



Sexually Explicit Material and Video On Demand Services

A Report to DCMS by Ofcom

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Section 1

Executive summary

Background

- 1.1 This report concerns the protection of children from hard core pornography on UK-based video on demand services¹. The government is concerned that under the current UK legislation these protections may not be adequate.
- 1.2 On 1 April 2010, DCMS wrote to Ofcom about the new legislation for UK-based video on demand services (implementing European law), which for the first time impose certain minimum requirements on regulated UK-based video on demand services (“VOD Services”)². In particular, the legislation introduces minimum requirements on the provision of potentially harmful material in VOD services. The relevant section of the Communications Act (368E(2)) states that:

“If an on-demand programme service contains material which might seriously impair the physical, mental or moral development of persons under the age of eighteen, the material must be made available in a manner which secures that such persons will not normally see or hear it”.

- 1.3 DCMS raised concerns as to whether this provision would in practice provide sufficient safeguards to protect children from sexually explicit material, or whether greater safeguards might be appropriate for such material which is made available over VOD Services.
- 1.4 DCMS considered in its letter to Ofcom that a precautionary approach would be justified. This was because such an approach:
- would be generally supported by the public, given the nature of the material in question and the need to protect minors;
 - would be consistent with the tough constraints which Parliament has already placed on the distribution of sexually explicit material in hard copy form as a film or a DVD (i.e. material classified as R18 by the British Board of Film Classification (“the BBFC”))³;
 - would also be consistent with the approach Ofcom has taken on the provision of this material on television under its Broadcasting Code.

In DCMS’s view, there is plainly an argument for concluding that on-demand programme services, which are capable of being accessed by children and young people at home round the clock, require sufficient safeguards.

¹ Video on demand services – in broad terms – are where a consumer can select television-like programmes from a catalogue and view them at a time of his choosing. Some of the best known UK examples are the BT Vision, BBC iPlayer and ITV Player.

² As defined in section 368A of the Communications Act. See paragraph 2.10 below.

³ BBFC R18 classified material in summary features explicit sex between consenting adults and whose primary purpose is sexual arousal. See paragraphs 3.10 – 3.13 below.

- 1.5 In light of the Government's clear intention to ensure the protection of children from sexually explicit material, DCMS asked Ofcom to consider and report to Government on the position under section 368E(2) of the Communications Act 2003 (as amended) ("the Act") with particular reference to:
- "the extent of the protection for children which these regulations provide, and in particular:
 - what level of risk of harm is posed to children by the provision of hardcore pornography (whether R18 equivalent or stronger material) via a VOD service?;
 - the adequacy of that protection, in light of relevant research and academic literature concerning the risks posed by, and the effectiveness of means of restricting access to, pornography provided via VOD services, and in particular:
 - what are the most appropriate ways of ensuring that children do not normally access this material by means of UK-based VOD services?;
 - the approaches adopted in other EU territories; and
 - whether further regulatory intervention might be appropriate, and if so, what regulatory options would be appropriate."

Research

Evidence relating to harm

- 1.6 In light of the Government's clearly stated intentions, we commissioned research to inform our response to DCMS.
- 1.7 A review was commissioned from Dr Guy Cumberbatch, an independent expert in the effects of media, especially on young people. This looked at the available evidence on the risk of harm from R18 material. The review updates the review of the research literature in this area conducted for Ofcom by Dr Ellen Helsper of the London School of Economics ("LSE") in 2005.
- 1.8 Guy Cumberbatch's main conclusions are consistent with the conclusions of the 2005 review. Firstly, that the research does not provide conclusive evidence that R18 material "might seriously impair" minors' development. Secondly, the research does not provide clear, conclusive evidence of a lesser degree of harm. It is acknowledged that the research is by its nature limited given there are significant ethical constraints about conducting experiments which expose children to this type of material and monitor their development for signs of potential harm.
- 1.9 However, some experts believe that there is evidence that exposure of minors to R18 material can have adverse effects. In short, this area remains highly controversial and in light of these considerations, it cannot be confidently concluded that sexually explicit material carries no risk of harm to the development of minors.
- 1.10 Guy Cumberbatch's report has been peer reviewed by Dr Sonia Livingstone of the LSE's Department of Media and Communications.

Europe

- 1.11 We have also surveyed 20 countries (15 from the European Union) about how they regulate material which “might seriously impair” minors’ development. European approaches to implementing the Directive and protecting children from sexually explicit content vary significantly, as do definitions and terminology in the area of sexual content.
- 1.12 Most countries have no detailed definitions of what material “might seriously impair” the development of minors. Further, no country has found conclusive evidence that sexually explicit material harms children. Moreover, although most countries do not consider that sexually explicit material broadly equivalent to R18 material “might seriously impair” minors, the same countries have decided to impose restrictions on such material on VOD. Where these countries have restricted access to sexually explicit material on VOD, they have rarely relied on the exact wording of the Directive alone. Rather they have relied on other existing legislation in their countries or they have introduced new legislation (accompanied by regulatory guidance) to provide certainty in this important area.

Protections

- 1.13 We have also assessed the types of access restrictions that are available both to consumers and to UK-based providers of VOD services, including gathering and assessing recent Ofcom Media Literacy research on children’s media use and their access to “inappropriate” and sexually explicit content at present.
- 1.14 The main conclusions from this work are that:
- there is a very wide range of different platforms, including the Internet, Digital TV, mobile devices and games consoles, on which VOD services are or will be available;
 - there is an equally wide range of protection measures currently available across the devices that could be used to access VOD content, which vary widely in rigour and efficacy; and
 - the four digit PIN and/or “pay walls” (which theoretically verify users’ ages as being over 18 through use of a credit card) remain the most widely used protection measures against adult material on existing UK-based VOD services.
- 1.15 Ofcom’s previous research into children’s media use in the UK shows that the most commonly visited websites among 13-15 year-olds include a number of internet sites offering unrestricted access to hardcore pornography.

Conclusions and recommendations

- 1.16 In reaching a view in response to DCMS’s request as to whether greater safeguards might be appropriate for the protection of children in this important and controversial area, Ofcom considered both R18 material and also material stronger than R18. It took account of the following important considerations.
- 1.17 In relation to R18 material, these considerations are:

- that the evidence for children being caused harm by exposure to R18 material is inconclusive and the research is necessarily limited by the ethical constraints of exposing children and young people to sexually explicit material;
- Ofcom has a statutory duty under Section 3 of the Communications Act 2003 to further the interests of citizens and consumers and in doing so, to have regard to the vulnerability of children (and others whose circumstances appear to Ofcom to put them in need of special protection);
- that the public (including parents) consider that whilst those who wish to should have access to pornography, access to this material should be restricted in such a way that children cannot see it;
- the range of approaches in Europe as regards implementing the “might seriously impair” obligation in the Directive, and the number of countries that have relied on other legislation (existing or new) to restrict access to sexually explicit material on VOD;
- the lack of any “test case” under current UK law establishing whether R18 promotional material supplied over the internet is “obscene” (i.e. has a tendency to deprave and corrupt its likely audience), but noting also that according to the Crown Prosecution Service (“CPS”) (Legal Guidance to prosecutors)⁴, it is possible that the publication of such material, provided it is sufficiently explicit and is freely accessible, is capable of being prosecuted as “obscene” and therefore a criminal offence under the Obscene Publications Act;
- the desirability in the public interest of giving children appropriate protection from highly unsuitable material;
- the absence in the current regulations of a clear standard requiring sexually explicit material of R18 standard (or its equivalent) to be prohibited, in VOD services, unless it is made subject to restrictions;
- the Government’s clear intention to ensure protection of children from sexually explicit material on UK-based VOD services; and
- the value of adopting a precautionary approach to protecting minors from the risk of harm from accessing R18 material (and material stronger than R18) on UK-based VOD services. There is clear evidence that the public (and in particular parents) support a precautionary approach.

1.18 In relation to material stronger than R18 we had regard to the following considerations:

- content stronger than R18 material encompasses a wide variety of unclassified material which cannot legally be supplied in the UK in licensed sex shops and includes abusive and/or violent pornography, examples of which have been held to be obscene and a criminal offence to provide, if accessible by children;

⁴ As discussed in Section 6 of this report, CPS Legal Guidance outlines the “principal factors” influencing whether a prosecution under section 2 of the Obscene Publications Act 1959 is required. It suggests that where children are likely to access R18 material on a UK-based website or on demand service, this “material may be considered to be obscene and subject to prosecution”.

- this material is acknowledged to be potentially harmful or very harmful to adults, particularly those who are vulnerable; yet
- the current legislation does not clearly prohibit it from VOD Services.

1.19 In summary, Ofcom's opinion is that taking into account:

- all the considerations set out in this report, including the evidence relating to harm;
- DCMS's clearly stated intention to ensure the protection of children; and
- the desire for certainty in this important and controversial area;
- the legislative protections currently in place are not sufficiently clear to provide that certainty. Greater safeguards should therefore be put in place.

1.20 We recommend the Government introduce new legislation which would specifically:

- prohibit R18 material from being included in UK-based VOD services unless appropriate mandatory restrictions are in place; and
- prohibit altogether from UK-based VOD services material whose content the BBFC would refuse to classify i.e. material stronger than R18.

Section 2

Introduction

Request from DCMS

2.1 On 1 April 2010 DCMS wrote to Ofcom about the recently introduced regulations governing video on demand (“VOD”) services based in the UK which fulfilled all the necessary criteria (see paragraph 2.10 below) (“VOD Services” or “on-demand programme services”). The DCMS letter referred in particular to the European Audiovisual Media Services Directive (“AVMS Directive”) which has been implemented in the UK by the Audiovisual Media Services Regulations 2009 (“the 2009 Regulations”). The 2009 Regulations amended the Communications Act 2003 (“the Act”).

2.2 The 2009 Regulations in particular inserted Section 368E(2) into the Act. This states that:

“If an on-demand programme service contains material which might seriously impair the physical, mental or moral development of persons under the age of eighteen the material must be made available in a manner which secures that such persons will not normally see or hear it”.

2.3 In light of this, DCMS asked Ofcom to consider and report to Government on the position under the 2009 Regulations as regards:

- “the extent of the protection for children which these regulations provide, and in particular
 - what level of risk of harm is posed to children by the provision of hardcore pornography (whether R18 equivalent or stronger material) via a VOD service?;
- the adequacy of that protection, in light of relevant research and academic literature concerning the risks posed by, and the effectiveness of means of restricting access to, pornography provided via VOD services, and in particular
 - what are the most appropriate ways of ensuring that children do not normally access this material by means of UK-based VOD services?;
- the approaches adopted in other EU territories; and
- whether further regulatory intervention might be appropriate, and if so, what regulatory options would be appropriate.”

2.4 In assessing these issues, DCMS asked Ofcom to take into account various factors. These include:

- the current protections in the Ofcom Broadcasting Code given its duties under the Communications Act to have regard to the vulnerability of children, which constrains television broadcasters’ freedom to show material [in linear services] which might be considered of more limited potential harm (including requiring mandatory restrictions on non-explicit ‘adult’ sex material) and prohibits the

showing of hardcore pornography which might be classified by the BBFC as ‘R18’ material;

- the precautionary approach designed to ensure the protection of children in relation for instance to the constraints the Government has placed on the distribution of R18 material in hard copy form (video recordings or DVDs – see above);
- the views of the Criminal Law Subgroup of the Home Secretary’s Task Force on Child Protection on the Internet when commenting on the decision in *R v Perrin* [2002] EWCA crim 747), indicating that where children are likely to access material of a degree of sexual explicitness equivalent to what is available to those aged 18 and above in a licensed sex shop, that material may be considered to be obscene and subject to prosecution; and that this would apply to material which is not behind a suitable payment barrier or other accepted means of age verification, for example, material on the front page of pornography websites; and
- the precautionary approach in the AVMS Directive itself requiring member states to restrict access to material which ‘might seriously impair’ children and young people.

2.5 In light of the wording in the AVMS Directive, DCMS expressed the view in the letter that there is a strong argument that the key test in relation to any particular item will in practice be whether there can be confidence that such material will not harm minors, rather than whether there can be confidence that it would.

Ofcom’s report

- 2.6 It is clear from DCMS’s letter of 1 April 2010 that there are concerns in Government regarding the possible risk posed to children from exposure to sexually explicit content on VOD Services. These concerns revolve around particular content of the kind that is equivalent to or stronger than BBFC-rated ‘R18’ pornography. Given Ofcom’s obligation under Section 3(4)(h) of the Communications Act 2003 when performing its statutory duties to have regard to “the vulnerability of children and of others whose circumstances appear to Ofcom to put them in need of special protection”, this is a concern shared by Ofcom.
- 2.7 This report aims to answer the various questions posed by DCMS set out in paragraph 2.3, above and make our recommendations to Government of what further regulatory action needs to be taken.
- 2.8 In order to respond to this request from DCMS, Ofcom has:
- considered whether or not BBFC-rated R18 material or its equivalent (“R18 material”) or material stronger than R18 material, when included in VOD services, “might seriously impair” the development of minors or harm them in any other way. To aid its understanding specifically of the risk of harm to minors from the R18 material category in the UK, Ofcom has commissioned a new review of academic research into the impact of sexually explicit material on minors, focusing in particular on new work that has been done since Ofcom’s last investigation of this issue in 2005. Our findings are set out in Section 3: Potential Harm;
 - sent a questionnaire to members of the European Platform for Regulatory Authorities (“EPRA”) on how they have implemented the AVMS Directive “might

seriously impair” obligations as regards VOD services in those countries. **The findings of this research are set out in Section 4: The Position in Europe;**

- produced an assessment of current available technical protections on VOD services, set out in **Section 5: Access and Restrictions on VOD;**
- analysed other relevant factors in reaching a view on the protections afforded by the current legislation. See **Section 6: Additional considerations;** and
- considered what protections the 2009 Regulations afford children from R18 material (and stronger materials) on VOD services, and whether the legislation was sufficiently clear and certain to ensure that children were protected; and, having set out options for further regulation in this area, we make a recommendation to Government to improve these protections. **This analysis and our recommendation are set out in Section 7: Conclusions and recommendations to Government.**

2.9 In preparing this report, Ofcom consulted the Association for Television On Demand (“ATVOD”). Ofcom designated ATVOD to be the co-regulator responsible for regulating editorial content on on-demand programme services in March 2010. ATVOD endorses Ofcom’s recommendations to Government in Chapter 7.

Background: regulation of R18 material on VOD services and linear television

What is a VOD Service

2.10 The 2009 Regulations set out a number of criteria for deciding whether a service is a VOD Service ie a UK-based video on demand service which is subject to regulation. In the legislation a VOD Service is defined as an “on-demand programme service”. All the criteria must be satisfied for a service to be a VOD Service. The criteria are set out in the new section 368A of the Communications Act 2003.

368A Meaning of “on-demand programme service”

(1) For the purposes of this Act, a service is an “on-demand programme service” if—

(a) its principal purpose is the provision of programmes the form and content of which are comparable to the form and content of programmes normally included in television programme services;

(b) access to it is on-demand;

(c) there is a person who has editorial responsibility for it;

(d) it is made available by that person for use by members of the public; and

(e) that person is under the jurisdiction of the United Kingdom for the purposes of the Audiovisual Media Services Directive.

(2) Access to a service is on-demand if—

(a) the service enables the user to view, at a time chosen by the user, programmes selected by the user from among the programmes included in the service; and

(b) the programmes viewed by the user are received by the user by means of an electronic communications network (whether before or after the user has selected which programmes to view).

Background: the relevant legislation on “might seriously impair”

2.11 Article 27 of the AVMS Directive in respect of television broadcasting services only states:

(1) Member States shall take appropriate measures to ensure that television broadcasts by broadcasters under their jurisdiction do not include any programmes which might seriously impair the physical, mental or moral development of minors, in particular programmes that involve pornography or gratuitous violence.

(2) The measures provided for in paragraph 1 shall also extend to other programmes which are likely to impair the physical, mental or moral development of minors, except where it is ensured, by selecting the time of the broadcast or by any technical measure, that minors in the area of the transmission will not normally hear or see such broadcasts.

2.12 Therefore, under current European legislation, there is a two fold test for linear television. Programmes that “might seriously impair” minors are prohibited under all circumstances on linear television. However, programmes that are “likely to impair” are permitted on television, provided minors “will not normally hear or see such broadcasts”. Exactly the same obligations concerning linear television were set out in the predecessor to the AVMS Directive, the Television Without Frontiers Directive (“the TWF Directive”).

2.13 In 2005 Ofcom set standards in its Broadcasting Code in relation to linear television services for the protection of minors in accordance with its statutory duties (<http://www.ofcom.org.uk/tv/ifi/codes/bcode/>). It considered at the time what material would be caught by the “might seriously impair” test set out in the European obligations (in the then TWF Directive). Partly based on an extensive and independent 2005 review of the research literature into potential harm to young people from exposure to sexually explicit material especially commissioned by Ofcom, Ofcom decided then that there was no evidence that R18 material (or its equivalent) on television “might seriously impair... minors”, as set out under Article 22(1) of the TWF Directive.

2.14 Partly on the basis of that same research, Ofcom determined in 2005 that R18 material was “likely to impair...minors”. This meant that R18 material fell under Article 27(2) of the AVMS Directive. Therefore such material could be provided on television as long as measures could be taken that were adequate to ensure the protection of children. In that context, and with regard to its standards objective under Section 319 of the Communications Act 2003 (to protect under-eighteens), Ofcom reviewed the access restriction technology available at the time and concluded that it did not provide sufficient protection to ensure that minors would be adequately protected from such sexually explicit material. Ofcom therefore introduced a specific Rule into the Broadcasting Code which prohibits linear television services from broadcasting R18 material or its equivalent at any time.

2.15 There are therefore important links to be made between the legislation regulating linear television and regulating UK-based VOD services because the wording in each

case is similar in some respects. However, the regulatory regime for VOD and linear TV is different (see paragraph 2.11 above and 2.16 below).

- 2.16 The UK was required to implement the new requirements of the AVMS Directive into UK law by 19 December 2009. Section 368E(2) of the Communications Act 2003 (as amended) transposes Article 12 as follows:

“if an on-demand programme service contains material which might seriously impair the physical, mental or moral development of persons under the age of eighteen the material must be made available in a manner which secures that such persons will not normally see or hear it”.

- 2.17 As noted above, television services are prohibited outright from broadcasting any material which “might seriously impair”. Under the AVMS Directive and section 368E(2) of the Act however this content is permitted in on-demand programme services provided under-eighteens will not normally see or hear it. The AVMS Directive and 2009 Regulations are silent regarding material on on-demand programme services which is “likely to impair.”
- 2.18 We have carefully considered section 368E(2) in light of DCMS’ request. Ofcom’s view on the meaning and application of this provision is set out in Section 7 of this report.

Freedom of expression

- 2.19 An important factor Ofcom has taken into account in construing section 368E(2) of the Act is the need to have regard to the right to freedom of expression. This right is enshrined in Article 10 of the European Convention of Human Rights, as incorporated in the Human Rights Act 1998. It gives the provider of a VOD Service the right to impart information and ideas and the right of the audience to receive them without interference by public authority and regardless of frontiers. However, it is a right which may be subject to such conditions or restrictions as are prescribed by law and necessary in a democratic society. Accordingly, section 368E(2) of the Act should be interpreted in light of this right and a public authority should not interfere with its exercise as regards VOD Services unless the restrictions on that right are required by law and are necessary to achieve a legitimate aim. Ofcom notes that the right to freedom of expression of the provider of a VOD Service, although applicable to sexual content and pornography, is more restricted in this context compared to, for example, political speech. This right can be legitimately restricted therefore if the restriction is prescribed by law and necessary for the protection of the public (including the protection of health and morals), and including the protection of those under 18.

Regulation of VOD Services

- 2.20 The powers and duties to regulate editorial content on on-demand programme services were passed to Ofcom by means of the 2009 Regulations. Following public consultation, in March 2010 Ofcom designated the Association for Television On Demand (“ATVOD”) to be the co-regulator responsible for regulating editorial content on on-demand programme services. Under the designation, Ofcom gave ATVOD the duty and powers to regulate material on UK-based VOD services which “might seriously impair” under-eighteens. Under the co-regulatory arrangements, ATVOD has the power therefore (subject to various obligations to Ofcom set out in

the designation) to reach decisions about whether a VOD Service breaches section 368E(2) of the 2003 Act.

- 2.21 ATVOD decided that it needed to publish guidance as to how it proposed to interpret and enforce section 368E(2) of the Act regarding material which “might seriously impair” minors. This is **interim** guidance (only) which sets out its provisional position subject to Ofcom’s review and this report to DCMS. The guidance states that in ATVOD’s opinion, based on a precautionary approach and on a provisional basis, R18 or R18 equivalent material “might seriously impair” the development of minors and should therefore only be made available on VOD services with particular access restrictions. ATVOD has issued this guidance specifically subject to review in light of this report and any action to be taken by the Government and/or Ofcom in this area.

Section 3

Potential harm: what effects does R18 standard material have on under-18s?

- 3.1 DCMS has asked Ofcom to consider what **level of risk of harm** is posed to children by the provision of hard-core pornography (whether R18 equivalent or stronger material) via a VOD Service, and the extent to which the current regulations provide adequate protection for children.
- 3.2 Ofcom has in this report focused on examining whether: a) hardcore pornography (equivalent to that classifiable as R18) on VOD Services can be shown to harm children; and b) what the nature and associated risk of that harm might be. In order to do so, This is in order to establish whether there is clear and compelling evidence demonstrating that R18 material has or could have this effect. If that were the case, then it would support the view that such material could confidently and with certainty be described as material that “might seriously impair” the development of minors, and therefore be caught by the requirement in the legislation that such material be made available only in a manner which secures that minors will not normally see or hear it.
- 3.3 To this end, Ofcom has commissioned Dr Guy Cumberbatch, an independent expert in media studies with considerable previous experience in this area, to update the 2005 review commissioned by Ofcom from Dr Ellen Helsper on the potential impact of R18 material on people under 18⁵ by reviewing the available research literature in this area. In this report we refer to Dr Cumberbatch’s report as the “2010 Report”, and Dr Helsper’s earlier work as the “2005 Report”. The 2010 Report is at attached as Annex 1.
- 3.4 Before summarising and commenting on the conclusions of the 2010 Report, we clarify the terms used to describe different types of pornography and potentially harmful sexually explicit material.

Categories of Pornography

- 3.5 The following section discusses the meanings of various terms used in this report and gives some illustrative examples of the kind of material in each category.
- 3.6 **Obscene material** is defined by the Obscene Publications Act 1959 (as amended). This makes the publication of material that has the tendency to “deprave or corrupt” a criminal offence. There is no definitive list of what this material might be.
- 3.7 The Criminal Justice and Immigration Act 2008 was amended to make the possession of certain **extreme pornography** a criminal offence, and defines extreme pornography as that which is both pornographic (“of such a nature that it must reasonably be assumed to have been produced solely or principally for the purpose of sexual arousal”) and extreme. Extreme pornographic material must portray in an explicit and realistic way:
 - a) “an act which threatens a person’s life;

⁵ The full 2005 Report by Dr Helsper, “R18 material: its potential impact on people under 18”, can be found at: <http://stakeholders.ofcom.org.uk/binaries/research/radio-research/r18.pdf>

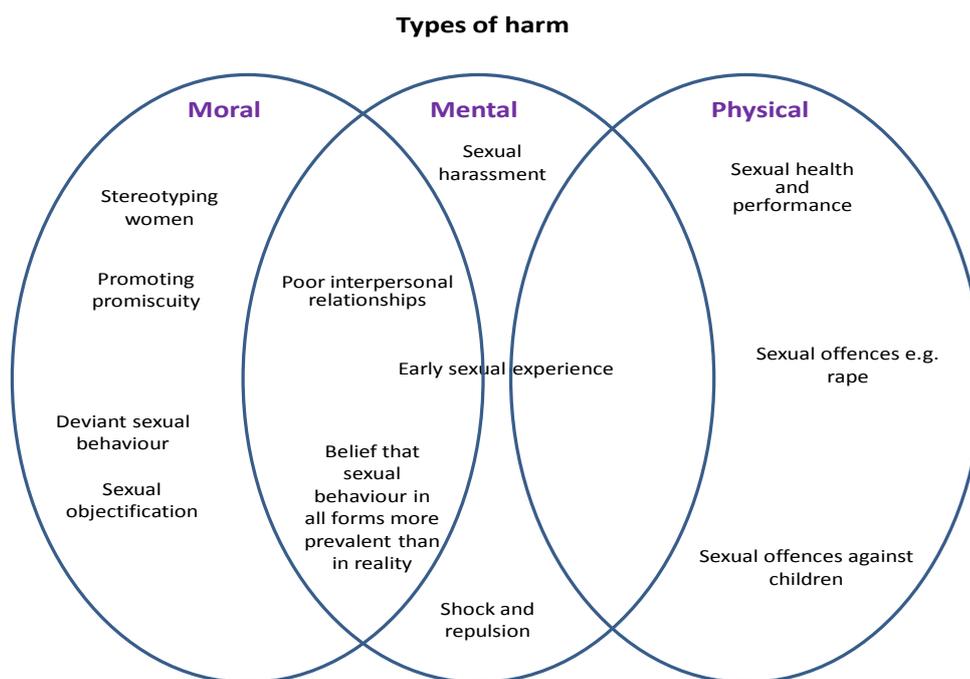
- b) an act which results, or is likely to result, in serious injury to a person's anus, breasts or genitals;
- c) an act which involves sexual interference with a human corpse; or
- d) a person performing an act of intercourse or oral sex with an animal (whether dead or alive)."

- 3.8 **Child pornography** in the United Kingdom is covered by the Protection of Children Act 1978 (as amended by the Criminal Justice Act 1988), which makes it illegal to "take, make, distribute, show or possess an indecent photograph or pseudo-photograph of someone under the age of 18". In the context of digital media, saving an indecent image to a computer's hard drive is considered to be "making" the image, as it causes a copy to exist which did not exist before. In 2009, the Coroners and Justice Act 2009 criminalised possession of all pornographic sexual images depicting under 18s. Media service providers under the UK's jurisdiction are subject to a ban on the dissemination of child pornography in accordance with the provisions of Council Framework Decision 2004/68/JHA of 22 December 2003.
- 3.9 **"R18 plus"** is a term we use in this report to indicate a wide range of material that is stronger than R18 (see below) or otherwise unclassifiable as R18. It therefore cannot legally be provided in the UK as a video work or film – but it would not otherwise, necessarily be illegal (for example under Obscenity or Extreme Pornography legislation). Such material might include but would not be limited to material likely to encourage an interest in abusive sexual activity (e.g. paedophilia, incest); material which includes adults role-playing as non-adults; sexual activity which involves lack of consent (whether real or simulated); the infliction of pain or physical harm (whether real or, in a sexual context, simulated); penetration by any object associated with violence or likely to cause physical harm; or sexual threats, humiliation or abuse which does not form part of a clearly consenting role-playing game, or strong physical or verbal abuse (even if consensual).
- 3.10 **"R18"** is a category of film and video defined by the British Board of Film Classification ("BBFC"). It refers to the graphic depiction of real sexual activity between consenting adults – therefore sex works where the sex is not simulated (commonly known as "hardcore pornography"). The BBFC guidelines governing this category are attached at Appendix 1. There is no distinction made between heterosexual and homosexual activity. For clarification, "R18" cannot include the material indicated listed above as "R18 plus".
- 3.11 The **"R18"** category was introduced via the 1984 Video Recordings Act (as amended) (the "VRA"), although the designation only came to incorporate "hard core" pornography after a legal test case in 1999. The current BBFC guidelines for "R18" material date from 2000. At present, "R18" videos and DVDs may be supplied to adults in the UK only over the counter in licensed sex shops. They may not be distributed by post (mail order).
- 3.12 It is important to note that the Video Recordings Act applies only to videos, film and DVDs and not to broadcast material (or indeed to VOD services). For this reason, the BBFC guidelines can only be a practical guide to the kind of material that Government has asked us to consider, rather than a rigid definition. Nevertheless, since R18 material is commonly defined by reference to these guidelines, we have referred to them here to assist in understanding the type of material being referred to.

- 3.13 “**R18 material**” is a term used in this report to mean material that has either been formally classified as R18, or would be regarded as its equivalent.
- 3.14 “**Adult sex material**” is a phrase used in the Ofcom Broadcasting Code, and refers to non-explicit sexual content (commonly known as “soft core” pornography). It is “material that contains images and/or language of a strong sexual nature which is broadcast for the primary purpose of sexual arousal or stimulation”. When applied to linear television it must not according to the Ofcom Broadcasting Code be broadcast at any time other than between 2200 and 0530 on premium subscription services and pay per view/night services which operate with mandatory restricted access, and with measures in place to ensure that the subscriber is an adult.
- 3.15 Material of this sort broadly follows the BBFC’s guidelines for “**sex works at ‘18’**” – i.e. material that can be bought or rented through any retailer and not confined to licensed sex shops. In the past much of this sort of material was simulated sexual activity; now it is more likely to be cut-down “hard core” pornography.
- 3.16 Dr Cumberbatch notes in his 2010 report that one of the problems with reviewing the academic research on the effects of exposure of young people to pornography or sexually explicit material is that the researchers are not consistent in their use of these terms and the studies they refer to rarely distinguish what kinds of sexual materials are in question. Accordingly, this research should be read in light of this.

Categories of Harm

- 3.17 As noted earlier in this report, the AVMS Directive in respect of **linear TV** draws a distinction between material that “might seriously impair” minors’ physical, mental and moral development, and that which “is likely to impair” such development. No such distinction is drawn in the AVMS Directive in respect of **on-demand services**, where the relevant legal provisions refer only to material which “might seriously impair”, and only as that material needing to be restricted. When responding to the various questions posed by Government, we must therefore address what this term means, and whether it is applicable to R18 material or only to material stronger than R18.
- 3.18 This task is complicated because academic researchers have different approaches to potential harm associated with, or resulting from, exposure to sexually explicit material. In his report, Dr Cumberbatch observes that a common definition of negative effects associated with or resulting from exposure to sexually explicit material is lacking; and an attempt to find evidence relating to “impairment” – whether mental, physical or moral – is hindered by the use of different terminology in research studies (where the term “harm” is frequently used rather than “impairment”). Similarly, the research literature tends not to distinguish between mental, moral and physical harm.
- 3.19 However, in our view, seeking to categorise the different, potential negative effects of viewing pornography (either by adults or children) may be done as follows under the headings of moral, mental and physical harm.



3.20 It is worth noting from this categorisation that:

- some types of effect are difficult to classify, and straddle categories; and
- many of these effects would need to be measured in the long term to provide possible evidence that they resulted from a childhood viewing pornography.

3.21 In 2010, however, we have only been required to consider evidence that sexually explicit material might cause serious impairment. In order for an effect attributable to exposure to sexually explicit material to be described in this way, it would in our opinion, have to have a serious effect on a child's mental, physical or moral development. As such, and in light of the ethical difficulties of conducting experiments which expose children to sexually explicit material, positive evidence of serious impairment – establishing cause and effect – is highly unlikely to be possible, and consequently, the evidence can never be conclusive.

3.22 With these considerations in mind, we now summarise and comment on the evidence Ofcom has found to date of the risk of harm to children from exposure to sexually explicit material, and then turn our attention to the 2010 Report prepared at our request by Dr Cumberbatch.

The Evidence to date

R18 material

3.23 The conclusions of the 2005 Report by Dr Ellen Helsper were:

- “There seems to be no relationship between the availability of pornography and an increase in sex crimes in other countries; in comparison there is more evidence for the opposite effect.

- Research with adults indicates no relationship between the commission of sex crimes and use of pornography at an early age. Again in comparison there is evidence for the opposite effect.
- Research indicates that V-chips and ratings were found useful by parents, but that they might be enticing youngsters to access this material.
- Due to ethical restrictions, there is a severe lack of research regarding the effects of exposure of minors to R18 pornography which contributes to the evidence being inconclusive.
- There is some evidence that indicates that sexual material influences the moral development of young people under the age of 18. In other words, that through exposure to such material young people become more cynical towards traditional relationships (marriage) and become sexually active at a younger age.
- There is no empirical research that proves beyond doubt that exposure to R18 material seriously impairs the mental or physical development of minors.
- Might R18 material seriously impair the development of minors?

From the research reviewed in this report the answer would be no.

- Is R18 material likely to impair the development of minors?

Since there is no conclusive evidence this is a hard question to answer. There might be an effect on the moral development of minors.”

R18 plus material

- 3.24 There appears to be some consensus in the research to date regarding the potentially harmful effects of consuming extreme pornography that would be considered “R18 plus” based on the above definitions. It is widely acknowledged to be potentially harmful or very harmful to adults, particularly those who are vulnerable.
- 3.25 Material that the BBFC would refuse to classify is either material it considers could be illegal, or it is material that it believes carries a sufficient risk of harm to adults to justify it not being classified for lawful supply or distribution in licensed sex shops as a video work or DVD under the Video Recordings Act. In respect of harm to adults, the BBFC considers that it is not a question that can be settled conclusively with empirical evidence of actual harm alone. In identifying the kind of material it would refuse to classify – as detailed above – the BBFC has tried to establish, with the help of psychologists and experts, whether or not it carries a realistic *possibility* of adverse affects. This is the case in particular with vulnerable adults who might already have a predisposition towards for example aggressive behavior or objectification of human beings. The conclusion of the BBFC expert consultations is that the BBFC is right to have concerns about strong pornographic material being sent for potential classification as “R18”. These concerns revolved in particular around R18 material featuring people who appeared to be under eighteen, child related props, dialogue and age references; violent and abusive pornography⁶.

⁶ See “R18 Teen References – Expert Consultation”, BBFC, June 2006; and “Violence and Abuse in ‘R18’ Level Pornography – BBC Expert Consultation”, BBFC, 2007 (both available from the BBFC).

- 3.26 This assessment of the type of material that the BBFC would refuse to classify is borne out by the 2005 review carried out for Ofcom by Dr Helsper. Although this review had no specific remit to consider material stronger than R18, Dr Helsper found that:

“The general conclusion of most reviewed research on adults is that it [is] *explicitly violent sexual pornography* (abusive porn) that causes serious impairment in adults. This is thought to take the form of an increased disposition towards aggressive behaviour and negative attitudes towards women”.

