involved the children themselves. Much of this research has come from the Crimes against Children Research Center (CCRC) at the University of New Hampshire and has been generated by two studies (YISS-1 and YISS-2), which involved telephone interviews with national samples of youth Internet users aged 10 to 17 conducted in 2000 and 2005 (Finkelhor, Mitchell, and Wolak, 2000; Wolak, Mitchell, and Finkelhor, 2006). Wolak et al. (2008) have suggested that, the research into Internet-initiated sex crimes makes it clear that the stereotype of the Internet child molester who uses trickery and violence to assault children is largely inaccurate (Wolak, Finkelhor, and Mitchell, 2005). This US research would suggest that most Internet-initiated sex crimes involve adult men who use the Internet to meet and seduce underage adolescents into sexual encounters. "The offenders use Internet communications such as instant messages, e-mail, and chatrooms to meet and develop intimate relationships with victims. In the majority of cases, victims are aware that they are conversing online with adults" (p. 112). Greenfield (2004), in the context of chatroom text analysis, felt that the content of the chat showed evidence of disinhibition in three areas: sexuality, aggression and race relations, which could impact on early sexual priming and provide a model for racism, negative attitudes towards women and homophobia. Of relevance is her conclusion that while some teenagers are unwitting, others are actively creating this culture and, 'constructing the Internet' (p. 757).

To date, the focus has been on the problems of children being made the targets of commerce, ignoring the kinds of social and cultural worlds that young people are creating online. However, children and adolescents are not simply the targets of adult Internet creations, but are active participants in creating their own cyber cultures (Quayle and Taylor, 2006). Wolak *et al.* (2008) have argued that it is these aspects of the Internet that create risks for some young people who engage in specific ways with the new technologies. While the majority of youth (and in particular older, male children) appear to take risks, the vast majority of children do not appear to be at risk (OPTEM, 2007). However, young people who send personal information (eg, name, telephone number, pictures) to strangers or talk online to such people about sex are more likely to receive aggressive sexual solicitations, defined by Mitchell, Finkelhor, and Wolak (2007) as solicitations involving actual or attempted offline contact. In the five years between YISS-1 and 2 there was an overall decline in sexual solicitations, but not amongst minority youth and those living in less affluent households. The authors felt that this increase in harassment was largely explained by the increase in the amount of Internet use of the previous five years (Mitchell, Wolak

and Finkelhor, 2007). However, in 2005 young people were 1.7 times more likely to report aggressive solicitations, even when adjusting for changes in demographic and Internet use and characteristics. The identified risk factors for such aggressive solicitations included being female, using chat-rooms, using the mobile Internet, talking with people met online, sending personal information to people met online, and experiencing offline physical or sexual abuse.

In the second survey, 4% (65 cases) reported an online request to send a sexual picture of themselves during the previous year, but only one young person actually complied. Being female, of black ethnicity, having a close online relationship, engaging in sexual behaviour online and experiencing sexual or physical abuse offline were risk factors for receiving a request for a sexual picture. Of interest is the fact that requests were more likely to occur when young people were with friends, communicating with an adult, someone they had met online, who had sent a sexual picture to the young person, and who attempted or actually made, some form of offline contact (Mitchell, Finkelhor and Wolak, 2007b). In the first survey sexual solicitation appeared to be associated with depressive symptomatology (Ybarra, Leaf and Diener-West, 2004). Young people who reported major depressive-like symptoms were 3.5 times more likely to report an unwanted online sexual solicitation compared to those with mild or no symptomatology, and those with symptoms were twice as likely to report feeling emotionally distressed by the incident. In general, distress was more common among younger youth, those who received aggressive solicitations and those who were solicited on a computer away from their home (Mitchell, Finkelhor and Wolak, 2001).

A recent Swedish study looked at the number of 16 year-olds who had received requests for sexual online meetings and offline encounters. Among the 7449 respondents 46% of the girls claimed that they had received such requests from an adult. Several of the respondents reported having received such solicitations both via the Internet and through other channels. The corresponding figure for boys was 16%. The requests made were for adolescents to strip in front of the webcam or to watch an adult while he was masturbating into his web camera. The adolescents in the study clearly described these incidents as common and that they happened all the time when using chat sites. None of the described attempted solicitations were in any way sophisticated; the adult started requesting sexual services at the onset of the chat conversation. In the same study, police reports of crimes against children committed via new technologies were examined and in 50% of these the reported crimes occurred online only where requests for images or for webcam contacts were the most frequent. The other reported crimes were offences committed offline but where contact was established on the Internet. In half of the offline crimes, the victim met with the perpetrator knowing that the meeting would lead to sex. The other crimes were all crimes in which the victim thought that the meeting would be of a completely different character (Brottsförebyggande Rådet 2007).

Recent accounts from victims of grooming in Sweden both confirmed the findings of the New Hampshire group and negated some of the conclusions. In the major Swedish case involving more than 100 girls it was evident that all of the girls knew they were meeting the man in order for him to have sex with them. At the same time none of the girls would admit to being fully aware of what this would imply. Something in the chat conversations with the girls made the perpetrator aware of their vulnerabilities and gave him an opportunity to exploit these even before he exploited the girls sexually. The vulnerabilities ranged from loneliness to suicidal thoughts. The fact that the girls went on their own account to the meetings with the perpetrator does not make them into consenting subjects (Wagner 2008). It is obvious that the growth of solicitations for online contacts is significant. Adolescents and children will report that they happen and that all children know about it. From looking into cases where offences both online and offline have occurred, it is obvious that requests for the adolescent to send images or to engage in webcam sex often marks the start of the sexual abuse.

In recent years there have been increasing concerns about the kinds of behaviour relating to social networking sites that may be associated with children placing themselves at risk. We will discuss this further when we examine the opportunities afforded by the Internet for young people to engage in problematic behaviour, but it is of note that in the YISS-2 16% of children had reported using blogs in the past year. Blogs contain self-generated material and share some of the qualities of social networking sites. Mitchell, Wolak and Finkelhor (2008) found that teenagers and girls were the most common bloggers, and bloggers were more likely than other young people to post personal information online. However, bloggers were not more likely to interact with people met online and not known to them in person. Bloggers who did not interact were at no increased risk of sexual solicitation and posting personal information in itself did not add to risk. However, bloggers were at an increased risk of online harassment, regardless of whether or not they interacted with others online. The UK Children Go Online Survey also suggested that young people who were less satisfied with their lives and who have become more frequent and skilled Internet users are more likely to value the Internet as a communicative environment, which may lead to more risky behaviours (Livingstone and Helsper, 2007).

Through practice experience, it is possible to highlight a number of factors that need to change if we are going to be able to assist those children who have been groomed online for sexual abuse offline. We have learnt that grooming online, as opposed to offline, happens more quickly and may be anonymous: children build up a quicker trust with their online

'friend' and tend to be less inhibited in what they communicate, and such offenders are not restricted by time or accessibility as they would be in the 'real' world. In general they: find out as much as they can about their potential victim; establish the risk and likelihood of the child telling; find out about the child's social networks; may give false information about themselves, including false images, and, if safe enough, will form a 'relationship' with or control the child such that they are able to meet the child offline.

Therapeutic approaches assisting children and adolescents made victims of offline and online exploitation are currently being investigated at BUP Elefanten, which is a Child and Adolescent Psychiatric Unit that treats sexually and physically abused children in Sweden. The project has been running for the last three years and has involved over 100 interviews with young people, therapists, police, prosecutors and social workers. The young people have been subjected to a variety of abuse practices including sexual harassment, engagement in webcam sex, having their images uploaded onto the Internet, online engagement leading to offline abuse, and children selling sex online (Jonsson, 2008). The analysis of this interview data suggested that these young people can be divided into three descriptive groups: the fooled, who were lured into something unexpected; the risk-takers, who take risks to meet emotional needs and secure attention, and the self-destructive, who, for example, sell sex or knowingly engage in abusive relationships. The latter group are reluctant to see themselves as 'victims', instead positioning themselves as being in control. The results of these clinical findings suggest that many of these children reject offers of help, and what is important is that practitioners do not collude with this but attempt to maintain contact with these young people until they feel ready to engage.

One of the predominant impacts of the grooming process is, as with children made the subjects of abusive images, to silence the children. This silence is brought about both by the fact that the young people seriously believed that the person they were going to meet was their friend and that they would not want to own up to the nature of the conversations that they held online. The former point has implications regarding how young people define and determine friendship, the latter relates to the fact that, as alluded to above, young people become far less inhibited when communicating online.

There is an additional aspect to the grooming-online scenario which has implications for how we investigate these matters. This concerns the situations which arise from time to time where police carry out a forensic examination of a suspect's computer and discover links with victims who, until that point, were unknown to them. The practice in the UK, to date, has been to trace the victim and to visit his or her home to interview the young person in the presence of parents or carers. Such 'cold calling' results in young people saying very little unless prompted by the police. Young people who have been in this situation have reported to one of the authors of this thematic paper that they told the very minimum of what had happened to the police and this was due to two distinct factors: they were too embarrassed to tell the police, in front of their parents/carers, what they had communicated to their online friend and, the breakdown of this friendship, prior to the police investigation, had resulted in their mourning the loss of the relationship.

There is a need to acknowledge that some children do form relationships with those they meet online, and for a small number of children these will lead to sexual abuse and possibly also sexual exploitation. The fact that many of these children will know that the person they are communicating with, or who wishes to meet them, has sexual intentions does not make this less exploitative, but does suggest a need for greater understanding, sensitivity and openness on the part of practitioners. Such children may reject the label of 'victim' and be difficult to engage with. We need resources to offer help over the long term, to stay in contact with children and to engage with them in less prescriptive ways.

4. Young people's behaviour online

4.1 Accessing pornography online

It would be naïve to assume that pornographic or sexualised materials did not exist prior to the Internet. However, the Internet has brought with it a proliferation of easily accessible sexualised material. On the Internet it is possible to find material to suit all interests and proclivities (Taylor and Quayle, 2003; Anderson 2006), either through purposeful or accidental exposure. The accessibility, interactivity and anonymity of the Internet, however, are the very factors that increase the likelihood of exposure to violent or sexual material. In the European Commission's Safety Awareness Facts Tools (SAFT) study (SAFT, 2003) study, almost one in five children had been invited to a face-to-face meeting with a stranger, and 34% had viewed a violent website, either accidentally or on purpose. Other authors have highlighted the accidental exposure of young people to unwanted sexual material on the Internet (Finkelhor et al., 2000; Mitchell et al., 2003), but have also acknowledged the fact that existing research examining the effects of exposure to unwanted sexual material had been," almost entirely based on college students and other adults. None of it concerns children, certainly not younger than aged 14. Moreover, the existing social research is all about voluntary and anticipated exposure. No research on children or adults exists about the impact of exposure that is unwanted or unexpected." (p. 334). The relationship between voluntarily or involuntarily accessing of pornography online and the risk of falling victim to exploitation online is an under-researched area. The hypothesis regarding the different kind of adolescents that are caught in abusive and exploitative relationships online may indicate that risk-takers and self-destructive young people may also be accessing pornography or visiting chat sites catering to adults searching for sex partners, but no such empirical knowledge exists to date.

Some authors would argue that involuntary exposure to pornography is indeed an exploitative act if it is specifically aimed at young people by purposefully targeting sites that young people frequently use with links that may lead to pornographic material, or using URLs that are close to URLs of sites frequented by young people, attracting the chance visitor who misspells the name of the website. In the YISS-1, Mitchell *et al.* (2003) indicated that one in four of children who regularly used the Internet encountered unwanted sexual pictures in the year prior to data collection. Seventy-three per cent of such exposures occurred while the young people were searching or surfing the Internet, and the majority happened while at home. These authors also discussed the ways in which programming techniques maintained such exposure: "Explicit sex sites are also sometimes

programmed to make them difficult to exit, referred to as "mousetrapping". In fact, in some sites the exit buttons take a viewer into other sexually explicit sites. Indeed, in 26% of the surfing incidents, youth reported they were brought to another sex site when they tried to exit the site they were in. This happened in one third of the distressing incidents." (p. 342). The majority of children who were exposed to material regarded such exposure as not particularly distressing. However, the authors emphasised that such exposure, particularly unwanted exposure, may affect attitudes about sex, the Internet, and young people's sense of safety and community. By YISS-2 there had been an increase in unwanted exposure to pornography and this was particularly apparent among 10-12 years olds, 16-17 year old boys and white, non-Hispanic youth (Mitchell, Wolak and Finkelhor, 2007). In a sample of Taiwanese adolescents, 38% of the sample had some exposure to online pornography, and the study indicated that this was associated with greater acceptance of sexual permissiveness and greater likelihood of engaging in sexually permissive behaviours (Lo and Wei, 2005). In a study of Australian youth (16-17 year olds), three quarters had been accidentally exposed to pornographic websites, while 38% of boys and 2% of girls had deliberately accessed them (Flood, 2007). This study concluded that two features of children's exposure to pornography mirror that seen in adults. First, males are more likely to seek out and are more frequent consumers of X-rated movies and pornographic websites. Second, Internet users of any age find it difficult to avoid unwanted encounters with sexually explicit materials. An example of this relates to some computer games, which may have a high sexual component. Such games may be rated 'for adults' but inevitably enjoy a high level of participation by young people. It is also important to note that such exposure is not unique to the new technologies, but take place through more traditional media such as television, where broadcasting times of erotic and sexual material (for example, in the Philippines) may occur during times when children are likely to be viewers.

