“...I wasn’t sure it was normal to watch it...”

A quantitative and qualitative examination of the impact of online pornography on the values, attitudes, beliefs and behaviours of children and young people.

By Elena Martellozzo, Andy Monaghan, Joanna R. Adler, Julia Davidson, Rodolfo Leyva and Miranda A.H. Horvath

Revised May, 2017
Foreword from the Research Commissioners

Turn the clock back a decade, and access to the internet was typically restricted to the family PC in the front room or classroom, both of which could be monitored by adults. In the intervening years, advances in technology have taken the internet from the front room to the playground - in 2015 Ofcom reported that for the first time, smartphones had overtaken laptops as the most popular device for getting online in the UK. Only now are we beginning to understand the impact this is having on the first generation of ‘smartphone kids.’

Whilst the online world has created incredible opportunities for young people to explore, experiment, socialise, create and educate themselves in ways which were previously undreamt of, it has also exposed children to the risk of harm, including from seeing pornography and from sexting.

Protecting children from potential harm and educating them about both the physical and online worlds are shared responsibilities in which parents, governments, policy-makers and educators, and importantly, industry, all have vital roles to play. Young people say that they want sex and relationships education, including discussions about pornography.

The Children’s Commissioner and NSPCC wanted to understand the numbers of children who view or who are exposed to pornography online, and its impact on them. The research we commissioned from Middlesex University provides the most robust and significant evidence of young people’s pornography viewing habits in the UK to date.

The findings highlight, not only the concerning scale with which young people are being exposed to online pornography, but also the numbers who are seeing it inadvertently.

They reveal the negative effects that being exposed to pornography can have; on children’s emotions, particularly on first exposure; that a proportion continue to search for it after seeing it inadvertently; and how feelings of shock and confusion can dissipate as they become seemingly desensitised to the content.

A significant minority want to emulate what they have seen in online pornography, and there is a perception, particularly from boys, that what they have viewed is realistic. These are worrying findings, given the acknowledgment by the young people themselves that online pornography is a poor model for consent or safe sex.

Reassuringly, the findings also show that just over half of the sample reported that they had never seen online pornography.

In the last few years, steps have been taken to curb the tide of pornography that children and young people can access with ease. But it is clear from our research
that there is no room for complacency. It is vital that effective safeguards are put in place, alongside better sex and relationship education, both in the classroom and online.

It cannot be right that so many children may be stumbling across and learning about sex from degrading and violent depictions of it. We need to act to restrict their access to such material and to ensure that they have spaces in which to discuss and learn about safe relationships and sex. It is our duty to protect children from harm, and so we must ensure this happens.

15th June, 2016

Authors’ Preface to the Revised Report, May 2017.

As part of routine review processes and given the continuing topicality around this issue, the commissioners and research team have taken the opportunity to produce a revised version of this report. The main revisions include the reporting of additional statistical detail and further analyses that elucidate young people’s feelings about pornography. Whilst there have been slight changes to some of the statistics considered in the original report, it should be noted that the key conclusions and policy implications of the revised report are unchanged from those originally drawn. The team believes that the recommendations are as pertinent now as they were in June, 2016.
Acknowledgements

The authors of this report would like to thank the staff of the NSPCC and the Children’s Commissioner for England who have been supportive, critical friends throughout the project. We are particularly grateful to Jon Brown, Dr Graham Ritchie and Dr Julia Fossi.

We are deeply indebted to the team at ResearchBods who worked hard to help us access children and young people across the four nations of the UK; Lee Carrack and Reuben Barker provided constant support.

We are also indebted to the expert members of the independent advisory board who gave up their evenings and weekends to comment on drafts and to provide useful feedback throughout. The members of the board were:

- Abi Billinghurst, Founder and Director, Abianda;
- Dr Maddy Coy, Deputy Director, Child and Woman Abuse Studies Unit, London Metropolitan University;
- Associate Professor Michael Flood, Sociology, University of Wollongong;
- Professor Rosalind Gill, Department of Sociology, City University;
- Reg Hooke, LSCB Chair and Independent Child Safeguarding Consultant;
- Tink Palmer, CEO Marie Collins Foundation. Visiting Professor, University Campus Suffolk.

Our thanks go too, to the children and young people who participated in the research and the school staff who recognised the importance of this sensitive topic and facilitated access. We also note that the quote in the title is taken from a research participant.