- 3.27 This conclusion, and the BBFC’s approach, is also supported in Hargreaves & Livingstone’s 2006 work “Harm and Offence in Media Content”:

“Considerable attention has been paid to pornography, focusing variously on harm to those involved in production, to male consumers, to children and to society (especially, attitudes towards women) more generally. The evidence for harm to men viewing non-violent (or consensual) pornography remains inconclusive or absent. However, the evidence for harm from viewing violent (non-consensual) pornography is rather stronger, resulting in more negative or aggressive attitudes and behaviours towards women as well as supporting the desire to watch more extreme content. 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.”⁷

- 3.28 In the 2010 Report, Dr Cumberbatch – in updating the 2005 work by Dr Helsper – acknowledged the difficulty of identifying the strength of the material assessed in the research he reviews. However, although he was not required to look specifically at material stronger than R18, he does point to one study that distinguishes between “mainstream” and “paraphilic” (i.e. deviant) pornography, and notes that, in this study the evidence appears to show increased sexual compulsivity for groups who preferred deviant material (likely to be regarded as R18 plus), although he notes that early exposure to pornography itself does not appear linked to compulsivity.
- 3.29 With all of these factors in mind, it seems reasonable to conclude that material broadly viewed by experts in the field as potentially seriously harmful to adults is likely to pose the same – if not a higher – risk of harm to minors.

The Evidence: 2010

- 3.30 Dr Cumberbatch’s 2010 review of the available literature (the “2010 Report”) set out to update the 2005 research by Dr Helsper (the “2005 Report”) and review any new evidence that R18 material: a) caused harm to children, and b) if so, the nature of any harm. Professor Sonia Livingstone of the Department of Media and Communications at the London School of Economics has peer reviewed Dr

⁷ Millwood-Hargrave, A. & Livingstone, S. (2006): *Harm and Offence in media content: A review of the evidence*. Bristol: Intellect Books

Cumberbatch's report and confirmed that his review was "thorough and conscientious" and his conclusions "balanced and appropriate". The 2010 Report and the peer review are attached at Annexes 1 and 2.

3.31 In 2010, Dr Cumberbatch reaches broadly similar conclusions to those of Dr Helsper in 2005, namely:

- the research reviewed in the 2010 Report does not provide conclusive evidence that sexually explicit material might "seriously impair" the development of minors;
- the research does not provide clear, conclusive, evidence on whether sexually explicit material might 'impair' their development;
- some studies report a pattern of associations between exposure to sexually explicit material and a range of sexual attitudes and behaviours which have typically been taken as problematic (for example, greater sexual permissiveness, stronger beliefs that women are sex objects, lower sexual satisfaction, earlier sexual activity, higher probability of anal intercourse). However, these associations could equally support the idea that those with particular attitudes and values are drawn to sexual media; and
- because the empirical evidence for harm is weak and the research is very limited, it cannot be confidently concluded that sexually explicit material carries no risk to minors.

3.32 Although it is important to consider the 2010 Report in its entirety, and together with the 2005 Report, Dr Cumberbatch also draws a number of other conclusions:

- Due to the ethical and practical challenges of working with young people on sexual topics, there is only a limited amount of research on the exposure of minors to sexually explicit material and in the UK there is a dearth of research in this area. Furthermore, this research tends to examine associations between different factors rather than testing for cause and effect.
- These limitations contribute to the research findings being inconclusive about the potential effects of sexually explicit material on minors.
- In addition, it proved challenging to evaluate the studies in terms of evidence of potential effects on minors, due to the variation in the definitions of sexually explicit materials used by researchers. Among the limited number of studies identified, it was rare for them to distinguish what kinds of sexual materials are in question. Furthermore, the literature is notoriously controversial.
- A further limitation is that most studies identified in this report combine all types of sexually explicit media into a total exposure score and so it was not possible to discriminate between different media, e.g. for example, television, internet, video on-demand, DVD.
- Since 2005 a limited number of studies have examined possible effects of sexually explicit material using self-report methods from participants as young as 13.
- The focus of these studies has been on the development of sexual attitudes (such as permissive views) and behaviours. Most of these studies report some

association consistent with negative effects of sexually explicit material, such as notions of women as sex objects or greater endorsement of uncommitted sex.

- Despite the wide age range of minors studied (from 13-18 years old), there is no evidence that the associations described above between sexually explicit material and sexual attitudes vary with age – younger people do not seem more ‘vulnerable’ than their older counterparts.
- Experimental research offers a different method for investigating the effects of sexually explicit material, which in principle allows for causal inferences. However, it poses obvious ethical and legal challenges as it requires minors to be exposed to sexually explicit material. This literature review identified only one experiment (undertaken in the 1960s prior to ethics committees) where young people were exposed to highly inappropriate adult films containing, for example, scenes of bestiality and rape.
- Very few of the studies identified in this literature review consider pornography from the viewers’ perspective. However, recent audience focused research suggests that, across the age bands studied (from early teens), media literacy about sexually explicit material is reasonably well developed and may help to protect minors from potential harm.
- This literature review also identified possible gaps in the research e.g. the age band 10-12 is when young people often begin to encounter sexual material and the absence of research in this area is a gap; and no studies were identified that evaluated the impact of sexually explicit material relative to the sexually non-explicit material. There is no evidence that pornography has any more or less influence on attitudes and behaviours than the sexual content in TV soaps or music videos.

Comments

- 3.33 As regards **R18 material**, the 2010 Report finds nothing that would lead Ofcom to reconsider the conclusions that it reached on the evidence in 2005, because the research reviewed by Dr Cumberbatch provides no conclusive evidence that R18 material “might seriously impair” the development of minors. In our view, it would seem that negative effects of pornography consumption may be identified which relate to what Ofcom considers might be described as “moral harm” – such as tolerance of promiscuity, stereotyping/objectification of women, a cynical attitude towards traditional relationships, and earlier sexual experience. However, there is a paucity of relevant research due to the ethical constraints on exposing children and young people to sexually explicit material, and the studies fail to focus on R18 material specifically or to employ consistent measures of ‘harm’. Concerns that mainstream media reflect “pornographic” imagery and concepts (and so may contribute to inappropriate sexualisation of children) are a subject of ongoing debate, but there is no research evidence in this area which appears relevant to establishing whether or not R18 material causes harm to children.
- 3.34 We turn now to evidence that the exposure of minors to R18 material might harm their development in some lesser way than causing serious impairment. Ofcom again acknowledges this is a controversial area of research where there are a number of approaches and strongly held views. The consensus however – as indicated by the 2010 Report and supported by the peer review of this study by Professor Livingstone – is that the the research does not provide clear, conclusive evidence that exposing minors to R18 material causes them harm or impairment. This is not surprising in

view of the relevant lack of this research in this area highlighted once again in the 2010 Report, which in turn is linked to the ethical difficulties associated with conducting it.

- 3.35 Dr Cumberbatch questions the methodology of the studies that do indicate some form of link between what some researchers regard as less severe types of harm and consumption of sexually explicit material. He notes for example that many of these studies fail to distinguish clearly between the kinds of material to which they are ascribing effects. However, bearing these caveats in mind, some of the studies do suggest some evidence – albeit very limited and inconclusive – of harmful effects to what can best be described in our view as the moral development of children from their exposure to sexually explicit material. Ofcom therefore considers that there appears to be **some** level of risk of harm associated with children consuming R18 content.
- 3.36 In the case of **R18 plus material**, Ofcom notes that such content cannot legally be provided in the UK as a video work or film, and carries the possibility that it is criminally obscene or otherwise illegal. It is widely acknowledged to be potentially harmful or very harmful to adults, particularly those who are vulnerable. We are therefore satisfied that this type of very strong content has the potential to cause severely negative effects to minors and vulnerable people generally. We note that one of the reasons why the BBFC refused to classify certain types of material is that the risk of harm (in this case, to adults) is considered sufficient to justify it not being lawful to supply or distribution in licensed sex shops as a video work or DVD under the Video Recordings Act. Examples of content stronger than R18 material have also been held to be obscene and a criminal offence to publish, if accessible by children.
- 3.37 Ofcom also notes there is no conclusive evidence that exposure of children to R18 material causes them no harm. Again this hardly a matter of surprise. To prove a negative is frequently very difficult, and it would be especially so in a controversial area of research such as this. However, in light of its statutory duties and taking account of the conclusions which may be drawn from the evidence concerning a risk of harm (see above) and the lack of any conclusive evidence of an absence of harm - and so an absence of any risk of harm - to young people from R18 material, Ofcom's view is that the evidence supports a precautionary approach to policy making in this area.

Section 4

The position in Europe

Introduction

- 4.1 As part of its request to Ofcom to consider whether the provisions of the AVMS Directive in respect of on-demand programme services (“VOD services”), as implemented into UK law by the Communications Act 2003 provide sufficient safeguards to protect children, DCMS asked Ofcom to report on approaches to implementation in other European countries.
- 4.2 Ofcom has conducted a survey amongst members of the European Platform of Regulatory Authorities (“EPRA”), a network of broadcasting regulatory authorities, looking at these approaches. The survey focused on the regulation of sexually explicit content on VOD in the first instance, but also, for background purposes, asked about the position in respect of linear TV.
- 4.3 This chapter identifies the key findings that emerge from this survey.
- 4.4 It should be noted that some EPRA members are not members of the European Union, and therefore are not required to implement the AVMS Directive. We consider that, even where it is not directly related to AVMS implementation, information supplied by other countries about their regulation of this area may be of interest to DCMS.

Ofcom’s questionnaire

- 4.5 The questionnaire’s aim was to establish:
 - How material that “might seriously impair” minors’ development has been defined in each country, the basis for such definitions and whether they had been challenged.
 - Whether any evidence had been found that (any) sexually explicit material harmed minors in any way.
 - Whether stricter rules had been introduced (or were anticipated) in each country above and beyond the wording in the Directive for VOD services, and if so by what means.
 - What kind of access restrictions have been used to ensure that minors do not normally see or hear potentially harmful content on VOD services and the effectiveness of such protections.

The Responses

- 4.6 We received twenty responses⁸ (two separate responses from Belgium: Flanders and Wallonia) including those from 5 non-EU countries.
- 4.7 VOD is currently available in all surveyed countries, though respondents could only provide estimated numbers of services. These varied significantly: six of the fourteen countries to respond to the question about the roll-out of VOD services estimated that there were between one and five providers in their country. Belgium (Wallonia) had seven providers and Ireland estimated that it had ten providers. Four countries (Germany, Slovenia, Slovakia and Poland) estimated that they had between 10 and 30+ providers. France and The Netherlands indicated that they had in the range of 175 to 200 providers. There was very little or no data on take-up, with services still at a very nascent stage.
- 4.8 It should be noted that the responses reflected an extremely wide range of approaches and that no single model has emerged as prevalent or preferable. We believe that regulatory approaches to VOD services may in many cases have been influenced by a country's pre-AVMS Directive regime for linear TV content regulation (and sexually explicit content) and the specific social context of any given country – its wider mores, its socio-political history and its long-standing views on sexual content and other harmful material. As a result, definitions and terminology in the area of sexual content are extremely varied, and views on the acceptability of different kinds of sexual material also vary widely.
- 4.9 That said, we believe we have identified some key findings, which will hopefully help to inform the direction that the UK Government decides to take. These are summarised below, and we elaborate on them in greater detail in the remainder of this chapter.

Key findings

- 4.10 Most countries have implemented the AVMS provision concerning the regulation of material which “might seriously impair” by adopting the Directive's wording. They do not have detailed definitions of what material “might seriously impair” the development of minors.
- 4.11 No country found evidence that sexually explicit material harms children.
- 4.12 Most countries consider that sexually explicit material broadly equivalent to R18 material⁹ does not seriously impair minors. Yet, they have only allowed it on VOD only if protections are in place (ie they have introduced stricter rules than are required by the AVMS Directive).
- 4.13 Protections to restrict access by minors to sexually explicit material on VOD vary from fairly light ones (e.g. watershed) to stronger ones (e.g. identification and authentication of the person accessing the material).

⁸ From the EU: Belgium (one each from Flanders and Wallonia), Denmark, France, Germany, Hungary, Ireland, Italy, Latvia, the Netherlands, Poland, Portugal, Slovakia, Slovenia, Sweden. From outside the EU: Norway, Bosnia, Serbia, Israel, and Turkey.

⁹ Due to the very different terminology used by each respondent it has been difficult to establish what other countries restrict in terms of what we would call R18 material.

- 4.14 Where countries have restricted access to sexually explicit material on VOD, they have used various means to do so. They have not always relied on the exact wording of the Directive alone, but mostly either on other (existing or newly introduced) legislation. France, for instance (see Appendix 2) has introduced new legislation which not only restricts access to R18 standard material, but also prohibits material that we would consider to be R18 plus (as defined in Section 3 above on VOD services).

Breakdown of key findings

Most countries have adopted the Directive's terminology and do not have detailed definitions of what material "might seriously impair"

- 4.15 Most countries do not have formal or detailed definitions of "might seriously impair" and for the most part have implemented the AVMS Directive's terminology *verbatim*, adopting a case-by-case approach in practice.
- 4.16 A number of countries have nonetheless elaborated by giving examples of the type of content they considered could result in lesser harm to minors – from their previous experience of interpreting the AVMS Directive in respect of linear TV (where the test is, as mentioned previously, whether material is "likely to impair" minors' development). In France, this wording includes "Pornographic and extremely violent content made for adults, pornographic films with explicit content and non-simulated sexual intercourse, erotic content and very violent films with repeated shots of explicit and seemingly real physical or psychological torture, gore horror films and crude erotic content for the purpose of sexual arousal". In Belgium (Flanders) this wording includes "cruel, violent and frightening scenes" as well as "sexual expressions". In Slovakia, it refers to "programmes with inappropriate context, erotic movies, fictional violence with strong impact (e.g., realistic violence), horror movies and particular scenes from reality shows".
- 4.17 Some countries (Germany, Poland, Slovenia) include under this "likely to impair" category some types of sexual content which can be described as "soft" pornography, erotic or sexual content. Slovenia defines this as "the material with scenes of human sexuality, represented in a way not commonly accessible to minors in everyday life".
- 4.18 There is an equally wide range of views on what content "**seriously impairs**" minors. This generally includes the detailed representation of extreme and gratuitous violence, extreme and perverse pornography and content instigating violence or crime or simulating acts that could constitute a criminal offence for the purpose of sexual arousal.
- 4.19 In Hungary, the approach is stricter and content that "seriously impairs" minors includes pornographic content where the aim is "mainly or solely to arouse the viewer's sexual instinct, where the presentation of sexuality lacks all emotional connections and where genitals are depicted in a rather magnified form". Aside from sexual content, certain types of violent material would also fall into this category, for example if "violent actions are presented in a sadistic form and the violent act or the suffering of the victim is emphasized" or the violence depicted "evokes feelings that are neither merciful or sympathetic but rather indifferent towards human suffering".
- 4.20 It is important to note that often no distinction has been made between the kind of content that seriously impairs minors and content that is illegal, given that both are subject to an absolute ban on linear TV (either because they are illegal or because

material that “might seriously impair” is prohibited completely under the AVMS Directive from being shown on linear TV).

- 4.21 Thus, in France “programmes dedicated to the representation of violence or sexual perversions, degrading human dignity or which lead to its debasement, hardcore violence and child pornography” would be considered content that “might seriously impair” minors’ development (although of course some of that content might be illegal). Similarly, in the Netherlands content which “might seriously impair” was described in general terms and included material prohibited under criminal law. In Sweden it is defined as including “child pornography and the illegal portrayal of violence”. The same is true for Norway where it also includes “content that might confuse, scare or frighten children over a longer period of time”. Slovenia defines it as “paedophilic and necrophilic material, pornography with scenes of sodomy, sadomasochistic pornography and all other forms of pornography which include scenes of immediately recognised abusive sexual activity”.
- 4.22 The fact that television’s absolute ban on material that “might seriously impair” is relaxed for VOD services seems to create a need to more clearly distinguish between legal content that *seriously* impairs, and legal content that impairs minors. In both the Netherlands and Norway the regulator is currently considering the distinction between the two and in Norway guidelines are expected in the near future.

No country found evidence that sexually explicit material harms minors

- 4.23 No country found evidence that sexually explicit material harms minors and none of the respondents had carried out independent research on what material “might seriously impair” or cause a lesser degree of harm to their development (in some cases research activities do not fall within regulators’ duties). A number noted the ethical issues of conducting such research.
- 4.24 Regulators in nine countries commented that they have relied in the course of their work on existing academic literature and studies and consulted experts in the field of child psychology.
- 4.25 In France, for example, the regulator has relied on existing studies and reports as well as the views of an experts’ committee consisting of psychiatrists, lawyers, magistrates, researchers, educational workers and others to assess potential risks. These suggest that violent and sexual content might have undesirable effects on children’s and teenagers’ socialisation, behaviour, psychological health as well as their mental and moral development. This applies to the consumption of this content via TV, video games or cinematographic works.
- 4.26 Some countries (Denmark, Norway) put particular emphasis on the long term effects that exposure to such material might have on the moral or psychological development of minors.
- 4.27 Lack of evidence notwithstanding, the majority of countries take a precautionary approach to safeguarding the development of minors and argue that there was at least a risk that harm could be done. Responses indicated that, for these countries, such a risk was sufficient to justify intervention to prevent children from accessing R18 equivalent sexually explicit content, even though they do not consider it “might seriously impair” the development of minors.
- 4.28 In Germany, research on the subject has not provided any conclusive evidence to date concerning possible impairment of minors by the consumption of unsuitable

pornographic content from the media. Experts agree, however, that there is at least a risk of such effects. German legislation therefore explicitly provides for an “assessment prerogative”, allowing for a future ban of any kind of pornography, should evidence emerge proving its negative impact on minors’ sexual development.

- 4.29 In Denmark, the Danish Radio and TV Board works closely with the Danish Media Council for Children, which is charged with content classification. The Council has worked on the basis of a presumption that “too early confrontation of children with adult’s sexuality may be a vigorous inspiration which can affect children’s identity project”
- 4.30 It is also worth noting that many countries indicated to Ofcom that further work in this area was planned and responses suggested that questions around children’s exposure to pornography were moving up the public agenda. For example, an independent committee is to be set up in Denmark to investigate the possible impact of, and eventually practical or legal solutions to prevent any, negative consequences of the current minimum legislation regime in the area of video on demand services in that country. Meanwhile, the Italian regulator, AGCOM, is preparing a White Paper on the relationship between the media and minors. This paper will incorporate a literature review on the relationship between media and minors and attempt to set guidelines for TV and multimedia programming to ensure it complies with regulations on child protection. Additionally, we understand the Netherlands is also looking at conducting further research into the way in which its European neighbours are implementing the AVMS Directive – similar to the work we have conducted for the purposes of this section of the report at the request of DCMS.

Most countries consider that sexually explicit material does not seriously impair minors. Yet, they have only allowed it on VOD with protections.

- 4.31 Although some countries told us that “pornography” fell within the category of content that can “seriously impair” minors, in practice it seems that they were using this term to refer only to extreme pornography and content that we have described in this report as R18 plus.
- 4.32 It does appear to be the case based on the above that most member states consider that material which might seriously impair would be broadly equivalent to material that we would consider stronger than R18.
- 4.33 Other sexually explicit content (i.e. R18 material in the UK) is not considered to fall in this category. This is the case in Belgium (Wallonia and Flanders), Bosnia, Denmark, France, Germany, Italy, the Netherlands, Slovenia and Sweden. Some of these countries already allow for the transmission of this kind of sexually explicit content on TV with a varying degree of protections (see Figure 1 below), while others have decided to prohibit it, even if they do not define it as causing serious impairment (this is the current situation in the UK for linear TV).
- 4.34 Only Hungary, Poland, Slovakia and Norway appear to define this kind of sexually explicit content as seriously impairing minors. Norway however is currently preparing new guidelines on this question and may reconsider where the line will be drawn in the future in relation to pornography

- 4.35 Therefore the majority of respondents did not appear to define sexually explicit material broadly equivalent to R18 standard as material which “might seriously impair”¹⁰.
- 4.36 In all of the surveyed countries, the regulation is platform neutral, with the notable exception of Israel where sexually explicit material is allowed for satellite-VOD providers without protections, while cable-VOD providers need to restrict access to content of the same nature.

Figure 1: Availability of R-18 equivalent sexually explicit content

	Linear TV	VOD Services
Sexually explicit material is prohibited	<p>Prohibited on the basis that this material “might seriously impair”: EU: Hungary*, Poland, Slovakia, Non EU: Norway*</p> <p>Prohibited on other basis: EU: Latvia, Portugal*, Ireland*, Luxembourg* Non EU: Turkey, Bosnia</p>	<p>EU: Latvia, Poland (likely) Non EU: Turkey</p>
Sexually explicit material is allowed with protections	<p>EU: Belgium (Wallonia and Flanders), Denmark, France, Italy, Netherlands, Serbia, Slovenia, Sweden, [Germany] Non EU: Israel,</p>	<p>EU Belgium (Wallonia and Flanders), France, Germany, Italy, Netherlands (PSBs), Sweden, [probably Ireland and Luxembourg], Slovakia Non EU: Bosnia, Israel (Cable), Serbia, [probably also Norway]</p>
Sexually explicit material is allowed with no protections		<p>EU: Denmark, Slovenia, Netherlands (commercial providers)</p> <p>Non EU: Israel (Satellite)</p>

* Note: Hungary, Ireland, Portugal, Luxembourg and Norway are still considering what regulatory regime to apply for VOD services (the competence to decide lies outside the regulator’s remit). Where they have given an indication of how they are likely to proceed we have tried to reflect it in this table. We will be following developments in these countries closely.

- 4.37 As the table above shows, and as already noted, a minority of countries (Denmark, Israel and the Netherlands) will allow sexually explicit content on VOD services without restrictions (see Appendix 2 for a detailed case study of Denmark’s approach). In Denmark, the Ministry of Culture plans to establish an independent committee to investigate the possible impact of minimum legislation in this area.

¹⁰ It should be noted that some countries, like the UK, have banned certain sexually explicit content from linear TV services despite NOT considering it “might seriously impair” minors’ development.

- 4.38 The majority of countries have or are planning to introduce some form of restrictions – of varying degrees – for sexually explicit content broadly corresponding to the UK’s R18 standard. This is despite the fact that restrictions are only required under the Directive for content that “might seriously impair” the development of minors. This suggests that consistency of regimes across TV and VOD is an underlying policy goal for many European countries: where such sexually explicit content is already allowed (with protections) on TV (because it fell under the category of content that “is likely to impair”) this will also be the case for VOD.
- 4.39 Poland, Latvia and Turkey are the only countries that will prohibit sexually explicit content on VOD services. Portugal, Norway, Slovenia, Hungary and Ireland are still considering this issue (except for Slovenia, all these countries already prohibit it on TV). We understand that it will probably be allowed on VOD with restrictions in Luxembourg, Norway and Ireland; the Slovenian regulator says that the current media law that transposes the AVMS Directive is not specific about such content but expects to have clarity about whether or not such content will be freely available or restricted from further statutory acts.
- 4.40 In summary, respondents either: (a) have transposed the TV regime across to VOD in practical terms (whether by fully prohibiting or allowing sexually explicit material with protections); (b) are currently considering what course of action to take, or (c) have liberalised in comparison with the prohibition on TV, albeit with protections.

Mechanisms to restrict access by minors to sexually explicit material vary from fairly light ones (e.g. watershed) to stronger ones (e.g. identification + authentication)

- 4.41 There is a wide spectrum of mechanisms used to restrict access to sexually explicit content either in TV or VOD across Europe. These usually take into account viewers’ age and the strength of the material, and range from scheduling, to access restrictions via age verification and pin controls.
- 4.42 Sweden only requires that broadcasters “exercise care” in the provision of such content. In three countries (Denmark, the Netherlands and Italy) providers have the option to rely either on a watershed protection or on technical measures to comply with the requirement that access to sexually explicit content must be restricted. In both Italy and Denmark, broadcasters can choose between making the material available at specific times of day (after 22:30 in Italy and an unwritten midnight watershed in Denmark) or make that content available any time as long as it is encrypted. The same is true for the Netherlands (22:00 watershed) although they also require that content respects the Kijkwijzer age classification system set out by the self-regulatory scheme (NICAM). We understand that in practice only niche broadcasters would provide such content and tend to do so after midnight. All other countries that allow sexually explicit content to be shown on TV require that this be subject to technical measures.
- 4.43 Eight countries use an age-based classification system (sometimes in combination with content-based classifications as well) in which visual and audio warnings are required before and/or at the start of the programme, and in some cases during the programme. The age categories and the content associated with them varies widely, however. For example, the Netherlands has 5 age-based categories (All, 6+, 9+, 12+ and 16+) while Denmark has a 3 age-based categories (7+, 11+ and 15+) as does Turkey (7+, 13+ 18+). The classification system is particularly well developed in France (see Appendix 2 which has acted as a model for a number of other countries, notably Belgium (Wallonia), Hungary and Italy).

- 4.44 Protections for VOD services usually consist of access restrictions including credit card payment systems, PIN access codes and age verification, and depend on the programme's rating and age classification. In Germany there is a two step process: adults seeking access to such content need to be identified (face-to-face control), and then authentication takes place every time the content is accessed.
- 4.45 Interestingly, a number of countries have maintained watershed restrictions in the VOD environment. France, for example, only allows content rated +18 and +16¹¹ to be made available between 22:30 and 05:00, while in Israel adult entertainment is available on VOD cable services only between 22:00 and 05:00 (the subscriber must call the service provider and ask to activate the option to watch adult entertainment, after which material can be ordered using a pin code). In the Netherlands restrictions are lighter and it is possible to watch sexually explicit content without protections on commercial VOD services (with those provided by PSBs subject to a watershed).
- 4.46 Several countries expressed concern about the efficacy of any of the technical measures available for restricting access to sexually explicit material. While there was no overall consensus on the efficacy of the various protection tools, those countries who expressed a view indicated that either credit card or PIN code access restrictions were the best systems currently available. Some also expressed concerns about attempts to apply the same rules to different platforms.

Where countries have restricted access to sexually explicit material on VOD, they have not always relied on the exact wording of the Directive alone

- 4.47 This finding requires some explanation. At the time of writing, not all countries have fully completed the implementation process. In the simplest cases, countries have introduced stricter rules for VOD, for example, banning material that "might seriously impair" altogether – although in some cases they define such content. This prohibition has largely been introduced through legislation (for example, in France – see Appendix 2) and Latvia.
- 4.48 Even where the wording of the Directive has been (or will be) transposed *verbatim*, the regime of any particular country could be described as "stricter" than the Directive in respect of the restrictions that it places on the availability of sexually explicit material because of that country's interpretation of the term "might seriously impair".
- 4.49 Where a country considers that **any** sexual content "might seriously impair", it would follow that all such content would be prohibited on TV and restricted on VOD by the exact wording of the Directive as transposed. As noted above, the only countries that appeared in their responses to interpret what we would call R18 material as that which "might seriously impair" were Hungary, Poland, Norway and Slovakia. Of these, only Slovakia has completed transposition and is considering purely voluntary restrictions for such material on VOD, while Hungary, Poland and Norway may in fact introduce further legislation to extend their TV ban on such material to VOD, thereby going beyond the requirements of the Directive.
- 4.50 Most countries, however, do not appear to consider this type of pornographic material – in as far as it corresponds to the UK's R18 standard – such that "might seriously impair." Yet they have still made or will make it available only with restrictions on VOD. Therefore they have also, in effect, gone beyond the minimum requirements of the Directive.

¹¹ See Annex 1 for detailed explanations of what material falls into these categories in France.

- 4.51 The question then arises: how has this been achieved? Some like Sweden have relied on existing criminal legislation not specifically related to broadcasting to ban or restrict such content in VOD. In others like Belgium (Wallonia), France, Germany, Italy, and the Netherlands specific broadcasting legislation has been adopted. Relevant legislation has also frequently been supplemented by regulatory codes or guidelines elaborating on the detail of the protections and rules applicable to such content – although some of these appear not to be legally binding. See Figure 2 below for examples of these different approaches.
- 4.52 Finally, it is worth noting that in some countries the regulator’s position or its individual decisions on specific cases have been contested either informally (in both Sweden and Israel pressure groups called for stricter interpretation of the rules) or formally challenged in Court (France, Poland, Portugal, Slovenia and Slovakia). This has been the case in particular in countries that have adopted a case by case approach rather than defining the term “might seriously impair”. And in France, the “Societe des auteurs-compositeurs dramatiques” – SACD (a society promoting the interests of those producing dramatic works) – has challenged the regulator’s definitions in particular with regard to regulatory requirement that films are re-rated when shown on TV to take account of the mass audience.

Figure 2: Different Approaches to Restricting Access to Sexually Explicit Material

Country	Regulatory Mechanism
Italy	Primary and secondary regulation (yet to be formally adopted)
Germany	Legislation for the protection of minors in the media. Legal basis for restrictions is established by the legislator while its interpretation and the organisation of the system are the responsibility of Commission for the Protection of Minors in the media (the KJM) and the media authorities. German Interstate Treaty on the Protection of Human Dignity and the Protection of Minors in Broadcasting and in Telemedia now states that content that is “suited to impair” (sic) can only be provided with protections.
France	Restrictions on content that might seriously impair imposed by legislation (Law of 30 September 1986) and developed by the regulator in a draft “délibération” (currently being notified to the European Commission under the 98/34 Directive).
Belgium (Wallonia)	Legislation provides the basis for the protection of minors, and the regulator has developed these through both rules and codes (an Ethics Code from 2007 and a recommendation on minors’ participation in programmes, both of which are not legally binding).
Sweden	Broadcasts that might seriously impair minors are forbidden in the Penal Code and the Fundamental Law on Freedom of Expression and a new Radio and TV Act will enter into force on the 1 August 2010.
Netherlands	Legislation introduced via the Media Act affects PSBs, which are not permitted to show sexually explicit content that they consider is likely to impair on VOD without access restrictions

Section 5

Access and Restrictions on VOD

5.1 This section assesses the protections for children from unsuitable (including sexual) material currently in use in VOD services and possible enhancements to these protections. It covers:

- the types of platforms and devices used to access this material;
- the types of content accessed by children online and on TV;
- the current protections in place across those platforms and devices;
- evaluation (benchmarking) of the effectiveness of available protection measures;
- current content labelling practices; and
- research into children's media literacy and their parents' use of protections.

How do VOD systems work?

5.2 VOD systems can either: a) stream content through a device such as a set-top box (e.g. a Sky or Virgin Box), a personal computer ("PC") or a games console, allowing consumers to view the content in real time; or b) download content to a device such as a computer, digital video recorder or portable media player for viewing at any time.

5.3 VOD content is delivered to consumers in a number of different ways. These include the following:

i) Web TV provider (known as Over The Top ["OTT"] TV)

This delivers VOD content over the open internet by using multiple software media 'Players', such as BBC iPlayer, ITV Player and SeeSaw typically running on a set top box, games console or PC. In this case usage may be limited by consumer broadband caps and competition for broadband capacity from other services.

ii) Internet Protocol television (IPTV) system

This is a broadband-delivered VOD service which typically streams/downloads to set top boxes. Examples of this service are BT Vision and Talk Talk TV, which offer the service exclusively to their broadband customers. IPTV differs from Web TV in that the quality of the network between the service provider and the end user device is managed to ensure a guaranteed quality of service.

iii) Cable VOD

From a consumer perspective VOD over cable is very similar to IPTV, however the delivery of VOD does not require the end user to have a broadband internet connection. The service is available to cable TV customers only. An example of this is Virgin Media.

iv) Push VOD system

This service uses a satellite or terrestrial infrastructure and does not require a broadband connection. Examples include Sky Anytime TV and Top Up TV. A push VOD system uses spare capacity on the hard drive of a personal video recorder set top box to automatically record a selection of programming, typically overnight. This effectively builds up a temporary library on the hard drive which is controlled by the service provider. Consumers can then select and view this programming if and when they chose to (i.e. on-demand). Due to limited space on the personal video recorder hard drive, downloaded content is usually deleted and replaced at regular intervals, often weekly.

v) Mobile Phones

VOD content is also delivered to mobile phones. This can be delivered either by the mobile providers' network or by using the handset to connect to broadband via Wi-Fi. The content accessed by the end user could be OTT from the internet or from a service managed by the mobile operator, in a similar way to IPTV.

How is VOD content delivered?

<u>Platform operator</u>	<u>e.g. Sky, Virgin Media, Fetch TV, Freesat, Project Canvas¹² (now known as YouView)</u>
<u>Service provider</u>	<u>e.g. Sky, Virgin Media TV, BT Vision, Talk Talk TV, SeeSaw, Lovefilm</u>
<u>Content owners</u>	<u>e.g. BBC, ITV, Channel 4, Five, NBC, Discovery</u>

- 5.4 The **platform operator** will determine whether to provide access to third party service providers or whether to restrict access to the platform and only offer its own service (which is likely to include content it has purchased from content owners).
- 5.5 Traditionally platform operators have chosen not to allow third party access to their VOD platforms. An example of this is Virgin Media, which only offers its own service and only Virgin customers have access to this. Sky has adopted a similar approach on its Sky Player and Sky Anytime services.
- 5.6 Increasingly platform operators such as Freesat or Fetch TV (or YouView) are providing access to their platforms to third party **service providers**. In such cases platform operators develop and deploy VOD capable platforms and access is sold to the service providers, who will acquire content from **content owners** and create a retail package for consumers (typically operating their own playout and billing infrastructure).

Devices to deliver VOD (sometimes also known as delivery platforms)

- 5.7 Delivery platforms are:

¹² Project Canvas (now YouView) a proposed partnership between Arqiva, the BBC, BT, C4, ITV and Talk Talk to build an open internet-connected TV device. 'Canvas compliant' set top boxes would provide access to a range of third-party services such as linear TV, VOD (e.g. iPlayer, ITV Player, 4OD) and other online content services (any content owner or service provider who can build applications for the device).

- **Digital TV** e.g. BT Vision, Talk Talk TV, Sky + / Sky Digital, Virgin Media TV on-demand, Freesat, Top Up TV Anytime, YouView;
- **TV via PC** e.g. BBC iPlayer, ITV Player, 4OD, Five On Demand, Blinkbox, SeeSaw, Sky Player;
- **games consoles** e.g. Microsoft Xbox 360, Sony PlayStation 3, Sony PSP (PlayStation Portable), Nintendo Wii; and
- **mobile** phones e.g. Vodafone, Orange, O2, T-Mobile, 3.

Children's access to media and content

5.8 There is currently no research data available that specifically covers children's (i.e. under-eighteens') use of VOD services only. We have therefore used existing information on children's access to other media and content as a proxy measure because this involves similar devices, content types and behaviour to those that would be considered as part of a discussion of their access to VOD.