One factor that may be of significance here relates to the controllability of exposure, and it may be that there are differences in the impact of accidental exposure to that of purposeful exposure. Fug (2008) has noted that there are a number of minors who are surprised by the content of the material that they inadvertently happen upon when using the Internet. Unexpected or partial access to material may be an important issue, and Hargrave and Livingstone (2006) have suggested that, "The newer technologies (including video but also the Internet and mobile communications) allow content to be seen out of context. One may see sets of trailers rather than the storyline in which to put the content. Editorial context has always been important in content regulation guidelines (eg, the British Board of Film Classification (BBFC), or the independent regulator and competition authority for the UK communications industries – Ofcom), but it may prove difficult to build into parallel guidelines for new media. However, it is clear from research on children's accidental exposure to pornography on the Internet that unexpected and decontextualised content can be particularly upsetting. This poses a challenge for regulators" (p. 205).

However, young persons' use of pornography has not been widely studied and most build on self-reports, in which differences may well be those that the prevailing societal norm would dictate to the adolescent. It may well be argued that many children and adolescents will claim they only accidentally stumble upon pornography since they believe it to be inappropriate to state that they actively looked for it on the Internet. Mossige, Ainsaar and Svedin (2007) convincingly showed that young people actively access pornography to a high extent and that the Internet is the main conduit. In the Swedish sample of 18-year olds taking part in the study 65% of the boys watch pornography every month as opposed to 5% of girls who only rarely access pornography as often. It should be noted that only 7% of the boys and 31% of the girls in the study claimed that they never watch pornography. The discussion of how access to pornography influences adolescents needs also take into account the fact that for many adolescents, pornographic films and images are something they or their friends are familiar with and that they watch on a regular basis.

A largely unknown factor relates to the nature of harm through exposure, and how it might manifest itself beyond the immediacy of any distress. This has bearing on how 'main stream' pornography can be viewed as exploitative in how it is presented to the viewer. Obviously pornography on the Internet is looking to make profit by directing viewers to pay-for-view sites but is pornography exploiting children and adolescents in more ways than this? Kanuga and Rosenfeld (2004) have expressed the view that, "While there is little documentation of the influence of unrestrained access to pornography on adolescents, there is, at minimum, concern that this may have a negative influence on the psychosocial developmental process which takes place during puberty... While it might not be possible to precisely define what constitutes normal sexual behaviour, there should be concern for young people with a relatively narrow perspective who are exposed to frequent images of behaviours such as sodomy, group sex, sadomasochistic practices, and bestiality" (p. 120). In a similar vein, in a review of the literature related to inadvertent exposure to pornography, Greenfield (2004) concluded that the evidence indicates that pornography and related sexual media can influence sexual violence, sexual attitudes, moral values and sexual activity for children and youth. However, it is important to note that studies on media violence show conflicting results and have not clearly established such a link, or, rather, a link has been established where already vulnerable groups seem to be negatively affected by accessing violent and pornographic material. Looking at the different research attempts made to establish a link between accessing pornography and maladaptive behaviours, Hargrave and Livingstone (2006) concluded that, the evidence that viewing pornography harms children remains scarce, given ethical restrictions on the research, though many experts believe it to be harmful. Other vulnerable groups have been researched, however, with some evidence that the harmful effects of violent content especially are greater for those who are already aggressive, for children with behaviour disorders, for young offenders with a history of domestic violence and – for pornographic content – among sexual offenders.

Geradin and Thibaut (2004) suggested that adolescent exposure to sexual pathology by a parent, sexual interactions of parents or surrogates, and exposure to pornography may create a maladaptive concept of appropriate sexual behaviours leading to offensive acts. This is a topic that we will examine further in relation to adolescent problematic online behaviour. However, what we do not know in this area far exceeds what we do know, and while such research alerts us to the possible dangers of unrestrained access to violent or coercive sexual materials, it does not help us quantify who is at risk or what factors might increase either vulnerability or resilience. Probably what is of more concern is that the majority of studies refer to online pornography as if it was a uniform concept. There is little attempt to differentiate between mainstream pornography between consenting individuals, content that is deviant (portraying the use of animals, or for example faeces), violent content and abusive images of children. An exception to this is The Baltic Sea Regional Study of Adolescent's Sexuality (Mossige, Ainsaar and Svedin, 2007), where questions were asked about images involving adult men and women, group sex, adults of the same sex and adults and children. In this study approximately 5% of the boys admit to having seen images where adults have sex with children. What may be central to the argument about harm through exposure to pornography, and may help account for the different reported impacts across countries, relates to family and parental context. Livingstone and Hargrave (2006) have commented that, "The evidence suggests that the children's response to certain media contents can be lessened or heightened by the ways in which families interact and discuss what is seen" (p. 42).

Participants in Paul and Linz's (2008) study who were exposed to sexually explicit depictions of females who appeared to be minors ('barely legal' pornography) were faster to recognise sexual words after being primed with neutral depictions of girls compared to participants who were pre-exposed to adult pornography. The results of this study suggested that the relationship between 'strengthened sex-youth cognitions' and the likelihood of acting upon them is complex. They concluded that the endorsement of deviant sexual behaviour involving minors may include the formation of a sex-youth cognitive schema (a core belief that endorses sexually explicit behaviour by young people), but that the mere formation of such a schema does not by any means guarantee deviant behaviour. This argument may sound academic, but these studies may be an important contribution to our very impoverished understanding of the impact of exposure to materials on the beliefs and attitudes of young people.

Many youth are exposed to online sexual materials, and we have clearly seen that not all of that exposure is accidental or damaging. One concern is that exposure to deviant or violent pornographies may impact on the beliefs and attitudes of some young people, and to a lesser extent on the behaviour of a few. This is increasingly being seen as a potential public health issue, (Perrin, Madanat, Barnes, Carolan, Clark, Ivins, Tuttle, Vogeler and Williams, 2008, p. 13) and it would appear that the consequence of exposure in the largely unregulated medium that is the Internet certainly warrants further research.

We understand very little about the consequences for children on decontextualised exposure to what tends, in the literature, to be called pornography. There has been little attempt to differentiate between different types of pornographies, although we know that the Internet has dramatically increased the availability of diverse sexualised material. We do know that some children are more vulnerable, but we have also to be aware of the fact that for many children accessing sexualised text and images is an everyday occurrence.

4.2 Internet affordance

A further harm posed by the new technologies relates to the media themselves and the opportunities afforded to young people to engage in ways that might be deemed worthy of concern. These might be called self-victimising activities through both the Internet and mobile phone technology, although this term may be seen to be problematic, as it relates largely to the increasing ability to generate online content. The evidence would suggest that mobile phone ownership may be higher among children aged 11-16 than among adults, with 76% of children having their own phone (Child-Wise Monitor, 2002). Madell and Muncer (2004) surveyed 1340 secondary school children from the Teesside area of the UK. Of these 86% owned a mobile phone (89.7% females and 82.3% males). In this study, mobile phone use was restricted to voice calls and text, but there is evidence that mobile phones can increasingly also act as other forms of communication. Livingstone and Bober (2005), however, have argued this is now diversifying, and in their study 38% of the young people had a mobile phone, 17% a digital television and 8% a games console, all with access to the Internet. For many young people, the mobile phone is both a vital means of communication and a way of relating to, and participating in, an extended social world. By 2007 in a qualitative study of 29 European countries, the vast majority of children had mobile phones (OPTEM, 2007).

However, there are emerging concerns that such technological participation may involve practices that target other individuals or involve the young person themselves. As yet, no published accounts of such activities have emerged outside of anecdotal or clinical case material, but it is an area that is worthy of consideration. In March 2005, two girls, in separate incidents, took indecent photographs of themselves in their homes without realising how widely they could be circulated on the Internet, (TES Cymru, 2005). The first case involved a 14-year-old girl who took naked pictures of herself using a digital camera, which she downloaded on to her computer and sent via an instant messaging service. The second case involved a 13-year-old girl who sent photographs of herself in underwear, with handcuffs and a whip, via a webcam to an Internet site. This set of photographs was widely accessed by other pupils and led to a fight in the school grounds. The child's parents were very distressed by the event as they thought she was using the computer to do her homework. Both of the girls described their actions as either a dare or fun. In a similar incident, a UK newspaper, the Daily Mail (2005), reported that police and social services were called in after six Suffolk schoolgirls took topless photographs of each other and posted them on the Internet. The 15-year-olds posted the pictures on a website they had set up and one of the girls was arrested on suspicion of taking indecent photographs of a child. A further report (BBC, 2005), involved both mobile phones and the Internet. It related to an adolescent boy in India who recorded a sexual act between himself and a 16-year-old schoolgirl on his mobile phone. The pictures were then circulated across India and abroad. The clip, which lasted 2 minutes 37 seconds, was copied onto video CDs and sold. Subsequently the head of an auction website was arrested after the sale of CDs that appeared on the Internet showing the sexual activity between the two students. The person who had attempted to sell the clip on the auction site was himself a student (Quayle, 2007).

Self-generated images or films where the offender convinces the child to send him images of her/himself naked or in some cases masturbating are also seen as part of the grooming process. The images are often used to persuade the child of the harmlessness in sexual contacts between a child and an adult, lowering the child's inhibition to engage in offline sex or to be paid by the adult to meet. The targeted child is vulnerable for a number of reasons; loneliness, being bullied or in constant battle with parents, something that the perpetrator often recognises in his chat contact with the young person and exploits. The adolescent involved sees him or herself as an accomplice to the abuse after having sent the perpetrator images and after having been paid for sexual services (Wagner 2008).

Another aspect of self-generated images is adolescents' involvement in voluntary and mutual webcam sex. The fact that webcam sex is becoming more and more mainstream for young people will also lower their inhibition regarding posting images or films of themselves on websites or mailing these to persons they have only met online. Again, not enough is known of how common webcam sex has become, but recent interviews with school counsellors and panels with adolescents seem to indicate a rapid increase (Jonsson, 2008). We do not know what effect, if any, this may have for adolescents, but we do know that it puts the adolescent at risk of having images and films that were intended for an exclusive relationship distributed in wider circles and thus exploited. Websites where former boyfriends or girlfriends post images as a form of revenge are popular in several countries across the world. These sites may be seen as affecting mainly adults but do also influence the lives of adolescents.

The question of harm was also examined by the University of New Hampshire group through examining the case-loads of 1,504 practitioners to see what kinds of problematic experiences were reported that related to the new technologies. They found 11 types of problematic experiences reported by youth and adult clients. These were: overuse; pornography; infidelity; sexual exploitation and abuse; gaming, gambling and role-playing; harassment; isolative-avoidant use; frauds, stealing and deception; failed online relationships; harmful influence websites; and risky and inappropriate use (Mitchell, Becker-Blease and Finkelhor, 2005). A further analysis examined which problematic experiences were identified as primary or secondary problems (Mitchell and Wells, 2007). Youth and adult users were more likely to have problems related to overuse of the Internet; use of adult pornography; child pornography; sexual exploitation perpetration; and gaming, gambling and role playing. Other Internet-related problems, such as isolative-avoidant use, sexual exploitation victimisation, harassment perpetration, and online infidelity were equally likely. Youth problems related to gaming, gambling or role-playing were 1.7 times more likely to be identified as a primary presenting problem, and online fraud or deception victimisation four times more likely. Data on 512 youth receiving mental health services for Internetrelated problems, with particular attention to victims of online sexual exploitation, were examined (Wells and Mitchell, 2007). Sexually exploited youth were more likely to have been given a diagnosis of Post Traumatic Stress Disorder (PTSD) than youth with other Internet-related problems. A quarter of these victims were male, and these young people presented with the same mental health characteristics as victims of offline sexual abuse. A quarter of all of the 512 young people had problems that related to sexual exploitation.

A possible harm that only recently has been acknowledged is the fact that children become witnesses to their parents' Internet activities. In the recently published report regarding concerns raised by children contacting the child helpline in Sweden, parents' use of the Internet was high on the list. Children contacted the helpline distressed over the fact that their father accessed pornography on the Internet or that a parent engaged in sex chats to which the child somehow became a witness. In a few reported cases adolescents had noted that a parent accessed what they interpreted as child pornography. In one telephone-call to the helpline, a 12-year-old girl discusses her distress in noting that her mother, scantily dressed in front of the computer, uploaded images of herself (Jonsland and Irgens, 2008). Technology affords opportunities for both adults and children to create content. For some children this is part of the 'grooming process', whereas for others it would, in other

contexts, be seen as a consequence of developmentally normal sexual needs. In the context of digital transmission, such behaviours may expose children to scenarios that may be both sexually abusive and sexually exploitative.

4.3 Staying safe on the Internet

We have already considered how certain online behaviours leave children more vulnerable in relation to online sexual solicitation and grooming. Yet it is also the case that not all children are vulnerable and the work of the University of New Hampshire researchers warns against scare stories and asks us to pay particular attention to young people who are at a higher risk, such as those with a history of sexual abuse, concerns about sexual orientation and patterns of offline and online risk taking (Wolak *et al.*, 2008). Rather than quantifying children's behaviour, the OPTEM (2007) study was a qualitative one and included data from 29 European countries. The children who were interviewed were extremely familiar with the Internet and described its use as being 'self-evident'. The majority had home Internet access as well as broadband and used the Internet regularly and frequently. However, frequency correlated with age, with 12–14 year olds using the Internet daily and often between 1–3 hours. What is of interest is that all the children recognized that there were risks with Internet use and they self-generated discipline rules in relation to this. As expected, younger children were more constrained in what they did and were more likely to be supervised by their parents.