Finally, the team would like to thank their families and friends, who gave us additional support and space to conduct this valuable research.
Table of contents

FOREWORD FROM THE RESEARCH COMMISSIONERS .................................................. 1
AUTHORS’ PREFACE TO THE REVISED REPORT, MAY 2017 ................................. 2
ACKNOWLEDGEMENTS .................................................................................................. 3
LIST OF FIGURES ............................................................................................................... 5
LIST OF TABLES .................................................................................................................... 6

1 EXECUTIVE SUMMARY ................................................................................................. 7
  1.1 OVERVIEW OF RESEARCH BACKGROUND AND METHODS ................................. 7
  1.1.1 Ethics .................................................................................................................. 7
  1.1.2 Safeguarding ........................................................................................................ 7
  1.1.3 Methods of analysis .............................................................................................. 8
  1.2 KEY FINDINGS ......................................................................................................... 8
    1.2.1 Which children reported seeing pornography? .. .................................................. 8
    1.2.2 Feelings and attitudes towards online pornography ........................................... 9
    1.2.3 Risks and harms ................................................................................................. 10
    1.2.4 ‘Sexting’ ........................................................................................................... 10
    1.2.5 Young people as critical users of pornography .................................................. 12
    1.2.6 Young people’s views on intervention ................................................................ 13
  1.3 POLICY IMPLICATIONS ........................................................................................... 13

2 OBJECTIVES AND METHODS ....................................................................................... 16
  2.1 RESEARCH OBJECTIVES AND DESIGN ................................................................ 16
  2.2 ETHICS AND SAFEGUARDING ................................................................................. 17
  2.3 ANALYSIS ................................................................................................................ 18

3 RESEARCH FINDINGS .................................................................................................... 20
  3.1 REPRESENTATIVENESS OF THE SURVEY SAMPLE ............................................. 20
  3.2 EXTENT OF EXPOSURE TO ONLINE PORNOGRAPHY ........................................ 22
    3.2.1 Numbers of children who have ever seen porn and with whom ........................ 22
    3.2.2 Children and young people who actively searched for online pornography .... 23
    3.2.3 Frequency of encountering online pornography .............................................. 24
  3.3 MEANS OF EXPOSURE TO ONLINE PORNOGRAPHY .......................................... 24
  3.4 AGE AND GENDER DIFFERENCES IN EXPOSURE TO ONLINE PORNOGRAPHY .... 25
    3.4.1 Age differences in exposure to online pornography ........................................... 26
    3.4.2 Gender differences in exposure to online pornography ....................................... 28
  3.5 SUMMARY OF KEY FINDINGS: ENCOUNTERING ONLINE PORNOGRAPHY ........... 31

4 YOUNG PEOPLE’S FEELINGS & ATTITUDES ABOUT ONLINE PORNOGRAPHY .... 32
  4.1 AFFECTIVE RESPONSES: HOW YOUNG PEOPLE FEEL ABOUT PORNOGRAPHY .... 32
  4.2 COGNITIVE RESPONSES: WHAT CAN WE LEARN FROM YOUNG PEOPLE’S ATTITUDES? 37
  4.3 SUMMARY OF KEY FINDINGS: AFFECTIVE AND COGNITIVE RESPONSES .......... 40

5 RISKS AND HARMs ......................................................................................................... 41
  5.1 EMULATING BEHAVIOURS ....................................................................................... 41
  5.2 SHARED MATERIALS ............................................................................................... 45
  5.3 SELF-GENERATED IMAGES: ‘SEXTING’ .................................................................. 47
  5.4 SUMMARY OF KEY FINDINGS: RISks AND HARMs ................................................. 53
6 YOUNG PEOPLE AS CRITICAL USERS OF ONLINE PORNOGRAPHY .......................................... 54
6.1 EDUCATIONAL MITIGATIONS ............................................................................ 57
6.2 DO CHILDREN AND YOUNG PEOPLE FAVOUR INTERVENTION? ..................... 61
6.3 SUMMARY OF KEY FINDINGS: YOUNG PEOPLE AS CRITICAL USERS OF PORNOGRAPHY ........................................................................................................... 64

7 DATASET LIMITATIONS .............................................................................................. 65

8 POLICY IMPLICATIONS ............................................................................................... 66

9 REFERENCES ............................................................................................................... 68