Media activities of under-18s

- 5.9 Ofcom's Children's Media Literacy Audit 2010 provides a useful overview of the media consumption of children (i.e. young people aged 5-15)¹³.
- 5.10 Figure 1 at page 58 (please see Appendix 3 – pp 58-69 – for all the Figures referred to in this section) shows an overview of the media activities children of different age groups regularly undertook in 2009. While TV ranks as the highest media activity regularly undertaken by children of all age groups, use of the internet and mobile phones are also notably widespread, with their use increasing with age. 78 per cent of 12-15 year olds were regularly using the internet for example. This is particularly significant when we consider further data shown in the tables below, which give greater detail of the types of activity carried out by children.
- 5.11 Figure 2 (p59) details the amount and type of watching and downloading of material carried out on the internet by children aged 8-15. This shows that the most common activities are the watching/downloading of videos made by people/the general public like on YouTube or watching/downloading music videos, while the watching/downloading of whole TV programmes, films or clips is less popular. Figure 3 (p59), meanwhile, outlines the types of activity carried out on mobile phones by children aged 8-15. This confirms that children using mobile phones for sending and receiving video clips or visiting websites is relatively infrequent. These tables demonstrate children's appetite for accessing audiovisual material using devices other than TV. It is important to note the level of audiovisual material accessed using the internet and mobile phones, since these platforms are often accessed without parents' knowledge.
- 5.12 In terms of the kind of activities children of different age groups carried out when using the internet, Figure 4 (p 60) outlines the percentages of children who watch or download television or films on the internet. While the largest numbers relate to children who access content from UK broadcasters' websites, it is important to note the numbers of children who access content from other websites. This is as high as

¹³ Please note that the exact age of children surveyed varied from question to question in the Audit. Please refer to each individual table for exact details. The full 2010 Audit can be found at: <http://stakeholders.ofcom.org.uk/binaries/research/media-literacy/ukchildrensm11.pdf>

almost one in ten children aged 12-15. This research did not ask the children to provide examples of the websites from which this ten per cent of children download, but this figure underlines that a significant number of young people are obtaining audiovisual material from a range of sources.

Reaction of under-18s to material they access

- 5.13 Figure 5 (p61) shows that around one in ten children of all ages has come across content that they believed was ‘too old for them’ on television and the internet. In addition, one in five children aged 8-11 admitted seeing or hearing things that made them sad, frightened or embarrassed on television, while one on ten said the same about content they had encountered online. A significant minority of children therefore encounter material on television or on line which arguably they themselves may consider unsuitable for them.

Supervision of children and use of protections

- 5.14 Figure 6 (p61) outlines how many children use the internet without adult supervision. Of all children aged 5-15 who were surveyed, a significant percentage – 46 per cent – use the internet either alone or with other children only. The other 54 per cent of children use the internet under adult supervision. A considerable proportion of children are therefore accessing the internet and doing so without adult supervision (see Figures 1 and 2).
- 5.15 In addition to this data, there is research which underlines the extent to which children have access to media devices in their bedrooms (where of course they are frequently not under adult supervision). Figure 7 (p62) provides year-on-year data for the last three years, from which we can see that children’s access to media platforms in their bedrooms increases in line with their age. This is the case for digital TV, the internet and games consoles. Almost a third of children aged 12-15 have digital TV and internet access in their bedrooms, while almost three quarters of 12-15s have a games console in their bedrooms, which is significant since many of these devices/platforms can be used to access audiovisual content of various types, including VOD services.
- 5.16 This data on access to devices in children’s bedrooms is important when paired with the data relating to unsupervised internet access, as it gives an overall picture of children’s ability to use media platforms alone, often out of the view or without knowledge of their parents or carers.

Material children access on the internet

- 5.17 Information has also been collected on the types of websites visited by children when they use the internet. Figures 8, 9 and 10 (pp 62-68) outline the web entities¹⁴ visited by children aged 5-15 (broken down into age groups 5-7, 8-12 and 13-15) from computers at home during the month of October 2009, as measured by Nielsen NetView. This period typically includes both school term-time usage and school-holiday usage (a half term week is typically five weekdays). This research supplements Ofcom’s children’s media literacy report summarised above, by showing the specific web entities that children visit and how this differs according to the age of the child.

¹⁴ Web entities is used to capture the various forms of web presences – web brands, websites, web channels and internet applications.

- 5.18 Data is sourced from Nielsen NetView and based on the internet usage of Nielsen's Online UK Home Panel. As of October 2009, this panel comprised 42,762 individuals (aged 2+) weighted to be representative of the UK's home internet population. Internet activity is recorded via tracking software downloaded with permission onto all panel members' computers within the household.
- 5.19 We have included this data not only because of the generally useful context, but also because the tables contain a reference to children's access to pornographic websites. In Figure 10 (pp 66-68), the table of web entities visited by children aged 13-15 includes Redtube.com and Pornhub.com. These are both websites which contain hardcore pornographic content, equivalent to R18. The data in Figure 10 show that just over around 110,000 children aged between 13-15 visited these websites during the month of October 2009. We understand that neither website is based in the UK.
- 5.20 Both websites handle their responsibilities to protect children slightly differently. RedTube has a holding screen that appears before users see any adult material. Its text reads: 'Under the governing law of my country I have reached the age of majority and the age required to view sexually explicit material and I am accessing this website from a location where sexually explicit content is legal and permitted. I will not permit any person to access this website who is not legally permitted to do so. I have read and I agree to the RedTube Terms of Service and Privacy Policy.' This is an easy measure for underage visitors to ignore and click through to the content.
- 5.21 Pornhub however does not even offer this most basic level of protection. This site makes available stills and video clips of hard core pornography as soon as the URL is visited. It has some terms and conditions, but these are footer links, and are not placed in front of users before they are allowed to access the material.

Current use of available protections

- 5.22 Current Ofcom research (Children's Media Literacy Audit 2010) notes that one in eight parents whose child watches content on a broadcaster's website has set up parental PIN controls. 47 per cent of parents are aware of PIN controls on broadcasters' websites but have not enabled them.
- 5.23 In addition, there is data outlining the types of access controls on multichannel television currently used by parents of children aged from 5 to 15 – see Figure 11 (p69) in the annex of tables. One most notable aspect of this data is that relating to the percentage of parents who are aware their children know how to override these access controls: according to this research 26 per cent of children aged 12-15 know how to do this. In reality of course probably an even higher number of children have this knowledge and their parents are not aware of this. We assume that the majority of these responses relate to the use of four-digit PINs, since they are the most widely used access controls on multichannel television.

Parental attitudes to children's media use

- 5.24 When looking at the extent to which parents and carers use the current range of protections available to them across media platforms, it is important to put this into context by also analysing available data on their attitudes to children's media use. This provides a picture of how parents and carers might need to be better informed about the types of content available via these platforms, including VOD.

- 5.25 We can look at data relating to parents and carers' attitudes to their children's use and access to content. For example:
- A minority of parents – 40 per cent or so – are concerned about content their child engages with across different media platforms, with variations by age and socio-economic group.
 - 34 per cent of parents in households with multichannel TV services remove adult channels from the Electronic Programme Guide (see Figure 11).
 - 43% of parents in households with a PC / laptop use filtering controls on them – down from 49% in 2008 (see Figure 12 (p69)).
 - Meanwhile, it is common for parents to have 'rules' about what their children watch on television, although without necessarily using technical controls to enforce them.
- 5.26 This research suggest fewer than half of parents using 'rules' and restrictions about children's use of media and the content they access. Arguably these attitudes should be addressed through more information and education if technical controls are to be more effective in protecting children.

Current protections available across VOD platforms and devices

Mandatory versus elective protections

- 5.27 When discussing the protection mechanisms across UK-based VOD devices and platforms it is important to distinguish between mandatory and elective protections. Mandatory protection is where the viewer has no choice about complying with the restriction. Across the majority of media devices and platforms, the main use of mandatory protection is where the provider is not blocking content to protect viewers. Instead, blocks are put in place primarily to protect revenue.
- 5.28 For example, for VOD services available via digital TV, paid-for or premium services are encrypted and sit behind registration so that the account holder must purchase them prior to viewing. In itself this purchase process is a proxy measure for age verification, since the purchase process typically requires a credit or debit card. Since debit cards are only made available to over-16s (and credit cards to over-18s), the assumption is that an account holder using one of these methods to pay is aged at least 16 in the case of a debit card and at least 18 with a credit card.
- 5.29 There are other protection measures that account holders can choose whether or not to put in place to restrict access to content or services that may be unsuitable for some viewers. These are elective mechanisms, where the responsibility for their use sits with the account holder. An example is a four digit PIN which needs to be entered into a set top box before viewing certain channels or material.

Current protections by device

- 5.30 This section briefly summarises the protection measures currently available across the platforms and devices that can be used to access VOD content. It also intends to provide a snapshot of what protections for consumers are currently in use. (Please see Appendix 4 for a more detailed analysis of the individual platforms/devices and their respective protection options).

Digital TV:

- 5.31 Platforms such as BT Vision, Talk Talk TV, Sky + on-demand/Sky Digital and Top Up TV Anytime all allow adult material¹⁵ to be available on their VOD services available via digital TV. Virgin Media TV does not allow its customers to view any adult content on its on-demand services.
- 5.32 Where adult material is available, age verification via purchase is the most common mandatory protection. In order to view all adult services the account holder must purchase them first. This can be done over the phone or online. Until the account holder has purchased a channel or combination of channels, no adult content can be accessed. Account holders are usually then given a PIN, which they would then normally use as part of their elective protections (see below).
- 5.33 In some cases, once an account holder has purchased access to adult content, he must enter his PIN each time he wishes to view any of the adult channels to which he has subscribed. (Not all PIN systems require this kind of PIN re-entry. It may depend on whether a monthly subscription is taken or a customer is purchasing the service on a "Pay Per Night" basis).
- 5.34 Elective protections mostly involve a 4-digit PIN, which can either be applied to entire channels or content with specific age ratings (although not always both). Some systems are more sophisticated. For example, Sky boxes use a four-digit PIN to block content that can also be extended to cover content recorded onto the PVR so that the PIN is required for 'pre-watershed playback', as well as being required before using the online services or purchasing items through the box.
- 5.35 It is worth noting that Talk Talk TV uses both PIN protection and a watershed. Its 'Adult Pack' content is also only available for viewing between 22:00 and 05:30. PIN protection can be used to block channels and programmes, with these chosen by the account holder through the system's control panel.

Potential additional protection on digital TV

- 5.36 One proposed extra measure of protection on the digital TV platform (not currently in use) would be to provide additional PINs for specific content (e.g. R18) services. This would mean an account holder would be issued with an additional, second PIN that would be used solely to access the restricted content service (such as R18 material if it were included in a UK-based VOD Service). It could be used in conjunction with the PIN that is already used by the subscriber as part of their parental controls settings. This system is not currently in use but Ofcom's preliminary assessment is that it would probably be technically feasible but would depend on the cooperation of the various platform providers.

TV via Personal Computer:

- 5.37 Adult material is not currently available on these types of VOD services, such as BBC iPlayer, ITV Player or 4OD (for Channel 4 programmes).
- 5.38 Because no material that requires restriction is provided on these services, there are no mandatory protections in place.

¹⁵ None of the UK providers detailed in this section of the report at present provide any material which is equivalent to R18. By "adult material" in this section we mean "adult sex material" as defined in the Ofcom Broadcasting Code, i.e. soft core pornography (see paragraphs 3.14-15, above)

- 5.39 When watching TV catch-up or on-demand services via a PC or similarly enabled device (such as a mobile phone or a tablet), a user must set up an account for all of the services listed below. During the account set-up, the user/ account holder can choose settings for age-rated material. This allows them to either restrict or allow access to content based on its age rating.
- 5.40 Material is rated with a 'G for guidance' if it is unsuitable for younger viewers – this typically applies to content broadcast after the 9pm watershed, although content broadcast before 9pm could also receive a 'G' rating if it contains material unsuitable for younger viewers. If the user chooses to restrict access to 'G-rated' content, a PIN will be required to view content of this type every time the service is used.
- 5.41 If the account is set up to allow unrestricted access to 'G'-rated material, no PIN is required. Account settings can be changed after the set-up process if the account holder wishes to change the access restrictions setting they have employed.
- 5.42 In terms of elective protections, BBC iPlayer uses a parental guidance lock system to block content categorised as being unsuitable for viewers under 16, and a parental password can be set up on a PC to help ensure only appropriate content can be viewed by various members of a household. Similarly, ITV Player and 4OD offer elective PIN access control systems to allow users to choose whether to PIN protect content (either originally broadcast after the 9pm watershed, 18-rated or 16-rated content). In general, such systems allow users to define their own PIN and choose which content they wish to restrict.
- 5.43 Service providers Blinkbox and SeeSaw charge for some of their content, and require an account to be set up (by those over 18 or over 13 with parental consent). SeeSaw offers elective protections through the use of parental controls consisting of a 6-character password and operates a 'G for guidance' system, flagging content which is unsuitable for younger viewers. The Seesaw website recommends parents set parental controls as part of the account set-up process. The site also recommends setting the password using different browser software.

Games consoles:

- 5.44 On these devices, adult material is not available via their specific (e.g. Xbox or PlayStation), content channels but where the devices have internet connectivity users can of course visit websites that contain adult content.
- 5.45 No mandatory protections are in place, due to the absence of any adult content on the official games consoles' channels.
- 5.46 In terms of elective protections, these are of course geared towards restricting minors' content to games rated by age. But most consoles come with "parental" or "family" control settings that can be used offline and online, with offline settings granting or restricting access to games based on the PEGI rating system (new games are auto-encoded with their PEGI rating) or Entertainment Software Rating Board (ESRB) ratings). Online settings restrict access to content and contacts based on the parent's choice.
- 5.47 Because these consoles tend to be used by children, there is a focus on filtering inappropriate websites, and restricting chat usage and spending.

Mobile:

- 5.48 Adult material is available on all the main networks: Vodafone, Orange, O2 and T-Mobile. Mandatory controls (Vodafone, O2 and 3's "Content Control", Orange's "Safeguard", T-Mobile's "Content Lock") are in place, creating automatic blocking of access to content rated 18 years or over (including adult material) where a customer's age has not first been verified. Customers over 18 must request the filters to be removed, and must verify their age as over 18 if they request removal of the filters – in most cases by the provision of credit card.
- 5.49 These mandatory controls also offer an elective barring and filtering mechanism, designed to prevent customers under 18 from accessing inappropriate content and internet services over the relevant network, and is applied by default to any mobile phone lacking confirmation of customer's age. This will stay in place when using dial-up WAP connection. It is removable by over-18s by registering their age, and can be reactivated, altered or removed again (usually without a fee) by customers after registering.

Content labelling

- 5.50 Content labelling enables consumers of media services and content to make informed decisions about whether they or the people around them should be able to access various forms of content. This is done by ensuring that all content comes with clear, easy-to-understand descriptions, labels and tags that outline what the content is likely to contain.
- 5.51 An example of how service and content providers are encouraged to adopt best practice with relation to their output is the Broadband Stakeholder Group's Good Practice Principles on Audiovisual Content Information¹⁶. These were developed to ensure that consumers are able to make informed choices about the content they access in a fast-moving media environment. They were launched in February 2008 and relate to content that may be unsuitable for children and young people or which some members of the public may find offensive.
- 5.52 While the format of the information provided may vary from platform to platform, content providers are committed to ensuring that it:
- is easy to use and understand
 - enables the user to make informed choices
 - uses plain and consistent language
 - is practical for the medium in which it is made available
- 5.53 The principles apply to commercially produced and acquired content that may be unsuitable for children and young people and which may be harmful or offensive more generally. The five principles are:
- Providers are committed to promoting and enabling media literacy through the provision of content information. The providers' respective approaches to these principles reflect that commitment.

¹⁶ <http://www.audiovisualcontent.org/audiovisualcontent.pdf>

- Providers offer content information in order to empower users and allow them to make informed choices about the content that they and their families access/consume/watch.
- Providers offer information about content that may be harmful or offensive to the general public, and that may be unsuitable for children and young people. In particular, content information is designed to enable parents and carers to exercise supervision over the content viewed by those they are responsible for.
- Providers employ editorial policies that reflect the context in which their content is delivered. These policies aim to guide users about the content that is available on a particular service so that they can make an informed choice about what to view or not view.
- While the exact format of the information may vary from provider to provider according to context, providers aim to present it in a way that:
 - is easy to use and understand
 - gives adequate information to enable the user to make an informed choice about whether or not to access the content
 - uses plain and consistent language, practical for the medium in which it is made available.

5.54 The following companies and organisations committed to the principles at launch: AOL, BBC, Bebo, BT, Channel 4, Five, Google, ITV, Microsoft, Mobile Broadband Group (represents Orange, O2, 3, T-Mobile, Vodafone and Virgin Mobile), Teachers TV, Virgin Media, Yahoo!, ATVOD (Association for Television on Demand), FOSI (Family Online Safety Institute) and BBFC (British Board of Film Classification). Since launch, BSkyB, MySpace and Tiscali have also committed to the principles. Organisations who want to become a signatory can do so via the Broadband Stakeholder Group website.

Evaluation of protection measures (benchmarking)

- 5.55 One of the key issues when evaluating the range and scope of different protection tools and services across multiple platforms is the paucity of effective benchmarking of these services. There are many tools and services available to provide protection across the various platforms on which content can be accessed, but these offer varying degrees of effectiveness.
- 5.56 In the context of elective protections that are available to parents and carers, many of these are purchased with little information available on their effectiveness, other than product reviews written by users, or recommendations from retailers. Independent benchmarking is therefore a useful tool to help people to make decisions about which services or products will be most useful in preventing access to certain websites, services or content types.
- 5.57 A number of benchmarking initiatives have been already put in place. These include SIP Bench and the BSI Kitemark / PAS74 for internet filtering software.

SIP Bench

- 5.58 The EU Safer Internet Programme Benchmarking Scheme for internet filtering tools (SIP Bench)¹⁷ has set out to benchmark the efficacy of a number of filtering tools across different platforms.
- 5.59 SIP quotes a figure from the Eurobarometer survey 2008, that 59% of parents declared that they use a form of filtering or monitoring software. According to the EC Information Society, the benchmarking study is: “an expert, vendor/supplier-independent, objective assessment of the filtering software and services currently available”. The study was carried out through an annual benchmarking exercise of approximately 30 parental control products or services repeated over three years.
- 5.60 The study aims at providing guidance to parents and educators, in particular at improving awareness of solutions and promoting best practices. In addition, the study provides recommendations for future products in order to steer vendors and service providers. The focus of the benchmarking was on effectiveness, performance, usability, configurability, transparency and suitability for the European cultural context. The benchmarking was segmented in two age brackets of children (below and over 10 years old) in order to cope with the different risks and requirements specific to each age.
- 5.61 Between 2006 and 2008 a total of 26 products were tested as part of the benchmarking study:
- AOL – Parental Controls
 - Blueprint Data – Kidsnet
 - Cogilab – Surfpass 4 Premium
 - Computer Associates – Internet Security Suite 2008
 - Computer Associates – Secure Content Manager
 - Easybits – Magic Desktop
 - Editions Profil – Parental Filter
 - F-Secure – Internet Security 2008
 - Intego – Internet Security Barrier X5
 - InternetSafety.com – EtherShield
 - InternetSafety.com – SafeEyes
 - McAfee – Internet Security Suite
 - McAfee – Total Protection

¹⁷ The SIP Bench report can be found at: http://ec.europa.eu/information_society/activities/sip/projects/completed/filtering_content_labelling/filtering/sip_bench/index_en.htm

- Microsoft – Windows Vista Ultimate (parental controls)
- MicroWorld – eScan Internet Security Suite
- Norman – Norman Security Suite
- Open Source Community – DansGuardian
- Open Source Community – Poesia Open Source Filtering
- Optenet – Optenet Security Suite
- Optenet – Web Filter PC
- Point Clark Networks – ClarkConnect
- Smoothwall – School Guardian 2008
- SoftForYou Inc. – CyberSieve
- Symantec – Norton Internet Security Suite 2008
- Telecator – Brightfilter
- Trend Micro – Internet Security Suite Pro

5.62 Each of the products was scored across a range of criteria:

- Effectiveness for kids of ≤ 10 years
- Effectiveness for kids of ≤ 10 years (porn only)
- Effectiveness for youngsters of > 10 years
- Effectiveness for youngsters of > 10 years (porn only)
- Install, uninstall and update procedure
- Tailoring and monitoring the filtering
- EU language support
- Security integrity

5.63 A score from 1 to 4 was given to each product against each of these individual measurements. The products were not 'passed' or 'failed', nor ranked in order of effectiveness. Instead, their effectiveness is laid out in detail and chart format on the European Commission website¹⁸.

¹⁸ The chart can be found at:
http://ec.europa.eu/information_society/activities/sip/docs/project_reports/sip_bench_2008_scores_table_en.pdf

BSI Kitemark / PAS74

- 5.64 The Kitemark for Child Safety Online has been developed through a collaboration between BSI, the Home Office, Ofcom and representatives from ISPs and application developers. This is a certification scheme for internet website filtering software produced by software manufacturers. These products can be bought as standalone products from computer stores or come as part of an operating system or ISP package. Either way, the software's performance, reliability and user-friendliness are tested to the scheme's criteria.
- 5.65 The scheme covers internet access control products, services, tools or other systems:
- Easy installation, configuration and use
 - Effective filtering
 - Essential features
 - Easy updating of software
 - Easy to understand instructions
 - Consumer communications and support
- 5.66 BSI will test for their ability to block the following categories of websites:
- Adult (sexually explicit) content
 - Violence (including weapons and bombs)
 - Racist and hate material
 - Illegal drug taking and the promotion of illegal drug use
 - Criminal skills/activity
 - Gambling
- 5.67 Laboratory testing will also check that the product or service:
- Does not unduly block access to suitable internet content
 - Configuration settings are adequately protected so that the product cannot be disabled
 - Security settings are not compromised by any tools provided by the hardware, operating system or browser
 - Regain control procedure is effective should the security system fail
- 5.68 Alongside the Kitemark, which at the time of writing has yet to be formally awarded to a submitted piece of filtering software, reference should be made to the Becta internet services accreditation scheme, for internet tools, protection and filtering

software used in schools. Suppliers of these services must apply for Becta accreditation before their products can be used in a school environment.

- 5.69 The accreditation scheme covers:
- Managed internet services requirements
 - Web content filtering products and services requirements
 - Email filtering products and services requirements
- 5.70 It offers detailed of accredited services and suppliers to schools and learning centres to ensure all services used are of certifiable quality.
- 5.71 In the event that a new, standard set of agreed blocking mechanisms are introduced to allow consumers to restrict access to R18 material, a benchmarking process would benefit consumers, by enabling them to identify which blocking mechanisms are considered to be of sufficient robustness and effectiveness when they are used to block types of content. An agreed logo, mark or other easily identifiable icon could inform users that the blocking options offered by a service or content provider are of a sufficient level of effectiveness. This would offer dual benefits – firstly by making consumers’ decision-making easier and simplifying the range of options available to them; and secondly by encouraging providers to sign up to a common set of best practice principles in the blocking mechanisms they offer.

Conclusions

- 5.72 This brief survey has shown that a number of elective protection measures are already in place across a range of devices and platforms, offered by different VOD service or content providers. However, according to Ofcom data fewer than half of parents use internet controls, and only a third of parents use parental controls on their television. We can see from the Nielsen data that a significant minority of children age 12-15 access pornographic websites online. This – despite the fact that research shows that many young are able to watch the television or access the internet without adult supervision – reinforces the need for parents to be aware of the kind of content their children are likely to encounter, and to put in place elective protections if they wish to restrict their children’s access to content of this nature.
- 5.73 There is a range of blocking mechanisms and encryption technology which is currently available which could be used to protect children from possible R18 material on VOD services – at least in theory. They include:
- PIN protection (typically four-digit, but in theory more than four could be) required.
 - Credit / debit card-related mechanisms (account holder uses card to prove identity and therefore age).
 - Password protection (can be alphanumeric for extra security).
 - Bespoke smartcard / provider-issued methods (hardware or content provider issues tools that enable certain content to be viewed).

- In addition to these, extra technology such as PIN verifiers can be employed (such as those used by some banks for online transactions), providing a further level of security.
- Fingerprint technology (increasingly used on devices such as laptops; could be employed on PCs, set-top boxes or PVRs).
- Iris-recognition and voice-recognition technology is less commonly used but nevertheless currently available.
- Tailored peripherals could be produced cost effectively and combined with existing hardware to accommodate these biometric measures.

In practice only the first two are widely used in UK-based VOD services at present as regards controlling access to “adult sex material”.

5.74 In addition, blocking mechanisms and technology currently not widely used for VOD services but which could be available soon, include:

- An additional and second PIN to be issued and used when accessing specified adult channels
- Individual PINs for each member of a household.
- Separate remote handsets for adults and children. These allow access to different types of content. These are already employed by Tiscali TV / HomeChoice.
- The use of more than one set top box / receiver for different types of content (for example, a set top box intended for use in a child’s room should only receive suitable content).

5.75 These are all various ways in which access to R18 material can be restricted on a UK-based VOD service. They clearly vary in effectiveness. Ofcom research shows that the four digit PIN used by itself is of very limited efficacy and is frequently circumvented by children. The requirement that the service must be purchased by someone who can prove he is aged at least 18 would appear to be more effective than the alternatives.

5.76 Ofcom however has not thought it appropriate in this report to examine and express a view on whether or not a particular protection – or combination of protections – is sufficient to provide adequate protection to children from hard core pornography on UK-based VOD services. This is because Ofcom’s view is that the current regulations are not clear about exactly what material “might seriously impair” and which does not. There is a corresponding lack of clarity therefore about which content “must be made available in a manner which secures that such persons [ie under-eighteens] will not normally see or hear it” and what protections might be necessary and appropriate. Clearly this issue needs further consideration. But first the Government must decide what steps (if any) it wishes to take in response to this report.

Section 6

Additional Considerations

6.1 We now turn to an examination of other factors that DCMS has asked us to take into account in reaching a view on the adequacy of the current legislative protections, as well as other relevant factors.

Precautionary approach to availability of pornography on VOD Services

6.2 Having decided that it was appropriate to adopt a precautionary approach to the availability of pornography on VOD Services for the reasons set out earlier in this report, Ofcom wished to apply this approach according to a logical and objective framework. We started our analysis with European law because the obligation to regulate VOD services derives from the AVMS Directive. We noted that no specific EU legal definition of the precautionary principle exists. The European Commission has however provided a Communication¹⁹ on the principle which provides, amongst other things, guidance on factors triggering the principle, when the decision maker is to have recourse to the principle and how it should be implemented.

6.3 According to the Communication, the precautionary principle may be invoked when there is a risk of harm to human, animal or plant health, the environment or for consumer protection, but scientific evaluation does not allow the risk to be determined with sufficient certainty, and absolute proof of harm actually occurring is not yet available.

6.4 In Commission v France, it was noted that “A correct application of the precautionary principle presupposes, first, identification of the potentially negative consequences for health of the proposed use of processing aids, and, secondly, a comprehensive assessment of the risk to health based on the most reliable scientific data available and the most recent results of international research”.²⁰

6.5 This definition neatly applies what the Commission identifies as the three pre-conditions necessary for the decision maker to use the principle:

- an identification of the potentially negative effects of a phenomenon, product or process;
- an evaluation of available scientific data on whether measures are necessary to protect the environment, consumers or human, animal or plant health; and
- for this evaluation to show the risk cannot be determined with sufficient certainty.²¹

6.6 In other words there needs to be a potential negative effect of a product/process but which cannot be determined for certain based on an evaluation of available information.

¹⁹ COM (2000) 1

²⁰ C-333/08 at para 92

²¹ See Communication para 5.1

- 6.7 According to the Communication, if these conditions are met then the decision maker can take protective measures despite a full demonstration of risks not being present. Protective measures can range from a legally binding measure to no more than a recommendation. It may be an appropriate response for the decision maker not to act at all or merely to inform the public of the adverse effects of a product or procedure²². The decision is a political one and depends on what is an acceptable level of risk to society.
- 6.8 Where the principle is invoked, the general principles of good risk management must be adhered to. This includes ensuring that:
- protective measures are not disproportionate to the desired level of protection (i.e. measures should not or very rarely aim for zero risk);
 - protective measures are not discriminatory in their application;
 - protective measures are consistent with those adopted in similar circumstances;
 - the benefits and costs of action and lack of actions are examined; and
 - the measures are reviewed in light of scientific developments.
- 6.9 The research into sexually explicit material commissioned by Ofcom has not provided conclusive evidence that R18 material “might seriously impair” minors’ development, nor does it provide clear, conclusive evidence of a lesser degree of harm. It also notes nevertheless that some experts believe that there is evidence that exposure of minors to R18 material can have adverse effects; and that it cannot be confidently concluded that sexually explicit material carries no risk of harm to the development of minors. Regarding content *stronger* than R18 material that cannot legally be provided in the UK as a video work or film, it is widely acknowledged that this content is potentially harmful or very harmful to adults, particularly those who are vulnerable.
- 6.10 Ofcom therefore believes that the precautionary principle is triggered here. The principle though is relevant to the Government deciding whether new legislation or rules are appropriate to deal with a perceived risk, rather than how to interpret existing legislation (here section 368E(2) of the Act).
- 6.11 However, it is Ofcom’s view, in light of the potential risks and the importance of protecting children and young people, that the UK legislation should more clearly and certainly restrict the availability of all categories of hard core pornography in VOD Services by introducing a more specific, legally binding requirement.

UK legislative controls on pornography

- 6.12 Another factor for Ofcom to consider in light of DCMS’s request, was that there are strict legislative controls under the VRA on the availability of sexually explicit material of R18 strength, and on material so strong the BBFC would not classify it for distribution, when in the form of videos and DVDs. At present, “R18” videos and DVDs may be supplied to adults in the UK only over the counter in licensed sex shops. They may not be distributed by post (mail order) and R18 films can only be shown in licensed sex cinemas to which no one under 18 can be admitted. By definition, the VRA does not permit material *stronger* than R18 to be made available at all in the form of videos, DVDs and films. The VRA however does not apply to

²² See Communication, paragraph 2

broadcasting which is an 'exempted' supply. Also the test of whether and how any DVD or video is to be classified by the BBFC is not whether it "might seriously impair" minors. Instead section 4A(1) of the VRA states that: "The designated authority [here the BBFC] shall, in making any determination as to the suitability of a video work, have special regard (among the other relevant factors) to any harm that may be caused to potential viewers or, through their behaviour, to society by the manner in which the work deals with-...human sexual activity."

- 6.13 Ofcom acknowledges that in terms of a coherent legislative framework, there would be inconsistency between the strict treatment of R18 material contained in DVDs and videos and that made available on VOD Services, if the wording "might seriously impair" in section 368E(2) of the Act in the UK were interpreted to exclude any R18 material. But in Ofcom's opinion these words in the Act must be interpreted in the context of all the relevant factors relating to the legislation in which they are placed, not in order to arrive at a regulatory outcome more consistent with that which has resulted from another piece of legislation (the VRA) – whose purpose was specifically to govern different media and where the statutory test ("any harm") is different to that in section 368E(2).

Crown Prosecution Service guidance

- 6.14 As requested by DCMS, Ofcom has also had regard to the decision of the Court of Appeal (Criminal Division) in R v Perrin [2002] EWCA Crim 747 and how this judgment has been interpreted by the Crown Prosecution Service ("CPS"). Concerning prosecutions for obscene publications, the CPS Legal Guidance²³ states that the "principal factors" influencing whether a prosecution under section 2 of the Obscene Publications Act 1959 is required include:

- "whether publication was made to a child or vulnerable adult, or the possibility that such would be likely to take place;"
- "where children are likely to access material of a degree of sexual explicitness equivalent to what is available to those aged 18 and above in a licensed sex shop, that material may be considered to be obscene and subject to prosecution. This applies to material which is not behind a suitable payment barrier or other accepted means of age verification, for example, material on the front page of pornography websites and non-commercial, user-generated material which is likely to be accessed by children and meets the threshold. see R v Perrin [2002] EWCA Crim 747"; and
- "where publication took place, especially if material can be readily seen by the general public, for example in a newsagents or market, or websites easily accessible to children".

- 6.15 Ofcom notes that the successful prosecution in the Perrin case in fact concerned material which was stronger than R18 material (people covered in faeces, coprophilia, copropagia combined with fellatio) shown as part of promotional trailers and without any protections for children. As far as Ofcom is aware there has been, as yet, no CPS prosecution – either successful or unsuccessful – against any UK-based website or VOD service provider for publishing R18 equivalent material which is not behind a suitable payment barrier or other accepted means of age verification.

²³ http://www.cps.gov.uk/legal/l_to_o/obscene_publications/

- 6.16 The statutory definition of what is obscene is set out in section 1(1) of the Obscene Publications Act 1959. This is that an article shall be deemed to be obscene if its effect is “such as to tend to deprave and corrupt persons who are likely, having regard to all relevant circumstances to...see or hear the matter contained or embodied it.” This test is therefore different to the test under the Directive as to whether “material might seriously impair” the development of minors.
- 6.17 Therefore whilst Ofcom notes that the CPS believes that where children are likely to access R18 material on a UK-based website or on-demand service, that “material may be considered to be obscene and subject to prosecution”, it is also not aware of any published legal authority that this is the case (as noted above, Perrin dealt with material clearly stronger than R18), or any CPS prosecution in this area. As a result, although we take into account the CPS Legal Guidance, we do not consider that by itself it might be determinative of whether R18 material provided on a VOD Service “might seriously impair” minors. If there were a successful prosecution of R18 material based on these specific guidelines, Ofcom would of course review the position. Such a prosecution would appear likely to be highly relevant, because if someone is successfully prosecuted for obscenity for providing R18 material on a website without protections so that children can access it, this would in Ofcom’s opinion, despite the different legal tests, be strong evidence that such material may “seriously impair” minors.