There was convergence in Internet use across the 29 countries, and most frequent uses reflected two recreational functions. Online games were played mainly by younger children and boys, and the other form of entertainment was looking for information on subjects that were of interest or browsing for fun. The Internet was also used for information for schoolwork, communication functions (particularly older children and girls), and downloading of music, films, videos and games, amongst older children and boys. Less mentioned activities included the creation of blogs or home pages, and posting text, photos or music; reading and responding to friends' blogs and home pages; downloading ring tones and images for mobile phones; and sharing files (such as music, films, videos and games) or photos. Things that children did not do very often included participating in open chatrooms, responding to blogs or home pages of strangers, taking part in competitions or making phone calls. In fact many of the activities identified as leaving children vulnerable to sexual solicitation did not take place. While most children had mobile phones, there were differences in patterns of use across different age groups. In younger children, keeping in contact with parents was seen as an essential way of reassuring both child and parents. With older children, the preferred use related to keeping in touch with friends, and while

taking photographs was widespread sending them was very rare. Very few used the mobile Internet as it was seen as expensive and unnecessary.

Risks identified by the children seemed to relate more to the Internet than to mobile phones, and included risks to the computer (such as viruses and hacking); inopportune appearances of images, or mistaken access to undesired websites showing violence or pornography; cons and fraud; and sex attacks by malicious adults. The latter was not mentioned as often, and older children tended to play down the impact of accidental exposure. While children acknowledged that they sometimes let themselves engage in risky behaviour, they did not show a lot of anxiety about risk and showed a preference for trying to solve the problems by themselves or within their peer group. They turned to their parents or other adults only in cases of potentially 'dramatic' problems.

Within the OPTEM (2007) study, children showed a high level of awareness about precautionary measures, but older children in particular often adopted actual behaviours that were inconsistent with their attitudes and stated principles. In particular they tended not to turn to parents or to other authority figures, and this was especially the case for older boys. They were more likely to be receptive to the use of a worry button (such as developed by the Virtual Global Task Force), but this was not unanimous. The study is important in highlighting the fact that children are aware of risks, and do 'police' their own activities, but do not necessarily share a view of the new technologies that implies that adults should be the reference point for judging and monitoring young people's behaviour. Livingstone (2008) has also cautioned against making simple distinctions between offline and online worlds, as this, " ... no longer captures the complex practices associated with online technologies as they become thoroughly embedded in the routines of everyday life... self-actualization increasingly includes a careful negotiation between the opportunities (for identity, intimacy, sociability) and risks (regarding privacy, misunderstanding, abuse) afforded by internet-mediated communication" (p. 407).

Wickman, Anderson and Greenberg (in press) have emphasised the critical importance of involving young people in shaping, planning and conducting health promotion interventions. These authors suggest that, "The belief that they will not get hurt contributes to teens thinking that they are capable of handling risks and that they can get away with it. This reinforces the belief that "it won't happen to me", thus contributing to further involvement in risk behaviours" (p. 8). Livingstone (2008) has also suggested that for those young people focused on 'identity as connection', online risks might arise because of their confidence that they can know and trust people with whom they feel intimate, as well as from the possibility that otherwise they may be neglected or excluded from their peer group. Indeed, as mentioned earlier in this paper, some young people report that they see some people they connect with online as their friends and some will describe themselves as 'in love' with a particular contact despite the fact that they have not met them offline. However, as we will go on to consider, some of the risks posed online do not relate to adult activities, but to those of other children. Rickert and Ryan (2007) have suggested that we should no longer conceptualise the Internet as the greatest source of abuse and exploitation for young people, nor can we depict adolescents as merely playing a passive, recipient role while online. These authors have emphasised that it is essential that we recognise the reciprocal nature of harassment and solicitation in order to design research and practice that are both representative and meaningful. This sentiment is also echoed by David-Ferdon and Hertz (2007), "... new media technologies are facilitating the development of a new group of adolescents who under traditional circumstances are not victimized by their peers as well as providing another conduit for perpetrators to continue to victimize youth who are already targets at school" (p. S2).

This relationship between harassment and unwanted sexual solicitation possibly leading to sexual exploitation is a difficult one. Ybarra, Espelage and Mitchell (2007) have noted that previous research has suggested that there may be an overlap between bullying and sexual harassment perpetration and victimization. Their 'Growing Up with Media' survey of 1588 10-15 year olds indicated that involvement in Internet harassment and unwanted sexual solicitation was associated with concurrent reports of psychosocial problems including substance use; involvement in offline victimisation and perpetration of relational, physical and sexual aggression; delinquent peers; a propensity to respond to stimuli with anger; poor emotional bonds with care givers, and poor care giver monitoring; as compared to youth with little or no involvement. This was especially true for perpetrator-victims of Internet harassment and unwanted sexual solicitation. From the same analysis, Ybarra, Diener-West and Leaf (2007) indicated that young people who were harassed online were significantly more likely to also report two or more detentions or suspensions from school, and skipping school in the previous year. Of special concern was that young people being targeted by Internet harassment were eight times more likely than all other youth to concurrently report carrying a weapon to school in the 30 days prior to the survey. This may be another example of young people generating their own solutions to risk, with the potentially unfortunate consequences of elevating rather than reducing the possibility of harm. It is also another very good example of the reciprocal nature of online and offline behaviours.

We will later consider the impact of educational programmes on children's online behaviour, but even from our discussion to date it is apparent that very often it is not that children do not understand potential risks, but that they chose to discount or minimise them, and they would certainly prefer not to share the consequences of both their mistakes and the malevolent behaviour of others. Aslanidou and Menexes (2008), in a study of Greek young people, suggested that the Internet is a place and space safeguarding the privacy of young people, with the majority of them preferring to surf alone. Yet there is an obvious tension between the bid to protect children, through education, advice and the use of proactive technical strategies, and the acknowledgements of the rights of children to explore their sexuality in the context of this mediated environment. Authors such as Berson and Berson (2005) have contended, from their analysis of US and New Zealand youth, that a significant number of adolescent girls are engaging in risky behaviours, including disclosing personal information, sending personal photographs to online acquaintances and arranging face to face meetings. Clearly this data is at odds with what has been suggested by more recent studies, and it may be that the impact of education programmes is being seen in a reduction of risk-taking behaviours, but these authors suggest that there is a lapse in preventative interventions to create and maintain awareness and safety for young people.

The tensions between protecting children's privacy online while reducing risk was addressed by Lwin, Stanaland and Miyazaki (2008). They argued that protecting children on the Internet generally takes two forms: regulatory intervention and parent mediation. The US Federal Trade Commission (FTC) found that many websites were reluctant to protect the privacy of children and suggested legislation to reduce the unnecessary solicitation of personal information from children (FTC, 1998). The result was the implementation of the Children's Online Privacy Protection Act (COPPA), which sets guidelines for online safeguards designed to prevent the collection of personally identifiable information from children unless parental consent is given (COPPA, 1998). With regard to the role of parents, research has suggested that active monitoring of children's online activities by parents can help guard children from the threats of the Internet. Valcke, Schellens, Van Keer and Gerarts (2007) suggested clear evidence of unsafe Internet practices, and that only parent control seemed to be significantly related to lower degrees of unsafe behaviours. This study found that no school based interventions seemed to be associated with the level of unsafe Internet use. Similarly, Fleming et al. (2006), in their study of older Australian children (13– 16 year olds), found that with regard to exposure to inappropriate material and behaviours no differences were found according to whether blocking or filtering software was installed, but that there were significant differences in online safety practices. Younger participants (13-14 year olds) and those participants whose parents had not discussed Internet safety with them were less safety conscious. Steevens and Webster (2008), in a study of Canadian youth (13-17 years old), indicated that high levels of parental supervision reduce but do not eliminate risk. These findings are at odds with blanket recommendations made by authors such as Blevins and Anton (2008) who, in the context of US Congressional efforts to protect children from Internet pornography, advocate the use of blocking and filtering software.

Two studies by Lwin et al. (2008) looked at the effectiveness of various mediation strategies in regulating children's online disclosure behaviour, both in the presence and absence of website safeguards. These authors suggested that there was a blurred distinction between social and commercial content in websites targeting children. This is of concern as previous research has suggested that incentives provided by commercial websites have been found to be more attractive to younger consumers than older ones. In the first study of younger children (319 respondents with an average age of 10.9 years), the authors found that general parental mediation strategies reduced children's online disclosure of sensitive information, and there was an interaction between parental mediation and website safeguards. However, the authors felt that parents' roles as socialisation agents for their children tend to decrease with the child's age, and that over time adolescents' perceived consequences of noncompliance with parents' instructions was less severe. Their second study therefore examined two groups of older children (13-14 and 15-17 years). Active mediation was shown to be more effective than regulated or no parental mediation, and the effectiveness of website safeguards for active mediation participants was more valid. However, the older group of adolescents was likely to react negatively to the presence of website safeguards, essentially expressing the intention to circumvent the safeguard and disclose more information than when the safeguard was absent.

It appears then that older children are not only reluctant to share information about their online activities, but when attempts are made to curtail some of their behaviours for some young people this is associated with a likely increase in the behaviours targeted. The reality appears to be that many older children behave in ways that make many adults uncomfortable in terms of accessing pornographic or violent material (eg, Carroll, Padilla-Walker, Nelson, Olson, Barry and Madsen, 2008) and engaging in what might be seen as occasional unsafe practices. Subrahmanyam, Smahel and Greenfield (2006) sampled conversations from monitored and unmonitored teen chatrooms and found that more than half of their respondents communicated identity information, most frequently gender. They compensated for text based chat environments by providing information about themselves that would be visible and obvious in face-to-face communication. Sexual themes constituted 5% of all utterances and bad or obscene language 3%. Participants who self-identified by gender produced more implicit sexual communication. Of interest, the protected environment of monitored chat demonstrated less explicit sexuality and fewer obscenities. While this may be attributed to the monitoring process, it may also be the case that differing populations of young people were attracted to different kinds of chatrooms. This seems to largely mirror a lot of adult activity online. Interviews with children conducted by ECPAT International in Thailand suggested that sexualised chat was not only a feature of western children, nor is lack of English a barrier, as interfaces exist in most languages for popular web applications. During the same interviews it was noted by one child that

mobile top-ups are used as bait for young people to pose in compromising ways. In some instances, the urgency and need to keep their mobile phones in a functional condition far outweighs the need for personal safety and protection.

What we see in this literature, then, are very conflicting views. From the assertion by Kierkegaard (2008) that, "Aside from chat rooms, grooming is facilitated through mobiles, email exchange, blogs and other types of social networking sites where children can create their own social contents and make it accessible to other users. At the same time they become targets to predators" (p. 43), which emphasised that children are vulnerable and open to exploitation, to a perspective that argues that the exclusion of young people from the Internet is one of the many examples of the diminishing public space that is available to young people in this post-modern world. In this regard, Hillier and Harrison (2007) have drawn our attention to one 'space-deprived' group of marginalised young people: same-sex attracted. These authors assert that in Australia opportunities to live their sexual differences openly remains limited, and they explore the role of the Internet as a space in which some important sexuality work can be done. They found that the Internet was providing young people with the space to practise six different aspects of their sexual loves: identity, friendship, coming-out, intimate relationships, sex and community.

There are considerable difficulties in deterring children and adolescents from online practices that might result in sexual abuse and exploitation. There are clearly tensions between protecting children's privacy online, while reducing risk, and this is a particular issue in relation to older children.

4.4 Exploring new territories vs. unsafe practices

We can maybe add to this by suggesting that for many young people the Internet offers opportunity for an exploration of sexuality in a relatively safe environment. (See also the comment made on the increase in consensual webcam sex between adolescents made in a previous section of this paper). Uecker, Angotti and Regnerus (in press) have suggested (although with no explicit mention of the new technologies) that, "Adolescents espoused in this new middle class sexual script are generally not interested in remaining virgins per se (for moral reasons) but nevertheless may exhibit the pattern of behaviour identified as technical virginity. Instead, they are interested in remaining free from the burden of pregnancy and the sorrow of STDs, so they trade the "higher" pleasures of actual intercourse for a set of low risk substitutes: coupled oral sex, mutual masturbation, and solitary pornography use (and masturbation)" (p. 4). In a very different context (but perhaps reaching the same conclusions), Lamarre (2006) has talked about platonic sex and *Shôjo Anime*, in that it not only presents pornography for young men as acceptable but also endorses pornography as a solution to the problem of human sexuality, "... what one might think of as sex with images, a kind of safe sex in which people don't touch, in which there is no penetration, but only a play with surfaces" (p. 58).

However, Heverly (2008) has pointed out that there is little, if any, explicit recognition among young people that digital media may not only be used by them, but in fact may use them. This is expressed very powerfully in the following. "... when young people become the subject (or object, if you will) of digital media, they are used by it; when a digital media artefact – a digital media file of any type, for example video, audio, still image, text - that features them is created, part of them becomes entangled with the digital media and forms the substance of it" (p. 199). Heverly (2008) distinguished between those young people who actively create media files in which they are embedded and those for whom the activity is passive. This is very similar to the descriptive categories used earlier to describe children's level of engagement in the process of image production and distribution. Such a young person neither participates in the decision to create the artefact, nor directs any part of its coming into being. They may not even know that the digital media are being created, although they may later acquire knowledge of it. Between these two extremes exist many situations where the young person may have knowledge of or may agree to the artefact's creation but cannot exercise control over its creation. As we have seen, the young person also lacks control on many levels - legal, cultural, normative, technological - over the artefacts after they have been created (Heverly, 2008). Things have changed in the move from analogue to digital, and where the products of exploring new sexual territories were, in part, controllable through their potential destruction, this is no longer the case.