Public attitudes

- 6.18 An additional factor is the question of public attitudes. In its letter to us, DCMS described the legislative restrictions on R18 material on video and DVD, as discussed above, and the prohibition on such material in the Ofcom Broadcasting Code, as a “precautionary approach”, and suggested that such an approach would “generally be considered by the public to be justified [for on-demand programme services] given the nature of this material”. We agree that public attitudes to such material are an important factor in deciding whether such material on VOD Services should be restricted.
- 6.19 Ofcom research carried out in 2009²⁴ found that sexual content on the internet is considered more of a concern than in television. In particular, participants considered the internet and other new technology, such as Personal Video Recorders (“PVR”s) and on-demand television, to present a greater possibility for children to view what was perceived as unsuitable content. This was particularly an issue for parents, as children could stumble across such content or may purposefully seek it out (especially children over twelve years old).
- 6.20 A particularly relevant finding was that most participants of the research believed in general that there is a place for sexual material on television, including ‘adult-sex material’ (the “strongest” they were asked about), providing the right restrictions were in place depending on the strength of the content. For example participants considered that mandatory access restrictions should be applied when the content is perceived to have the primary purpose of arousing viewers. This research also identified that while regulation was felt to help protect those children whose parents may not police (television) viewing, parents should share responsibility with broadcasters and regulators for the protection of under-eighteens. Such parental responsibility was seen to increase in relation to the increase in on-demand programmes and PVRs.

²⁴ Attitudes towards sexual material on television:
<http://stakeholders.ofcom.org.uk/binaries/consultations/bcode09/annexes/sextv.pdf>

- 6.21 Overall protection of under-eighteens was the main concern for participants with respect to sexual material on television. The need to protect younger children from stumbling across sexual content (unintentional viewing) was raised across all demographic groups (including non-parents).
- 6.22 Although focused on television, the 2009 research reflects overall tolerance for pornographic content. However, this tolerance appears closely linked to the availability of access restrictions.
- 6.23 Qualitative research conducted by the BBFC in 2005²⁵ further confirms the overall public desire to restrict sexually explicit material – in this case, R18 material specifically. Even those participants who advocated wider availability for this material stated that the material should be “clearly separated from other material and effectively policed to protect young people from access”.

²⁵ Cumberbatch, G. & Gauntlett, S. (2005) *Knowing It When You See It: The Difference Between '18' and 'R18' Video Works*. BBFC Research Report

Section 7

Conclusions and recommendation to Government

Current protections

- 7.1 Government has asked Ofcom to consider the protection offered by current UK legislation for minors from the provision of hard core pornography on UK-based video on demand services. Therefore, Ofcom's first task was to consider the application of section 368E(2) of the Communications Act 2003 (as amended) to the provision of sexually explicit material on VOD Services. Section 368E(2) states:

"If an on-demand programme service contains material which might seriously impair the physical, mental or moral development of persons under the age of eighteen, the material must be made available in a manner which secures that such persons will not normally see or hear it".

- 7.2 As set out in section 3 of this report, there are in the UK generally accepted categories of sexually explicit audio visual material. These include: R18 material, which is classified according to the BBFC guidelines for distribution under the Video Recordings Act 1984 (as amended) ("VRA"), and contains sexually explicit images whose primary purpose is sexual arousal; and material which is unclassified by the BBFC and not lawfully supplied or distributed in the UK in licensed sex shops under the VRA, i.e. R18 plus material. As far as unclassified material is concerned, this includes, but is not limited to, abusive and/or violent pornography, examples of which have been held to be obscene and a criminal offence to provide if available free of charge to anyone with access to the internet.
- 7.3 Under current legislation, only material included in a VOD Service which could be regarded as content which "might seriously impair" the development of under-eighteens is subject to mandatory restrictions. It is therefore left to the regulator to decide on a case by case basis what types of material would be caught.

R18 material

- 7.4 Ofcom commissioned a respected expert, Dr Guy Cumberbatch, to prepare a comprehensive review of the research on the evidence of harm or the risk of harm to minors from exposure to sexually explicit audiovisual material (the "2010 Report"). His work focused on the evidence relating to R18 material. It was intended to update and supplement the earlier report on the same subject prepared for Ofcom in 2005 by Dr Ellen Helsper ("the 2005 Report"). The 2010 Report was peer reviewed by Professor Sonia Livingstone of the LSE.
- 7.5 Based on the 2010 Report, Ofcom considers the evidence as to whether R18 material "might seriously impair" minors' development is inconclusive, as is the evidence as to whether it could result in a lesser degree of harm. Though the evidence of harm is inconclusive, the research is necessarily limited by the ethical constraints of exposing children and young people to sexually explicit material and some experts believe there is evidence that exposure of minors to R18 material can have adverse effects on their moral development. In these circumstances, it cannot

be confidently concluded that sexually explicit material carries no risk of harm to the development of minors.

- 7.6 In Ofcom's view, this is not a surprising result. It is consistent with the 2005 Report, and reflects the various difficulties highlighted by Dr Cumberbatch in 2010 with research in this notoriously challenging area.

R18 plus material

- 7.7 As discussed in Section 3, in the case of R18 plus material, Ofcom notes that any material stronger than R18 standard cannot legally be provided in the UK as a video work or film. Examples that amount to extreme pornography may also be illegal.
- 7.8 We note that one of the reasons why the BBFC refuses to classify certain types of material is that the risk of harm (in this case, to adults) is considered sufficient to justify it not being lawful to supply or distribution it in licensed sex shops as a video work or DVD under the VRA. Other R18 plus material has been found to be criminally obscene and therefore a criminal offence under Obscene Publications Act 1959 (as amended) in circumstances where it is made available on the internet free of charge to anyone with access to the internet. It is clear therefore that the provision of certain types of this material would be a criminal offence and it is widely acknowledged that other such material is potentially harmful or very harmful to adults, particularly those who are vulnerable.
- 7.9 However, material that is stronger than R18 which is not illegal - particularly if it is of a type that is violent or abusive – also clearly has the potential to cause harm or serious harm to minors. We therefore considered that there was clear potential for serious harm to minors from material stronger than R18 material, and did not consider it necessary to seek out further empirical evidence to support this assumption.

European approaches

- 7.10 Ofcom surveyed a total of 20 countries – including 14 who are Member States of the European Union. We asked how they were implementing the “seriously impair” provisions in the AVMS Directive. (See Section 4 above). The responses suggest that no Member State has carried out the equivalent exercise to that completed on behalf of Ofcom by Guy Cumberbatch: a thorough and independent assessment of the potential harm to minors from exposure to hard core pornography. A majority of Member States who responded to Ofcom's survey do not consider that R18 material is content “which seriously impairs” and therefore is automatically subject to mandatory controls. Nonetheless, a majority also believe such material in on-demand services in their jurisdiction should only be made available if there are appropriate restrictions. A majority of states have adopted various measures – either under existing legislation or by the introduction of new legislation – to ensure this happens.
- 7.11 The significant point to emerge from the survey, Ofcom believes, is that the majority of Member States have decided to put additional safeguards in place to ensure that children are protected from R18 material on VOD services. Only a minority of Member States (for example Poland and Hungary) are providing protections for children from sexually explicit material by relying on the current restrictions placed on material that “might seriously impair” the development of minors.

Assessment of other relevant factors

- 7.12 We believe that in the circumstances a precautionary approach to the provision of R18 material on VOD Services is appropriate. This is because Ofcom has identified the possible negative results of exposure to R18 material, and assessed these results in a thorough and critical way. We have also established that the risk of harm that this material poses cannot be quantified with any certainty.
- 7.13 Ofcom also takes account of public attitudes – the widespread view and concern in Britain that minors should not have unrestricted access to R18 material or its equivalent. This concern was reflected in the Ofcom and BBFC research already referred to²⁶, and in 2000 in the Home Office “Consultation Paper on the Regulation of R18 Videos”. This set out the then Government’s view with regard to the potential harm such videos might cause:
- "...there is widespread public concern about the possibility of children viewing sexually explicit material which is clearly unsuitable for them and the Government takes the common sense view that exposure to such material at an early age may be harmful to children. There is, therefore, a need to ensure that controls on the distribution and viewing of these videos is as stringent as possible".
- 7.14 These concerns are also reflected in the rules and arrangements in place controlling R18 material in cinemas, and in DVDs and videos, and in broadcasting. As pointed out above, Parliament gave powers to the BBFC which have resulted in R18 material in DVD and video form being made available only to those who are aged eighteen or over in licensed sex shops, and stronger material not being available at all lawfully. On television Ofcom introduced rules through its Broadcasting Code which prohibit R18 material or its equivalent being shown at any time, whether subject to restrictions or not, on all broadcasters²⁷. There would, in Ofcom’s view, be greater coherence and consistency in the regulation overall of R18 material in the UK, if clearer safeguards were put in place to protect children and young people from hard core pornography in VOD Services.
- 7.15 We have noted the CPS Legal Guidance for obscenity prosecutions. The CPS considers there is a reasonable legal argument that R18 material included on a UK-based website and available to view to minors without protections is capable of being obscene. However, this argument has not yet been tested in the courts. Therefore although Ofcom does not consider this is in any way determinative of whether R18 material in a VOD Service “might seriously impair” minors’ development, it is an argument which would support the introduction of some form of mandatory protection, and prohibition of stronger material. This is on the basis that the CPS clearly believes such material *may* be obscene and so unlawful. Ofcom therefore considers it best to adopt a precautionary approach based on this view in terms of ensuring adequate protections for minors are explicitly introduced, unless or until it is proved correct or incorrect.
- 7.16 There is no evidence in Ofcom’s view that the concerns about the potential harm to young people from exposure to R18 material have lessened over the past ten years:

²⁶ See paragraphs 6.18-6.23

²⁷ Ofcom introduced these restrictions on the basis that R18 material was “likely to impair” and not “might seriously impair”, relying on its duties to provide adequate protection to the under-eighteens derived from the 2003 Act, and on the fact that as regards television the protections available were not sufficient to ensure sufficient protection for minors from R18 material.

the vast majority of UK citizens would support the “common sense” view that the state should do its utmost to ensure those under eighteen should be protected from sexually explicit material on VOD Services or elsewhere.

- 7.17 Research shows that the public are broadly tolerant of sexual and sexually explicit content provided access to it is restricted. This seems to suggest that they do not consider it appropriate for everyone to have access to it, but do not consider it so grossly harmful that it should be banned altogether.
- 7.18 Moreover, since the current legislation does not provide for any outright prohibition on pornographic material, however strong, in VOD Services, material stronger than R18 material could fall within the meaning of material which “might seriously impair.” It might therefore be permitted to be shown on VOD Services with mandatory protections, which we do not believe was the Government’s intention.
- 7.19 In our view, therefore, the possibility we have identified that section 368E(2) could permit R18 plus material to be included on VOD services – albeit with mandatory restrictions – is of particular concern. R18 plus material cannot legally be provided in the UK as a video work or film, and some of it too may be criminally obscene or otherwise illegal. Moreover, it is restricted by the BBFC on the basis that it is potentially very harmful to adults, particularly those who can be said to be vulnerable (as discussed in Section 3, above). However, under the current video on demand legislation, there is no clear prohibition of this material on VOD Services, because no pornographic material – however strong – is required by these regulations to be prohibited.

Conclusion & Recommendation

- 7.20 In responding to the request from DCMS, therefore, Ofcom’s opinion is that taking into account:
- all the considerations set out in this report, including the evidence relating to harm;
 - DCMS’s clearly stated intention to ensure the protection of children; and
 - the desire for certainty in this important and controversial area;
- the legislative protections currently in place are not sufficiently clear to provide that certainty. Greater safeguards should therefore be put in place.
- 7.21 We recommend the Government introduce new legislation which would specifically:
- prohibit R18 material from being included in UK-based VOD services unless appropriate mandatory restrictions are in place; and
 - prohibit altogether from UK-based VOD services material whose content the BBFC would refuse to classify ie material stronger than R18.
- 7.22 ATVOD supports this recommendation. It does so on the basis that there is no clear consensus on the meaning of “material which might seriously impair.” Although ATVOD considers that R18 material might seriously impair under-eighteens, it recognizes that there is some lack of certainty on this point. In order to ensure that children have appropriate protection from R18 and R18 plus material, ATVOD

believes that any uncertainty that exists under the current regulations should be removed as soon as possible through new legislation.

- 7.23 The exact content of any new (probably secondary) legislation would of course be for Government. In Ofcom's opinion legislation along these lines – including a prohibition of material *stronger* than R18 – could be made sufficiently precise and certain to capture relevant material. It could provide an appropriate balance between the need to protect young people (and indeed other vulnerable groups) from unsuitable pornographic material while respecting the right to freedom of expression of VOD Service providers and their audience. In the circumstances, it seems to us that prohibiting material stronger than R18 absolutely from VOD services would be a legitimate restriction of freedom of expression given the clear risk of harm to minors (and adults) from this material. Also such a prohibition would give clarity about the protections offered to minors and to the general public because all such material would be explicitly banned from VOD Services.
- 7.24 A decision as to whether to proceed with any new legislation is of course one for the Government.
- 7.25 However, introducing new legislation along the lines Ofcom recommends would have a number of advantages. The most important is that it would provide legal certainty, thus ensuring that under-eighteens in the UK would be unequivocally protected from content which most people believe is unsuitable for them, and also potentially harmful. In addition, the regulation of R18 material and the prohibition of stronger material on VOD Services along the lines proposed would ensure greater consistency with regulation on other media in the UK, such as DVD, video and broadcasting; and greater consistency with the way in which this content is being treated in on-demand programme services in most other Member States.
- 7.26 Of course, we recognise that recommending new legislation is a significant step and may involve a short delay (for example for the new requirements to go through the technical standards clearance process at European level). However, we consider that achieving the right regulatory framework for the protection of minors in this area means that in this case new legislation is appropriate.
- 7.27 Ofcom (and ATVOD) strongly support this recommendation and urge the Government to pass the necessary legislation as soon as possible.

Appendix 1

BBFC Guidelines on R18

'R18'

To be shown only in specially licensed cinemas, or supplied only in licensed sex shops, and to adults of not less than 18 years

The 'R18' category is a special and legally restricted classification primarily for explicit works of consenting sex or strong fetish material involving adults. Films may only be shown to adults in specially licensed cinemas, and video works may be supplied to adults only in licensed sex shops. 'R18' video works may not be supplied by mail order. The following content is not acceptable:



- any material which is in breach of the criminal law, including material judged to be obscene under the current interpretation of the Obscene Publications Act 1959
- material (including dialogue) likely to encourage an interest in sexually abusive activity (for example, paedophilia, incest or rape) which may include adults role-playing as non-adults
- the portrayal of any sexual activity which involves lack of consent (whether real or simulated). Any form of physical restraint which prevents participants from indicating a withdrawal of consent
- the infliction of pain or acts which may cause lasting physical harm, whether real or (in a sexual context) simulated. Some allowance may be made for moderate, non-abusive, consensual activity
- penetration by any object associated with violence or likely to cause physical harm
- any sexual threats, humiliation or abuse which does not form part of a clearly consenting role-playing game. Strong physical or verbal abuse, even if consensual, is unlikely to be acceptable.

These Guidelines will be applied to the same standard regardless of sexual orientation.

Appendix 2

Comparison of French and Danish Classification systems for sexual material on TV and VOD

France Is likely to impair (several categories)					
Definitions	Examples	Availability TV	Protection	Availability VOD	Protection
-18 * Legal pornographic material * other strong material which could include fetishes	* explicitly showing real sexual activity between consenting adults (e.g. sexual intercourse or oral sex with penetration)	only on specific pay services	* subject to watersheds (allowed from midnight to 5 am) * restricted access system including pin code	only on specific pay services	* payment ID (pay per view-services) * PIN code plus watersheds (10:30 pm to 5:00 am) (SVOD)
-16 * erotic material * violent content	* images or language of a strong, sexual nature with the primary purpose of sexual arousal (not featuring or showing explicit shots of real sexual intercourse with penetration) * gore horror films	* on cinema and PPV services * on other services	*subject to watersheds * allowed from 8:30 pm to 6:00 am on cinema and PPV services * allowed from 10:30 pm to 6:00 am on other services	yes	* subject to watershed * 10:30 pm to 5:00 am (on free content)
-12 * systematic / repeated physical or psychological violence * themes that may trouble children under the age of 12	* soft horror films * programmes on topics that may affect minors (paedophilia, prostitution, use of drugs, etc.), depending on editorial treatment	* on cinema and PPV services * on other services	* subject to watersheds * not allowed before 8:30 pm on Wednesdays on cinema and PPV services * allowed from 10:00 pm to 6:00 am on other services * Exceptions allowed from 8:30 pm to 6:00 am (but not the day before legal school or public holiday, or on Tuesday, Friday or Saturday, or during legal school holiday)	yes	no restrictions
-10 * contents which are likely to shock children under the age of 10	* nudity, vulgar language, violent relationships between people, etc.	yes	no restrictions	yes	no restrictions
France Might seriously impair					
Definitions	Examples	Availability TV	Protection	Availability VOD	Protection
* obscene material * extreme pornography * material likely to encourage interest	* criminally unlawful material * child pornography, bestiality, necrophilia, zoophilia	prohibited	-	prohibited	-

in abusive sexual activity * material involving lack of consent (real or simulated) * the infliction of physical harm, violent material, degrading material etc.					
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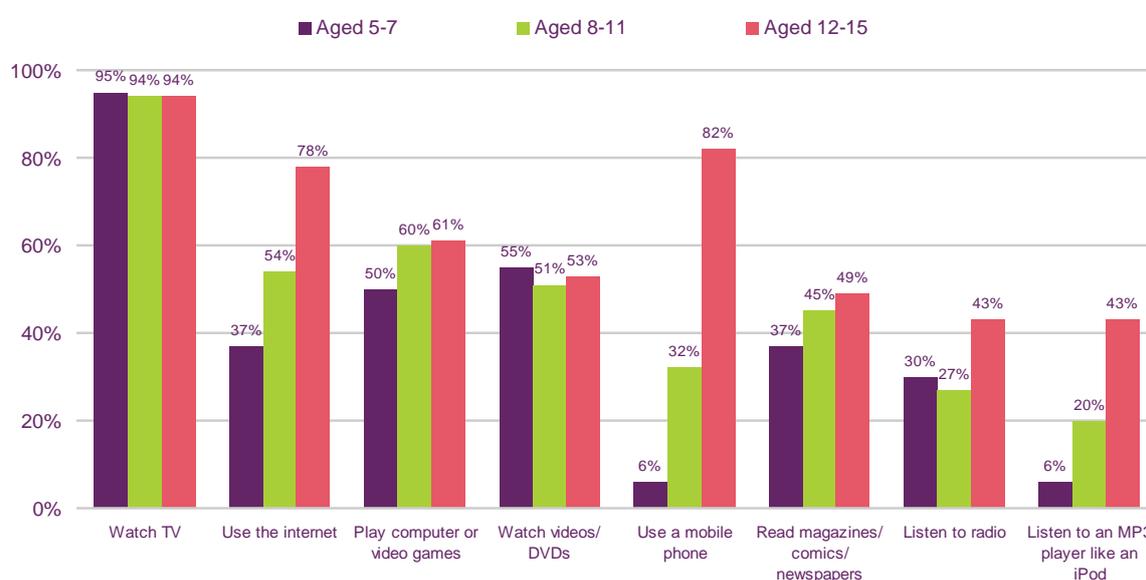
Denmark Is likely to impair (basic AVMS-Directive adoption)					
Definitions	Examples	Availability TV	Protection	Availability VOD	Protection
-	* programmes likely to damage the physical, psychological or moral development of minors * sexually explicit content	yes	no	yes	* labelling of programmes including harmful content * unwritten watershed 24.00
Denmark Might seriously impair (basic AVMS-Directive adoption)					
Definitions	Examples	Availability TV	Protection	Availability VOD	Protection
-	* pornography or unprovoked violence	no	* labelling of programmes including harmful content * unwritten watershed 24.00	yes	no restrictions

Appendix 3

Figures relating to Children's Media Use (Section 5)

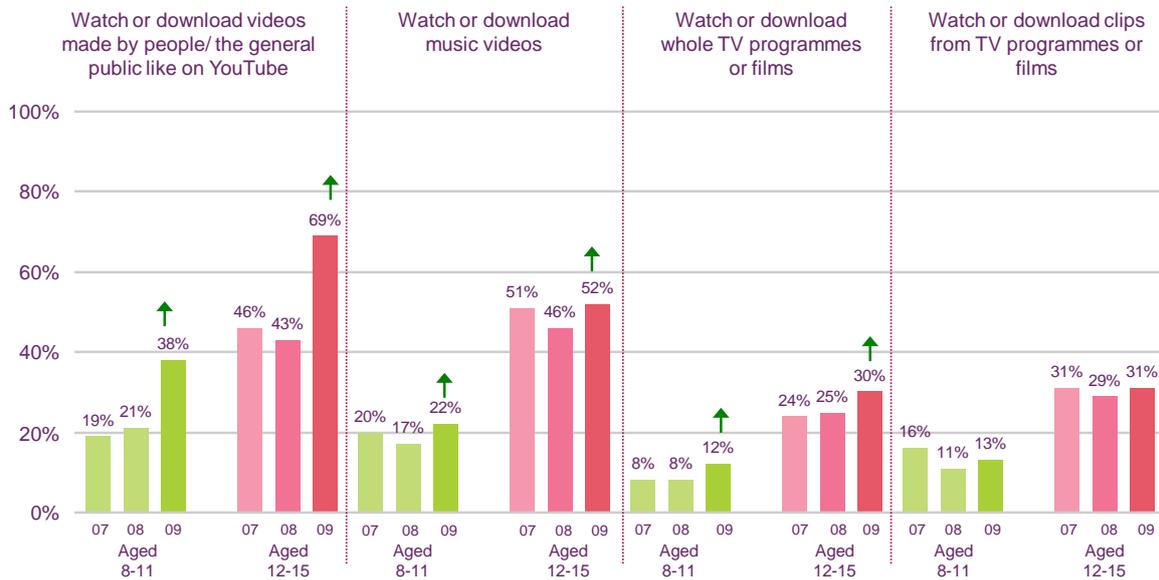


Figure 1: Regular media activities undertaken, by age - 2009



QC39A – Which of the following do you do almost every day? (prompted responses, multi-coded)
 Base: Children aged 5-15 (576 aged 5-7, 774 aged 8-11, 781 aged 12-15)
 Source: Ofcom research, fieldwork carried out by Saville Rossiter-Base in April to May and September to October 2009

Figure 2: Watching/ downloading activities carried out by users aged 8-15 – 2007, 2008 and 2009

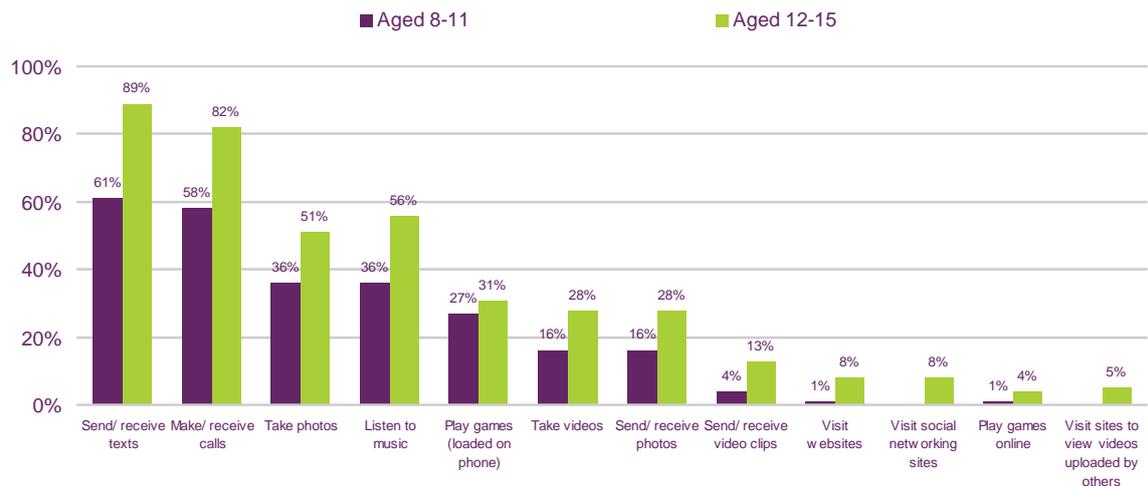


QC13A-M – Thinking about what you do when you use the internet at home, do you use the internet to do any of these? (prompted responses, multi-coded) – PERCENTAGES SHOWN REFLECT THOSE THAT UNDERTAKE ACTIVITY EVER
 Base: Children aged 8-15 who use the internet at home (499 aged 8-11 in 2007, 527 aged 8-11 in 2008, 582 aged 8-11 in 2009, 1045 aged 12-15 in 2007, 615 aged 12-15 in 2008, 645 aged 12-15 in 2009) – significance testing shows any change between 2008 and 2009
 Source: Ofcom research, fieldwork carried out by Saville Rosstiter-Base in April to May and September to October 2009

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Figure 3: Mobile phone activities carried out at least once a week by owners - 2009

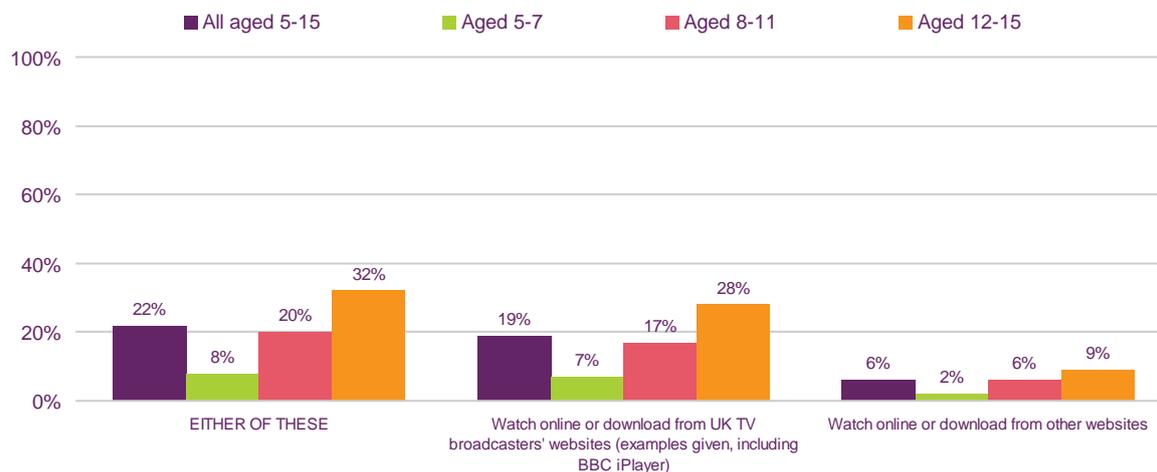


QC36A-O – Thinking about what you use your mobile phone for, do you use it to do any of these? (prompted responses, multi-coded) - PERCENTAGES SHOWN REFLECT THOSE THAT UNDERTAKE ACTIVITY AT LEAST WEEKLY
 Base: Children aged 8-15 with their own mobile phone (392 aged 8-11, 684 aged 12-15) - Only showing activities undertaken at least weekly by 3% or more, among either age group
 Source: Ofcom research, fieldwork carried out by Saville Rosstiter-Base in April to May and September to October 2009

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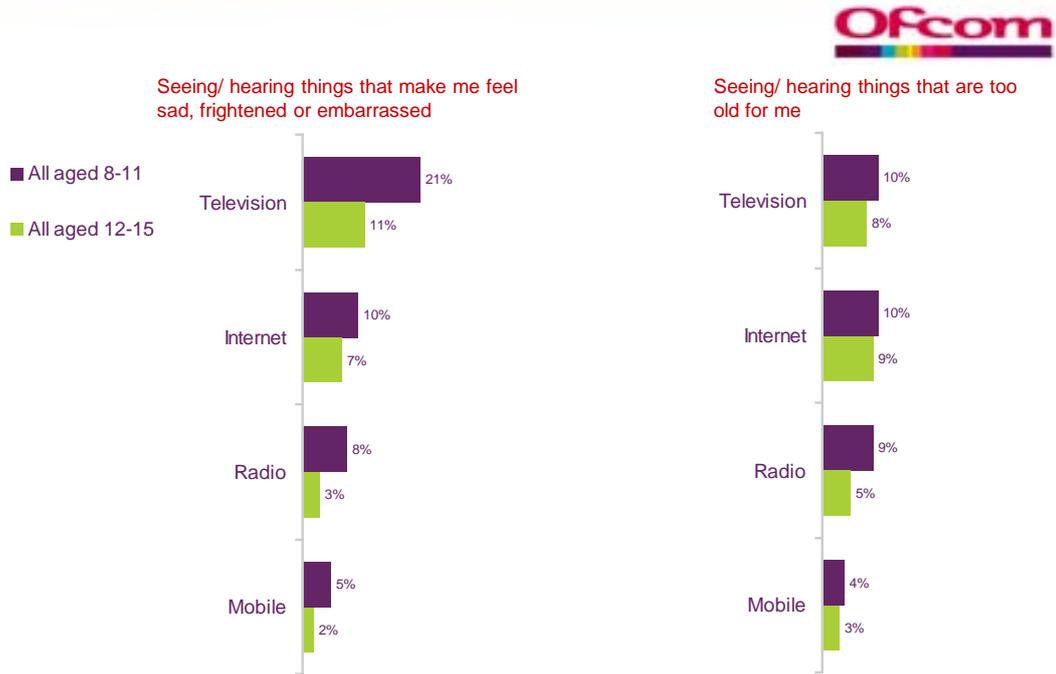


Figure 4: Watching television programmes and films online, by age -2009



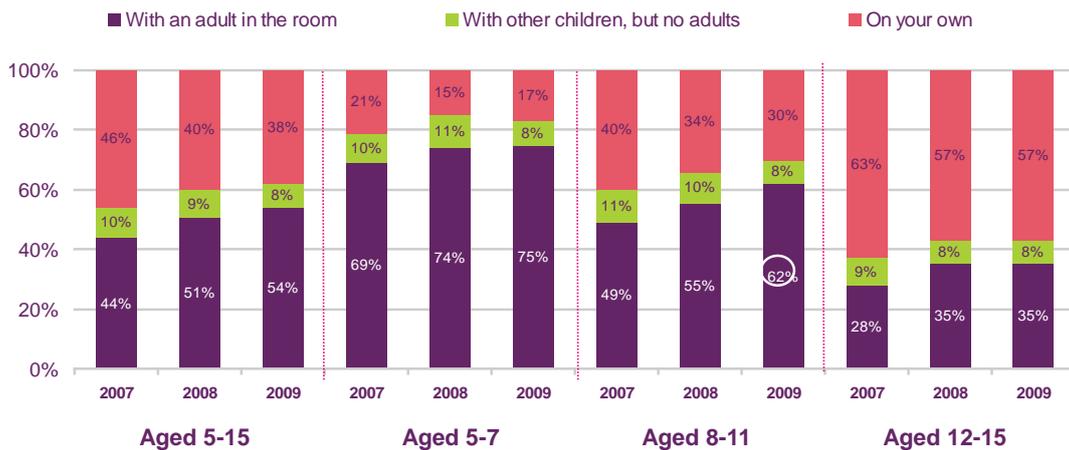
QP31 – Does your child watch TV programmes or movies in any of the following ways? (prompted response, multi-coded)
 Base: Parents of children who use the internet at home (1567 aged 5-15, 340 aged 5-7, 582 aged 8-11, 645 aged 12-15)
 Source: Ofcom research, fieldwork carried out by Saville Rossiter-Base in April to May and September to October 2009

Figure 5: Comparison of selected dislikes across television, internet, mobile phones and radio, by age - 2009

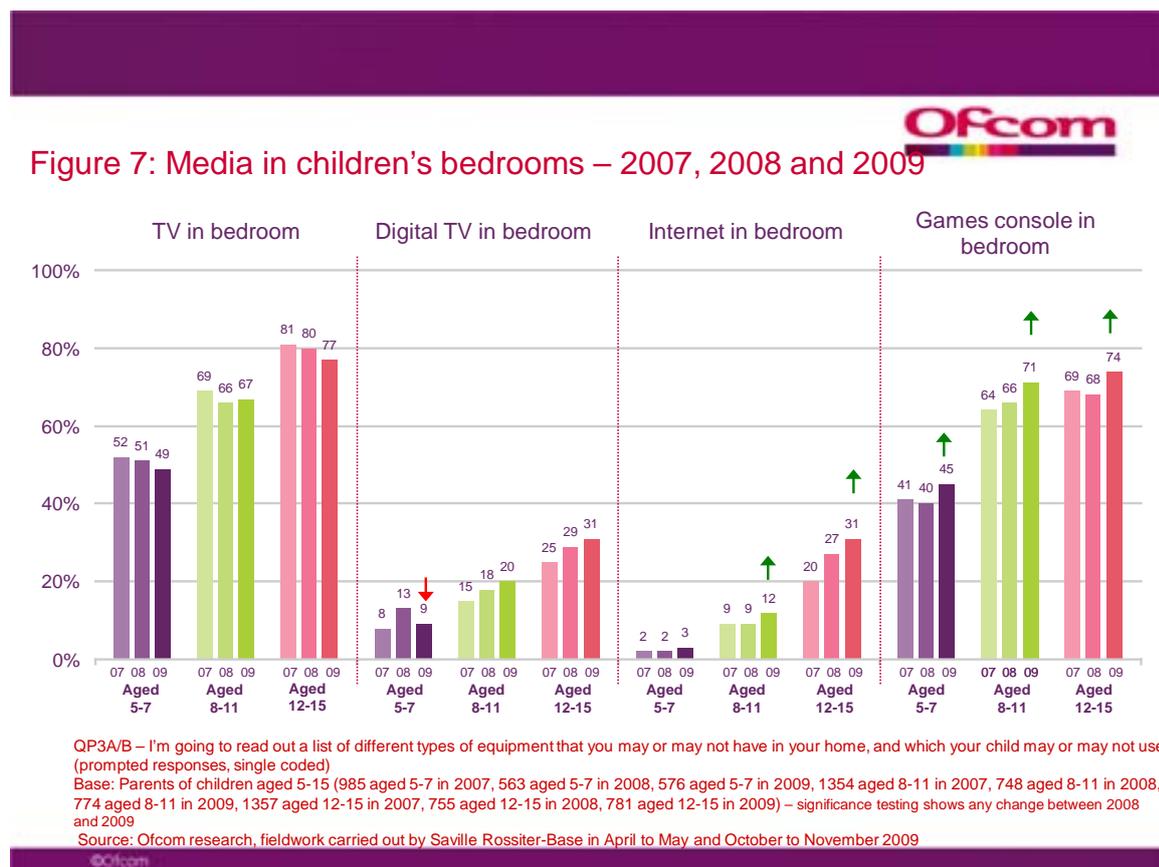


QC5/ QC15/ QC9/ QC38 – Which of these things if any are things that you don't like about [MEDIA] (prompted responses, multi-coded)
 Base: Children aged 8-15 who use each media (VARIABLE BASE)
 Source: Ofcom research, fieldwork carried out by Saville Rossiter-Base in April to May and September to October 2009

Figure 6: Who is with the child when using the internet - 2007, 2008 and 2009



QC11 – Thinking about when you're using the internet at home, do you spend most of the time using... (prompted responses, single coded)
 Base: Children aged 5-15 who use the internet at home (2397 aged 5-15 in 2007, 1449 aged 5-15 in 2008, 1567 aged 5-15 in 2009, 477 aged 5-7 in 2007, 308 aged 5-7 in 2008, 340 aged 5-7 in 2009, 875 aged 8-11 in 2007, 527 aged 8-11 in 2008, 582 aged 8-11 in 2009, 1405 aged 12-15 in 2007, 614 aged 12-15 in 2008, 645 aged 12-15 in 2009) – significance testing shows any change between 2008 and 2009
 Source: Ofcom research, fieldwork carried out by Saville Rossiter-Base in April to May and September to October 2009



7.28

Figure 8: October 2009 Web entities accessed by children aged 5-7

Site	Level	Unique Audience (000)	Coverage (%)
Google	Brand	464	71.29
Google Search	Channel	435	66.91
BBC	Brand	324	49.74
Facebook	Brand	243	37.32
MSN/WindowsLive/Bing	Brand	194	29.86
BBC CBeebies	Channel	185	28.5
Yahoo!	Brand	185	28.47
YouTube	Brand	132	20.28
Disney Online	Brand	131	20.09
BBC CBBC	Channel	121	18.58
eBay	Brand	110	16.96
Ask Search Network	Brand	110	16.87
Windows Live Hotmail	Channel	108	16.61
Nickelodeon Kids and Family Network	Brand	95	14.64
Amazon	Brand	94	14.5
AOL Media Network	Brand	88	13.5

Google Image Search	Channel	87	13.37
SPILL Group Network	Brand	79	12.13
Yahoo! Search	Channel	79	12.09
Sky	Brand	73	11.16
Yahoo! Mail	Channel	71	10.92
Club Penguin	Channel	70	10.75
Yahoo! Homepage	Channel	70	10.72

Only web entities with a unique audience of 70,000 or above are listed.