While Hillier and Harrison (2007) have noted the importance of the new technologies as providing a space for same-sex attracted children to explore their sexuality, it is also important to note the special vulnerability of children who are gay, lesbians, bi-sexual or trans-sexual. This is a particularly at-risk group for sexual exploitation as they are more likely to use the new technologies to explore their sexuality, given the limited access to social support provided by many countries (Svedin and Priebe, 2007). This is also highlighted by the report of the Special Rapporteur on the sale of children, child prostitution and child pornography (Petit, 2005), who concluded that gay, lesbian, bisexual and transgender adolescents are more exposed to violence, especially psychological violence. Hostile reactions to their sexuality by society may leave them alone in a marginalised situation that then exposes them to exploitation. Young people may fail to understand that in using technology they are potentially used by it. This may be of particular concern in relation to gay, lesbian, bisexual and transgender adolescents who may exhibit special vulnerabilities and who may be open to exploitation by others within the online environment.

4.5 Young people's sexually problematic behaviours and the new technologies

4.5.1 Sexual solicitation

To date, there is very little published research that helps us understand what it is that young people do (as opposed to what they may be exposed to) that constitutes sexually problematic behaviour in relation to the new technologies (Quayle, 2007). In the following we are going to reconsider some of the behaviours recently examined in the context of adult offenders and see how they apply to young people. The first of these, soliciting activities, was explored in the YISS 1 study by Finkelhor et al. (2000) through the analysis of telephone interview data from a large sample (1501) of young Internet users about their experiences online. Their findings indicated that one in five children who regularly used the Internet experienced a sexual solicitation or approach over the year examined by the study. One in 33 received an aggressive sexual solicitation, which included being asked to meet offline, telephone calls or things sent through the post. One in four had unwanted exposure to sexual images, and one in 17 were threatened or harassed. Approximately one quarter of the children who reported these incidents were distressed by them. The data from Finkelhor et al.'s (2000) survey indicated that juveniles made up 48% of the overall solicitations and 48% of the aggressive solicitations against youth (27% were of unknown age). These authors concluded that not all of the sexual solicitors on the Internet fit the media stereotype of an older, male predator. Many were young and some were women. A number of the sexual solicitations appeared to be propositions for 'cybersex', and in almost half of the incidents the young person did not tell anyone about the episode.

Many of the stereotypes we have of those who sexually solicit children within the online environment have been challenged, and it is important that we acknowledge this in both understanding who is at risk and that other young people may be the perpetrators.

4.5.2 Young people accessing child abuse images

The second group of sexually abusive practices by adults and young people, involving abusive images of children, were described in an important research report examining cases investigated by the Department of Internal Affairs Censorship Compliance Unit (CCU) in New Zealand. The results of this study were subsequently updated later that year by Wilson and Andrews (2004), using the same methodology, and including an additional 79 offenders. Their results indicated that of the 184 people in the study, only one was female, and 89% were classified as New Zealand Europeans. The largest single group of offenders, which remained the same as in Carr's (2004) study, "continues to be aged between 15 and 19 years. Those under 20 years of age at the time of detection comprise a quarter (24.3%) of all offenders" (p. 2). The largest occupational group was students (32.4%), followed by those whose career was in information technology (19.5%). The majority of the offenders were found to be in possession of child sex abuse material, with images of bestiality and material containing the use of urine and excrement being the second and third most commonly found sorts of objectionable material. These two New Zealand reports provided the first systematic analysis of seized materials. They caused considerable concern because they identified a high number of young people engaged in the collection of illegal images, and this was substantiated in the second data set. The results were somewhat different from those reported by Wolak et al. (2005) in the US in a study called N-JOV (National Juvenile Online Victimisation Study) where only 3% were younger than 18.

However, it should be noted that all of the school students were found to trade and/or possess images of children and young people engaged in explicit sexual activity, including images of children aged between 2 and 7 years, giving cause for concern about their activities. Also of concern was that school children were also proportionately more likely to trade and/or possess images of children and young people that suggested or implied incest. Nonetheless, Carr (2004) felt that the data did provide clues as to the motivation for initially accessing this material and that it offered support for, "the concept of a sexually curious group of adolescents". In contrast to the results of school students, those individuals who were identified as tertiary students aged under 25 years and non-students aged under 25 were found to demonstrate a much greater range of image preferences and were identified as being proportionately more likely to collect images portraying babies as the subject of sexual exploitation. In addition, 60% of those aged under 25 spent less than 10 hours per week using the Internet. The research did not provide any evidence that these individuals were involved in the commission of physical sexual offences against children, but the author expressed concern about the nature of the images in the light of research suggesting offence behaviour beginning in adolescence.

The results of the New Zealand study also indicated that offenders identified as secondary school students were more likely than the others to collect large numbers of images that were well indexed. They were also more frequently associated with the collection of images of older children and teenagers, portrayed with other children, and were much less likely to collect images of adult rape or the torture of adults or children. Carr (2004) concluded that what is worrying was that their Internet-based exploration had led them to subject matter involving largely deviant activities at a time when they were most likely to be influenced by the message they convey. Moultrie (2006) described the referral of seven adolescent boys to The Taithe Service in 2001–2004 (a Barnardos' UK project where young people who have engaged in sexually harmful behaviour are referred for assessment and longer-term intervention work). Their referral followed arrest for possession and/or distribution of child abuse images. The number of abuse images of which the young people were found in possession varied from 15 to 'several hundred' (police information). The majority were also charged with distribution, either sending images via email or making them available to others on 'peer-to-peer' networks. Ages on referral ranged from 13 to 16 years, and all but one child was identified as being white-westernised. Moultrie (2006) said of these children, "Two of the young people in the internet sample were known to have sexually offended in addition to their index offence... One young person was arrested for taking indecent photographs of local children. Another had sexually assaulted his younger sister and another younger girl, which he admitted immediately following his arrest for the Internet offences. Two young people also transmitted images of themselves masturbating via webcam... There were no specific allegations in relation to the other boys, although it became apparent during involvement that a further three were engaging in 'risky' behaviours, ie, following children, involving themselves in child focused activities and using film recording equipment in the community" (p. 168). What is similar to the results from Carr's study, and of concern given high levels of exposure to pornography, is that approximately half the young people stated they first used the Internet to view adult pornography, which was heterosexual and/or homosexual. A similar proportion said that they began using chatrooms to explore their sexual orientation. Conversations with others became increasingly sexual and, over time, turned to increasingly younger adolescents and children. The boys were aware at the outset, or became aware during the course of the communications, that they were corresponding with adults, and this has resonances with the work of Wolak et al. (2008). Moultrie (2006) concluded that, "Young people in this sample have undoubtedly been victimized, in that adults have sent them abuse images and communicated with them about the sexual abuse of younger children. However, to regard these young people solely as victims may result unintentionally in the neglect of the needs we would identify for them in addressing their sexual arousal and attitude towards children involved in the abuse images. Online relationships and the ongoing influence of such, should not be dismissed" (p. 173).

Some abusers intent on grooming young people online in order to meet and abuse them offline introduce them to different forms of pornography, including illegal material. Palmer (2004) suggested that this is generally done with two aims in mind: to desensitise the young person to sexualised activities which may become increasingly abusive, and to feed the groomer's fantasies of introducing a young person to this material and to encourage them to develop masturbatory fantasies fuelled by the images. In such circumstances, the perpetrator encourages exposure of the young person to adult pornography as a way of demonstrating 'preferred' or 'fantasised' sexual activity to the young person and as a demonstration of what activity the adult wishes to engage in. During this process, the young person is unlikely to be aware of the motivation behind their online 'friend's' suggestions but could become fixated on and develop masturbatory fantasies to images which are deemed illegal. A UK case example, which reflects Moultrie's conclusions, is that of a 13-year-old boy introduced to adult pornography online. He was encouraged to masturbate to this material and then, over time, introduced to illegal material of children being sexually abused. By the time the police arrested this young person following a 'sting' operation, he was masturbating to images of very young children being buggered and raped. Following a 6-month assessment period of his intervention needs, the therapists were unable to find any contra-indicators within the young person's background, family, schooling and attitudes which would cause them to have concern about him, other than he had accessed abusive images of children. On further discussion with the police and an in-depth examination of the forensic evidence, it transpired that the young person had been groomed by an adult who was intent on eventually meeting him offline to sexually abuse him. Thus, here we have a serious predicament: a young person who pleaded guilty to downloading abusive images of children, is now a convicted sex offender, has his name placed on the sex offenders' register and will never be allowed employment which involves working with children but who is in fact the victim of a sophisticated adult perpetrator. This case example reflects the need to review how we manage cases where young people are involved in sexual offending behaviour via the new technologies. At the very least, a full and comprehensive assessment needs to be carried out before decisions are made regarding how to dispose of the matter - placing children and young people before the criminal justice system may not be the most appropriate way of resolving matters in many cases involving young people who have displayed sexually abusive behaviours via the Internet.

It is apparent that we understand very little about how children become involved in accessing abusive images, the relationship of this to other sexually problematic behaviours and the developmental needs that this may be meeting. What is of concern, for some adolescents, is the lack of adequate assessment to understand their behaviour, and we argue that placing such children within the criminal justice system is not the appropriate response.

5. Cultural and geographical diversity and the connection between online exploitation and other forms of sexual exploitation of children

5.1 Cultural and geographical diversity

The thematic papers from both the First and the Second World Congresses called for the national and international harmonisation of laws that would enable more effective policing of the Internet, particularly in relation to abusive images. However, while intuitively this would seem to make sense it would be wrong to ignore cultural and geographical differences, both in relation to constructions of childhood and appropriate or acceptable practices. This is a difficult challenge and one that remains to be addressed. At best, what we might achieve in this paper is to open the debate. Orchard (2007), in the context of child prostitution among young Deradasis in rural Karnataka, India, has suggested that, "Dominant models of child prostitution presented in the media and many academic contexts rely on certain constructions of what constitutes a 'child', such as innocence, purity and dependence, which are often assumed to be universal features of this life stage. Indeed, the case for the abhorrence of child prostitution is often founded upon the absence of these characteristics. The etiological exercise in disassociating young prostitutes from 'normal'/'good' girls is an essential ingredient in mainstream representations of child prostitution" (p. 2387). Orchard (2007) goes on to describe how understanding the picture portrayed by these young women is not straightforward because they do not present themselves to be frightened, brainwashed victims of parental or systemic violence depicted in most accounts of child prostitution but instead present themselves as girls who do not always like what they do or what is demanded of them, but do so out of a sense of filial duty, economic need, and "because doing dhandha is incorporated into their models of filial duty..." (p. 2388). Orchard (2007) concluded that this data, obtained from ethnographic interviews with the girls themselves, mirrors findings from Thailand that identify the role of cultural, economic, religious, gender or familial factors in the creation of abuse through child prostitution. These include filial duty, a rite of passage, a desired economic alternative as well as a form of sexual exploitation.

Why might this research on abuse through child prostitution be of importance to our discussion of sexual exploitation in the online world? As yet we have little understanding of the relationship between different forms of sexually exploitative practices. Often the connection between one form of sexual exploitation with another is not understood or not taken into account. In the ECPAT (2005) study it was asserted that, "Sometimes a child

or young person's experience of being made the subject of abuse materials is regarded as a secondary harm. This view is apparent where the violation coincides with the committal of other crimes against the child or young person, such as prostitution or trafficking for sexual purposes. As well, the perception that image-making is less harmful can be apparent in situations where a child's carers or guardians express relief that a child was 'only photographed' rather than directly physically violated. These outlooks fail to recognise the deep harm that may be caused. Using a child for pornography production in any context should be seen as a fundamental abuse, rather than a by-product of other harms" (p. 13). Azaola (2000), a study completed in 1999–2000 on the commercial sexual exploitation of children in Acapulco, Mexico, found that a number of children were exploited through pornography production, and that much of the exploitation appeared well-organised. Many of the children were boys who lived on the streets, some of whom were involved in abuse through prostitution with tourists. Other children came from poor rural areas, and their parents were paid for their daughters to leave to supposedly gain a job or further education. Others were middle-class schoolchildren who agreed to pose for photographs in exchange for money. The people exploiting the children in these instances were both nationals and non-nationals.

O'Brian, van den Borne and Noten (2004), in their report on trafficking of children for sexual purposes in Europe, noted the following case. "Maria, a 17-year old from Kharkiv, Ukraine, was brought up in a single-parent poor family. Together with her mother, she carefully studied the ads of marriage agencies and dreamed about a happy marriage with a rich foreigner. A good friend advised Maria to go to an agency which was located in a private flat, equipped as an office, in the centre of Kharkiv. Maria was worried that there was no notice or company name on the door, but she still went in. First, she was asked to have pictures taken of her in her underwear. Some time later, she was called by the agency and asked to come and have the photos taken again because the previous pictures were said to be bad. She went. She was brought into a room in which there were a lot of computers. Several naked girls were waiting there. Maria was offered \$100 for posing for nude photos. Maria refused because she noticed that pornographic pictures were immediately sent via Internet to the customers. The clients indicated what position a girl had to take and what she had to do" (p. 138). Similarly, the study reported a tourist agency from Moldova, which was set up in 1999 by two citizens who were husband and wife, who advertised jobs for young girls as dancers and waitresses in Cyprus and Spain. In discussion with the girls who were interested in obtaining more details about the jobs, the couple explained the working conditions. Depending on their perception of the girls, they told some of them that if they wanted to earn more money they could offer sex, but to others these conditions were not explained. The girls who accepted the agency's offer were photographed in bikinis, and the photos were sent to the purchasers, who then made their choices, over the Internet.

These accounts raise important challenges. They highlight the need to understand the complexity of living circumstances for many of the world's children, and again the agency (or lack of it) that we afford to older children in the choices that they make. Haider (2008), in the context of working children in Bangladesh, examined the tensions between official international and national laws and the actual reality or 'living laws' regarding working children. He asserted that while these children are mainly so impoverished that they have to work for their own survival, to deny them any agency in their own position seems misguided. Haider (2008) argued that the present dominant understanding of child work is not compatible with the real-life situations of such children and may be injurious to their individual interests. The article suggested that a culture-specific analysis which properly diagnoses the contextual struggles of working children in countries like Bangladesh is better suited to minimising the ongoing suffering of working children. "Child labour became an issue in Bangladesh in 1993 when the US Harkin Bill, threatening to boycott imports from countries resorting to child labour, had the effect of very quickly emptying the garment factories of an estimated 50,000 child workers (UNICEF, 1997). But these 'freed' children were then forced into rather worse situations, including prostitution, as a consequence of this extra-territorial legislative threat, even though the International Labour Organization (ILO), UNICEF and the Bangladesh Garment Manufacturers and Exporters Association reached an agreement in 1995 for 'rehabilitating' these young workers with education and other opportunities (UNICEF, 1997). Earlier work by Blanchet (1996) had highlighted the unequal social relations in which children's work is embedded and its far-reaching consequence on working children. Her empirical study on child workers in rural bidi (local cigarette) factories, child prostitute workers in rural brothels and child workers in urban slums and streets demonstrated how both the state and society ignore the survival activities of working children. Haider (2008) concluded by saying that, "For many children in Bangladesh, the experience of childhood is clearly not the ideal world constructed in books, while earning a living and making important livelihood decisions are very much part of their routine life" (p. 66).

Such choices made by some of the world's older children might mean that being photographed in an abusive way is a better choice than being abused through prostitution. It also highlights the fact that older children may make choices which run counter to what we conceptualise as being ideal. Such choices are not only made by children living in Bangladesh, Mexico or Eastern Europe. Svedin and Priebe (2007) sampled 4339 students from the third year of upper secondary schools in five Swedish cities. Their results indicated that 1.8% of the boys and 1.0% of the girls reported that they had sold sex for money or other reimbursements. Selling sex was associated with having an immigrant background, higher level of unemployment in the family, and studying a practical/ vocational programme. Adolescents with the experience of selling sex had an increased risk

for different psychosocial problems, such as poorer mental health, weekly use of alcohol, and antisocial behaviours. The adolescents selling sex were also characterised by having had a greater number of sexual experiences, a greater preoccupation with sex, relatively early sexual debut, and experience with sexual abuse as victim and/or perpetrator. The index group students watched pornography more frequently than the majority, and they also watched more deviant forms of pornography. However, it is important to note that these authors were not suggesting that 'selling sex' and 'prostitution' are commensurate. Svedin and Priebe (2007) suggested that "It is plausible to think that selling sex covers a broad spectrum of behaviour from novelty seeking to acting out behaviour with possible links to early sexual debut and to the adolescent's own sexual traumatisation. It is difficult to establish a direct causal link between different background factors and selling sex" (p. 31?). In the second largest city in Sweden a group working to assist prostitutes has made a survey of young people selling sex. An interesting conclusion in the report is that even though several studies in western countries show that boys sell sex to a higher extent than girls, boys are non-existent in accounts of sex selling. Somehow the female prostitute remains the norm even when we talk about adolescents selling sex. The authors of the study believed that the reproduction of gender stereotypes means that we see a boy selling sex as so much more in control than a girl doing the same thing. This study concluded that the Internet is the major arena for coming into contact with the buyer for boys selling sex. Sixty per cent of the boys and 45% of the girls having sold sex met with the buyer on the Internet making this the major arena for connecting buyers of sexual services from adolescents with sellers (Abelsohn and Hubelsjö, 2007).

In Azaola's (2000) study of Mexican children, photographs were taken by people from the community as well as by those from outside of it, and it is apparent that here has been an investment in trying to understand the role of 'sex tourism' in the production of abuse images. Huda (2006) has argued that economic and social inequalities, along with political conflicts, have led to the movement of people within countries and across borders in South Asia. Factors such as illiteracy, dependency, violence, social stigma, cultural stereotypes, gender disparity and endemic poverty are thought to place women and children in powerless, non-negotiable situations that have contributed to the emergence of sex trafficking. In a summary of patterns of sex trafficking in South Asia, Huda (2006) concluded that there is:

- An increase in the number of girl children from poor, rural and urban families.
- Sexual exploiters and prostitute users are the same clusters of men who abuse children. Although only a small percentage of these individuals are pedophiles, a great majority are ordinary men who buy sex to reinforce their masculinity and exercise power over the weak and vulnerable.

- For foreign men, there is the added layer of racial discrimination and power over third world women and children.
- Increased trafficking of women and girls from ethnic and minority groups who are very often also experiencing abuse in their communities and/or caught in armed conflicts and civil war.
- Increasing control of trafficking routes and destinations by crime syndicates.
- Increasing use of technology to market women and children for prostitution, bride trade, pornography and other slave-like practices via the Internet.
- The mainstreaming of prostitution in legitimate business and occupational categories in tourism, hospitality, health and entertainment establishments which are integral to development policies of governments.
- Massive migration of women for entertainment and domestic work.
- Continuing inability of governments and the international community to respond to the increasing trafficking in women and children.
- Intense lobbying of certain groups calling for a liberalization of sex industry through the legalization of prostitution and its redefinition as work on one hand, and the lobby to make distinctions between forced and free (choice prostitution, child vs. adult, and first world vs. third world, etc). (p. 376)

Once again we see the tensions around discourses of work and children's agency, and we also see emerging the role of the new technologies in the propagation of abusive practices. Chow-White (2006) has argued that while images of 'sex workers' have primarily been disseminated through informal networks of mail-order travel guides, magazines and videotapes, the Internet has become an increasingly important tool for the global spread of information. There are increasing numbers of websites which provide commercial and information exchange which purport to relate only to information about adults. Given the nature of the Internet, and the fact that, for example, this site provides a free discussion forum, it is likely that information may be shared that would provide information to those with a sexual interest in teenagers or young people. The following is on the opening page of one particular site:

We are your information source on where to find sex – with consenting adults – across the globe. From Bangkok hookers to Filipina virgins to Latina busty babes, we bring the world of sex travel, sex tours and romantic adventure to you. Thailand, The Philippines, Brazil, Cambodia, Costa Rica, Amsterdam and Germany. We cover it all. Our adult videos and adult DVD's point the way. Our free discussion board allows everyone to share their experience. Our adult travel guides pinpoint the hottest and best places to find sex, romance, love, marriage and adventure throughout the world. That is what we are all about. Have Fun and tell your friends about us. (Accessed 28.7.2008) A recent study from Ukraine demonstrated the connection between the trafficking in children and the production of child abuse images: in 2002 girls were trafficked from Moldova to Ukraine where they were photographed for pornographic purposes. The Ukrainian militia was told by the girls that they had received money from foreigners for modelling for pictures in the nude. The children were obviously exploited in the production of child abuse images for the commercial market (see also ECPAT, 2008).

One final example of the production of abusive images within a non-western country comes from India. In a national study on child abuse in India (Kacker, Varadan and Kumar, 2007) these authors reported that, "Out of the total child respondents, 4.46% reported being photographed in nude. This is an unusually high percentage. Also for the first time data on this kind of abuse has been collected. The RAHI study had asked the question, "asking you to pose for dirty pictures" and they reported a response of 0.1%. When compared to this the revelation of the present study is alarming and needs further probe. Among these children, 52.01% were boys and 47.99% were girls. In different age groups, the majority of cases (48.17%) where children were photographed in nude were among younger children in the age group of 5-12 years. This was followed by 28.02% among adolescents in the age group 15–18 years and the remaining 23.81% in the age group of 13–14 years" (p. 85). The majority of children questioned did not report the matter and preferred to keep quiet. What is of concern about the production of such images is that we have little knowledge of how they have become part of abusive practices against children, and no knowledge as to how they were used. Kacker et al.'s (2007) study demonstrated that the vast majority of the children were photographed by someone within their immediate familial and social network. We do not know if these photographs were sold on, whether they became part of commercial sexual exploitation (through the sale of DVDs) or whether their images will ever find their way onto the Internet.

The analysis of the COPINE archive in 2003 indicated that the majority of images available were of white Caucasian and Asian children, with very few African or African-American children (Taylor and Quayle, 2005). Indeed, in 2003, websites started to appear advertising specialist sites that included interracial pictures. Similarly, Carr's (2004) study, which was one of the few to analyse the images used by offenders, indicated that the vast majority of offenders selected material portraying Caucasian and Asian children. It is clearly unknown as to whether this will change as Internet availability and uptake increases in other countries. Grabosky (2007) has noted that, "By the year 2015, half of the world's online population will reside in two countries: China and India. The take up of digital technology in Asia over the coming decade will be nothing short of dramatic. In all probability, the growth of online commerce will follow a parallel trend. This will provide an unprecedented number of potential victims and prospective offenders" (p. 157).

There are increasing reports of the production of abusive images across the world, but we know little about how such images are used and whether we will see increasing dissemination of the same through technology. This also highlights the fact that for some older children, decisions are made by them in contexts that are less than ideal.

5.2 Internet child pornography and the law

Throughout this paper we have resorted to moving between the terms 'abuse images' and 'child pornography' as well as using these to describe related crimes that reflect both sexual abuse and sexual exploitation across a number of studies. However, in the context of the law, the term 'abuse images' is not used. Akdeniz (2008) has suggested that, "In the fight against child pornography it is imperative from a legal point of view to define what constitutes child pornography... In England and Wales the Protection of Children Act (1978) concentrates on indecent photographs and indecent pseudo-photographs of children, and there is no definition provided for 'child pornography' per se. Other common law jurisdictions such as the United States and Canada provide statutory legal definitions for child pornography..." However, this view is not shared by all. Gillespie (personal communication) has argued that the Sexual Offences Act (SOA) of 2003 defines the 'child involved in pornography'. The definition in the SOA 2003 refers to the definition in the Protection of Children Act 1978, and might suggest that in England and Wales child pornography is defined as indecent photographs of children. When it comes to the crimes committed and how these are described we rely on the use of the terms 'sexual abuse' and 'sexual exploitation'. These terms are sometimes used interchangeably and at times the term 'sexual exploitation' is used to describe all crimes committed against a child in the context of Internet offences, trafficking of children and child prostitution. In this paper we have maintained the view that 'sexual abuse' is the direct offence against the child, whether or not it constitutes an actual contact offence, and 'sexual exploitation' is the purposeful exploitation of the inferior status or dependency of the child for some form of gain, commercial or otherwise. The term 'exploitation' may, as is suggested by Asquith and Turner (2008) be used to ascribe a lack of agency on the part of the victim.

In research it is equally important to use terms that makes analyses comparable across countries, cultures and geographical regions. The use of 'child abuse images' as a term both in research and in looking at legal definition would speed up the process of aggregating comparable data on the children that are abused. To recognise the role of the sexual exploiter as sometimes being separate from that of the sexual abuser would possibly mean legislating more firmly against some exploitative practices that have been described in the paper, such as online abuse where there is no physical contact between the offender and the child/adolescent. Gillespie (personal communication) has questioned whether most legal systems adequately deal with this situation, and although many States suggest that it is covered by child pornography laws, these focus on the images and not the conduct of the offender. Another term that creates difficulties is that of the Internet offender who attempts to meet a minor for offline sexual encounters. Here the term minor in some countries would mean a person up to the age of 17 whereas in other jurisdictions a minor would indicate a person below 15 or 14 years of age. Several studies on Internet sex offenders meeting with adolescents will present data on offenders meeting with 16 and 17 year olds. In countries where adolescents at that age 'own' their own sexuality and are considered old enough to consent to sexual relationships, an encounter where the alleged victim consents to the meeting and to having sex would not be considered a crime. In other countries, most notably in several states in the US, it would.

At the same time, during the past few years we have witnessed the development of supranational and international policy documents which set out to define 'child pornography'. Since the Second World Congress we have seen the development of four policy documents that are central to this issue. The European Union's *Framework Decision on combating the sexual exploitation of children and child pornography* entered into force in 2004 and required member states to take steps to ensure compliance by 20 January, 2006. Here child pornography is defined as pornographic material that visually depicts or represents:

- (i) a real child involved or engaged in sexually explicit conduct, including lascivious exhibition of the genitals or the pubic area of a child; or
- (ii) a real person appearing to be a child involved or engaged in the conduct mentioned in (i); or
- (iii) realistic images of a non-existent child involved or engaged in the conduct mentioned in (i).

As we can see, the definition in the EU *Framework Decision* talks about a 'real' child, 'real' person and 'realistic' images, which may prove unlikely to cover virtual images or cartoons. The Council of Europe's *Cybercrime Convention* (2001) came into force in July 2004, and Article 9 defines child pornography as pornographic material that visually depicts:

- a. a minor engaged in sexually explicit conduct;
- b. person appearing to be a minor engaged in sexually explicit conduct;
- c. realistic images representing a minor engaged in sexually explicit conduct.

This includes all persons under the age of 18 years, however a Party may require a lower age limit, which shall not be less than 16 years. In addition, each Party may reserve the right not to apply sub-paragraphs b. and c. Such materials may therefore be left out of legal provisions targeting child pornography.