Figure 9: October 2009 Web entities accessed by children aged 8-12

Site	Level	Unique Audience (000)	Coverage (%)
Google	Brand	1,480	84
Google Search	Channel	1,447	82.12
MSN/WindowsLive/Bing	Brand	944	53.56
YouTube	Brand	891	50.55
BBC	Brand	856	48.61
Google Image Search	Channel	825	46.85
Facebook	Brand	819	46.49
Yahoo!	Brand	751	42.62
Windows Live Hotmail	Channel	569	32.29
Wikipedia	Brand	540	30.65
eBay	Brand	499	28.33
Ask Search Network	Brand	480	27.27
AOL Media Network	Brand	472	26.79
Disney Online	Brand	407	23.1
Amazon	Brand	404	22.95
MSN Homepage	Channel	393	22.29
Ask.com	Channel	350	19.85
BBC CBBC	Channel	334	18.93
Yahoo! Search	Channel	313	17.78
Microsoft	Brand	307	17.41
Bing Web	Channel	291	16.51
Club Penguin	Channel	284	16.12
SPILL Group Network	Brand	283	16.09
WikiAnswers	Brand	281	15.95
Yahoo! Mail	Channel	280	15.91
Nickelodeon Kids and Family Network	Brand	273	15.52
MiniClip	Brand	267	15.17
Google Maps	Channel	244	13.86
Yahoo! Answers	Channel	234	13.3
Yahoo! Homepage	Channel	234	13.27

Sexually Explicit Material and Video On Demand Services

BBC iPlayer	Channel	227	12.87
Windows Live Profile	Channel	208	11.82
iGoogle	Channel	208	11.8
Blogger	Brand	201	11.42
Sky	Brand	187	10.62
Google Account	Channel	184	10.45
Bebo	Channel	184	10.44
Fox Interactive Media	Brand	175	9.93
BBC Homepage	Channel	171	9.69
Zynga	Brand	167	9.48
Argos	Brand	166	9.43
Virgin Media	Brand	165	9.34
BBC News	Channel	163	9.23
Gorilla Nation Websites	Brand	160	9.1
Windows Live Messenger	Channel	160	9.07
AddictingGames	Channel	155	8.78
Apple	Brand	153	8.7
AOL Homepage	Channel	152	8.64
My Web Search	Channel	150	8.5
Google Video	Channel	149	8.47
About.com	Brand	148	8.43
Tesco	Brand	145	8.26
Yahoo! BT Yahoo! Internet	Channel	142	8.04
Apple Product Info & Support	Channel	140	7.93
BBC Sport	Channel	132	7.51
Glam Media	Brand	131	7.45
AOL Search	Channel	130	7.39
Agame.com	Channel	127	7.22
MyMaths.co.uk	Brand	126	7.15
BBC CBeebies	Channel	125	7.1
BBC Learning 5-19	Channel	122	6.92
UGO	Brand	119	6.76
Orange	Brand	118	6.7
PayPal	Brand	118	6.67
WordPress.com	Brand	113	6.43
CBS Entertainment Network	Brand	112	6.37
BBC Search	Channel	111	6.32
NetShelter Technology Media Network	Brand	110	6.23
Real Network	Brand	105	5.94
Adobe	Brand	104	5.89
FreeOnlineGames	Brand	102	5.79
MindJolt Games	Brand	101	5.75
Google Gmail	Channel	101	5.73
Moshi Monsters	Brand	100	5.67

Sexually Explicit Material and Video On Demand Services

Yahoo! News	Channel	100	5.66
BBC Future Media & Technology	Channel	100	5.65
Yoville.com	Brand	99	5.62
Google News	Channel	98	5.57
ITV.com	Brand	95	5.41
News Corp. Newspapers	Brand	94	5.31
Game.co.uk	Brand	92	5.22
RealGames Network	Channel	90	5.13
Windows Live Homepage	Channel	88	5.02
Play.com	Brand	86	4.91
alot	Brand	86	4.91
Microsoft Windows	Channel	86	4.9
The Carphone Warehouse	Brand	86	4.87
Disney International	Channel	85	4.81
Armor Games	Brand	85	4.8
GameSpot	Channel	83	4.73
BBC Drama	Channel	82	4.67
SlashKey	Brand	82	4.66
Bing Maps & Local	Channel	82	4.64
Stardoll	Brand	82	4.64
Nick	Channel	81	4.62
AOL Music	Channel	81	4.58
BBC Knowledge - Specialist Factual	Channel	80	4.52
IGN Entertainment Gaming Network	Channel	79	4.51
Mozilla	Brand	78	4.45
Associated Newspapers	Brand	78	4.41
PopCap Games	Brand	77	4.39
Fun Web Products Network	Channel	76	4.32
IMDb - Internet Movie Database	Brand	76	4.32
AOL Email	Channel	75	4.28
Tiscali	Brand	73	4.17
Twitter.com	Brand	73	4.17
GirlsGoGames.com	Channel	73	4.16
UGO Games	Channel	72	4.1
Myspace.com	Channel	72	4.07
LEGO	Brand	71	4.05
BT	Brand	71	4.03

Only web entities with a unique audience of 70,000 or above are listed.

Figure 10: October 2009 Web entities accessed by children aged 13-15

Site	Level	Unique Audience (000)	Coverage (%)
Google	Brand	1,193	85.15
Google Search	Channel	1,168	83.35
Facebook	Brand	928	66.27
MSN/WindowsLive/Bing	Brand	880	62.82
YouTube	Brand	834	59.54
Google Image Search	Channel	654	46.72
Yahoo!	Brand	645	46.03
Windows Live Hotmail	Channel	612	43.67
BBC	Brand	552	39.42
Wikipedia	Brand	522	37.29
AOL Media Network	Brand	495	35.3
eBay	Brand	402	28.72
Amazon	Brand	346	24.73
Ask Search Network	Brand	321	22.94
MSN Homepage	Channel	316	22.54
Bebo	Channel	298	21.3
Microsoft	Brand	281	20.06
Bing Web	Channel	275	19.64
Blogger	Brand	262	18.69
Yahoo! Mail	Channel	259	18.46
Google Maps	Channel	256	18.3
Windows Live Messenger	Channel	252	17.99
Yahoo! Answers	Channel	250	17.83
Fox Interactive Media	Brand	233	16.66
Yahoo! Search	Channel	229	16.34
Zynga	Brand	222	15.85
Sky	Brand	212	15.12
WikiAnswers	Brand	203	14.49
Apple	Brand	201	14.37
Virgin Media	Brand	192	13.71
Windows Live Profile	Channel	190	13.59
Google Account	Channel	169	12.08
Apple Product Info & Support	Channel	169	12.05
Yahoo! Homepage	Channel	169	12.04
BBC iPlayer	Channel	165	11.79
Ask.com	Channel	165	11.75
MindJolt Games	Brand	163	11.65
BBC News	Channel	162	11.57
BBC Sport	Channel	162	11.57
MyMaths.co.uk	Brand	156	11.17
Glam Media	Brand	154	11.01

Sexually Explicit Material and Video On Demand Services

iGoogle	Channel	154	11.01
Myspace.com	Channel	152	10.85
Nickelodeon Kids and Family Network	Brand	147	10.48
BBC Homepage	Channel	141	10.04
CBS Entertainment Network	Brand	139	9.92
Google Video	Channel	138	9.88
About.com	Brand	134	9.54
Orange	Brand	130	9.31
Gorilla Nation Websites	Brand	130	9.27
IMDb - Internet Movie Database	Brand	130	9.27
Argos	Brand	124	8.84
NetShelter Technology Media Network	Brand	119	8.47
Windows Live Homepage	Channel	116	8.31
UGO	Brand	115	8.19
RedTube*	Brand	113	8.09
AOL Homepage	Channel	112	8.03
Pornhub.com**	Brand	111	7.94
ITV.com	Brand	111	7.92
Play.com	Brand	109	7.81
Game.co.uk	Brand	106	7.59
MiniClip	Brand	106	7.53
AOL Music	Channel	105	7.5
Tesco	Brand	105	7.49
Yahoo! BT Yahoo! Internet	Channel	105	7.48
AOL Search	Channel	102	7.3
Bing Maps & Local	Channel	100	7.15
News Corp. Newspapers	Brand	100	7.12
My Web Search	Channel	99	7.04
Twitter.com	Brand	98	6.97
Mozilla	Brand	97	6.89
Yahoo! News	Channel	95	6.77
Yoville.com	Brand	93	6.61
Channel 4	Brand	92	6.56
Microsoft Passport	Channel	91	6.51
Disney Online	Brand	90	6.39
NHS	Brand	89	6.39
MSN News & Weather	Channel	88	6.28
WordPress.com	Brand	88	6.28
AddictingGames	Channel	86	6.16
BBC Radio	Channel	86	6.11
PayPal	Brand	86	6.1
Associated Newspapers	Brand	83	5.94
Google News	Channel	83	5.9

Sexually Explicit Material and Video On Demand Services

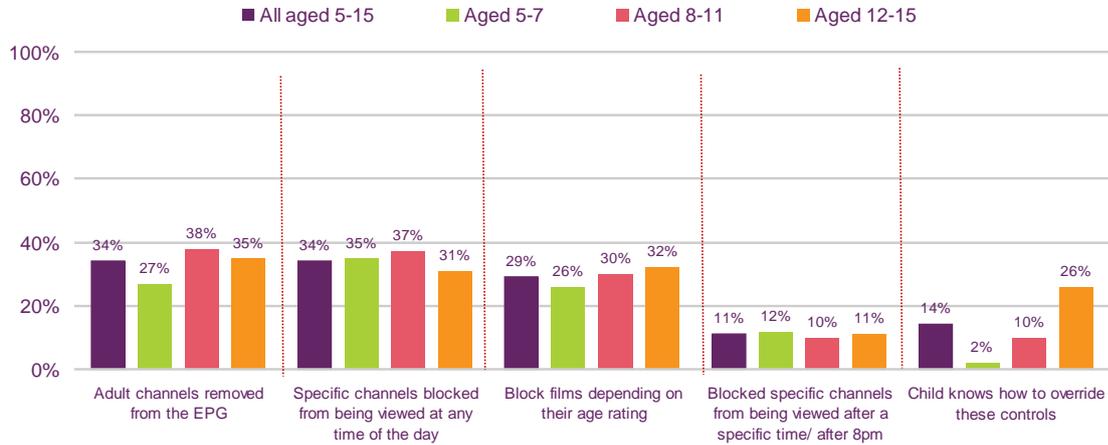
SPILL Group Network	Brand	80	5.72
New Look	Brand	79	5.66
Microsoft Windows	Channel	79	5.65
GameSpot	Channel	78	5.58
PopCap Games	Brand	77	5.5
The Carphone Warehouse	Brand	77	5.49
O2	Brand	76	5.39
SlashKey	Brand	75	5.39
Real Network	Brand	74	5.3
Flickr	Brand	73	5.25
Photobucket	Channel	71	5.04
eBay Stores	Channel	71	5.04

* For boys aged 13-15, coverage was 13.90%

** For boys aged 13-15, coverage was 13.00%



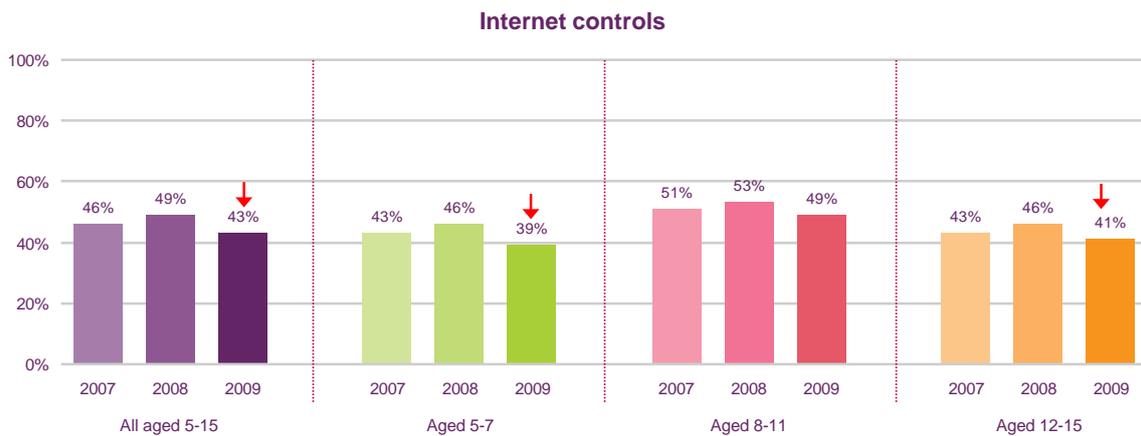
Figure 11: Type of access controls in place for multichannel television, by age - 2009



QP13/QP14 – Do you use these parental controls in any of these ways? (prompted response, multi-coded) /Does the child know the PIN or password to override these controls? (spontaneous response, single coded)
 Base: Parents of children aged 5-15 with multichannel TV in the household and parental controls set (601 aged 5-15, 151 aged 5-7, 237 aged 8-11, 213 aged 12-15)
 Source: Ofcom research, fieldwork carried out by Saville Rossiter-Base in April to May and September to October 2009



Figure 12: Internet controls/ filtering software loaded, by age – 2007, 2008 and 2009



QP26– Are there any controls set or is any software loaded to stop your child viewing certain types of websites? (prompted responses, single coded)
 Base: Parents of children aged 5-15 who use the internet at home (2397 aged 5-15 in 2007, 1449 aged 5-15 in 2008, 1567 aged 5-15 in 2009, 477 aged 5-7 in 2007, 308 aged 5-7 in 2008, 340 aged 5-7 in 2009, 875 aged 8-11 in 2007, 527 aged 8-11 in 2008, 582 aged 8-11 in 2009, 1045 aged 12-15 in 2007, 614 aged 12-15 in 2008, 645 aged 12-15 in 2009). Significance testing shows any changes between 2008 and 2009
 Source: Ofcom research, fieldwork carried out by Saville Rossiter-Base in April to May and September to October 2009



Appendix 4

Current protections available across platforms

Mandatory versus elective protections

- A4.1 When discussing the protection mechanisms across VOD devices and platforms it is important to distinguish between mandatory and elective protections. Mandatory protection is where the viewer has no choice about complying with the restriction. Across the majority of media devices and platforms, the main use of mandatory protection is not blocking content to protect viewers. Instead, blocks are put in place primarily to protect revenue.
- A4.2 For example, on digital TV, paid-for or premium services are encrypted and sit behind registration so that the account holder must purchase them prior to viewing. In itself this purchase process is seen a proxy measure for age verification, since the purchase process typically requires a credit or debit card. Since debit cards are only made available to over-16s (and credit cards to over-18s), the assumption is that an account holder using one of these methods to pay is aged 16 in the case of a debit card and 18 with a credit card.
- A4.3 There are other protection measures that account holders can choose whether or not to put in place to restrict access to content or services that may be unsuitable for some viewers. These are elective mechanisms, where the responsibility for their use sits with the account holder. An example is a four digit PIN which needs to be entered into the set top box before viewing certain channels or material.

Current protections by device

- A4.4 This section describes the protection measures currently available across the devices that can be used to access VOD content. This is not an exhaustive list of every provider's protection measures. It is a summary of measures offered by major providers, to provide a snapshot of what protections consumers currently have available to them.

Digital TV:

BT Vision

- a) Is adult material¹ available?

Yes.

- b) What mandatory protections are used?

A specific standalone PIN is required for adult content. The PIN is obtained online by the account holder, with Mastercard or Visa used to verify age is 18+. The PIN is then emailed to the account holder, thus offering a further level of security. The

¹ None of the providers detailed in this section of the report at present provide any material which is equivalent to R18. By "adult material" in this section we mean "adult sex material" as defined in the Ofcom Broadcasting Code ie soft core pornography

Adult PIN can also be obtained over the phone. If an account has been active for two years or more, BT says this verifies the user's age as 18+. If the account is less than two years old, Mastercard or Visa is again used to verify age.

- c) What elective protections are offered?

Parental controls use a standard four-digit PIN. This can be used to block on-demand content (this can mean all on-demand content, to avoid children running up a bill without the account holder's knowledge), entire channels, and content with a certain age rating.

Talk Talk TV

- d) Is adult material available?

Yes. Talk Talk TV has an 'Adult Pack', consisting of channels offering "adult sex material" which must be purchased by the account holder before it can be viewed.

- e) What mandatory protections are used?

In order to view all adult services the account holder must purchase them first. This can be done over the phone or online. Until the account holder has purchased a channel or combination of channels, no adult content can be accessed. Once an account holder has purchased access to adult content, they must enter their PIN each time they wish to view any of the adult channels to which they have subscribed. This is the same PIN they would use as part of their elective protections (see below).

- f) What elective protections are offered?

PIN protection and a watershed-style system are both used. This 'Adult Pack' content is also only available for viewing between 10pm and 5.30am. PIN protection can be used to block channels and programmes, with these chosen by the account holder through the system's control panel.

Sky + / Sky Digital

- a) Is adult material available?

Yes. A range of channel and combinations of channel packages can be subscribed to, on either a monthly or pay-per-night basis.

- b) What mandatory protections are used?

In order to view adult services the account holder must purchase them first. This can be done over the phone or online. Until the account holder has purchased a channel or combination of channels, no adult content can be accessed. Once an account holder has purchased access to adult content, he must enter his PIN each time he wishes to view any of the adult channels to which he has subscribed. This is the same PIN they would use as part of their elective protections (see below).

- c) What elective protections are offered?

Sky boxes use a four-digit PIN to block content. This can be applied to entire channels or can be used to block content with specific age ratings. This blocking measure can also be extended to content recorded onto the PVR so that the PIN is required for 'pre-watershed playback', as well as being required before using the online services or purchasing items through the box.

d) Additional information:

One provider of adult content on the Sky platform offers a payment system handled by a third-party provider. In order to access this provider's content, the account holder must call the third-party provider with their credit or debit card details. As in some other cases, the provision of these card details is taken as proof that the caller is aged 18+ and access to the content is subsequently provided.

If a customer subscribes, on a monthly basis, to one of these adult channels, that channel is added to their Sky channel package. This channel is then accessible without entering an additional PIN. The owner of the box must set up Parental Controls to disable the channels, requiring the same PIN they would use as part of their parental controls settings, for example to block age-restricted films or pay-per-view content.

However, if a channel is purchased for one night only (Pay Per Night, PPN), then the customer needs to enter their PIN to view the channel. Even if he switches between channels, he must re-enter his PIN again to view it – just as he would have to in order to access an age-rated film during the day, for example. PIN access here is mandatory, but it is one PIN for all channels.

Finally, if a channel is available for both subscription and PPN viewing, then a PIN is required when accessing the channel even if a customer subscribes to it (same behaviour as if it were solely a PPN channel). In essence, PPN channels or combined subscription/PPN channels already require mandatory PIN access, even when flipping between them.

Virgin Media TV on-demand

a) Is adult material available?

No.

b) What mandatory protections are used?

None are in place, due to the absence of any content which requires mandatory protections.

c) What elective protections are offered?

An elective, consumer-end, four-digit PIN can be used on all linear TV services and TV on-demand services. The PIN is set by owner at installation and can be used to block programmes and channels they choose to.

Top Up TV Anytime

a) Is adult material available?

Yes.

b) What mandatory protections are used?

In order to view adult services the account holder must purchase them first. This can be done over the phone or online. Until the account holder has purchased a channel or combination of channels, no adult content can be accessed.

c) What elective protections are offered?

Top Up TV uses a four-digit PIN which is chosen as part of the equipment set-up process. The user is asked to choose if there is any age-rated content that is to be blocked. After setting up this protection, the viewer must enter their four-digit PIN in order to view any of this restricted content. The PIN cannot be used to block entire channels, nor specific programmes. It only functions on an age-rating system.

Potential additional protection on digital TV

- One proposed extra measure of protection on the digital TV platform would be to provide additional PINs for specific content (e.g. R18) services. This would mean an account holder would be issued with an additional PIN that would be used solely to access the restricted content service (such as adult material). It could be used in conjunction with the PIN that is already used by the subscriber as part of their parental controls settings. This system is not currently in use but Ofcom's preliminary assessment is that it would probably be technically feasible but would depend on the cooperation of the various platform providers.

TV via PC:

- When watching TV catch-up or on-demand services via a PC or similarly enabled device (such as a mobile phone or a tablet), a user must set up an account for all of the services listed below. During the account set-up, the user / account holder can choose settings for age-rated material. This allows them to either restrict or allow access to content based on its age rating.
- Material is rated with a 'G for guidance' if it is unsuitable for younger viewers – this typically applies to content broadcast after the 9pm watershed, although content broadcast before 9pm could also receive a 'G' rating if it contains material unsuitable for younger viewers. If the user chooses to restrict access to 'G-rated' content, a PIN will be required to view content of this type every time the service is used.
- If the account is set up to allow unrestricted access to 'G'-rated material, no PIN is required. Account settings can be changed after the set-up process if the account holder wishes to change the access restrictions setting they have employed.

BBC iPlayer

a) Is adult material available?

No. Material is rated by age, with a 'G for guidance' category used for content which has typically been broadcast after the 9pm watershed or which might

otherwise be considered inappropriate for younger viewers even though it might have been broadcast prior to the watershed.

- b) What mandatory protections are used?

None are in place, due to the absence of any content which requires mandatory protections.

- c) What elective protections are offered?

It uses a parental guidance lock system to block content categorised as being unsuitable for viewers under 16. A parental password can be set up on a PC to ensure only appropriate content can be viewed by various members of a household. The BBC website states that the PC owner is responsible for determining whether content is suitable for children to view. (It is unclear how this applies to a PC which is owned and used only by a young person and is located in a bedroom, for example.)

ITV Player

- a) Is adult material available?

No. Material is rated by age, with a 'G for guidance' category used for content which has typically been broadcast after the 9pm watershed or which might otherwise be considered inappropriate for younger viewers even though it might have been broadcast prior to the watershed.

- b) What mandatory protections are used?

None are in place, due to the absence of any content which requires mandatory protections.

- c) What elective protections are offered?

It has a PIN access control system to allow users to choose whether to PIN protect content originally broadcast after the 9pm watershed. By activating PIN access control you can opt to ensure that any material that was originally broadcast after the watershed or which carried an on-air announcement will require PIN access every time such material is selected for viewing. A PIN prompt is served up whenever 'G'-rated content (i.e. that which was broadcast after the watershed) is selected for viewing.

4OD

- a) Is adult material available?

No. Material is rated by age, with a 'G for guidance' category used for content which has typically been broadcast after the 9pm watershed or which might otherwise be considered inappropriate for younger viewers even though it might have been broadcast prior to the watershed.

- b) What mandatory protections are used?

None are in place, due to the absence of any content which requires mandatory protections.

- c) What elective protections are offered?

4OD operates a four-digit PIN protection system, which can be applied to either 18-rated content or 16-rated content. Users define their own PIN and choose which content they wish to restrict. The PIN must be entered before restricted content can be viewed, but is only required once per session.

Five On Demand

- a) Is adult material available?

No. Material is rated by age, with a 'G for guidance' category used for content which has typically been broadcast after the 9pm watershed or which might otherwise be considered inappropriate for younger viewers even though it might have been broadcast prior to the watershed.

- b) What mandatory protections are used?

None are in place, due to the absence of any content which requires mandatory protections.

- c) What elective protections are offered?

Five On Demand uses a PIN system based on post-watershed content, which has a 'G' rating. Every 'G' programme also comes with information about why the programme has guidance, such as 'contains strong language', 'contains violent scenes', etc. This will be displayed alongside the 'G' or is viewable if you put your mouse over the 'G'. Viewers must be over 18 years of age and must register and log in via their account to view programmes with a G. Users can set up a PIN to ensure that children using the computer cannot access 'G' programmes even when the account is logged into.

Blinkbox

- a) Is adult material available?

No. However, age-rated films are available.

- b) What mandatory protections are used?

Account holders must be 18 – or 13 with parental consent – in order to set up an account. Much of the content available must also be purchased for viewing. Since this involves a credit or debit card, this provides the proxy proof of age that most providers accept.

- c) What elective protections are offered?

There is currently no parental blocking system available on the service, but according to the Blinkbox website this is 'coming soon'.

SeeSaw

- a) Is adult material available?

No. Most SeeSaw content comes from broadcasters and providers who have previously shown the content on their own channels and platforms.

- b) What mandatory protections are used?

None. Much of the content is available for free, with other content available for purchase once a user has created an account.

- c) What elective protections are offered?

Parental controls consist of a password of 6 characters or more. This is set up by the account holder before confirmation of their age as 18+. This password is then used to access any content which was previously broadcast after the 9pm watershed.

SeeSaw also operates a 'G for guidance' system, flagging content which is unsuitable for younger viewers. Accounts can be created by children from the age of 13 upwards provided they have parental consent, but the site recommends parents set parental controls as part of the account set-up process. The site also recommends setting the password using different browser softwares.

NB – SeeSaw has a prominent 'Parental control' footer link on its homepage.

Games consoles:

Microsoft Xbox 360

- a) Is adult material available?

Adult material is not available via the Xbox platform channels, but the device has internet connectivity, which means users can visit websites that contain adult content.

- b) What mandatory protections are used?

None are in place, due to the absence of any adult content on the official Xbox channel.

- c) What elective protections are offered?

Xbox 360 Console Family Settings can be used offline and online.

Offline settings grant or restrict access to games based on the PEGI rating system (new games are auto-encoded with their PEGI rating). It can disallow or allow access to all original Xbox games not available with PEGI auto-encoding.

Online settings restrict access to content and contacts based on the parent's choice. It can also control access to all the features of Xbox Live, including the various forms of media available through it, and can be used to set levels of protection for gameplay and friends lists. Parents can also decide who the child can communicate with online.

A pass code can be used to protect Family Settings.

Sony PlayStation 3

- a) Is adult material available?

Adult content is not accessible via the PlayStation 3 content channels or download services, but the device has internet connectivity, which means users can visit websites which contain adult material.

- b) What mandatory protections are used?

None are in place, due to the absence of any adult content via the PlayStation 3 platform.

- c) What elective protections are offered?

PS3 Parental Control Settings can be used offline and online. To change parental control settings a password is needed. To change parental control settings for offline and online content the same password is needed. Offline settings restrict playback of games, DVDs and Blu-Ray discs so they do not exceed a level chosen by the parent. Online settings restrict web browsing, either by prohibiting use of the device's web browser without entering a PIN, or by filtering inappropriate websites. When using the PlayStation Network, chat usage can be restricted and a spending limit put in place. This also applies to sub-accounts, which are used by minors – a master account is needed for these to be set up. Content not appropriate for the age will no longer be displayed in PlayStation Store when a parental control option for content restriction is employed.

Sony PSP (PlayStation Portable)

- a) Is adult material available?

No adult material is available via the PSP itself, but the device's internet connectivity means users can visit websites that contain adult material.

- b) What mandatory protections are used?

None are in place, due to the absence of any adult content over the PSP platform.

- c) What elective protections are offered?

PSP Parental Control Settings can be used offline and online.

Offline settings restrict playback of games and video content so it does not exceed a set level. There are 11 settings, and content must support the parental control function. Online settings restrict web browsing by prohibiting use of the device's web browser without entering a PIN. A web filtering service which blocks inappropriate Web sites is currently only available in Japan.

When using the PlayStation Network, chat usage can be restricted and a spending limit put in place. This also applies to sub-accounts, which are used by minors – a master account is needed for these to be set up. Content not

appropriate for the age will no longer be displayed in PlayStation Store when a parental control option for content restriction is employed.

Nintendo Wii

- a) Is adult material available?

No adult material is available via the Wii's content channels or download services, but users can use the device's web connectivity to access websites that contain adult material.

- b) What mandatory protections are used?

None are in place, due to the absence of adult content on the device.

- c) What elective protections are offered?

Nintendo Wii parental control settings can be used offline and online. Offline settings restrict playback of games so they do not exceed a set level (based on Entertainment Software Rating Board (ESRB) ratings).

In online settings a PIN is required to play or download content in the Wii's Online Channels that exceeds the Parental Controls setting. This includes communications, user-generated content, etc.). Use of the device's internet channel can also be restricted or blocked.

Mobile:

Vodafone

- a) Is adult material available?

Yes.

- b) What mandatory protections are used?

Vodafone automatically blocks access to 18 years or over rated content, including adult material. Customers over 18 must request for the filters to be removed, and must verify their age as over 18 if they request removal of the filters.

- c) What elective protections are offered?

Vodafone Content Control limits access to: 18-rated content and services available over Vodafone live!; premium rate picture messaging; WAP Push services; and mobile internet outside the Vodafone live! portal.

Content and services rated as 18 years or over include chat and dating services, 'erotica', gambling and betting and violent games.

It is designed to prevent customers under 18 from accessing inappropriate content and internet services over Vodafone networks. It is applied by default to any Vodafone mobile phone lacking confirmation of customer's age, stays in place when using dial-up WAP connection. It is removable by over-18s by

registering their age with Vodafone, and can be reactivated and removed again without fee by customer after registering.

Orange

- a) Is adult material available?

Yes.

- b) What mandatory protections are used?

Orange Safeguard automatically blocks 18-rated content from Orange customers younger than 18, or those who cannot be verified as over 18. This block can be removed by users who verify their age is 18+.

- c) What elective protections are offered?

Orange Safeguard limits access to 18-rated content and services. This includes pornography, as well as other material which Orange categorises which includes: anorexia – bulimia sites; gambling; chat services; bomb-building instruction sites; dating sites; forums; sites promoting racism, sects or violence.

Orange Safeguard is applied by default to any Orange mobile phone lacking confirmation of customer's age (with the exception of pay monthly customers with contracts after 31 March 2010, who are assumed to be over 18 due to credit reference process; and customers with iPhones). It can be reactivated and removed for all devices without fee by customer after they have registered as over 18. For browsing safety Orange Safeguard also blocks: hackers, malware and spyware. Orange customers over 18 will have their default settings set to 'filters off', meaning they have unfiltered access to adult material on the network.

O2

- a) Is adult material available?

Yes.

- b) What mandatory protections are used?

All over 18 content is automatically blocked. People 18 or over who want to access over 18 content can request for the block to be removed via the O2 helpline. This process requires a credit card. Customers without a credit card can take a photo ID to an O2 store to request the removal of the block. Customers who try to access over 18 content are automatically taken through a process to confirm their age. This also requires a valid credit card.

- c) What elective protections are offered?

O2 Content Control is a barring and filtering mechanism designed to prevent under-18s from accessing inappropriate internet services over the O2 network (limited to those sites, games or services where the content providers have a commercial relationship with O2). It is applied by default to any O2 mobile phone lacking confirmation of customer's age, but is removable by over-18s by registering their age as over 18 with O2. It can be reactivated and removed again

after registration.

NB – O2 customers whose ages is verified as over 18 when they purchase their phone will have their default settings set to 'filters off', meaning they have unfiltered access to adult material on the network.

T-Mobile

- a) Is adult material available?

Yes.

- b) What mandatory protections are used?

T-Mobile Content Lock automatically blocks all 18+ and unmoderated content. This blocking function can be removed upon request and after provision of credit card details and an age check carried out by T-Mobile using the customer's name.

- c) What elective protections are offered?

T-Mobile Content Lock prevents the accessing of 18-rated material by under-18s. Content and services rated as 18 years or over include 'visual material of a sexual nature', as well as: unmoderated social networking sites; unmoderated chatrooms; sites with persistent bad language; 'horror content' and extremely violent content.

It is filtering software with three settings:

- On (no access to unmoderated and interactive user-generated sites, chatrooms and 18-rated material from the internet, or downloads from its 't-zones' portal);
- Moderate (restricts access to all 18-rated material, allows most social networking sites); and
- Off (no restrictions)

Moderate Content Lock is automatically applied to all devices. It can be removed after verifying a customer's age as 18+, and can be altered to 'on' or 'moderate' by the user sending T-Mobile a text message requesting this.

3

- a) Is adult material available?

Yes.

- b) What mandatory protections are used?

3 Content Control limits access to 'age-restricted services' (any 3 services which are specified for use only by customers 18 or over). Access to what 3 calls 'adult visual premium rate services' is automatically barred unless a mobile has been verified as belonging to an adult.

- c) What elective protections are offered?



Sexually explicit material and the potential harm to minors:

An independent review of the research evidence
By Dr Guy Cumberbatch

Research Document

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Section 1

Foreword

This independent research was commissioned by Ofcom from Dr Guy Cumberbatch, Chartered Psychologist, to assist in consideration of the questions posed to us by the DCMS about the recently introduced 2009 regulations for UK-based video on demand (“VOD”) services, in particular regarding the level of risk posed to children by the provision of hardcore pornography (whether R18 equivalent or stronger material) via a VOD service.

The 2009 regulations implemented into UK law the requirements of the Audiovisual Media Services Directive, and imposed for the first time certain minimum requirements on regulated UK-based video on demand (“VOD Services”). In particular, the regulations introduced a new section 368E(2) into the 2003 Communications Act, which places minimum requirements on the provision of potentially harmful material in VOD services. This section states that:

“if an on demand programme service contains material which might seriously impair the physical, mental or moral development of persons under the age of eighteen the material must be made available in a manner which secure that such persons will not normally see or hear it”.

In 2005, Ofcom commissioned independent research from Ellen Helsper, London School of Economics to assist in the consideration of points raised by the public consultation on the Ofcom Broadcasting Code, which began in July 2004. This previous research provided an academic overview of the literature available to examine the potential impact of R18 and equivalent material upon people under the age of eighteen. Dr Helsper concluded that there was no evidence that R18 equivalent material “might seriously impair the physical, mental or moral development” of minors, but that there was some, inconclusive, evidence regarding the effect of this material on the moral development of minors.

This new independent research is intended to update that review, focusing on empirical research carried out since 2005, and to establish if there was any new evidence to suggest that R18 equivalent material “might seriously impair the physical, mental or moral development” of minors.

Ofcom has asked Dr Cumberbatch to focus on R18 equivalent material without special reference to material that is stronger than R18 because Ofcom is confident that pornographic material on VOD services that is so strong that the BBFC refuses to classify it – but that is not necessarily illegal – should fall into the category of content that “might seriously impair” minors’ development. This is because it is generally acknowledged that material of this nature poses a risk of harm sufficient to make its distribution or sale as a video work or film unlawful.

Section 2

Executive summary

Introduction

This 2010 review of research literature updates that of Helsper (2005): *R18 material: its potential impact on people under 18 - An overview of the available literature*.

The aim is to examine the evidence for any harm or risk of harm caused to minors (under 18s) by sexually explicit material¹ and whether this could be considered to 'seriously impair' or 'impair' their development. It covers sexually explicit audio visual material in general, but discriminates by media platforms such as television and internet services where possible.

The review focuses on empirical research carried out since 2005, but includes a small number of earlier publications relevant to the central question of harm to minors.

Conclusions to the 2010 review

In this 2010 review, similar conclusions to the 2005 review were reached; that:

The research reviewed in this report does not provide conclusive evidence that sexually explicit material 'might seriously impair' the development of minors.

The research does not provide clear, conclusive, evidence on whether sexually explicit material might 'impair' their development.

Some studies report a pattern of associations between exposure to sexually explicit material and a range of sexual attitudes and behaviours which have typically been taken as problematic (for example, greater sexual permissiveness, stronger beliefs that women are sex objects, lower sexual satisfaction, earlier sexual activity, higher probability of anal intercourse). However, these associations could equally support the idea that those with particular attitudes and values are drawn to sexual media.

The empirical evidence for harm is weak and the research is very limited, so it cannot be confidently concluded that sexually explicit material carries no risk to minors.

More detailed conclusions are outlined below:

- Due to the ethical and practical challenges of working with young people on sexual topics, there is only a limited amount of research on the exposure of minors to sexually explicit material, and in the UK there is a dearth of research in this area. Furthermore, this research tends to examine associations between different factors rather than testing for cause and effect.
- These limitations contribute to the research findings being inconclusive about the potential effects of sexually explicit material on minors.

¹ In this review sexually explicit material is used to describe content similar to R18 material. See section 3 for more details.

- In addition, it proved challenging to evaluate the studies in terms of evidence of potential effects on minors, due to the variation in the definitions of sexually explicit materials used by researchers. Among the limited number of studies identified, it was rare for them to distinguish what kinds of sexual materials are in question. Furthermore, the literature is notoriously controversial.
- A further limitation is that most studies identified in this report combine all types of sexually explicit media into a total exposure score and so it was not possible to discriminate between different media, e.g. for example, television, internet, video on demand, DVD.
- Since 2005 a number of studies have examined possible effects of sexually explicit material on participants as young as 13 - mainly using self-completed questionnaires.
- The focus of this research has been on the development of sexual attitudes (such as permissive views) and behaviours.
 - Most studies report some association consistent with negative effects of sexually explicit material. These include notions of women as sex objects; greater endorsement of uncommitted sex; earlier sexual activity; greater number of sexual partners and lower sexual satisfaction, amongst others. However, these associations are weak and are only correlations which could equally well support the idea that those with particular attitudes and values are drawn to sexual media.
 - Despite the wide age range of minors studied (from 13-18 years old), there is no evidence that the associations, described above, between sexually explicit material and sexual attitudes vary with age - younger people do not seem more 'vulnerable' than their older counterparts.
- Experimental research offers a different method for investigating the effects of sexually explicit material, which in principle allows for causal inferences. However, it poses obvious ethical and legal challenges as it requires minors to be exposed to sexually explicit material. This literature review identified only one experiment (undertaken in the 1960s, prior to ethics committees) where young people were exposed to highly inappropriate adult films containing, for example, scenes of bestiality and rape.
- Very few of the studies consider pornography from the viewer's perspective. However, recent audience-focused research suggests that, across the age bands studied (from early teens), media literacy about sexually explicit material is reasonably well developed and may help to protect minors from potential harm.
- This literature review also identified possible gaps in the research.
 - Developmental stages have not been the lynchpin of research design. The age band 10-12 is the point at which young people often begin to encounter sexual material, and there is an absence of research in this area.
 - No studies were identified that evaluated the impact of sexually explicit material relative to sexually non-explicit material. There is no evidence that pornography has any more or less influence on attitudes and behaviours than the sexual content in TV soaps or music videos.

Conclusions to the 2005 review

The conclusions of the 2005 review were:

Might R18 material seriously impair the development of minors?

From the research reviewed in this report, the answer would be no.

Is R18 material likely to impair the development of minors?

Since there is no conclusive evidence, this is a hard question to answer. There might be an effect on the moral development of minors.

- There seems to be no relationship between the availability of pornography and an increase in sex crimes in other countries; there is more evidence for the opposite effect.
- Research with adults indicates no relationship between the commission of sex crimes and use of pornography at an early age. Again, there is evidence for the opposite effect.
- Research indicates that V-chips and ratings were found useful by parents, but that they might be enticing youngsters to access this material.
- Due to ethical restrictions, there is a severe lack of research regarding the effects of exposure of minors to R18 pornography; this contributes to the evidence being inconclusive.
- There is some evidence indicating that sexual material influences the moral development of young people under the age of 18. In other words, that through exposure to such material young people become more cynical towards traditional relationships (marriage) and become sexually active at a younger age.
- There is no empirical research that proves beyond doubt that exposure to R18 material seriously impairs the mental or physical development of minors.

Section 3

Introduction

Introduction

The purpose of this monograph is to provide an update to the review carried out for Ofcom by Ellen Helsper (2005) *R18 material: its potential impact on people under 18 - An overview of the available literature*.

The report sets out to identify, through reviewing existing international research, whether sexually explicit material similar to R18 content might 'seriously impair' or 'impair' the development of minors or otherwise result in harm. It focuses on empirical research carried out in the last 5-6 years, but includes a small number of earlier publications relevant to this. See Annex 1 for a summary of the review process.

Although it might be tempting to evaluate the various studies identified in the review as a whole so as to reach one conclusion, there is a risk that this could be misleading, as Helena Barwick (2003) argued. She produced *A Guide to the Research into the Effects of Sexually Explicit Films and Videos for the Office of Film and Literature Classification in New Zealand*. Her advice was that because so little agreement existed in the literature, conclusions were not possible, declaring: 'The review is not an attempt to forge a consensus from very conflicting research; it endeavours to explain why there is conflict' (Barwick, 2003, P4).

Some understanding of this conflict of evidence and conclusions should be provided here and will be attempted by a close scrutiny of the studies in the next section of this report.

First, in this section, it is useful to provide some background about the different terms used in the studies that relates to this lack of consensus. Two obvious sources of confusion stem from the terms used in the research to describe types of sexual material and descriptions of potential negative effects.

The review found that there is no clear link between the language used in research and the language of legislation in either area. While there are definitions provided by regulators and law, the review found that researchers use many different types of terms to describe sexual material or potential effects, often with lack of clarity and consistency. This is described in more detail below.

Defining sexually explicit material

Defining terms is a persistent problem since it is remarkably difficult to discern what materials are under consideration in any piece of research, and this is of crucial importance in surveys of pornography exposure and experience. The range of materials used is highlighted by comparing the definitions of 'pornography' in two recent studies involving the same author, Neil Malamuth. In the first, Hald and Malamuth (2007, eP3²) provided their participants with the following 'standardised definition':

'Any kind of material aiming at creating or enhancing sexual feelings or thoughts in the recipient and at the same time containing explicit exposure and/or descriptions of the

² eP refers to the page number of an electronic version provided by an author.

genitals and clear and explicit sexual acts, such as vaginal intercourse, anal intercourse, oral sex, masturbation, bondage, sadomasochism, rape, urine sex, animal sex etc’.

However, in the same year, Vega and Malamuth (2007) published a study where the only measure of ‘pornography consumption’ was the frequency of reading *Penthouse*, *Playboy* and *Hustler* magazines. These are all titles which have usually been considered merely ‘top shelf’ erotica or ‘softcore’ material since they do not show the sex act or aroused genitals³. These magazines are certainly some way removed from material showing sex with animals.

Terms used in the research

The terms ‘pornography’ and ‘sexually explicit material’ are used in the studies identified in this report to describe the sexual material researched. However, the focus of this review is on the UK legal category of R18 material (see below). That is; hardcore sexually explicit works showing actual sex. In the UK, extreme pornography including rape and animal sex are illegal and so precisely matching studies (or legislation) from other countries that focus on material similar to R18 is impossible. Thus, the approach taken here was, by necessity, akin to fuzzy-set logic - categorising the materials under discussion pragmatically according to the information supplied by authors.

Pornography

Millwood Hargrave and Livingstone (2009) provide a definition of pornography from the World Encyclopedia: ‘Visual or oral material presenting erotic behaviour that is intended to be sexually stimulating and is lacking in artistic or other forms of merit. It is often considered to be demeaning to both sexuality and the body’ (Philips, 2005). This particular definition does not refer either to the sexual activity or to the explicitness of the detail, which some researchers consider to be its distinguishing characteristics (i.e. distinguished from softcore or erotica). The adjective ‘hardcore’ is often used to describe more explicit pornography where oral or penetrative sex can be seen.

Sexually explicit material

Since the term ‘pornography’ often has negative connotations (see above), most researchers tend to prefer the more neutral expression: ‘sexually explicit material’, which can be taken to have essentially the same denotive meaning as pornography. Even though this does not ensure much better agreement on the kind of material under discussion, the adjective ‘explicit’ helps exclude softcore material (see above comments on Malamuth).

R18⁴

The focus for this review is content similar to R18 material. R18 refers to a classification of sex films unique to the UK and to the organisation that regulates films: the BBFC. The characteristic of these films is that they are as sexually explicit as could be imagined and this sexual activity provides the dominant theme. They do not contain images of bestiality, rape or extreme violence, which would be a criminal offence in the UK. The BBFC website home page shows the various relevant classification logos with the accompanying text for 18 and R18:

³ Material kept on a shop’s top shelf for adult eyes only (See Robertson & Nicol, 2008, P 206).

⁴ Under the Video Recordings Act 1984 and 2010 it is an offence punishable by up to 6 months imprisonment or up to £5,000 fine to:

(S11) Supply a work to anyone who has not attained the age specified in the classification or
(S12) Supply R18 works other than in a licensed sex shop.

- 18 - Suitable only for adults: No one younger than 18 may see an '18' film in a cinema. No-one younger than 18 may rent or buy an '18' rated video work.
- R18 - To be shown only in specially licensed cinemas or supplied only to licensed sex shops and to adults of not less than 18 years: The 'R18' category is a special and legally restricted classification primarily for explicit works of consenting sex or strong fetish material involving adults. Films may only be shown to adults in specially licensed cinemas, and video works may be supplied to adults only in licensed sex shops. 'R18' videos may not be supplied by mail order'.

Films may be classified as 18 for reasons other than the sexual content, but in the case of sex works – i.e. films which are intended to be sexually stimulating and where the dominant theme is sexual activity, one key distinction between 'R18' and '18' is that in the former actual sex is depicted explicitly as taking place while in the latter it usually appears to be simulated.

Perhaps a source of confusion is that, albeit very rarely, actual sex has been allowed in 18-rated art house-type films. Additionally, a number of 18-rated films have included sexual violence when this is not tolerated in R18. The central issue is that R18 films are sex works where the central purpose is to arouse sexually. Rape depictions which are not intended to arouse sexually and which are justified by the films narrative may be tolerated at 18.

An interesting example is *Baise-moi*, which was submitted to the BBFC for classification in 2002. Ten minutes into the film there is a violent rape scene containing a ten-second close-up shot of actual penetrative sex. Audience evaluation research commissioned by the BBFC (Cumberbatch, 2002) indicated that viewers saw this scene as pornographic and not sufficiently justified by the narrative (adding nothing to the film). However the film is clearly not a sex work and an R18 classification was thought inappropriate. The distributors agreed to the ten-second cut and the film was released as an 18.

Even when provided with BBFC guidelines, many people have difficulty understanding what R18 entails (see for example Cragg, 2000). However, once the works are viewed, the distinction becomes clear. This is illustrated by a study commissioned by the BBFC to explore audience perceptions of such material (Cumberbatch & Gauntlett, 2005). A panel of 40 adult males and 40 adult females was set up to watch, under natural conditions at home, two full length films from a pool of 12 - one 'R18' and one '18' plus a compilation of excerpts from R18 films. Panel members knew the films would contain sex but not the BBFC classification decision. In-depth interviews probed reactions and, for each film title, asked whether it should be classified as 18 or R18 and where each would be placed on a 1-10 scale of 'only just' to 'very definitely'.

The results were unambiguous. All the BBFC R18 sex films were spontaneously rated R18 by the viewers and all the BBFC 18 sex films were spontaneously rated 18. This pattern was sustained across the film excerpts, indicating that R18 films are quickly recognised as such. When asked to explain why a film should be rated R18, the very graphic detail was always cited. Moreover, the distinction between real and simulated sex, as in the BBFC guidelines, was clearly part of their conceptual vocabulary. Both in the interviews conducted and the focus groups convened, the clear majority view, whether liberal or conservative, was that the R18 category (along with the restrictions that this imposed on the films) was highly desirable.

Types of material not included in the review

Obscene material

Section 1 of the Obscene Publications Act 1959 provides the statutory definition of obscene: "an article shall be deemed obscene if its effect...is, if taken as a whole, such as to tend to deprave and corrupt persons who are likely, in all circumstances, to read, see or hear the matter contained or embodied in it". In law, 'obscene' has a different and much stronger meaning than in common usage.

Extreme pornography

This is a concept which in the UK has acquired a special legal meaning through Section 63 of the Criminal Justice and Immigration Act 2008. In the Act, "extreme pornographic images" are defined as images "of such a nature that (they) must reasonably be assumed to have been produced solely or principally for the purpose of sexual arousal" and which are "grossly offensive, disgusting or otherwise of an obscene character" (such as bestiality, life threatening violence and sexual interference with a human corpse). Possession of such material is punishable by a prison sentence of up to three years.

Child pornography

The Protection of Children Act 1978 made it a criminal offence punishable by up to ten years in prison to take, make or distribute indecent images of children (under the age of 16). In 1988, the legislation was bolstered by The Criminal Justice Act s.160, with the creation of a new offence of possessing an indecent picture of a child. In 2000, the penalty for such possession was increased to a maximum prison sentence of five years and/ or an unlimited fine.

Although legislation proscribing particular content - such as the above - might appear simpler to operate than legislation which proscribes harm or impairment, in practice 'the courts have been unable to provide a meaningful definition of "indecent", short of "offending against recognised standards of propriety" or "shocking, disgusting and revolting ordinary people" (Robertson & Nicol, 2008, P 221).

Descriptions of potential negative effects

Definitions of 'impair'

Article 12 of the Audiovisual Media Services Directive (Directive 2010 /13/ EU) and Section 368E(2) of the Communications Act refer to materials which 'might seriously impair the physical, mental or moral development of minors'. The provenance of such language is unclear. However, Eberstadt and Layden (2010, P 8) cite the 1986 USA Surgeon General's Report (the Meese Commission) which used a similar phrase:

'A panel of clinicians and researchers concluded that pornography does stimulate attitudes and behavior that lead to gravely negative consequences for individuals and for society and that these outcomes impair the mental, emotional and physical health of children and adults'.

Helsper commented on this Commission: 'This report was highly criticized by many because it was said to draw conclusions contrary to the evidence presented' (Helsper, 2005, P 10).

Despite this, it would clearly be helpful if this review were able to organise the research literature according to the criteria of 'seriously impair' and 'impair'. With this in mind, a global search was conducted of the electronic documents assembled for this review. This revealed that the key term 'impair' is not now in common use.

'Impair' appeared only once in the research in this report. This was in the context of speculation about whether adolescents might become so preoccupied with sex as a result of pornography exposure that their functioning in everyday life is impaired (Peter and Valkenburg, 2008b, eP 27). Here, the meaning is clearly that of impairment as a disabling phenomenon. This sense of interfering with normal functioning was also investigated by Štulhofer, Jelovica & Ružič (2008) in a study of 'sexual compulsiveness' – a borderline clinical condition which could restrict everyday life. However, note that Štulhofer et al (2008) did not use the term 'impair'. In any case, as will be seen, this study found no significant association between early exposure to pornography and high sexual compulsivity (see section 3 for more details). This sense of 'impairment' is of a tangible reduction in functioning such as might merit some therapeutic intervention. This arguably might constitute a stronger effect than the 'social harms' or 'negative effects' referred to in some studies.

Most of the recent studies covered in this review pick up on previous findings and the concerns articulated by others about specific effects of sexually explicit material (e.g. that it leads to sexual dissatisfaction). They then move on to predict particular outcomes which become the focus of the research. Thus, evaluative appraisals of effects - for example whether they constitute harm or just why they might be considered negative - are largely absent from the studies.

A similar observation must be made about the distinction between mental, moral and physical development (i.e. the objects of impairment in Article 12). These facets may have some meaning in literature on child development, but do not seem to have been used in any of the studies reviewed. For this reason, it would be misleading to attempt to impose such distinctions on the findings. Electronic searches through Council of Europe databases did not reveal any definitions of these terms relevant to the effects of the media (although impairment is discussed in the context of disability). International dictionaries and encyclopaedia did not produce any pointers as to how distinctions between mental, moral and physical might provide a meaningful classification of the contemporary literature on the effects of the media, let alone pornography.

There exists an unsatisfactory interface between the language of research and that of legislation. Therefore, for practical purposes, this review takes 'impair' as broadly equivalent to 'harm' - encompassing any effects which many people might perceive as negative.

Concerns about harm

The vast psychological literature on the social and personality development of young people documents the often dramatic changes from pre- to post-puberty. Most theories of child development suggest that adolescence is a critical or sensitive period for new experiences and these might shape later development (e.g. Shafer, 2008). Brain researcher Dahl (2004) claimed that the adolescent brain was 'a natural tinderbox'. Thus the particular concern has been that in adolescence, young people may be particularly susceptible to the images in sexually explicit material. For example, Štulhofer et al (2008) suggest that if pornography experiences occur before sexual experience then there is a danger that pornographic images become the first ones to be embedded. Peter and Valkenburg (2008a) argue that such material presents sexual beliefs and values that could conflict with those learned in family and school environments.

The most comprehensive list of potential harms to young people emerged from a UK-based study commissioned by the BBFC. A sample of 38 experts in child mental health was invited to consider the potential impact on minors of viewing R18 material (Cragg, 2000). Even though they were provided with guidelines on R18 classification, many continued to refer to videos which went beyond anything acceptable for this (e.g. scenes of brutality). With this proviso, concerns fell into three overlapping categories:

1. Immediate shock and trauma;
2. Sexualisation and possible re-enactment;
3. Broader effects to do with perceptions of sexuality and relationships.

The first two categories were thought to be ones where children might be propelled into some form of professional care, whereas in the last group broader effects were regrettable but more subtle and less likely to be detected.

Shock and trauma were more likely where children were unprepared for the images and had difficulty talking about it afterwards. Here, most were thinking about relatively short-term effects which might soon dissipate, especially with one or two therapeutic sessions.

Many respondents said that a serious problem was that children might become intensely interested in sex when they could not give their feelings expression. Re-enactment of pornographic scenes might be an expression of traumatic distress.

The third category was somewhat broader and included effects such as how children came to perceive the place of sex in relationships. This was seen more of a problem in post-pubescent young people, where some of the experts believed that such material normalized sexual behaviour, reducing the age at which they became sexually active. Here, distorted, unrealistic images were seen as antithetical to the important values necessary for lasting, fulfilling relationships. Finally, several of the respondents suggested such material might erode trust between parent and child (such as after finding gay pornography at home) or lead to children becoming confused about their sexual identity.

Risk assessment of harm

None of the experts in Cragg's study thought that pornography could be helpful to a child's development. Some felt that with well cared-for children, the very young might not take much notice of pornography anyway, while older ones who knew about sex might not be shocked by it. Many of the experts had encountered cases where exposure to pornography was one element in a larger pattern of neglect and abuse of a child. While they believed that this represented an additional harm to children, the role of pornography could not be isolated. When asked if they could think of any children that had been harmed by pornography in the absence of other abuse, only five of the experts (13%) were able to do so. It is not clear from Cragg's report how many cases were involved here. Given the tens of thousands of cases which the experts represented, this study helps inform a risk assessment. As one of the psychiatrists explained:

'I asked the members of the team...We could not think of a case where there was a direct link between pornography as such, where the referral had been made solely on that basis, and some ill effects that would have been evident in the child...Practising for 22 years, 2,000 cases a year...Looking back on my case load, I was able to identify about seven or eight cases where pornographic films may have played a role, but not a direct one' (P 48).

Section 4

The research literature on minors

Introduction

For the most part, concerns about the effect of sexually explicit material on young people involve a substantial amount of conjecture that children are particularly vulnerable to harm, but conclude that evidence is lacking simply because it would be quite unethical to conduct such research on this (e.g. Flood, 2009).

While it is inappropriate (and potentially illegal⁵) to expose minors to material classified as adult viewing, there are now a number of studies which have examined the impact of sexually explicit material on young people.

Research methodologies

This review includes more than 30 research reports which were not available in the previous literature search.

For the most part, these are surveys looking at the co-occurrence of exposure to different types of sexually explicit material and respondents' attitudes or reported behaviours. Such studies can provide correlational findings, but no causal inferences can be reliably drawn.

A second type of survey asks teenagers and adults to recall their experiences of sexually explicit material during early adolescence, and this information is used to investigate differences in current attitudes and behaviours. This retrospective design is usually taken to provide some support for causal inferences.

A third design is one conducted over time (longitudinal research) where early experiences of sexually explicit materials can be linked to any changes in attitudes and behaviours. This kind of design potentially controls for initial differences in attitudes between those who become exposed to sexually explicit material and those who do not, thereby providing stronger support for causal inferences.

A very different method for quantitatively investigating the effects of sexually explicit material is the use of experimental research⁶, which in principle allows for causal inferences. However, quite apart from concerns about the ecological validity of such an approach, it poses obvious ethical challenges when working with young people. This review identified just one experiment in the last 40 years: Elthammar (1967) showed 11-18 year olds adult material containing scenes which many would consider to include hardcore sexual violence. Such a study would not pass ethical committee standards today.

⁵ Sexual Offences Act 2003, Section 12: Causing a child to watch a sexual act: Intentionally causing a child under 16 to watch another person engaging in an activity, or to look at an image of any person engaging in an activity is an offence carrying a maximum sentence of 10 years on indictment.

⁶ Usually participants are presented with a video depicting sexually explicit material and then their reactions are measured.

Report structure

These various methodologies provide the structure for organising the material that has become available since 2005 when the last review was conducted:

- Experimental research: emotional reactions to film;
- Correlational studies;
 - Recalling childhood exposure to pornography
 - Surveys among young people
 - Longitudinal studies
- Qualitative studies on the experiences of young people;

This is followed by a section on crime-related evidence:

- Crime rate statistics;
- Criminogenic fantasies;

The final section examines evidence of the mainstreaming of sex.

In each section, the design and findings of each study are summarised, critically evaluated and conclusions drawn in relation to the central question: Does the research provide evidence of harm to minors from exposure to sexually explicit material?

Experimental research

This report identified only one experiment with minors that examined the potential effects of different types of film content. The dearth of research using this technique is due to the obvious ethical reasons outlined above.

Elthammar's experiment (1967)

Although published in 1967, still available in Sweden, and held at the British Library, this study does not seem to have been reviewed elsewhere. It is a remarkably bold experiment which would not be allowed today by any ethics committee⁷. The study was of the emotional reactions of more than one hundred 11-18 year olds to 'intensely provoking films' (containing gross violence, sexual violence and bestiality). It therefore deals with one concern - that young people might become traumatised by seeing very inappropriate films. One youngster - a 13 year old girl - showed signs of disturbance with 'prolonged anxiety afflictions' (Elthammar, 1967, P 141). However, two mothers who accompanied their children to a screening session were so distressed that they needed psychiatric treatment for months afterwards.

⁷ While ethical codes for research on humans were drawn up in 1947 following the Nuremberg war crime trials, it was not until 1975 that Article 1.2 of the Declaration of Helsinki introduced 'independent committees' to oversee all such research.-

This study formed the basis of a PhD thesis by psychologist Olof Elthammar (1967) in the Child Psychiatric Department of the University of Göteborg. There was such a public outcry over this experiment that the researcher, in retrospect, considered himself fortunate not to have lost his job or even been driven out of the country⁸. It should be noted that the response of the two mothers may have been less to do with their personal reaction to the films but more to do with their shock at what the children were being exposed to.

The focus of the research was on whether the age of the children and adolescents determined how they reacted. Elthammar believed that this might help appraise the suitability of films for different ages, and liaised with the Swedish Film Institute. In all, 30 films were recommended from which 7 were selected: *Forbidden Game*; *The Boy in the Tree*; *The Bridge*; *The Young and the Damned*; *The Naked Night*; *Crime in the Street* and *491*.

This last film was clearly problematical. The lead character, Silva, is seen having sex on a ship and in cars to earn money and, in one scene, is held down and raped by a dog. The film received various cuts in Sweden before public release - notably the scene with the dog. Elthammar showed the full uncut version.

Findings

Reactions to the films were assessed by observation, through the use of projective techniques,⁹ by self-reports and by interview. Stills representing provocative scenes in the films were used to promote discussion about emotional reactions. A structured seven-point response scale (from 'not at all' to 'extremely') was offered to rate feelings of anxiety, depression, pleasure and aggression. Across all the films, most of the results failed to show significant differences either by age or by gender. Quite consistently, the film *491* was the second lowest across the various measures. It might be expected that female viewers would respond differentially, but this was not the case. The only group to show a consistent trend of lower reactivity to the various film titles were the 18 year old males. Across all film titles, the eleven year olds showed somewhat higher anxiety than other age groups, both in the laboratory measures and at home. However, these were not statistically significant in the case of the film *491*.

One youngster (a 13 year old female) was judged by Elthammar to have experienced 'a disturbing effect' from the films and this reaction was due to *The Bridge*, a harrowing film of teenagers in World War 2. At home she regularly got up in the night to check that her parents were at home, but little further information is available on the case. A child psychiatric exploration was carried out 9 to 10 months later on the whole group, but this did not reveal any continuing anxieties.

Evaluation

The Elthammar study is unique and likely to remain so for obvious ethical reasons. Although quite dated, the measures of emotional reaction were quite extensive. The descriptive statistics are well documented but the analysis was cursory. Although the films presented in this research were not pornographic (bestiality excepted) they could be considered to include scenes of hardcore sexual violence.

⁸ Dr Elthammar kindly replied to this reviewer answering various questions about his research.

⁹ Projective techniques include asking participants to interpret stimuli, complete sentences, or report what associations particular words bring to mind. Participants project their own personalities onto the stimulus, revealing personal motivations, or other characteristics.

Conclusions

The main conclusion must be that the results did not support the particular concern that young people might be traumatised by exposure to such inappropriate material. However, the experiment focused only on the emotional reactions of young people and it is possible that exposure to such content had other negative effects which were not studied.

Correlational studies

4.3.1 Recalling childhood exposure to pornography

To understand the possible effects of early exposure to sexually explicit material, a number of researchers have asked adults to recall such experiences from childhood. This report identified that since 2005 a total of five studies using recall measures have been published, and these are included in this section.

Online survey by Štulhofer

Here, three journal articles are reviewed from a multi-disciplinary team at the University of Zagreb, directed by Aleksandar Štulhofer. These studies are all based on one recent large online survey of 18-25 year olds who were asked about their first exposure to pornography (for most, this was when they were 10-11) and about their experiences of such material at ages 14, 17 and currently. The study therefore adopts a retrospective design, effectively providing three time points for analysis, as might be found in a longitudinal study.

Findings will be given for each study. Evaluation and conclusions will cover all three studies.

In late 2006, a generic email was sent to the mailing lists of students at several universities in Croatia, plus a number of electronic forums. It contained a brief explanation of the research and provided a web link to the questionnaire. This link was visited by 6,443 individuals; 4,605 started to fill in the questionnaire while 3,136 completed the task. The questionnaire took around 40 minutes to complete and covered 244 items including socio-demographics, sexual behaviour, sex attitudes, as well as questions about experience of and attitudes to sexually explicit material.

Respondents were told that pornography meant 'direct, detailed and uncensored depiction of sexual activities' and included: the internet, DVD, VCR, cable and satellite TV and the print media. They were invited to record the frequency of their pornography experiences, from 1= never; 2= once a month or less; 3= several times a month; 4= several times a week; 5= every day. They were also asked to indicate which genres, if any, they sought out most often. The list provided included S&M (sado-masochism), B&D (bondage and discipline), fetishism, bestiality and violent/coercive sexual activities - perhaps flagging up to the participants that the study was particularly interested in experiences of hardcore materials.

i Štulhofer et al (2007)

The first publication looked at the potential effects of exposure to sexually explicit material - both in childhood and later - in shaping sexual identities and expectations. Here the emphasis was on 'the process of symbolic interaction between pornographic presentations, related fantasies, real-life sexual experiences, frustrations, partners' demands, as well as peer conversations about sex' (P 68).

An obvious candidate for such an approach was Gagnon and Simon's (1973) notion of sexual scripts, which they see as personalised systems developed over time by individuals through interaction with the environment. These scripts are considered to provide a way of thinking (cognitive schemata) which help people to define sexual reality and guide their sexual decision-making and sexual behaviour. This perspective has been used before but only in a qualitative way (e.g. Attwood, 2002; Hardy, 2004), unsuitable for a large survey.

This approach is sophisticated and was developed further by the Zagreb team through their *Sexual Script Overlap Scale* which was used to examine the potential 'colonisation' of sexual scripts by pornographic material. This scale was constructed by asking two groups of male and female college students respectively, to make lists of things/activities/sensations that were:

- A) Important for the pornographic depiction of sex.
- B) Personally important for great sex.

These lists were then developed appropriately (according to psychometric principles) to produce a final scale containing 42 items. Each item was to be rated using a response scale from 1= completely unimportant to 5= extremely important. In terms of procedure, respondents were asked fairly early in the questionnaire to assess the importance of these items for 'great sex'. Then, at the end of the questionnaire, they were asked to go through the inventory again, this time rating the items for their importance in 'pornographic representations of sex'.

The *Sexual Script Overlap Scale* was scored by adding up the differences in the two ratings. Thus if 'cuddling after 'sex' was rated as 1 (completely unimportant) for pornography and 3 (somewhat important) for good sex then the difference score would be 2. The lower the overall score, the closer pornographic scripts match real-life sex scripts.

Findings

Analyses assessed the potential direct and indirect effects of pornography. These were computed separately for men and women, since gender differences would normally be expected in both pornography use and in sexual attitudes and scripts (e.g. Wiederman, 2005). Surprisingly, there was no significant direct association of pornography use with the sexual satisfaction measures. However, for both genders, there was both a direct and an indirect link with a greater variety of sexual experiences. Their statistical analysis ('path analysis') revealed indirect effects due to the amount of sex script overlap. For men, exposure to pornography was significantly linked to sex scripts overlap, which was linked to greater sexual experience, which was linked to overall sexual satisfaction in life. However, alongside this 'positive' linking was a negative path from pornography use to sexual script overlap, to lower scores on measures of intimacy with a partner; and this linked to lower sexual satisfaction. In the case of women, although pornography use was linked to sex script overlap, which also linked to lower intimacy ratings, the size of the indirect effect was 'rather negligible' (Štulhofer et al 2007, P 77).

ii Štulhofer, Jelovica & Ružič (2008)

The second report examined pornographic genres and focused on whether early exposure to pornography might lead to the development of sexual compulsivity. This would include obsessive sexual thoughts, compulsive masturbation, excessive use of pornography, sex with multiple partners, and so on. The particular concern is that if pornography experiences occur before sexual experience, there is a danger that pornographic images become the first ones to be embedded (e.g. Cooper et al, 2004, Flood, 2009). Thus - as the sexual script theory might predict - these pornographic experiences might become a way of thinking (a

heuristic) about later sexual experiences, driving expectations, interpretations, negotiations and evaluations of such experiences.

This second publication is the only study identified in this report to investigate whether pornography use at the age of 14 might be a marker for later sexual compulsivity. As earlier, results come from the online survey in 2006. The useable sample was reduced to 1,528 when strict criteria were applied, such as excluding those who did not report sexual intercourse.

The sexual compulsivity scale was composed of four core items - after Salisbury (2008). These were: 'My sexual thoughts and behaviors are causing problems in my life'; 'My desires to have sex have disrupted my daily life'; 'I sometimes fail to meet my commitments and responsibilities because of my sexual behaviors' and 'I find that my sexual thoughts and feelings are stronger than me'.