The third document is the United Nation's Optional Protocol to the Convention on the Rights of the Child on the sale of children, child prostitution and child pornography. This came into force in January 2002 and defines child pornography as, "any representation, by whatever means of a child engaged in real or simulated explicit sexual activities or any representation of the sexual parts of a child for primarily sexual purposes". In all three documents a child is defined as someone under the age of 18 years and all three include both photographs of actual children as well as representations of children, which would appear to include computer generated images. However, the issue of age is subject to several reservations and complicated by the age of sexual consent established under national law. There is no instrument that establishes a uniform age of consent, and this tends to clash with legal provisions aiming at protecting children up to that age. The UN Optional Protocol does not expressly make reference to age but since it is a protocol to the UN Convention on the Rights of the Child it is clear that it must mean a child under 18. Article 1a of the EU Framework Decision states that a child is someone under the age of 18, and this is one reason why, for example, the definition of a 'child' in this context was redefined to 18 in England and Wales (Gillespie, 2008). Under the Cybercrime Convention the term 'minor' used in the definition of child pornography includes all persons under 18 years of age. A Party may, however, require a lower age-limit, which shall be not less than 16 years. The ILO Convention 182 on the Worst Forms of Child Labour (WFCL) describes child pornography as a WFCL (Art. 3(b) and states that the Convention applies to all children under the age of 18. In Article 1 it determines that member States that ratify this Convention shall take immediate and effective measures to secure the prohibition and elimination of the WFCL as a matter of urgency. To date 169 countries have ratified this Convention. Also, all 181 member States of the ILO have an obligation (under the ILO Declaration of 1998) to respect, promote and realise the principles concerning fundamental rights at work, including the right to be free of the WFCL, which includes child pornography, (van de Glind, personal communication). Akdeniz (2008) draws our attention to the fact that the UN definition is broad and, as it refers to "any representation", would also include textual material, cartoons and drawings. This is an important development as, has been suggested by authors such as Kierkegaard (2008), what has been sadly lacking is the inclusion of provisions that are future-proof. This would include "morphed images and writings or all materials that degrade the child", including written pornography. The most recent relevant instrument establishing a definition of child pornography is the Council of Europe Convention on the Protection of children against sexual exploitation and sexual abuse which provides the following definition in Article 20 – Offences concerning child pornography:

- 1 Each Party shall take the necessary legislative or other measures to ensure that the following intentional conduct, when committed without right, is criminalised:
 - a producing child pornography;
 - b offering or making available child pornography;
 - c distributing or transmitting child pornography;
 - d procuring child pornography for oneself or for another person;
 - e possessing child pornography;
 - f knowingly obtaining access, through information and communication technologies, to child pornography.
- 2 For the purpose of the present article, the term "child pornography" shall mean any material that visually depicts a child engaged in real or simulated sexually explicit conduct or any depiction of a child's sexual organs for primarily sexual purposes.
- 3 Each Party may reserve the right not to apply, in whole or in part, paragraph 1.a and e to the production and possession of pornographic material:
 - consisting exclusively of simulated representations or realistic images of a non-existent child;
 - involving children who have reached the age set in application of Article 18, paragraph 2, where these images are produced and possessed by them with their consent and solely for their own private use.
- 4 Each Party may reserve the right not to apply, in whole or in part, paragraph 1.f.

It is important to note that this definition is restricted to visual materials but does not require that a real child be used in their production (as is the case in the US). However, member states may opt not to criminalise the production and possession of virtual child pornography. The Convention also creates a number of new offences and the offence of possession of child pornography is made broader as there is no requirement to prove the intent to distribute the materials. The Convention, however, is clear on criminalising the sexual exploitation through the clear description of the different crimes that connect to child abusive images. Importantly the Convention has chosen not to criminalise the consensual production and possession of materials created by children who have reached the age of consent. However, most instruments do not directly address the issue of adolescents who make or access indecent images of children. This in itself may prove to be problematic. Piper (2001) has argued that one of the landmark changes in terms of criminal justice policy in recent times has been the approach to juvenile crime, which in the UK led in the 1990s to the effective reduction in the age of criminal responsibility to

10 years accompanied by a series of measures that were designed to tackle youth crime. She convincingly argued that adolescents involved in criminality became less victims of social failings in need of protection but rather criminals who require the intervention of the criminal justice system. Gillespie (2008) has argued that in the UK the criminal justice system is increasingly adopting a harsher approach to adolescents who break the law, with the law adopting very different approaches to adolescents involved in indecent images of children and those who have direct sexual contact with another adult. This is echoed by Heverly (2008), "There is a desire to recognise children as autonomous actors, while at the same time insulating them from the repercussions of some of their actions. This conflict seems to underlie the current movements to remove minor protection, even if the minor could not - from a developmental standpoint - fully understand the implications of their actions" (p. 110). It is also worth noting that the Optional Protocol does not expressly call for the non-criminalisation of children who are victims of sexual exploitation, and many children who are exploited through prostitution and pornography are treated as criminal in the justice system. The Committee on the Rights of the Child encourages State parties to abolish every legal provision resulting in administrative or other punishment of the victims of commercial and sexual exploitation and to prevent other stigmatisation of the victims.

Even in countries where legislation uses the definition of child pornography quoted in the international instruments, the fact remains that images of adolescents who are postpubertal will, in many countries, not be investigated as crimes against the law making possession or distribution of child pornography illegal. In a controversial ruling by the supreme court of Sweden in January 2005, a man was not sentenced for producing child pornography, even though he knew that the two girls that he paid to act in a pornographic film were only 16 years old. He was sentenced for sexual assault, but not for producing child pornography since the court found the girls' physical maturation to be such that their physical age should not be seen as the decisive fact (Supreme Court of Sweden, 2005). A change in Swedish legislation has since been suggested but has not come into force. Police in several countries will admit to not investigating images that portray adolescents in sexually abusive situations since the verification of an adolescent's age is difficult. It might be argued that, at a very minimum, child pornography definitions should include any material:

- Which shows or relates to a person who is a child, or is being depicted as a child, engaged, or depicted as being engaged, in sexual activity;
- Which shows a person who is a child, or is being depicted as a **child**, **witnessing any such activity** by any person(s);
- Which has as a **dominant characteristic the depiction**, for sexual purposes, of the **breasts**, genitals or anus of a child, or of a person being depicted as a child;

- Which is a visual or audio representation that **advocates**, **encourages or counsels any sexual activity with children** that is an offence under any enactment, or
- Which is any visual representation or description of, or information relating to, a child that **indicates or implies that the child is available for sexual purposes.**

The above is based on the Irish *Child Trafficking and Pornography Act*, 1998, Section 2 (Government of Ireland, 1998).

ICMEC (2006) used the UN definition in its study of the 184 Interpol member countries. Their results indicated that 95 countries have no legislation at all that specifically addresses child pornography and 41 countries do not criminalise possession of child pornography, regardless of intent to distribute (ICMEC, 2006). The topics addressed in this report emphasised that attention should be give to:

- 1. Defining "child" for the purposes of child pornography as anyone under the age of 18, regardless of the age of sexual consent;
- 2. Defining "child pornography," and ensuring that the definition includes computer and Internet specific terminology;
- 3. Creating offences specific to child pornography in the national penal code, including criminalising the possession of child pornography, regardless of one's intent to distribute, and including provisions specific to downloading or viewing images on the Internet;
- 4. Ensuring criminal penalties for parents or legal guardians who acquiesce to their child's participation in child pornography;
- 5. Penalising those who make known to others where to find child pornography;
- 6. Including grooming provisions;
- 7. Punishing attempt crimes;
- 8. Establishing mandatory reporting requirements for healthcare and social service professionals, teachers, law enforcement officers, photo developers, information technology (IT) professionals, ISPs, credit card companies, and banks;
- 9. Addressing the criminal liability of children involved in pornography; and
- 10.Enhancing penalties for repeat offenders, organised crime participants, and other aggravated factors considered upon sentencing.

However, the call by ICMEC (2006) for stiffer sentences does not elaborate on what these sentences might be (prison or community) and does not consider other options, such as requirement to engage with a sex offender management programme. Beech *et al.* (2008) have indicated that, "However, social science evidence indicates that deterrence will not improve community protection. Not one single review of controlled outcome research in criminal justice or corrections has found a large or consistent effect on reducing re-

offending through variations in the type or severity of the criminal penalty or disposition (Andrews, 1995). For example, Smith, Goggin, and Gendreau (2002) concluded, after an in-depth review of 111 studies involving 442,000 offenders, of all offense types, that: (1) harsher criminal sanctions do not deter re-offending; (2) prison sentences are related to increased re-offending rates; (3) longer prison sentences are associated with high reoffending rates; and (4) sentences of more than two years result in average increases of re-offending rate of 7%. The exception may be incapacitation where the community is protected while offenders are in prison. However, it is expected that the majority of offenders in the context of this paper would eventually be released, if incarcerated in the first instance" (p. 11). Adler (2001) has gone beyond this to suggest that the legal war against pornography has already been lost, and that there is, "the possibility that certain sexual prohibitions invite their own violation by increasing the sexual allure of what they forbid. I suggest that child pornography law and the eroticization of children exist in a dialectic of transgression and taboo: The dramatic expansion of child pornography law may have unwittingly heightened pedophilic desire" (Adler, 2001, p. 4). This remains a contentious issue.

However, in law offences related to child pornography are not all treated as the same. Akdeniz (2008) referred to this as a 'chain of liability'. At the top of the chain are those who produce abusive images or content, and will be made up of, although not exclusively, those who will have sexually abused the children in the images. Many of these will produce images within a domestic setting where production is part of a spectrum of abusive practices. As has been previously discussed, this group consists of sexual abusers and sexual exploiters since the photography is always there to continue to exploit the sexual abuse in some way. The second group that sexually exploit are those who distribute child pornography over the Internet, either commercially (for financial gain), or non-commercially, where the images themselves function as a form of currency (Taylor and Quayle, 2003) or possibly as a means to raise their status in a group or to confirm their allegiance and sense of belonging to a group. The final group are those who sexually exploit the child through the possession of images downloaded from the Internet (or occasionally acquired via mobile phone). This latter group are often considered the least serious of offenders and are likely to attract a lower sentence. However, Clough (2008) has suggested that, "We have seen that traditional notions of possession may prove problematic in the digital environment. While actual possession may be difficult to prove, in many cases it is clearly established, often on their own admission, that the defendant did in fact view child pornography. It may therefore be argued that rather than being prosecuted for possession, they should be prosecuted for 'accessing' child pornography" (p. 233). Clough (2008) goes on to break accessing down into three components:

1. Displaying/viewing

- i. The display of the material by a computer or any other output of the material from a computer or
- ii. The copying or moving of the material to any place in a computer or to a data storage device or
- iii. In the case of material that is a program the execution of the program.
- 2. Transmitting/receiving
- 3. Requesting

It may also be argued that national laws should also include an offence of procuring child pornography for oneself or another person, with the implication that this is actively sought. This might cover downloading of computer data as well as the purchase of child abuse images online.

It is perhaps surprising that not all instruments necessarily criminalise the viewing of Internet child pornography. Gillespie (2008) concluded that, "The UN Protocol does not mention this at all. The Council of Europe *Convention on Cybercrime* mentions it only obliquely, as it criminalises the procurement of child pornography. Procurement could mean obtaining (and this, it is submitted, would include viewing) or it could mean purchasing (in which case viewing may not be included)". All four instruments criminalise possession, although this is sometimes subject to certain limitations. Again the fact that viewing is not universally criminalised may be attributed to a disparity in how the exploitation of the image of child abuse should be seen. If viewing the image is part of the chain of sexual exploitation set in motion by the sexual abuse committed, then this too should be criminalised. It would seem sensible to conclude that States should include a separate offence of 'the intentional viewing and accessing' of child pornography in their national body of laws.

One issue that remains ambiguous is how child pornography should be judged. We have seen that there are differences in whether these judgments are made objectively or subjectively. This was discussed earlier in relation to definitions of child pornography. Gillespie (2008) has argued that the international instruments do not agree, or indeed on what should be represented. The UN *Optional Protocol* appears to indicate that there should be an objective judgment, as it refers to representations of sexual activity or sexual parts, but it then introduces a subjective element by saying that it must be, "for primarily sexual purposes". Presumably this has been done to exclude material such as medical images that are used for legitimate reasons (but which might also be misused). The Council of Europe *Convention on Cybercrime* adopts an objective stance by concentrating on explicit conduct, similar to the EU *Framework Decision* which includes, "lascivious exhibition of the genitals or pubic area of a child". The Council of Europe *Convention on Cybercrime*

follows the UN *Optional Protocol* definition, but then introduces subjective elements. These differences may lead to different understandings of what needs to be represented. The new Council of Europe *Convention on the protection of children against sexual exploitation and sexual abuse* establishes a new offence of, "knowingly obtaining access, through information and communication technology, to child pornography", which is intended to criminalise the behaviour of those who access child pornography without downloading. The act must be intentional, meaning that it would not cover those who come across illegal material inadvertently. However, this is subject to an important caveat that States may reserve their right not to criminalise this conduct.

However, the Council of Europe *Convention on the Protection of children against sexual exploitation and sexual abuse* seeks not only to legislate against sexual exploitation through the production, dissemination and possession of child pornography. Article 23 relates to the solicitation of children for sexual purposes, requiring each Party to take the necessary legislative or other measures to criminalise the intentional proposal, through information and communication technologies, of an adult to meet a child who has not reached the age set in application of Article 18 paragraph 2, for the purpose of committing any of the offences established in accordance with Articles 18 paragraph 1a or 20 paragraph 1a against him or her, where this proposal has been followed by material acts leading to such a meeting. The Convention was opened for signature on 25 October 2007. To date (September 2008) there have been 29 signatures and no ratifications.