Findings

The results supported some of the concerns about sexual compulsivity - those who scored high on this at age 18 were less sexually satisfied and more prone to sex-related guilt and anxiety and sexual boredom (men only). However, neither the age of first exposure to pornography, nor the frequency of use at age 14, significantly predicted sexual compulsivity.

The authors claimed that they had produced the only solid results on this subject, but there is more to the study than this. It is unusually comprehensive in the measures taken and includes a number of sound scales (developed using psychometric principles) covering, among others, sexual intimacy, sexual risk-taking and sexual contentment. The results contained only one significant predictor of sexual compulsivity: the participants' currently preferred genre of pornography. Here the results are not tabulated, but only referred to in the text, where it is reported that two-thirds of women and over half of the men in the high sexual compulsivity group reported current preferences for deviant (paraphilic) pornography. Surprisingly, no further information is provided in this 2008 study. However, the earlier 2007 report (on a larger sample) revealed that 28% of women and 31% of the men said that their preferred genre was not mainstream pornography, but more deviant material.

This genre of deviant (paraphilic) pornography was listed in the questionnaire to invite responses on the preferred material 'in the last 12 months'. The results are shown below (more than one type could be included by respondents):

Table 1: Deviant pornography preferences by gender

Paraphilia type	Males%	Females%
Fetish	*22	*12
Violent/coercive	*13	*19
S&M/B&D	10	11
Bestiality	3	2
* Gender differences significant $P < .001$		

Štulhofer, Jelovica & Ružič (2008)

Men were far more likely to mention fetish material, while the preferred genre for women was violent/coercive material. This provides a challenging context for concerns about the effects of such material on men. Of course, as Nancy Friday (1973) documented in *My Secret Garden*, coercive sexual fantasies are not uncommon but are ones which they wish to remain very firmly in the fantasy world.

iii Štulhofer, Buško and Landripet (2010)

The most recent publication from the Zagreb team explored paraphilic pornographic experiences further, asking whether exposure in early teens might determine later use of such material, as well as sex-related behaviour and attitudes. Once again, this was based on the 2006 survey, but: 'since negative effects were observed only in men, in this study we focus exclusively on male participants', and, 'it was expected that negative effects would be more likely observed among men with paraphilic preferences for sexually explicit material' (P 169). No reason was given for this expectation.

Analysis was restricted to those reporting both sexual intercourse and pornography use at each of three time points: when they were aged 14, 17 and in the last twelve months. This data set comprised 650 males.

Findings

Questions about which genres of pornography had been used most in the past 12 months allowed the sample to be categorised as either mainstream (N=445) or paraphilic (N=205). For both these groups, the median age of self-reported first exposure was 10, but the paraphilic (deviant) group had much greater exposure to pornography at the age of 14 (18% claimed daily use compared with only 10% of their counterparts). Moreover, their current use was also much higher: 44% used it for 3+ hours per week compared with only 27% of the mainstream group.

In terms of demographics, the two groups were fairly similar but the respondents who enjoyed deviant pornography reported 'significantly higher masturbation frequency' and 'a higher number of lifetime partners'. Almost a quarter (23%) of the paraphilic group claimed eight or more lifetime partners compared with just 15% of their counterparts' while 74% masturbated 'a few times a week or more' compared with 67% of the mainstreamers.

In this publication, the researchers focused on measures of sexual socialisation and satisfaction. They reported results on seven measures: the *Sexual Script Overlap Scale* (measuring the extent to which porn scripts overlap with real-life sex); the *Sexual Boredom Scale* (a 5-item scale measuring how easily and rapidly bored participants became with sexual routine), the *Sexual Compulsiveness Scale* (10 items about sexually compulsive behaviour); the *Myths about Sexuality Scale* (8 items, each rated on a 5-point scale from agree to disagree, such as 'Men are always ready for sex'); the *Varied Sexual Experiences Scale* (covering varieties of sex experienced); the *Social Intimacy Scale* (5 items concerning intimacy with the current or most recent partner); and *Satisfaction with one's sexual life* (3 items). Compared with the mainstream pornography group, those who showed a preference for paraphilic materials showed significant differences in having:

Greater overlap between scripts for good pornography and good sex;

- Higher levels of sexual boredom;
- Higher scores on sexual compulsiveness;
- Greater acceptance of sexual myths.

No results are provided on the three other measures taken. Instead, the report moves on to testing statistical models of the relationship between early exposure to pornography (at age 14) and the criterion measure of Sexual Satisfaction. The hypothesised path is from pornography exposure to greater sex scripts overlap, leading to greater sexual experiences,

which would increase sexual satisfaction, but also to lower partner intimacy, which would reduce sexual satisfaction.

In the analyses, some evidence was found that early exposure to pornography predicted both wider sexual experiences and diminished intimacy. Both of these predicted sexual satisfaction – but only in the paraphilic group. ‘No effect of early exposure to SEM was found among the mainstream SEM users’ (P 168). These, as noted earlier, were the majority - making up seven in ten of the sample. The results are interesting, but difficult to interpret. As Štulhofer et al (2010) observed: ‘It could be that suppression of intimacy is the consequence of one’s native or consolidated love map and not of one’s exposure to paraphilic sexually explicit material. In other words, a specific intrapersonal sexual script might be the cause of interest in specific (paraphilic) material and suppression of intimacy’ (P 173).

This interpretation is supported by the findings of Condron & Nutter (1988) who examined various groups including non-incarcerated sex offenders and a group of men reporting paraphilic behaviours. Although the sample was small (N=62), one surprising finding was that the first deviant act for sex offenders was, on average, at 27; but in the paraphilic group it was only 10 years old. More than this, masturbation occurred prior to exposure to pornography in 41% of ‘normal’ men, in 47% of sexual dysfunction patients, in 63% of sex offenders and in 91% of the paraphilic interest group. Taking these two findings together - that paraphilic deviancy began at 10 years old and that 91% of this group masturbated before exposure to pornography - it seems unlikely that pornography could be implicated in any causal way with such deviancy.

Evaluation of the three studies

As the Zagreb team acknowledge, such online surveys are not probability samples and therefore may not represent the wider population. However, this is also true of almost all research on sexually explicit material, in which undergraduate volunteers are used. Moreover, the study does not claim to estimate the population incidence of exposure to sexually explicit media, only to examine the processes of effect, which it does in an intelligent way. The lack of a probability sample is therefore not an issue. The sample size here is impressive. Measures have been carefully developed and are quite comprehensive. The theoretical underpinnings are sophisticated and intelligently inform the design. Their data analyses (using Structural Equation Modelling) are also sophisticated and allow testing of both direct and indirect associations.

Although the authors discuss their results in terms of the effects of early exposure to sexually explicit material, they admit: ‘The study design clearly precludes causal inferences’ (2010, P 176). Sexual scripts overlap could also be due to such scripts pre-existing pornography use (and the reason for finding it attractive) or even, as the authors note, could be due to the mainstreaming of porn and a ‘by-product of a culture of hyper-individualism’ (2010, P 176).

The researchers do not demonstrate that adult recall of adolescent experiences is valid or reliable. However, they explain that the decision to exclude all those over the age of 25 was simply that recall among older people might be less reliable. Also, the age of 14 was chosen because in Croatia this is when most young people complete primary schooling, and is also the age of legal consent and legal culpability. So, quite apart, from this age being something of a psychosocial landmark, in Croatia it is also a watershed and should facilitate recollections about the period.

The research by the Zagreb team is in sharp contrast with most studies in looking beyond the issue of harm. Štulhofer et al present a less judgemental, if not value-free, perspective.

For example, their reference to the 'positive' effects (P 77) of pornography on sexual experience perhaps should be evaluated in the context of what this sexual experience scale measured. It contained 11 sexual activities, including anal sex, group sex, BD/SM, sex with strangers and sex in public places, which were simply coded as either zero (no experience) or 1 (have experienced). Clearly this measures some variety in sexual experience, but whether the experiences were perceived as risky or not, pursued further and repeated, or deemed positive or negative, although quite important, was not recorded.

As the authors point out, the study left unexplored the possibility that pornography might have stronger negative effects on the sexual satisfaction of the participant's partner. The intimacy scale (the degree to which participants felt close to their partner, their need to spend time together and open up emotionally) can tell us nothing about how partners might experience such attitudes. Indeed, McNulty & Fisher (2007), in a study of newly-weds, found only a moderate correlation between partners in their ratings of satisfaction.

Finally, while the Zagreb team move beyond a simple cross sectional analysis, they have yet to examine age of first exposure (10-11) to sexually explicit material, to answer important questions about the effects of very early exposure to such material. Further analysis by the various time points would be desirable.

Conclusions regarding the three studies

Numerous results were presented from this large, well-conducted survey in Croatia. First of all, one major concern - that sexual compulsiveness may result from early exposure to sexually explicit material - is not supported here and is perhaps the most important finding. Secondly, for most participants, sexually explicit material was not directly linked to sexual satisfaction. However, further analysis revealed linking from such material to lowered intimacy with a partner and lowered sexual satisfaction from this (a negative 'effect') while at the same time sexually explicit material linked to greater varieties of sexual experience and sexual satisfaction (a positive 'effect') in males. This is also important in suggesting that looking for direct effects may be oversimplifying matters. Finally, just under one third (31%) claimed a preference for 'deviant' material and this group showed greater acceptance of sex myths, and greater sexual boredom and sexual compulsiveness, which the researchers considered to be negative. This suggests that closer attention must be given to the type of material used when studying media effects in this area.

Kraus and Russell (2008)

A sample of adults in the USA was asked about their experience of X-rated material when they were 12-17 years old. This was a 'convenience' sample of 437 participants who were mainly recruited, via a campus-wide email at a north-east liberal arts college, to complete the online survey. Kraus and Russell cite previous studies where up to 42% of 10-17 year olds had been exposed to online pornography in the past year (2008, P 163) and believe this could be linked to early sexual experiences (they do not present hypotheses as such). The measures were fairly cursory. Sexual experience was covered by three questions asking: the age of first intercourse, the age of first oral sex and the lifetime number of partners. The internet and movies were covered by just two forced-choice questions where respondents had to answer yes or no. Each question began 'When I was between the ages of 12 to 17':

- 'There was a computer with internet access in the home'.
- 'I viewed X-rated movies with friends'.

Findings

Contrary to their expectations (P 165), there were no significant differences between the groups in the number of lifetime partners. However, both males and females with internet access reported significantly lower ages for first sexual intercourse and oral sex. A finding described as 'interesting' by the authors was that those with internet access who said 'no' to having watched X-rated movies were the youngest to experience sexual intercourse (significant for both males and females) and oral sex (significant for males only). See Table 2 below.

Table 2: Media exposure, by sexual behaviour

Group	Internet I	X-rated movies	Age of intercourse	Age of oral sex
1	Yes	Yes	15.5	15.4
2	Yes	No	11.7	12.6
3	No	Yes	16.4	15.9
4	No	No	17.1	16.5

Kraus and Russell (2008)

Evaluation

The question on internet access does not ask about exposure to sexually explicit material, while that on watching X-rated movies with friends does not cover personal use. The response scale (yes/no) is crude compared with scaled responses (such as frequency of use) and also restricts the statistical analyses available. Group 2 (internet access but no X-rated movies) is clearly different and may be due to any number of factors such as family environment. It would seem very unlikely that watching X-rated movies with friends protected youngsters against the effects of the internet, but the limited scope of this study cannot illuminate results further. Finally, although the authors note that previous studies have shown that age plays a significant role in media relationships (P 163), no breakdown by age was attempted.

Conclusion

The results are mixed. The authors do not make much of the results relating to X-rated movies, but recommend that internet access should be the most important area for future attention.

Hunt and Kraus (2009)

In a related study, retrospective accounts were used to explore the role of 'erotic disruption' in childhood as a cause of sexual dysfunctions in later young adulthood. As with many studies, age is seen as a critical variable. This study focused on experiences during the period of 6-12 years of age, which Freud described as a 'latency period' when the child will channel libidinal energy into asexual activities in school, sport and friendships (Hunt & Kraus, P 80). Freud was convinced that any erotic disruption of this period would lead to serious impairment of ego development, with the likely occurrence of borderline personality and other impulse disorders. Theory apart, the concerns of some contemporary writers are not much different. The 'erotic disruptions' investigated here were child sexual abuse and exposure to sexually explicit material.

As the authors note, population estimates of child sexual abuse in some studies are as high as one in three, while rates for adult sexual dysfunction can be even higher. Moreover, there seems strong evidence of a link between these two experiences. But Hunt and Kraus do not provide any details of the prevalence of abuse, pornography or sexual dysfunction in their

study. Their aim appears to have been only to examine the association between these variables. This was achieved through a 20-minute survey of 'a convenience sample' of 359 students from 'a large Western state university'. Although unstated, this must have involved self-completed questionnaires. At the end, participants received a de-briefing statement with a list of relevant help organisations and, in addition, were advised that a trained family therapist was available for anyone who experienced anxiety (no contacts were reported). Participants received course credits for their contribution.

Essentially, the data analyses involved various statistical techniques to identify underlying factors in the questionnaire items. These factors were then used to assess the predictive power of early experiences (sexual abuse and pornography) for later adult sexual dysfunction (such as sexual arousal difficulties and experiencing emotional shutdown).

Findings

Hunt and Kraus provide results separately for child sexual abuse and for early exposure to sexually explicit material as predictors of adult use of pornography, internet sex and adult sexual dysfunction. In each case the early experiences account for 11-13% of the variance, which is substantial.

Evaluation

No information is given on where the questionnaires were completed. Some privacy should have been given (especially given the questions about child sexual abuse). The results in their first table show various items including one which reads 'Exposed to sexually explicit material between the ages of 8-10' which is a puzzle since the rationale for the study was based on the ages of 6-12. The study does not reveal how many of the young people reported this experience, nor the figures for child sexual abuse. However, there are clues elsewhere in this journal article. The response scales were from 1-5. In the results, the mean scores for child sexual abuse are shown as 1.42 for men and 1.60 for women and therefore appear to be roughly halfway between 1 = disagree strongly and 2 = disagree. This indicates that very few agreed - i.e. very few reported child abuse - but no numbers are given. Finally, gender differences were found - males were significantly higher on both early and late exposure to sexually explicit material as well as online sexual behaviours - but these were not controlled for in the analysis. The results would have been more meaningful if the figures had been simply computed for males and females separately. Given the importance attached to the age of these experiences, it would have been useful to include a breakdown by age band.

Conclusion

Although the association between early exposure to sexually explicit material and later sexual dysfunction appears quite strong, there are no figures to indicate the prevalence of any of the experiences in this study. The age range given, 8-10, is very young to pick up many reports of exposure to sexually explicit material, so the results may be based on relatively small numbers. Further development of such research is overdue. This is the only study to compare exposure to sexually explicit material with child sexual abuse. As the experts in Cragg's (2000) study observed, childhood exposure to pornography may be part of a larger pattern of neglect and abuse.

4.3.2 Surveys of young people

Surveys of media use by minors, and the associated attitudes, have remained popular over the decades. Prior to 2005, none dealt directly with sexually explicit material (as understood here), focusing instead on more mainstream sexual content (such as on television). However

by 2010 a total of 13 research reports had been produced, dealing more directly with R18 type material. The most important are a series of eight studies from the Netherlands, reviewed in detail below. Following this are studies from the USA, Sweden, a cross-national Norway, Finland and Denmark survey, Iceland and Italy.

Peter and Valkenburg

Peter and Valkenburg adopted a comprehensive approach to understanding the relationship that young people have with sexually explicit media. The framework for their hypotheses was located in the tradition of the 'media practice model' developed by US researchers Steele and Brown (1995). This model emerged from a series of studies of how young people select and use sexual messages in the media. They identified the key drivers of this as:

- Demographics (age, gender, ethnicity)
- Developmental characteristics (pubertal status, sexual experience)
- Social context variables (parental control, religiosity, peer culture)

Peter and Valkenburg expand on these ideas, generating numerous hypotheses about how these characteristics might relate to the effects of sexually explicit material. To date they have produced a series of eight reports on this research. Findings will be provided for each report while the evaluation and conclusions will cover all eight studies.

Their work is based on two large online surveys of teenagers aged 13 and over in the Netherlands. Both surveys focus on sexually explicit internet material (SEIM) but also asked four questions covering traditional media: How often, in the six months prior to each interview, participants had used the internet to intentionally look at (a) pictures showing clearly exposed genitals; (b) movies showing clearly exposed genitals; (c) pictures in which people are having sex; (d) movies in which people are having sex; (e) erotic contact sites.

Answers to these questions were invited using a 1-6 scale of never (=1) to every day (=6). The second survey added 'several times a day' (=7). Participants were notified that this question was about sexually explicit, pornographic content, either on or from the internet. They were also told that looking at such content did not imply being online.

Almost all the results given in the various reports are based on the total (composite) measure of sexually explicit material. On only one occasion are results relating to DVDs reported.

Survey 1 was carried out in 2005; by this time high-speed broadband penetration in the Netherlands was high. Downloading R18-type films was therefore quite viable.

i Peter and Valkenburg (2006a)

Peter and Valkenburg (2006a) reported the first results based on 690 adolescents aged 13-18 (mean age 15.5) who were recruited as a quota sample from an existing online panel.

Findings

The gender differences were considerable: 53% of males and 20% of females claimed to have watched a movie with people having sex (defined for them as vaginal, oral or anal penetration). In total, 24% of males claimed to do so at least once a week compared with only 3% of females. Exposure to other sexually explicit internet material (SEIM) was higher.

Exposure did not vary significantly with the age of respondents, but no breakdown on this is provided in the report. The researchers suggest that chronological age could be less important than puberty. However, while this may be true of boys – those who were more advanced in their development tended to consume more SEIM - it was not the case for girls. Contrary to this, there was a non-significant trend for the more sexually experienced girls to expose themselves less to SEIM, whereas with boys there was no similar relationship.

Various other hypotheses were not supported. Exposure did not vary according to self-reported religiosity or perceived parental control or whether or not the respondents were in a (romantic) relationship. However, those who scored higher on measures of life dissatisfaction, sexual interest and a need for sensation seeking also viewed the most SEIM.

ii Peter and Valkenburg (2006b)

In a second report, the researchers examined the relationship between SEIM and recreational (permissive) attitudes to sex. This measure included six items such as 'sex is a physical thing like eating', and 'sex is a game'.

Findings

As expected, SEIM exposure predicted these permissive attitudes relatively well (accounting for almost 6% of the variance) which is far higher than the 1-2% they report elsewhere for other measures. Moreover, while male adolescents scored higher than their female counterparts on the scale of permissiveness, once again chronological age did not appear to discriminate.

The various results were processed using a sophisticated form of statistics (path analysis) similar to that used by the Croatian team reviewed earlier. This revealed some unexpected relationships. The association between gender and recreational attitudes to sex disappeared when SEIM exposure was added to the equation. This supported the idea that such attitudes were mediated not by gender as such, but by exposure to sexually explicit material (which was higher in boys). A further twist developed when the researchers added the results of an additional measure – the perceived realism of the internet. This appeared to provide a mediated predictor between SEIM and permissive sexual attitudes. Thus the researchers suggest that exposure to sexually explicit media – especially when perceived as realistic - encourages the development of permissive attitudes. A final puzzle was that when the sexual experience of the respondents was added to the model, it had no effect on the mediated predictor of perceived realism. (It had been hypothesised that greater sexual experience would result in SEIM being judged lower on realism).

iii Peter and Valkenburg (2007)

A third report from this survey focused on a measure later described as *Notions of Women as Sex Objects* (NWSO). This was based on five items such as 'An attractive woman can expect sexual advances' and it was hypothesized that SEIM would encourage adolescents to have such notions. The sample here was 674 adolescents aged 13-18.

Findings

As earlier, age trends were very weak and become insignificant in the final iterations of the analyses. The authors conclude: 'To sum up, we found, in line with our expectations, that adolescents' exposure to sexual media content was linked with stronger beliefs that women are sexual objects' (P 392). In this there was no significant interaction due to gender.

Perhaps the most important finding was one quite hidden in their report. Apparently, exposure to sexually explicit video and DVD was not significantly related to notions of women as sex objects. This measure, presumably of film, is of particular interest for this review, but no further information was provided on this, either here or in any of the other reports from the 2005 sample. 'Explicit video/DVD' appears without introduction as a variable entered into a summary of the regression models used (P 391) and simply summarised (p.392) in a textual reference that explicit videos and DVD was not associated with notions of women as a sex object.

Survey 2 was carried out in 2006. Again, this was an online survey in the Netherlands recruited from an existing online panel. A total of 2,343 respondents with an extended age range from 13-20 took part. The focus was on exposure to sexually explicit internet material (SEIM) and various measures of sexual attitudes and sexual behaviour.

iv Peter and Valkenburg (2008a)

This study examined the relationship between sexually explicit material and two other measures: sexual uncertainty (e.g. 'As far as sex is concerned I wonder what I really like') and uncommitted sexual exploration (such as 'trying many sexual things').

Findings

More frequent exposure to SEIM was associated with greater sexual uncertainty and more positive attitudes towards uncommitted sexual exploration. Unfortunately, the only breakdown given for SEIM is for sexually-explicit picture exposure by age. Age differences are not discussed in terms of the relationship between SEIM and the above sexual attitudes. Despite this, there are interesting age trends here, in that both of these seem positive in a socially conventional sense. For example, those disagreeing with uncommitted sexual exploration rose with each age band from 37% (13-14); 47% (15-16); 50% (17-18) to 55% (19-20). Given the concerns regarding younger age groups, closer attention to positive findings such as this would have been welcome.

v Peter and Valkenburg (2008b)

This report examined whether sexually explicit internet material predicted sexual preoccupation (as given by items such as 'I have thought frequently about sex'). The authors note that sexual curiosity is a characteristic of adolescence – the question here is whether SEIM enhances this to the point of preoccupation. Again, there is no breakdown of the SEIM, so that the role of movies cannot be isolated, nor is age discussed.

Findings

Gender explained up to 25% of the variance in exposure to SEIM in each wave, with much greater exposure by males. But despite this, gender did not produce an interaction effect between SEIM and sexual preoccupation. In other words, although females were less exposed, the association between SEIM and sexual preoccupation was the same for them as for males. In both cases exposure was related to greater sexual preoccupation.

vi Peter and Valkenburg (2009)

This paper reported the results of two follow-up surveys after that conducted in 2006. These were carried out six months and one year later. The authors hypothesised that adolescents might use sexually explicit material as a comparison with their own experience and become dissatisfied sexually.

Findings

Results supported this idea, showing that SEIM exposure at each time point was negatively related to sexual satisfaction. Again, there is no breakdown to reveal the effect of movies in this. In their analyses, the authors concluded that there was evidence of a reciprocal causal link between SEIM exposure and lowered sexual satisfaction. Interestingly, once again, 'chronological age did not moderate the influence of SEIM on sexual satisfaction' (eP 36).

vii Peter and Valkenburg (2010a)

This report examined the relationship between exposure to sexually explicit internet material and *Notions of Women as Sex Objects*. Here a five-item scale was used (such as 'Sexually active girls are more attractive partners'; 'An attractive woman asks for sexual advance').

Findings

Again, no detail was provided on sexually explicit movie exposure. Nevertheless, as might be expected, there was a good association between the overall SEIM and *Notions of Women as Sexual Objects*: the zero order correlations at each wave show that SEIM predicted up to 16% of the variance in *Notions of Women as Sexual Objects*. The analyses attempted to determine the causal direction of this link. The direct 'effect' of SEIM on women as objects appeared to be the same for both males and females in the sample. However, testing the fit in the other direction, the 'effect' of *Notions of Women as Sexual Objects* on SEIM exposure was significant only in males. In addition, when a new variable, liking for SEIM, was also added to the model, the authors concluded that this liking mediated the effect of SEIM on *Notions of Women as Sexual Objects* in both men and women.

The authors explain all this by suggesting their results reveal that sexually explicit material (SEIM) and notions of women as sex objects have a direct reciprocal influence on one another. This is an attractive model, but the evidence for this is less impressive. In any case, as the authors acknowledge, the effect sizes are very small - only reaching significance due to the generous sample size.

Perhaps the most important point for this review, and the most puzzling, is that again there were no significant interaction effects due to age in this study. In other words, the mediation between SEIM and *Notions of Women as Sexual Objects* was not moderated by the quite considerable range from 13 to 20 years old. It might well be expected that the younger age groups would be more vulnerable to media influences, and so Peter and Valkenburg double-checked this using sophisticated statistical procedures (re-computing the interaction variables and interaction effect variables as latent composites) but to no avail: no moderating effects of age emerged.

viii Peter and Valkenburg (2010b)

In this paper Peter and Valkenburg revisited the concept of perceived realism in the use of sexually explicit internet material and examined its potential role in mediating the perceived utility of the internet (e.g. for 'getting valuable information about sex') and influencing instrumental attitudes to sex (e.g. 'sex is just a game', 'sex is a physical thing like eating').

Findings

The inter-correlation between each of these variables was quite high in each wave. For example, in the first set of results (given in their zero order matrix) exposure to sexually explicit material predicted 9% of the variance in social realism, over 20% of that in perceived utility and 4% of that in instrumental attitudes.

As with previous analyses, the researchers apply statistical modelling (path analysis) in an attempt to determine whether sexually explicit internet exposure (SEIM) could have indirect effects on instrumental sex attitudes via the perceived utility and realism of the medium. As earlier, having three waves of the survey helped to determine the route which a causal chain might take. The authors summarise their results: 'The more frequent use of SEIM increased both the perceived social realism and the perceived utility of SEIM. In turn, these two perceptions led to more instrumental attitudes toward sex' (eP 1).

The perceived social realism of SEIM did not affect the perceived utility of the material. Moreover, neither social realism nor perceived utility predicted exposure to SEIM. As reported in the other studies, gender did not contribute any interaction to the associations. Also quite puzzling is that neither did sexual experience - which might well be expected to challenge both the perceived realism and the perceived utility of SEIM.

Finally, it is also worth noting the scores (means) provided in the results. Those for sexually explicit exposure are very similar at each point in time. However, both social realism and perceived utility, scores are highest in the final wave, while those for instrumental attitudes (the criterion measure) decline slightly with each wave from 2.44 to 2.37 to 2.33. No test of significance is given for this, but given the sample size and the small differences which are recorded as significant elsewhere, these too might indicate a reliable trend towards less permissive attitudes in the cohort. Indeed, since these attitudes were measured on a 1-5 scale from 'disagree' to 'agree', the scores indicate that the respondents overall lay somewhere between disagree (=2) and neutral (=3). In other words, it seems that there was more disagreement than agreement with these attitudes. It would be really useful to know just how many of these young people supported instrumental sex attitudes.

Evaluation of the eight studies summarised above

There is no doubt that alongside that of Štulhofer, this is research of a high order. Considering the high quality of so many aspects of this work, it is disappointing that a composite measure of sexually explicit material is given without the breakdown - desired here - of DVD/video/film. The studies to date do not illuminate the particular concerns of this review regarding the effects of R18-type material on young people.

It is perhaps worth noting that the second online questionnaire appears to have been designed to be completed in less than 15 minutes. Bearing this in mind, it covered a vast amount of ground - as witnessed by the number of publications to date. However, by the same token, economies in the questionnaire have left a number of the measures quite fragile and provide an uncertain foundation for building much more than hypotheses.

The statistical analysis is sophisticated and helps reveal indirect effects such as perceived realism mediating between exposure to sexually explicit material and attitudes. The authors seem confident that it is possible to tease out causal relationships in their work, but these remain only hypotheses. Determining causal paths remains elusive and requires multiple time points as part of the analysis (Kline, 2005).

Peter and Valkenburg believe they have identified reciprocal relationships between sexually explicit materials and various attitudes. There was some evidence that, for example, those who endorsed statements which objectified women were more likely to expose themselves to SEIM (but this was significant only in males) and this exposure amplified endorsement of such statements (both in males and females). However, it is difficult to gauge the strength of this effect since it is hypothesised to operate in two directions. Certainly the conceptualisation of reciprocity between attitudes and SEIM must be the way forward in understanding media effects.

It would have been useful to see simple summary data by gender and age, showing what proportion of the sample viewed SEIM and expressed liking for this material. The only summary data is coincidentally provided (such as in the zero order correlation matrices, which, helpfully, also show the means for some of the variables). However, these indicate that liking for sexually explicit material declines with each wave, as do the scores on the notions of women as a sex object. For many, this might promise a 'Pandora's box' phenomenon and the hope must be that Peter and Valkenburg could open this up for scrutiny.

Conclusions about the eight studies

The Netherlands research has produced a considerable number of interesting findings. In terms of understanding the possible effects of sexually explicit material on minors, the most important result was that there was no indication that young people were any more or less vulnerable to or 'affected' by SEIM than older adolescents (at least within the age range studied). This was despite the authors' hypothesis that age would be a factor and their best efforts to tease out an effect due to age.

Secondly, although the researchers only once report on 'explicit video/DVD' exposure, this was to observe that it was not associated with 'notions of women as a sex object' (unlike their total SEIM score, which was).

Across the various reports Peter and Valkenburg show associations between exposure to sexually explicit material and a number of other measures including: more permissive attitudes to sex; greater sexual uncertainty; stronger agreement with uncommitted sexual exploration; higher sexual preoccupation; lower sexual satisfaction. Their analyses often revealed that the association was not direct but was mediated by such things as the perceived realism of internet sex. However, in almost all cases the associations are relatively weak, accounting for only 1-2% of the variance in these measures, and achieving significance only because the sample sizes are so large.

Peter and Valkenburg also provide some evidence consistent with a reciprocal relationship between various attitudes and SEIM, suggesting that there is a two-way process of effect (a spiral) from attitudes to exposure and from exposure to attitudes.

Taken as a whole, the results appear to support concerns regarding the negative influences of sexually explicit material but, as always, cause and effect are not clearly established.

Ybarra and Mitchell (2005)

A large telephone survey was carried out in the USA of 10-17 year olds, focusing on self-reported 'pornography'-seeking behaviour. This was a nationally representative sample of 1,501 children and adolescents, under the rubric of The Youth Internet Safety Survey, and covering both internet and traditional media (X-rated movies and magazines). No hypotheses are offered but the list of measures taken, such as psychosocial characteristics, caregiver-child relationships and demographics appear designed to identify the kinds of adolescents who seek out such material.

Findings

The results did suggest important differences between the groups. The traditional pornography users tended to be older: 87% were aged 14 and over compared with 74% of non-seekers and 60% of online seekers. Delinquent behaviour was reported four times more often by pornography seekers – 48% by online seekers compared with 42% offline and

11% of non-seekers. Similarly, substance abuse was higher in the pornography seekers, at 37% of online seekers versus 26% offline and 10% of non-seekers.

Evaluation

First of all, while the survey is impressive, one limitation is that the fieldwork was carried out some years earlier - between late 1999 and spring 2000. Since then, internet speeds have increased dramatically, making film downloads more feasible, while X-rated web sites have also increased. Secondly, no details are provided of the kinds of pornography encountered; the results are simply aggregated to produce three groups: non-seekers of pornography (85% of those surveyed, offline seekers (8%), and online seekers (7%). The logic of why substance abuse and delinquency should be linked to pornography is unclear.

Conclusion

The authors conclude that adolescents seeking out pornography may be 'manifesting age-appropriate sexual curiosity' but that in some cases 'it also appears that the behavior may be a marker for greater challenge for some young people.' So the authors are not attributing psychosocial difficulties to pornography exposure but see it as 'one behavior among many for young people struggling in their adolescence' (P 485).

Wallmyr and Welin (2006)

This survey was of 876 young Swedes (15-25) who visited a youth centre 'clinic' over a period of one year. This centre was one of a national chain providing counselling on contraception and unwanted pregnancies. These centres also support the development of sexual identities and the prevention of psychosocial disorders. Attendance is compulsory for 15 and 16 year olds as part of the school curriculum. The researchers' interest was in sex education (which is an important part of the centres' work) and the challenge which pornography might present for this. Their concern was that young people may be exposed to violent or bizarre sexual activities at an age before they had any personal sexual experiences. The questionnaire was short, comprising 29 items for self-completion, and covered exposure experience, reasons for viewing and attitudes to such material. The authors reported an 88% response rate.

Findings

The most common source for pornography for all ages was cable TV and the internet followed by 'movies', where borrowing from a friend predominated. Among the 15 year olds, 99% of boys and 74% of girls had viewed pornographic movies (not defined). Among females, the most common reason for viewing was 'curiosity', reported by 50% of 15 year olds and 58% of 16-19 year olds. Curiosity was also claimed by males (42% of 15 year olds and 16-19 year olds). However for males 'to get sexually excited' predominated in the youngest age group (62% of 15 year olds compared with 39% of 16-19 year olds).

Among 15 year olds, almost 70% of females described pornography in negative terms ('degrading', 'disgusting', 'turn off') compared with 26% of males. Conversely, almost 80% of males thought it 'exciting', 'cool', 'arousing' against 18% of females. Among older groups aged 16+ these gender differences were less marked.

Evaluation

Given that the young people were attending a centre dedicated to youth sexual health and development, it would have been appropriate to ask more questions such as whether the pornography experienced was judged true to life, how it related to their sexual knowledge

and whether they believed that it encouraged distorted thinking about sexual relationships. The study is quite limited.

Conclusion

The authors conclude that the young people gleaned most of their information about sex and sexuality from their peers, but that the relatively high number who reported curiosity as the motive for viewing pornography illustrated the importance of sex education for young people. The study does not assist with understanding the potential harm from such exposure.

Sørensen and Kjørholt (2007)

This large online survey across Scandinavia was of exposure to, and attitudes about, pornography among 12-20 year olds. In 2005, a questionnaire was published on websites belonging to the state TV channels in Norway, Finland and Denmark. A total of 1,776 young people responded. The survey was not a probability sample. The original work was unavailable in the time scale of this review and, unfortunately, in the English-language publication, there are very few detailed figures and no breakdown by age.

Findings

The authors note that the majority first viewed pornography at the age of 12-14 and in this age group, 81% had done so. Seeing anal/oral sex was reported by 75%, group sex by 72%, while around six in ten thought that pictures of sexual organs and naked people touching themselves were also pornographic. The younger the males, the more likely it was that they would rate 'soft' categories (sexy clothes, naked people, breasts) as pornographic. This was not true of the girls. The large majority were low-frequency users who 'viewed pornography a couple of times a month, a year or almost never' (P 101). Other findings were:

- The most commonly-named platform was television (by almost 8 in 10 males and females), followed by the internet (almost 9 in 10 males but just half of females) followed by pornographic magazines (almost 7 in 10 males and half of the females). DVDs and videos were reported by just over half the males and almost one third of females.
- Males predominated among the high-frequency users who claimed to view pornography almost daily. At nearly 2 in 10 males, this was 10 times higher than the females. Almost 4 in 10 males claimed 'a few times a week' which was nearly six times higher than the females.
- These large gender differences also appear in the motives for viewing pornography. Three times as many males as females said masturbation was the most important reason (60% and 19% respectively). This was reversed for curiosity (30% of females, 10% of males).