Let us conclude this section by revisiting the Optional Protocol. One significant feature lies in its focus on the welfare protection of the child, reflected in Articles 8-11. Duties are placed on States to protect the rights and interests of child victims at all stages of the criminal justice process (Article 8), to support laws, social policy and programmes to prevent the Protocol offences and promote public awareness (Article 9) and to take all necessary steps to strengthen international co-operation (Article 10). However, an examination of the reservations and declarations by countries were largely concerned with providing a clearer focus on the various definitions to refine the policy of international criminalisation. Buck (2008) concludes that, "Despite the 'holistic' approach that emerges from the work of the Special Rapporteur and the duality of overall purpose implicit in the text of the Protocol, the observations of state behaviour, in terms of their reservations and declarations and in the reporting dialogue with the committee, reflects an uneven emphasis on international criminalisation but without the additional intended focus on welfare protection, reintegration and rehabilitation of child victims... The content of the OPSC itself has emerged more as an instrument of international criminalisation as its central thrust rather than a comprehensive package of welfare protection" (p. 176). When we look critically at our understanding of, and responses to, victimisation through Internet sex offending, this would certainly seem to be true. The Optional Protocol has emerged more as an instrument of international criminalisation as its central tenet rather than a comprehensive package of welfare protection. Article 8 does provide a number of measures that States must take to protect children in the legal process but these are not implemented. This means that other key instruments must also be used and implemented, notably the *Guidelines on Justice for Child Victims and Witnesses*.

The Guidelines provide a practical framework to: guide professionals working with child victims and witnesses of crimes in their day-to-day practice; assist in the review of laws, procedures and practices so that these ensure full respect for the rights of child victims and witnesses of crime; assist governments, international organisations, public agencies, non-governmental and community-based organisations and other interested parties in designing and implementing legislation, policy, programmes and practices, and support those caring for children in dealing sensitively with this particularly vulnerable group. Even though the Child Victims Guidelines do not constitute a legally binding document, their importance is manifest in that the UN Committee on the Rights of the Child now systematically refers to them in its recommendations to State Parties, for example by recommending that they adapt child-sensitive procedures in accordance with the Child Victims Guidelines.

It is apparent that not all instruments necessarily define the intentional viewing of Internet child pornography as criminal, and while possession is criminalised this is sometimes subject to certain limitations. There are still unresolved issues about how child pornography should be judged, and ultimately while the *Optional Protocol* places duties on States to protect the rights and interests of child victims at all stages of the criminal justice process, its central thrust is as an instrument of international criminalisation rather than a comprehensive package of welfare protection.

6. Prevention and education

The fact that children may come to harm in more ways than by being the objects of child abusive images has resulted in a growing concern regarding the risks posed to children and young people as they increasingly interact and communicate via the Internet and mobile phones. This transition that we have seen over the past 10 years seems to be accelerating as the commercial interests grow. Young people are a profitable market to explore and a website that can demonstrate a high number of daily young visitors will attract advertisers and generate profit. Creating and maintaining a large group of loyal repeat visitors to a site, such as a group of members or owners of their own space that spend time on the site, is a means of attracting investors and increasing likelihood of generating profit.

In other parts of this paper we have described young peoples' use of the technology and what is known about the risks of abuse and violence they run. To counteract these threats organisations began producing materials with the aim of educating young people and children of different ages. The European Commission set up the Safer Internet programme, followed by the Safer Internet plus programme that, apart from financing national hotlines involved in the effort to curb traffic in child abusive images, also financed initiatives to make the Internet safe for children and young people by educative measures and awareness-raising activities. The Safer Internet Plus programme has financed the establishment of Awareness nodes in the member states and also the coordination of these nodes through INSAFE⁵. Over the years the programme has financed the development of filtering technology software along with the production of traditional awareness-raising materials describing risks that young people may run when using the Internet⁶.

6.1 Youth, agency and education

6.1.1 Information materials

The first generation of safety tools were the infamous "Don't" messages. These were printed on mouse-mats, in leaflets and on stickers that could be stuck to a computer screen. The message in them was that young people should keep their contact details away from people they met on the Internet. These people might not be who they claim to be, and it was most important not to meet IRL (In Real Life) with anyone met only online. These messages were later refined, partly because young people did meet other youth IRL and because the vast majority who met someone offline with whom they had only had contact with online had found the meeting fun and rewarding (Medierådet, 2006). The message of not meeting anyone offline who had only been met online, changed into: "Bring your parent or a friend along to the first meeting". In examining of the Internet habits of young people, some questionnaires and surveys have included a question about offline meetings with online acquaintances. In the SAFT survey of 2005, a representative sample of 11–15 year olds was asked about meeting someone offline with whom they had become friends online. Only 8% admitted to having done so. This figure was, in fact, lower than that in a similar survey made in 2003, when as many as 26% claimed having met someone in this way. The authors speculated whether young people had taken heed of some of the safety messages and publicity about children being hurt by people they meet offline after having become friends online. A follow-up question of obvious interest asked the young person to categorise the experience. None of the respondents ticked the box: "The person I met with tried to hurt me". The majority of the young people in the 2005 survey claimed that the meeting had been fun and rewarding.

The predominant aim of the safety tools and messages has remained to keep young people from meeting with strangers offline. Films have been produced warning about the possible harm that can occur. An example of this is *Jenny's Story*, produced by Childnet-International in the UK. Websites where true stories of young peoples' experiences are described have also been set up (www.katiesplace.org). The goals of such material are to keep adolescents safe online by increasing the technological awareness and sophistication of the teenagers themselves. We cannot ignore the fact that attempting to prohibit certain activities, both online and offline, does adolescents a disservice and denies the fact that educational, social and psychological benefits of using the Internet far outweigh the dangers for the majority of children (Tynes, 2007).

6.1.2 Online safety tools

Online safety tools have included abuse buttons added to websites that children visit, making it easy for young people to report problematic issues or frightening online encounters they experience. In the UK, the abuse button introduced by the Child Exploitation and Online Protection Centre, CEOP, has been widely publicised, giving young people and adults a one-stop possibility of reporting different forms of unwanted experiences including abusive experiences, bullying or other forms of abuse they may witness or be exposed to. The Norwegian police have recently initiated a similar abuse button, the use of which is now quickly spreading through the different networking sites and chatrooms used by children and adolescents in Norway⁷. In both these countries Microsoft has agreed to carry the abuse button on Windows Live Messenger.

Chatrooms are being moderated. Moderators follow in real time the conversations taking place on chat sites, and are able to block users who use words that would indicate improper use of the site or who attempt to contact young people for offline meetings. Chatmoderation uses software tools to build databases with words and phrases to look out for or aliases that might raise suspicion⁸. Some projects have included adults who are visible and present on the chat sites. They contact the young people entering the site, making them aware of what may happen and telling them that they are there to assist should the young person or child require assistance. A form of online mentoring fits into this category of online safety measures whereby young people in a specific community may be contacted by an adult mentor and where an online relationship can be built.

6.1.3 Helplines

In response to young people's need for counselling after having experienced abusive or problematic encounters online, organisations have set up specific helplines. These function in different ways: some will target parents with advice, others will mainly target children and young people themselves, while others will also give advice to professionals that meet children. Several helplines target a number of different audiences and also offer advice on topics related to other forms of distress that young people may have experienced. In Europe, the European Commission, in its 'Safer Internet plus' programme, is now encouraging all awareness nodes and hotlines to team up with organisations that run a helpline, or set up one themselves. To date, 11 EU member States have such helplines included in the European network of awareness nodes.⁹

6.1.4 Education packages for use in school settings

Throughout Europe, North America, Australia and New Zealand a number of education packages have been produced for use with different age groups in school settings. The tools address cyberbullying, chatting and general safety on the Internet.¹⁰ Tools are sometimes collated into tool-boxes and very often there is an interactive element involved.

Alongside these packages for children and young people, some useful awareness raising products have been developed for both parents/carers and teachers. This is a welcome development and one which has enabled adults responsible for the welfare of children to become more empowered and pro-active in safeguarding the children in their charge.

6.1.5 Media co-operation

In some countries, awareness initiatives have been supported by mainstream media. The Polish awareness node produced the film *I am Anna*; this received a great deal of attention from mainstream media, which that broadcast the film free of charge.¹¹

6.1.6 Evaluation of impact

Few information or educational tools have been evaluated for their impact on behaviours of the target groups. Evaluation of educational tools is generally limited to a description of user satisfaction. In the report, Online Behaviour of Young People – A European Perspective, Insafe, the European network of national Safer Internet nodes, attempted to measure how behaviours of young children may change as a result of education in Internet safety. With variations between age groups, 40–60 % of the respondents claimed that they listen and take action when told about dangers on the Internet; this may indicate a change in behaviour (Insafe 2007). The impact on children and young people who have seen the film Jenny's Story, mentioned above, has been measured in a survey of 2000 students and 19 teachers: 80% of the pupils thought that watching the film had increased their awareness of risks they may run by meeting offline someone they have met on the Internet. Seventy-two per cent believed that their view about introducing someone they met on the Internet to a friend had changed since watching the film. After viewing the film only 3% thought they would share their personal details with someone they had not met face to face, compared to 18% who would have done so prior to watching the film. Before watching the film, only 14% would have told someone about going to a meeting a person they had met online. After the film, 95% believed they would tell someone.¹²

Obviously these statistics do not tell us whether this publicity impacts on behaviour or will prevail over time, or if the behaviour change will withstand the test of reality. As pointed out elsewhere in this paper, vulnerability factors influence how children and young people perceive contact attempts on the Internet. A child may leave school only to come home to a lonely situation, in which an adult contacted on the Internet, far from being the dangerous person the child learned about at school, will be someone they would appreciate staying in contact with.

Only a few studies have evaluated how well Safer Internet educational programmes change students' knowledge, attitudes and behaviours. A Canadian study carried out in 2003 measured the effectiveness of the 'Missing Program', which was an interactive computer game designed to assist students in developing their own Internet safety guidelines. The study found that children demonstrated more knowledge about Internet safety after being involved in the programme, but that their attitudes or behaviour did not change (Crombie and Trinneer, 2003, cited in Chibnall, Wallace, Leicht and Lunghofer, 2006). Similarly, a larger study made in the UK focused on how children applied their knowledge on safety guidelines when interacting in chatrooms. The study included 1,369 children between the ages of 9 and 16, and concluded that children are well aware of safety guidelines but did not know when to apply this knowledge. The study argues that educational programmes need to develop children's online safety skills in real-time online environments (O'Connell,

Price and Barrow, 2004). The evaluation of the i-Safe programme was an attempt to use a more rigorous longitudinal design including a test group and a control group. The findings were that students in the test group gained considerable knowledge on how to use the Internet safely, and that the changes were statistically significant and remained over time. However, "For behavior, the findings were not as positive. For the most part, there were no significant changes in behavior between the treatment and comparison groups on all scales" (Chibnall, Wallace, Leicht and Lunghofer, 2006). In summary, there seems to be little existing evidence that safety-guidelines education influences children's online behaviour, even though the different awareness campaigns significantly increase the level of knowledge of how to behave safely on the Internet.

The paper acknowledges the considerable work that has been done in generating information and educational materials for young people, teachers and parents, along with the development of helplines. However, few information tools or education tools have been evaluated for their impact on the behaviour of the target groups. We might conclude that in spite of considerable investment in this area there is little evidence that such strategies influence behaviour, as opposed to attitudes or level of knowledge.

6.2 The role of industry, the private sector and NGOs

6.2.1 INHOPE

One of the recommendations made by the thematic paper for the Second World Congress was that more hotlines were needed to assist with the reporting and removal of child pornography. In 2001 there were 15 members of INHOPE drawn from 12 countries, and as of 2008 this has grown to 28. INHOPE's 2007 Global Internet Trend Report (INHOPE, 2007) indicates that during the last quarter of 2006 the hotline network processed an average of 91,000 reports per month. Approximately 35,000 of these reports were received from the public, and 19,000 were determined to refer to either illegal or harmful content (not actionable by the hotlines but accepted as being 'disturbing' to some people). INHOPE determined that 9,600 reports related to child pornography, and that this number was increasing at an average of 120 reports per month. However, as a percentage of all illegal or harmful content child pornography comprises approximately 50%, and is decreasing at an average rate of 2% per year. INHOPE also provides data on reports of 'Other Child-Related Content' and this is comprised of: child trafficking, child-sex tourism, child nudism, child grooming activities, child erotica/inappropriate images of children, and adult pornography accessible to children. Some of this content is considered illegal in most countries, but other types (such as nudity) would not be considered illegal in most countries. However, such images can give cause for concern depending on the context in which they are acquired and collected and might be thought of in these circumstances as 'indicative'. The number of such reports received was approximately 3,600 per month in the last quarter of 2006, with an average rate of increase of 51 additional reports per month. 'Other Child Related Content' accounted for approximately 19% of all processed reports about illegal or harmful content.

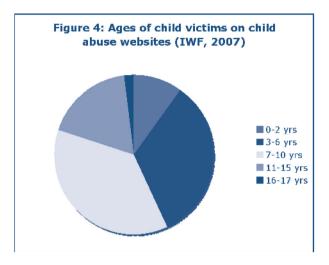
However, INHOPE not only receives reports (both from the public and through its own proactive searches), but also takes appropriate action. In the last quarter of 2006 approximately 6,400 reports per month were made to law enforcement agencies. However, INHOPE hotlines rarely received any structured feedback from law enforcement agencies in relation to these reports. While there may be a variety of reasons for this, the report suggested that this was demotivating for staff and, as a result, INHOPE is working to adopt a signed Memorandum of Understanding with national law enforcement agencies which would include feedback in relation to reports forwarded for investigation. The matter is further complicated as some national law enforcement agencies request that hotline reports are not forwarded to them when content may lie outside their jurisdiction. The paucity of feedback given to hotlines by law enforcement agencies is a cause for concern, and it is difficult to understand how the effectiveness of the hotlines can be evaluated in terms of their impact without adequate feedback.

6.2.2 IWF

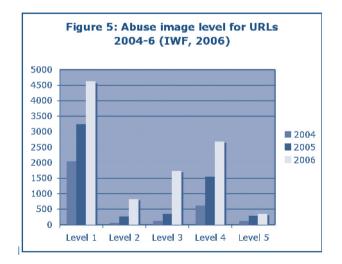
The Internet Watch Foundation (IWF) is a member of INHOPE and takes as its remit that it will work in partnership with ISPs, telecommunication companies, mobile phone operators, software providers, the police, government and the public to minimise the availability of potentially illegal online content. During 2007 the IWF processed 34,871 reports, which resulted in 2,755 top-level domains with child sexual abuse content being assessed, confirmed as potentially illegal and traced; the appropriate intelligence was then disseminated (IWF Annual Report, 2007). The overall number of child sexual abuse domains known to the IWF appears to have remained relatively static over recent years. This may suggest that content distributed through the World Wide Web appears not to be on the increase, in spite of global Internet access, speed of connection and the availability of technologies. The 2007 figures also suggest that 80% of child abuse domains known to IWF are commercial operations.

The IWF also provides an analysis of abusive images in relation to intelligence that may be seen as actionable and therefore passed on to CEOP (the Child Exploitation and Online Protection Centre, UK). IWF also provides information about the children whose images

are hosted on identified websites; distribution according to age is shown in Figure 4:

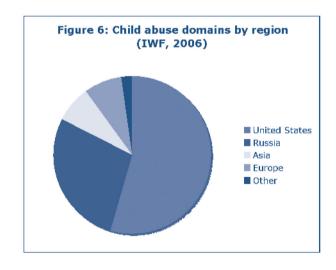


The IWF data also suggests that, "There is a continuing trend in the severity of the abuse in images on the websites our analysts examine, with a significant proportion of websites depicting records of abuse at levels 4 and 5; the most brutal and extreme sexual abuse, as categorised according to the UK Sentencing Guidelines Council... 47% of the websites we assessed depicted potentially illegal child sexual abuse images in these most severe categories..." (IWF, 2007).



Probably one of the most significant contributions made by the IWF since the Second World Congress has been the development of a blocking list of URLs ascertained to contain child abuse images. Potentially illegal URLs are regularly added to the unique list of online child sexual abuse content; this list is dynamic and is updated twice a day. The list also enables the IWF to track the longevity of the websites offering abusive content. Their results suggested that while a small number of domains were consistently 'live', and therefore represented on the blocking list, during 2007 the vast majority (71%) were live for less than 50 days during the year. This also shows the continuing trend for such websites to change servers regularly to avoid detection and removal, but also, "the effectiveness of efforts to make operations difficult, transient, costly and risky for offenders" (IWF, 2007). The list has been used by ISPs, mobile phone operators, search providers and filtering companies. Law Enforcement Agencies and associated hotlines that are members of INHOPE can also choose to have access to the list, which typically contains between 800 and 1,200 live child abuse URLs at any one time.

Unfortunately, the blocking mechanism cannot put an end to offenders abusing children or distributing images of child sexual abuse on the Internet, but at least this initiative contributes to an overall solution. Blocking facilitated by the use of this list applies only to website content and as such has no role or remit for tackling the distribution of child sexual abuse content through other channels such as peer-to-peer or instant messaging.



As can be seen in Figure 6, above, 82.5% of all domains apparently featuring child abuse content during 2006 were traced to servers apparently located in the US and Russia. Those that appeared to be hosted in domains in the UK remained under 1% (IWF, 2006). Where a UK host is identified, the IWF links with both industry and law enforcement agencies to ensure its removal.

6.2.3 IT industry response

The recommendations made by the thematic paper from the Second World Congress included those for the Internet industry. In particular, reference was made to Codes of Practice with regard to minimum standards for the industry to follow, along with stronger, clearer and effective online and offline advice and support for parents, other carers and children on how to stay safe online in relation to both solicitation and child pornography. As we have seen, both government and NGO organisations have worked effectively with the IT industry in generating educational materials both as offline training events and as online information sources. However, it is difficult to identify data within the public arena that helps educators and those involved in child online safety to understand the impact of educational packages (beyond attendance at training events, uptake of DVDs and CDs and self-reports from children) and the impact of educational pages. The latter is important given the IT industry's investment in providing such information, yet outside the industry we were unable to source materials that indicated data on how many children visited the staying-safe information and for how long, and whether this was a one-off viewing or something that occurred on a more regular basis. Given the ease of obtaining this information and the ability to compare such data with the length of time it takes to both read and process information given the age of the child, this is surprising.

In July 2008 Fox Interactive Media recently published a response to the European Commission's Safer Internet Public Consultation on Age Verification, Cross-Media Rating and Classification and Online Social Networking, which they kindly made available to the authors of this thematic paper (Fox Interactive Media, 2008). We can use this information to examine some of the issues identified as being important in relation to the IT industry. In the context of Cross Media Rating and Classification, Fox Interactive stated that, "Given the different uses and characteristics of different delivery platforms we do not believe that a cross-media rating system is practical or in the best interest of users. We also believe that the current rating systems are well established and the creation of a new rating system could cause consumer confusion. In addition, rating systems must take into consideration cultural sensitivities which vary across EU member states. Therefore, we do not believe it is appropriate to develop a pan-European system even if it is applied to a single medium". The issue of media rating is clearly more complex than might have initially been thought. It is also the case that the available empirical evidence would suggest that media ratings affect behaviour in different ways across populations, depending on the motivation of the media user and their age. For older adolescents, media ratings might actually serve to increase the likelihood that the person might try to access what would otherwise be thought to be ageinappropriate material. Equally, the use of age verification was thought by Fox Interactive to be more relevant to ecommerce sites (to prevent young people from buying prohibited products or engaging in prohibited services, such as accessing adult content, alcohol and

gambling). Based on research commissioned by MySpace Fox Interactive conclude that, "MySpace does not believe that existing age verification systems are effective or reliable when used to prevent inappropriate contact, access to inappropriate content, or reduction of predators from free sites, including social networking sites. Age verification systems can in fact add significant privacy and safety complexities to the environment, and may pose new risks to teens".

The focus instead has been on educating users about safer online practices and providing tools to enhance the online safety of users. The tools listed by the document include:

- 1. a registration page that requires prospective members to enter their exact birth date, and individuals who enter a date that does not meet the requisite age are not permitted to register;
- 2. a session cookie on the registration page so that a prospective member cannot change his/her age if the initial age was below that specified in our terms of service.;
- 3. to combat a situation where a teen under 14 lies about his or her age, MySpace employs a search algorithm, utilising terms commonly used by underage users, to find and delete underage profiles. The site is scanned for such terms and the database of search terms is updated to reflect changes in user behaviour and terminology;
- 4. profiles that have been reported by MySpace members or parents as belonging to an underage user also are reviewed by MySpace. Whenever an underage user is identified, the profile is deleted. MySpace similarly will remove members if it believes they are over 18 and they represent themselves as under 18.

This clearly demonstrates that the IT industry has responded to many of the challenges made in relation to child safety, but again it was difficult to secure information about how many profiles are deleted and for what reasons, and what impact these measures are having on the actual behaviour of both young people and adults.

On a cautionary note, while the IT industry has taken a responsible and increasingly proactive stance in relation to online child protection, this has largely been voluntary and self-regulated. One recommendation made in the report by the ICMEC (2007) was in relation to mandatory reporting of content, whereby a 'notice and takedown' requirement should be enacted within national legislation. The report also suggests that consideration should be given to statutory protocols that would allow ISPs to report child pornography fully and effectively (including the transmission of images) to law enforcement agencies or another designated body. This is something of a challenge. In the US, the *Protection of Children from Sexual Predators Act* of 1998 placed new responsibilities on all US electronic services and remote computing service providers. ISPs must report to law enforcement agencies knowledge of facts or circumstances from which a violation of specified offences

involving child victimisation or child pornography is apparent. However, a study by McCabe (2008) indicated that the majority of law enforcement agencies did not report any cases of child abuse referred to them through ISPs, and that in those cases that were reported to law enforcement agencies, the overwhelming majority of cases related to child pornography.

Finally, in recent times we have also seen the establishment of The Financial Coalition against Child Pornography (FCACP), which includes financial institutions, ISPs, online payment providers, and the non-profit National Center for Missing and Exploited Children. The Federal Deposit Insurance Corporation (FDIC), other federal banking agencies and financial institution trade associations also work with the coalition to support its endeavours. In 2007 the FCACP published its first best-practices document addressing the methods used by the financial industry to research, verify and monitor merchants who want to join the payments system (FCACP, 2007). It is anticipated that the FCACP will refine its methods for analysing data and sharing information, as well as expand its network to regions outside the US. Against this background, it was therefore surprising to learn of the comparatively recent emergence of new financial instruments, stored value cards, otherwise known as pre-paid credit cards, which can be obtained for cash and therefore, effectively, used anonymously. It would be highly regrettable if these new cards, or other new forms of online payment, were allowed to undermine much of the excellent work already done by the FCACP (Carr, personal communication).

This section acknowledges that since 2001 there has been an increase in both the number of INHOPE hotlines and the number of reports made to law enforcement agencies. However, INHOPE hotlines rarely received any structured feedback from law enforcement, and this is a cause for concern. An example is also given of the work of one hotline, the Internet Watch Foundation (IWF), which has developed a blocking list of URLs ascertained to contain child abuse content. This list is updated daily and has been used by law enforcement, associated hotlines, Internet service providers, mobile operators, search providers and filtering companies. Similar actions are being taken within other countries. The Internet industry has also responded in a positive way to educating users and providing tools to enhance online safety. There are still opposing viewpoints as to whether industry should be voluntary or mandated, and there is clearly a need for industry to share its information to facilitate the development of better research and outcomes for young people. The paper also acknowledges the welcome actions by the Financial Coalition Against Child Pornography (FCACP).

7. Recommendations

In preparation of this thematic paper the authors were requested to suggest six recommendations to be implemented. The first three are for implementation in the immediate future, while the remainder are for implementation by 2013, five years from now and the likely date for the next World Congress against the Sexual Exploitation of Children and Adolescents. It is anticipated that each State concerned should present evidence that that the actions have been achieved.

7.1 Actions to be achieved in the immediate future

Together with all relevant stakeholders, including children and adolescents, each State should:

- Effect an evaluation of national educational and information programmes to determine their impact on the behaviour of youth Internet users and ensure that this information enters the public domain and addresses the deficiencies identified. As they are citizens of this technologically mediated world, such evaluation should be supported by children's participation, building on their expertise and good practices.
- 2. Determine current provision and practices for children victimised through the new technologies and ensure that systems are in place, involving both law enforcement and child protection, to allow for effective investigation, assessment, intervention, support and follow-up. Building on the rights of the child, this should be based on developmental needs and with reference to good practice. At a minimum this would require the development of at least one administrative hub within each country, which would draw upon national and local skills, resources and practices, and would provide training for dedicated child-protection staff.
- 3. Work at a national level with children and young people of different age groups to determine factors that protect children in relation to the new technologies and which promote resilience.

7.2 Actions to be achieved by 2013

Together with all relevant stakeholders, each State should:

- Amend existing legislation to reflect objective, and internationally acceptable, measures against all sexually abusive and sexually exploitative behaviours and materials related to the new technologies (including virtual and cartoon imagery and text), and make obtaining for self or others, intentional viewing and possession, criminal activities. Such legislation should also protect all victims of sexually abusive and sexually exploitative practices and ensure that law enforcement and judicial processes adopt child sensitive procedures in accordance with the Guidelines on Justice for Child Victims and Witnesses. This should include children and adolescents who have engaged in sexually abusive behaviours towards others through the medium of the new technologies.
- 2. Demonstrate investment in prioritising children by allocating increased child protection and law enforcement resources to the identification of children whose images are circulating on the Internet and enable greater co-operation at national and international levels.
- 3. Initiate a programme of research across States to address:
 - a. inherent aspects of the new technologies that appear to increase the likelihood of sexually exploitative and sexually abusive practices towards children in relation to the new technologies;
 - b. the impact of technological expansion on the demographic characteristics of children sexually abused and sexually exploited through the new technologies;
 - c. the impact, on the family and wider social networks, of increasing criminalisation of Internet related activity
 - d. the role of the IT sector in the risk assessment and analysis of current and upcoming products, in the use and adaptability of age verification methods and online access systems, and in image-detection systems.

All States should set targets and indicators of progress to determine the results of this programme and report on these by 2013.

Endnotes

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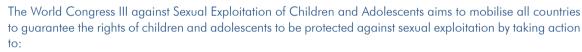
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- Build on current achievements, examine new challenges and dimensions of sexual exploitation and set more targeted strategies and measures to address them;
- Examine initiatives that have been effective in different regions and identify channels to facilitate better exchange of experience, skills and knowledge;
- Open new channels and secure greater international cooperation on key issues (including cross-border and inter-regional cooperation) to facilitate collaborations for counteraction;
- Catalyse a systemic and inter-sectoral approach to guarantee children and adolescents' right to be protected from sexual exploitation; and
- Establish time-bound goals to promote and monitor progress on action plans made by the Congress.

Commercial sexual exploitation of children occurs in many different ways and in a wide variety of settings. The underlying causes are numerous, complex and closely interrelated and must be analysed, understood and confronted accordingly. In order to facilitate the implementation of the objectives of the World Congress III, the Central Organizing Committee (Government of Brazil, UNICEF, ECPAT and the NGO Group for the Convention on the Rights of the Child) commissioned thematic papers on five major areas of this complex phenomenon and violation of child rights.

The World Congress III themes are on:

- Theme 1: Dimensions of Commercial Sexual Exploitation: prostitution of children, child trafficking for sexual purposes, child abuse images and sexual exploitation online, sexual exploitation of children in tourism
- Theme 2: Legal Frameworks and Law Enforcement
- Theme 3: Integrated Inter-Sectoral Policies
- Theme 4: Role of the Private Sector and Corporate Social Responsibility
- Theme 5: Strategies for International Cooperation