Overall, just under one half of respondents (45%) believed that 'pornography can improve one's sex life' while almost one in three (29%) believed pornography could have a detrimental effect - which the authors say was a point of view more prevalent in girls.

Evaluation

While there is some interesting detail, such as the ambiguity of what constitutes pornography and the overall judgements about positive and negative views on it, there is no attempt to cross-tabulate results such as by frequency of exposure, or type of material

Conclusion

The results indicate that pornography has become an ordinary part of everyday life for young people in Scandinavia, but for most, exposure rates remained relatively low. Those who felt that such material could improve one's sex life outnumbered those who thought it could have a detrimental effect. However, it would seem essential to know more about these people (age, gender, sexual experience) and what they meant by this. In the absence of this information the results do not contribute much to the central questions about harm.

Kolbein (2007)

Kolbein translated the questionnaire used in the above study into Icelandic and carried out a similar online survey in 2005. This was based on a probability sample of 15-18 year olds drawn from the Icelandic National Register of Persons. A total of 1,500 people were invited to take part but the response rate was only 23%, yielding 126 males and 197 females.

Findings

As elsewhere, the young people were between the ages of 11 and 12 when they first came across pornography and the frequency of viewing was quite similar to that reported by Sørensen and Kjørholt: one in five males viewed almost daily and an additional 37% viewed a few times a week (compared with 2% and 10% respectively for females).

Nearly everyone (95%) said that pornography did not show sex as it really was, while 54% of males and 22% of females said that pornography showed them that sex was wonderful. Three times as many males as females said pornography was fun (65% versus 23%) while almost three times as many females as males said it was disgusting (37% versus 14%). Females were more than twice as likely as males to say it could lead to rapes (30% versus 14%) but a few agreed that it could prevent rapes (7% of males, 3% of females).

Evaluation

As elsewhere, it is important to know how younger age groups compared with older ones, but details are not provided. This is especially true of the 51% of males and 21% of females who said 'it makes me want to try what I have seen' and the 10% of males and 30% of females who said 'it makes me unhappy with my own body'. As above, cross-tabulations would have been informative.

Conclusions

The prevalence of pornography experience is noteworthy. Although there may be some doubt over what 11-12 year olds are exposed to, this confirms the need to find out more about how such experiences in early puberty are received. A high proportion of respondents said it did not show sex as it really was, which provides some reassurance that young people do not accept pornography as a window on the world and therefore may be less susceptible than some people fear to distorted thinking.

Bonino, Ciairano, Rabaqlietti and Cattelino (2006)

In this Italian study, self-reports of pornography use and involvement in sexual violence were obtained in a school-based survey of 804 adolescents aged 14-19. There were two questions, asking how frequently in the last six months they had read or seen pornographic magazines or comics, or watched pornographic films or videos. The options were (1) = never (2) = about once or twice (3) = about once a month (4) = about once a week or more. Four further questions investigated whether or not respondents had (a) sexually harassed a peer;

(b) forced someone to have sex; (c) had been sexually harassed by peers; (d) had been forced to have sex. The response scale provided was (1) = Never (2) = sometimes (3) = often (4) = always.

Findings

Bonino et al concluded: 'In response to the first research question ('Are there relationships between active and passive forms of violence and between the use of pornography and sexual violence?'), the majority of the correlations found in this adolescence sample were positive and significant.' (Bonino et al, 2006, P281). This result has been quoted by various other researchers (e.g. Eberstadt & Layden, 2010, P 40; Skoog, Stattin and Kerr, 2009, P 2).

Evaluation

The tables do not inspire confidence. They reveal that very small numbers admitted to any experience of sexual violence: the breakdown for the total number of males claiming to have sexually harassed a peer as: always = 5; often = 3; sometimes = 14. The equivalent for females was: always = 0; often = 0; sometimes = 7. In the case of forcing someone to have sex, the numbers for males are: always = 6; often = 0; sometimes = 13. The equivalent for females was: always = 5; often = 0; sometimes = 0. It may be a welcome finding that such experiences are rare, but this creates a problem for any further cross tabulation, such as by pornography.

The vast majority (96% to 97%) of respondents answered 'never' to each question. It could be that the small minority who did not, might have provided valid and reliable responses. However, it is worth noting that these questions were included in a 700-item health survey: *Me and My Health* (Io e la mia salute) which was administered in a classroom setting without a teacher present. With such a lengthy questionnaire, the probability is high that respondents would become restless and careless or endorse false answers just to amuse themselves. Certainly without some attempt to check, it would be somewhat ingenuous to take the answers at face value. An additional uncertainty is the response scale which does not logically match the questions, casting further doubt on what was measured in this study.

Conclusions

The subject of sexual violence is very important and deserves closer attention. The weakness in the design of this study (as outlined above) erodes confidence in the results. Conclusions regarding the effects of sexually explicit material are not warranted here.

4.3.3 Longitudinal studies

Many researchers believe that following a panel of participants over time is the best way to tease out causal relationships between variables. This kind of research is very expensive – especially compared with a single survey wave. Despite this, numerous longitudinal studies have been published over the last decade, notably on health-related issues. The only one to include a measure of sexually explicit exposure was recently reported by Jane Brown and Kelly L'Engle. However, two additional studies by Brown and her team on other mainstream media with sexual content (i.e. not sexually explicit) are also reviewed in this section since they allow some comparison of effects.

Brown and L'Engle (2009)

These researchers followed up a large sample (N=967) of 12-14 year old adolescents over a two-year period. These were all volunteers from 14 public middle schools in south-eastern USA, from which a random stratified sample was selected to assess the influence of sexually

explicit material, including X-rated movies, on later sexual attitudes and behaviours. The outcome measures of interest were as follows: permissive personal sexual norms (a five-item scale such as 'Sex before marriage is OK if you are in love'); progressive gender role attitudes (a seven-item scale such as 'It is all right for a girl to want to play rough sports like football or hockey'); sexual harassment perpetration (a seven-item scale including 'pressurised a schoolmate for a date' and 'told sexually offensive jokes'). In addition, the young people were asked if they were sexually experienced.

Findings

Overall, two-thirds (66%) of males and almost four in ten (39%) females had seen at least one form of sexually explicit medium in the previous year. Table 3 provides the breakdown by type of medium. .

Table 3: Sexually explicit media exposure in the last year, by gender

Males		Females	
1. The internet	40%	1. X-rated movies	36%
2. X-rated movies	36%	2. The internet	10%
3. Porn magazines	29%	3. Porn magazines	5%

Brown and L'Engle (2009)

The first survey took place a few years earlier (in 2002), which is probably why the internet did not eclipse other media in the results. The age range chosen for this study proved appropriate: When asked if they had ever had sex (explained as 'when a guy puts his penis into a girl's vagina') 13% said 'yes' in the first wave, rising to 33% two years later. Similarly, a second question asking if they had ever had oral sex (explained) produced 7% affirmative in the first wave and rose to 27%.

In the case of sexual harassment, only 23% of those who scored zero had had sexually explicit material experience, compared with 43% of females who admitted to some activities counting as sexual harassment. More dramatically still, looking at sexual experience, just 25% of the females who were still virgins had experience of sexually explicit material compared with 67% of those who had engaged in sexual intercourse. Results for the male group showed a similar pattern, but with much higher overall rates of exposure to sexually explicit material.

Their key findings were that early exposure to sexually explicit material predicted various attitudes and behaviours two years later:

- Males with early exposure showed more permissive sexual norms, greater sexual harassment perpetration and having both sexual intercourse and oral sex.
- Females with early exposure showed less progressive gender role attitudes and having intercourse and oral sex.
- The contribution of sexually explicit media to predicting sexual attitudes was relatively small – zero in half the cases and in the remainder varied from 1% to 1.7%.
- Taken in conjunction with all the other measures (such as race and sensation-seeking) the additional variance in attitudes explained by sexually explicit media averaged only 0.5%. (P143, Table 4)

Evaluation

The small effects noted above should not be taken to trivialise the potential problem: that such material contributes to the formation of attitudes and values. However, when the additional variance explained is as small as 0.5%, this could be due to sundry other factors not measured in the study.

Brown and L'Engle's results show considerable demographic differences between those with experience of sexually explicit material and those without. For example, examining the results of the female sample in the first phase, the criterion of 'any sexually explicit material media in the last year' was reached by 20% of White females and 37% of Black; 24% of those who did not receive a free school lunch compared with 41% who did; 21% whose parents were educated to post graduate level compared with 39% who had left at high school. Such differences suggest two different populations from the outset.

This study also included a personality measure; sensation-seeking, which also might be expected to correlate with both sexual activity and exposure to sexually explicit material. Among the females, only 22% of those low on sensation-seeking had exposure to sexually explicit material compared with 38% of females high on sensation-seeking. The figures for males were: 46% low, 64% high.

These are important considerations for any study and show how essential it is to take such background factors into account when researching media effects. The value of this longitudinal analysis is that these baseline differences can be controlled at stage one when looking at the youngsters two years on. However, such differences as race and ethnicity are likely to be associated with other sub-cultural effects which need to be examined as the context in which sexually explicit material is encountered.

Although the sample size could have allowed it, there is no breakdown of the different sexually explicit media. The dimension from more to less socially acceptable, from erotica through soft to hardcore pornography, is collapsed into one single composite measure.

Finally, the authors acknowledge: 'It is not possible with only two waves of data to sort out to what extent young adolescents who have more permissive sexual norms and attitudes and/or are already sexually active are choosing more sexually explicit media rather than vice versa' (Brown & L'Engle, 2009, P 146).

Conclusions

The results from a longitudinal study give stronger support for a causal link between sexually explicit media exposure and sexual attitudes and behaviour. The authors perceive the effects to be negative and describe them as 'troubling'. However, they do not seem to have much confidence in a causal link. Moreover, the effect size is extremely small and needs to be compared with other studies: The authors conclude (P145): 'Similar patterns have been found for mainstream sexual content (Ashby et al, 2006; Brown et al, 2006; Collins et al, 2004)'. The two studies below, from the same stable, are not evaluated as earlier research since they are included only to show how sexually explicit media effects need to be compared with non-explicit media fare.

L'Engle, Brown and Kenneavy (2006)

As noted, this study does not cover sexually explicit media, but is from the same stable as the above research. Indeed, it appears to be the same sample as the above study, although none of the measures reported are the same, and there is no mention of sexually explicit material. This study describes how 12-14 year olds completed a 36-page media

questionnaire and then took part in a lengthy '*Audio-Computer Assisted Self Interview*' where they heard questions on earphones and responded using a laptop touchscreen (as described in the 2009 study). This media questionnaire allowed the researchers to assess the (non-explicit) sexual content of various mass media. From this, they calculated the overall 'Sexual Media Diet' of each youngster and correlated this with intentions to have sex – concluding that there was 'a consistent and significant association'. The Sexual Media Diet explained 13% of variance in intention to have sex in the near future. This compares with 21% for demographics; 20% for peers and 2% for religion.

Pardun, L'Engle and Brown (2005)

This paper also reported on results from this Sexual Media Diet analysis. Here results are given for Sexual Movie Diet which predicted 3.5% of the variance in light sexual activity; 1.9% of the variance in heavy sexual activity and 3.8% of the variance in intentions to have sexual intercourse in the near future.

Neither of these two studies can be directly compared with the Brown and L'Engle longitudinal study above – except to note that the variance explained by sexually explicit material in the 2009 study seems considerably lower than mild sexual content (such as in popular TV shows). It is disappointing that the authors did not provide a direct comparison, since the data was available.

This leaves unanswered the vital question of whether sexually explicit material (X-rated movies in the above research) accounts for any more variance in the troubling 'outcome' measures than, say, music videos, rap music, non-explicit sex on TV and movies, or even comic books, all of which have been implicated as potential community health problems in other studies.

Qualitative studies

Although the focus of this review is on the 'effects studies' which have adopted quantitative approaches, such as in surveys, there is another tradition of qualitative research which has helped to illuminate the relationship that young people have with sexually explicit material.

This provides snapshots of the experiences of small samples of young people, making it difficult to draw conclusions about the wider interpretations of the findings or the extent to which they challenge the assumptions of the survey approaches. As such, this section of the report does not follow the same evaluation and conclusion process that has been used when reviewing the previous studies, but rather gives a broad overview of the themes that emerge. Almost of all these studies are from the Nordic countries and are reviewed briefly below.

Although these Nordic studies are not an obvious part of the Cultural Studies tradition, they certainly resonate with the nuances, ambivalences and contradictions which Buckingham (2004, 2009), Attwood (2005) and Ciclitira (2004) noted in their own research, exploring the narratives that viewers engage in when asked about sexual media (these did not include sexually explicit material). The picture which emerges below is not of naïve children uncritically absorbing pornographic messages, but rather one of a more dynamic relationship with the media.

Berg (2007)

Berg (2007) described her work as a youth counsellor, in which she probed the relationships which 15 year old girls had with pornography. These revealed ambivalences – many admitted being sexually stimulated by such material, but felt reluctant to confess this. As Berg described it: 'the biggest challenge for the girls was to walk the narrow line between

being seen as a slut and being judged as a dry stick. (The Swedish word they used here was 'lagom' meaning 'just enough' or 'a happy medium'). Here pornography was clearly part of the identity negotiation of adolescence.

Månsson and Löfgren-Mårtenson (2007)

These researchers described the results of interviews and focus groups with 73 adolescents and young adults aged 14-20 about their experiences with pornography. Overall it was seen as negative, perhaps even dirty and distasteful, especially for female users. Some of the young men explained how it helped them masturbate: 'Sometimes I just want to get rid of the energy in my body....And then it [porn] is a fast way of doing that! Afterwards I can do other things...go to school, exercise and so on' (Male 15). Three main functions of pornography were identified:

- As a form of social interaction - such as teenage parties where a film can provide the pretext for observing the reactions of others and testing one's own reactions to the sexual activity on screen;
- As an inspiration for sexual arousal;
- As a source of information. Here the researchers note that there is nothing uncritical in this – porn does not happen in a vacuum. Sometimes porn is seen as a reliable source, but more often young people judge the content as exaggerated, distorted or downright false.

The two researchers concluded that adolescents negotiate the pornographic landscape fairly successfully. They give one example of a young woman who recounted how her boyfriend wanted to try anal sex. She told him that neither she nor her girl friends wanted to do that. 'However, knowing that the boyfriend of one of my girlfriends also wanted to try it, I told my boyfriend to do it with him!' (Månsson & Löfgren-Mårtenson, 2007, P 252).

Priebe, Ackerman and Svedin (2007)

This study profiled high-frequency consumers of pornography: 200 males and 35 females. Not surprisingly, their attitudes were far more positive about pornography than their peers. Almost 7 in 10 of the males said it had made them want to try what they had seen (compared with 42% in the main sample) while the difference was even greater with females (54% high-frequency users versus 18%).

Aagre (2007)

In this study 50 adolescents aged 15-16 were asked to write essays beginning 'When I think of pornography, I think of...'. The analysis showed that girls were critical or neutral, boys were positive or neutral.

Graugaard and Roien (2007)

These researchers summarised their impressions of young people revealed by research: 'Nordic teenagers have developed a sophisticated 'double gaze' with regard to pornographic images, and most adolescents distinguish sharply between the phantasmal universe of pornography and the social reality in which they circulate'.

Investigating positive and negative effects of sexually explicit material

Only one study has directly asked about the balance of positive to negative experiences of sexually explicit material. This cannot be included in the research on minors, since it was based on the contemporary experiences of adults aged 18-30 and so is beyond the remit of this brief. However, for completeness, it is briefly summarised here.

Hald and Malamuth (2007) reported the results of a postal survey in Denmark on the self-perceived effects of pornography. The sample was of 688 adults aged 18-30. They were randomly selected from the National Central Person Register and so may be considered a representative sample. Although it cannot be assumed that the findings from this study would be true of younger people, it has a particular value in revealing that, in contrast to the effects studies reviewed earlier, 'Across all areas investigated, participants reported only small, if any, negative effects. ...In contrast, moderate positive effects were generally reported by both men and women' (Hald & Malamuth, 2007, eP 1). They continued:

'For both genders, the report of overall positive effect of consumption generally was found to be strongly and positively correlated in a linear fashion with amount of hard core pornography consumption' (eP 8).

Crime related evidence

The following section assesses crime-related evidence, in the areas of criminological fantasies, crime rates and rapists.

Criminogenic fantasies

As noted by the experts interviewed in the Cragg (2000) study on R18, one of the particular concerns about pornography is that it could lead to sexual fantasies, which might then be acted out. It might be expected that this area would have been well explored, but there has been very little relevant research. In 1990, the Broadcasting Standards Council published an exploratory study *Television and Fantasy* based on interviews with children and adults. It concluded that television can trigger existing fantasies in people, modify those already existing, or create new ones (Cumberbatch et al, 1990). This led to an interest in whether criminal fantasies might be stimulated by the media. Around the same time, Ray Wyre (1987) established the Gracewell Clinic in Birmingham for the treatment of convicted paedophiles. A strong plank of the treatment programme was to persuade the residents to recognize their 'offender thinking' and develop strategies to avoid such thoughts. Here avoiding pornography would be advised, as Wyre explained:

'So pornography certainly reinforces and can also create the predisposition to carry out the abuse. It feeds the fantasy. And it creates distorted thinking' (Wyre, 1992, P 240).

This new treatment centre provided the opportunity to examine more closely the origin and development of fantasies – did they begin in early childhood? How do they relate to offending and just how important is pornography in this? A second report: *Criminogenic Fantasies* (Cumberbatch & Howitt, 1992) describes this research. Depth interviews (usually lasting three hours) were carried out with 11 offenders. The main conclusions were that:

- Fantasies were less closely related to offending than expected – a number described fairly normal fantasies of vaginal intercourse with adult women.

- Most fantasies seemed quite closely related to early childhood sexual experiences, some of which were abusive, some of which were with peers.
- Media images could provide masturbatory stimuli but were more often mundane images (e.g. travel brochures or scout magazines). Pornography as such was rare.

There is no doubt that 'offender thinking' could be stimulated by the media but neither sexual imagery nor pornography seemed to be important in this. As one interviewee explained:

'There is a Comfort advert on at the moment where the young girl is just standing naked and then wrapped in a towel...[and that would lead to masturbation] ... we make it pornography by way of thinking'.

There also seems little doubt that fantasy is important in the offending behaviour of paedophiles and, while the offending fantasies seem to have been established very early in life, there was no sense that they became entangled with pornographic images. Later research by Howitt (1995b) revealed that the issue was complicated by individual differences such as psychopathy (Williams et al, 2009). The most recent study of paedophile offenders and fantasy was carried out at Rampton Special Hospital. It did not ask about pornography use even though it included a sample of men convicted of child pornography (Sheldon & Howitt, 2008). However once again, fantasies seemed anchored in experience:

Case A: 'It was very much a case of almost... the offences became the fantasy afterwards.... Then I would masturbate to the fantasy'.

Case B '...when I'm fantasizing.... I am remembering what me and the victim did'

(Sheldon & Howitt, 2008, P 146).

This raises a very important issue here: what pornographic thinking entails. One of the more important studies published in *The Archives of Sexual Behavior* was of men with a history of either gross sexual offences or of non-sexual violent attacks on women (Hinton, O'Neill & Webster, 1980). The fact that they were residents of Broadmoor Special Hospital indicates that they must have been considered an extreme danger to the community. Participants (including a control group of psychology technicians) rated their 'felt sexual arousal' to various material including slides and films. At the same time, physiological measures were taken, including that of penis volume (penile tumescence). Although there were a number of interesting findings, just one will be discussed here. One of the films showed a girl who appeared to be around 12 years old in the countryside, fully clothed riding a bicycle. After a minute or so she is approached by two men who struggle with her and chase her. The last three minutes of the film showed a violent rape. Hinton et al comment:

'It became apparent early in the testing of sexually deviant patients that offenders against young girls showed a marked increase in penis diameter simply on viewing the first two minutes of the girl rape film. During this period, the girl is seen standing alone, fully clothed, being taken, chased and finally (still fully clothed) struggling with two men' (Hinton et al, 1980, P 215).

Unfortunately, we cannot know whether the offenders became aroused by the anticipation of seeing rape or just by the struggling; and if the latter were the case, whether such struggling triggered fantasies based on their own offences. Whatever the case, if pornography is a construct defining how viewers relate to images, rather than being an intrinsic quality of that image, then regulatory interventions become impractical.

Crime rates

Concerns that pornography fuels sexual violence have been persistent and well represented in reviews by, for example, Itzin et al (2007), Malamuth (2008) and Papadopoulos (2009). However, the research on this is particularly controversial and other reviewers of the same literature such as Helsper (2005) do not accept that harm has been convincingly demonstrated. Nevertheless, there is a regrettable lack of UK-based research looking at youth crime over the decades, mapping, where possible, the availability of pornography.

The only study to examine crime rates recently is by Ferguson and Hartley (2009). They plotted the exponential rise in hardcore pornography titles released in the USA since the early 1990s and showed that recorded rape had followed quite the opposite pattern. Thus, from a peak of well over two rapes per thousand in the population it declined to 0.5 per thousand in 2005, whereas in the same period, pornography titles increased sevenfold - from 2000 per annum to almost 14,000. The authors note that the only other recent evidence on crime patterns (by Linz, Paul et al, 2004) concluded that neighbourhoods in the USA that had pornographic ('adult') stores enjoyed lower crime rates than those without.

Mainstreaming sex

The experts in Cragg's (2000) study noted that traumatic responses to R18 material might be less likely in modern times as sexual imagery had become more prevalent. They also observed that the increasing accessibility of sexual material in the media could be the source of precocious sexualisation (rather than pornography). Štulhofer, Buško and Landripet (2010) concluded that the attitudes detected (such as greater acceptance of pornographic scripts) could be due to other media such as the mainstreaming of sexual imagery in society.

Since the beginning of this decade, there have been growing concerns about the normalization of sex in society. This issue deserves some mention, especially since one argument has been that pornography is part of this mainstreaming process. Additionally, the prevalence of sexual imagery within the culture will be of some relevance as providing the context in which R18 material is received and responded to.

Clearly, as a society we are developing new forms of 'public intimacy' which appear preoccupied with self-revelation and exposure. A considerable literature has developed to describe and diagnose this phenomenon. Paasonen et al (2007) listed the terms used by writers on the subject: pornographication, pornification, normalization of porn, porno chic, mainstreaming of sex, the rise of raunch culture, to name just a few. As Attwood (2009) noted, sexual exposure has become increasingly louder and more public and alongside this a new sexual sensibility is developing. In this, sex has become a form of self-expression and the source of transient, but renewable pleasure which is no longer located within traditional frameworks of romantic stable relationships.

Although the anecdotal evidence for all this appears overwhelming, there is little by way of documented evidence to show how much things have changed over the years. The exception is in a series of content analyses commissioned by the Broadcasting Standards Council. These showed that in the decade from 1993, the number of sex scenes and references to sex on UK television doubled (Cumberbatch, Gauntlett & Littlejohns, 2003).

There are few pointers as to how things may have changed since. The increase in talk about, and references to, sex may be seen as a two-edged sword. For some parents (see Papadopoulos, 2009) this will be an intrusion into the constructed world of child innocence. Sexuality lies at the watershed of transition from childhood to adulthood and so it is

understandable that it is usually unwelcome as an early visitor. On the other hand, talk about sex might encourage better communication about the whole issue of sexual identity and how this is negotiated in a modern world rich with such sexual imagery.

Although it is very difficult to compare cultures, the impression from the Nordic studies into pornography is that the researchers seemed surprised at the openness with which young people discussed sexual material. One outcome of their enquiries was that the issue of pornography was introduced to the Danish sex education syllabus (based on the contribution in particular of Sørensen and Knudsen, 2006). This is perhaps a good example of focused media literacy designed to provide young people with the life skills to negotiate their way through what might be regarded as inevitable exposure to pornography.

It may be worth quoting the rationale for this initiative, as given by the Danish Minister for Equality (Ligestillingsministeriet, 2006): 'We can put an abundance of filters on computers to remove porn, but this won't make any difference. The filters must be inside children's and young people's heads' (cited by Graugaard and Roien, 2007, P 317).

Section 5

Conclusions

- The various research covered in this report provide some evidence on the potential effects of sexually explicit material on young people. The field remains limited, but there are considerably more studies than was the case in 2005. A number of these are of a high quality and sophistication.
- Most of these studies report a pattern of associations between exposure to sexually explicit material and a range of sexual attitudes and behaviours which have typically been taken as problematic. These include: greater sexual permissiveness; stronger support for recreational sex; stronger beliefs that women are sex objects; stronger belief in instrumental attitudes to sex; greater sexual uncertainty; higher endorsement of uncommitted sex; lower sexual satisfaction; higher sexual preoccupation; earlier sexual activity; a greater number of sexual partners; higher probability of anal intercourse.
- In the major studies the researchers conclude that these represent 'effects' of sexually explicit material and, taking their conclusions at face value, we might consider the evidence for this to be stronger today than in the mid-2000s.
- However, most researchers admit that their findings do not allow causal inferences. A number of the studies indicate that those who experience sexually explicit material early in life appear to be different kinds of people to those who do not – for example, in terms of gender and social class.
- Therefore the conundrum remains: whether those with particular attitudes and values enjoy sexually explicit material and are unchanged by the experience, or whether the experience changes attitudes and values. It could be that casual attitudes to sex, indifference to gender equality and so on, are a pre-requisite for enjoying pornographic experiences. Or it could be that there is a reciprocal relationship between the two.
- One of the problems with the 'effects' listed earlier is that the associations reported tend to be very small. Typically, exposure to sexually explicit material might account for no more than 1-2% of the variance in sexual attitudes and this is less than that reported for non-explicit sexual content such as on television.
- This should not undermine what could be a social problem, but when the variance explained is so small, the concern must be that it might be caused by something else which has not been measured.
- Most studies combine all types of sexually explicit media into a total exposure score and so it is not possible to discriminate between the various platforms – for example, video on demand versus DVD.
- A particular frustration is that developmental stages have not been the lynchpin of research designs. The age band 10-12 is when young people are on the point of puberty and also when some begin to encounter sexual material. Thus the absence of research in this area is a notable gap that needs filling.

- Finally, there is a surprising lack of evidence from experts in child welfare. There has been no advance on the valuable contribution by Cragg (2000). When these experts were asked if they could think of any children that had been harmed by pornography in the absence of other abuse, only five of the experts (13%) were able to do so. While it is not clear from Cragg's report how many children were involved here, given the tens of thousands of cases which the experts collectively represented, this study helps to begin to inform a risk assessment.

Annex 1

The review process

- The focus of this 2010 review is on research which in the last 5-6 years has made some empirical contribution to knowledge about the effects of sexually explicit material on young people under the age of 18.
- Additionally, a small number of earlier studies were included that were either unavailable to the previous reviewer or thought to require closer attention.
- In selecting material for review, the main criterion was that the studies should have some clear integrity. In practice, the large majority of work was published in refereed journals. With one exception, the remainder were either findings from a 2 year research programme commissioned by the Nordic Council of Ministers or research reports commissioned by UK Regulatory bodies. The exception included here was a published Doctoral thesis (peer reviewed).
- The review archive was assembled in various stages as the net was cast wider. In the first working week of the review, both Google Scholar and the British Library catalogue were searched for 'Effects + porn' and effects + sexual explicit'.
- At this stage a list was drawn up of currently active researchers who were emailed with a request for publications. Over the period of the review (July and August), 22 authors were contacted and 14 responded with material including studies in press. Not surprisingly, the remainder were on annual leave returning 'out of office' replies.
- As the exercise progressed, classic studies were identified and entered into citation searches. This revealed more recent studies which had referred to them. Alongside this, numerous academic data bases were trawled using various combinations of the terms. These included:
- Pornography, sexually explicit material, sexual material/s, sex, sexual content, adult material, erotica. Young people, youth, adolescent/s, adolescence, teenager/s, juvenile/s, young adult/s, children, child. Television, media, mass media, multimedia, popular culture, film.
- Additional data bases were mainly EBSCO: CINAHL; E-Journals; Education Research Complete; Film & Television Literature Index; Humanities International Complete; Inside Serials and Conference Proceedings; International Bibliography of the Social Sciences; Library, Information Science & Technology Abstracts; PsycARTICLES; Psychology and Behavioral Sciences Collection; PsycINFO; SocINDEX. Others comprised: Social Care Online (SCIE) Pubmed; ScienceDirect – Journals; Web of Knowledge (ISI); Education Resources Information Centre (ERIC).
- Wherever an abstract or summary or first page indicated possible relevance, full texts were obtained. Often these were initially purchased on a 24 hour access (non-downloadable) basis from the publishers so as to allow rapid key word searches of the whole document e.g. to identify 'film' content in recent studies of internet effects.
- Thanks to Sally Gauntlett and Andrea Bailey for assisting with this review.

Annex 2

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3 Content Control acts as a filter, and blocks access to websites containing content including nudity, unacceptable violence, racism, exposure to hacking / phishing, and other harmful content. It is applied in a default 'on' setting but can be removed after verification of customer's age as 18+. It can be turned back on / off with adult security PIN by customer. Premium rate services (calls / texts to chat lines, competitions) are not blocked by default but can be barred through customer support.



27 September 2010

Re: Ofcom's R18 Report on sexually explicit material and the potential harm to minors: a review of the research evidence (2010)

Peer Review Commentary by Sonia Livingstone, Department of Media and Communications, London School of Economics and Political Science.

Introduction

I have been asked by Ofcom to comment on Dr Guy Cumberbatch's update (in 2010) of Dr Helsper's original (2005) review of the evidence regarding R18 material and its potential harm to children. Specifically, I was asked to comment on the balance of the argument and to identify any major gaps in the sources. These comments follow below. At the end of this document I append a short biography detailing my expertise in this field, plus my website for a full CV.

Overview

The 2010 review was designed to update the review of the empirical literature conducted for the 2005 review, to determine if the conclusions drawn in the earlier review should now be revised. The conclusion is that although further research has been conducted, the original conclusions remain valid. In short, there seems to be no conclusive evidence to support the claim that sexually explicit R18 material might seriously impair the development of minors. There is, however, a rather mixed body of evidence, with some methodological limitations, which on balance points to a possible association between exposure to sexually explicit material and negative outcomes for children. The direction of any cause-effect relationship cannot be determined in the absence of rigorous experimental studies, and these cannot be conducted for ethical reasons.

Commentary

I am confident that a thorough and conscientious review has been undertaken of the available research literature by Dr Cumberbatch, most of it drawn from academic sources and therefore most of it already subjected to a rigorous process of independent blind peer review. The review and bibliography contain a significant number of empirical studies published since 2005, providing a fair basis on which to proceed.

Although arguably there are some troubling gaps in the literature as it exists, I have not identified any omissions from the literature included in this review. In other words, it is unfortunately the case that the research literature contains more correlational than causal studies, and many of them are also unclear or non-comparable regarding children's age/circumstances and/or the nature of the sexually explicit material at issue. Usefully, the R18 review provides a careful analysis of the merits or otherwise of each study and notes the methodological limitations and evidence gaps as they exist.

In my view the literature and associated policy debates face a particular problem in their failure to specify exactly what kind of harmful consequences are hypothesised to result from exposure to sexually explicit material. I say this not with the intention of denying any such

Annex 2

consequences, but as a methodological critique of a research and policy domain which has not been clear regarding the nature of its concerns. It is unsurprising, then, that the field does not pursue the possibility of particular adverse consequences with any consistency but rather, and for whatever reason, uses different indicators of potential harm in different studies.

The 2010 R18 review by Dr Cumberbatch presents a detailed account of each of the available studies, weighing the evidence according to the widely-accepted conceptual and methodological criteria employed in reputable academic research. A series of possibly counter-intuitive findings emerge (e.g. that evidence of potential harm is equally strong – or weak – for older and younger children), as one would hope from a fresh review of the evidence. Over and again it becomes clear that, to the extent that exposure to sexually explicit material may have adverse consequences for children, such exposure can only be one part of a much more complex and multi-factorial explanation; it cannot be held accountable for direct adverse effects as the sole cause.

The review's conclusions are balanced and appropriate. I am among those who would, as suggested in the conclusions, consider the evidence for harm stronger than it was ten years ago. Nonetheless, the methodological limitations of the studies conducted are undeniable. Thus only very cautious conclusions, such as those drawn in the review, can be justified on the basis of the evidence.



Professor Sonia Livingstone, LSE

Biography

Sonia Livingstone is Professor of Social Psychology and Head of the Department of Media and Communications at the London School of Economics and Political Science. She is author or editor of fourteen books and many academic articles and chapters on media audiences, children and the internet, domestic contexts of media use and media literacy. Recent books include *Young People and New Media* (Sage, 2002), *Audiences and Publics* (edited, Intellect, 2005), *The Handbook of New Media* (edited, with Leah Lievrouw, Sage, 2006), *Harm and Offence in Media Content* (with Andrea Millwood Hargrave, Intellect, 2006), *Media Consumption and Public Engagement* (with Nick Couldry and Tim Markham, Palgrave, 2007), *The International Handbook of Children, Media and Culture* (edited, with Kirsten Drotner, Sage, 2008), *Kids Online* (edited, with Leslie Haddon, Policy, 2009), and *Children and the Internet* (2009, Polity).

Having directed the research project, *UK Children Go Online*, for the ESRC's e-society programme, Sonia Livingstone is now directing a 25-nation thematic network, *EU Kids Online*, for the EC's Safer Internet Programme. She serves on the Executive Board of the UK's Council for Child Internet Safety, for which she also chairs the Expert Research Panel, and on the DCSF's Ministerial Taskforce for Home Access to Technology for Children, Ofcom's Media Literacy Research Forum and, until recently, the Internet Watch Foundation. She has advised Ofcom on media literacy and advertising unhealthy foods to children, the BBC on taste and standards in broadcast content, the DCSF on the impact of the commercial world on childhood, and The Byron Review on children's online risk. She was President of the International Communication Association 2007-8.

See <http://www.lse.ac.uk/collections/media@lse/whosWho/soniaLivingstone.htm>