10 APPENDICES .............................................................................................................. 71
10.1 APPENDIX 1: METHODOLOGY ........................................................................ 71
10.2 APPENDIX 2: MATERIALS- ONLINE DISCUSSION FORUM ............................ 77
10.3 APPENDIX 3: MATERIALS- STAGE 1 FOCUS GROUPS ..................................... 79
10.4 APPENDIX 4: POST SURVEY EMAIL TO YOUNG PEOPLE .................................. 81
10.5 APPENDIX 5: SAFEGUARDING EMAIL TO SURVEY RESPONDENTS .................. 82
10.6 APPENDIX 6: MATERIALS- STAGE 3 FOCUS GROUPS ..................................... 84

List of figures
Figure 1: Recruitment from the four nations .................................................................... 20
Figure 2: Stage 2 sample age ......................................................................................... 21
Figure 3: Stage 2 sexuality ............................................................................................... 21
Figure 4: Stage 2 school type ......................................................................................... 22
Figure 5: Do children first view pornography alone? .................................................... 23
Figure 6: Cross tabulation of age by active searching for pornography ....................... 24
Figure 7: Frequency of viewing online pornography .................................................... 24
Figure 8: Device used to view online pornography for the first time ............................. 25
Figure 9: Where pornography was seen for the first time ............................................. 25
Figure 10: Ever encountering online pornography ...................................................... 26
Figure 11: Current viewing of online pornography ...................................................... 26
Figure 12: Actively searching for online pornography by age ....................................... 27
Figure 13: Frequency by age of viewing online pornography ........................................ 27
Figure 14: Actively searching for online pornography- gender differences ................... 28
Figure 15: Seeing online pornography has led me to believe that sexual activities should be enjoyable for everyone .......................................................... 38
Figure 16: Seeing online pornography has led me to believe that sexual activities should be safe for everyone involved ......................................................... 39
Figure 17: Online pornography has given me ideas about types of sex to try out, by age ... 41
Figure 18: Online pornography has given ideas about types of sex to try out, by gender ... 42
Figure 19: Seeing online pornography has led me to believe that women should act in certain ways during sex, by age ......................................................... 44
Figure 20: Seeing online pornography led me to believe that men should act in certain ways during sex, by age ................................................................. 44
Figure 21: Did respondents know the people to whom they transmitted naked or semi-naked images? ....................................................................................... 50
Figure 22: Cross-tabulation between gender and ‘has the online pornography that you have seen shown you about safe sex?’ ......................................................... 56
Figure 23: Seeing online pornography has led me to believe that sexual activities should be agreed to by everyone involved, by whether or not they have had sex and relationships lessons ......................................................... 58
Figure 24: Cross-tabulation between age group and ‘has the online pornography that you have seen shown you about safe sex?’ ......................................................... 59
List of tables

Table 1: Stage 2 family heritage ........................................................................................... 22
Table 2: Initial feelings about online pornography ................................................................. 33
Table 3: Current feelings about online pornography ............................................................. 33
Table 4: Views about pornography seen .............................................................................. 35
Table 5: Photographing yourself naked or semi-naked. ....................................................... 48
Table 6: Photographing someone else naked or semi-naked.................................................. 51
Table 7: Seen a naked body, or private body part, belonging to someone else ................... 51
Table 8: Beliefs affected by pornography from 13-16 year olds who had seen it. .............. 55
Table 9: Teachers talking about online pornography ............................................................ 59
1 Executive Summary

1.1 Overview of Research Background and Methods

This paper presents findings about young people’s experiences with online pornography. It draws on data from the first national survey of secondary school boys and girls regarding their attitudes and feelings about online pornography, whether viewing it deliberately or accidentally. To our knowledge, this is the most extensive survey of 11-16 year olds regarding online pornography. The sample is representative of the four nations of the UK and includes boys and girls. The project was designed and run by academics from Middlesex University. It was implemented in conjunction with ResearchBods. The design employed a Delphi\(^1\) type approach (Linstone & Turoff, 2002) and consisted of:

1. An online discussion forum and four online focus groups with 34 children and young people (11-16) from across the United Kingdom (England, Wales, Scotland and Northern Ireland) to inform the design of a survey and identify emerging issues. The initial discussion forum and focus groups were segregated by age;
2. An online survey with 1001 children and young people (11-16) across the United Kingdom;
3. Six online focus groups with 40 children and young people (11-16) from across the United Kingdom, to provide more in-depth information on elements of the online survey findings. These groups were segregated by both age and gender.

1.1.1 Ethics

The research was conducted in accordance with the Health and Care Professions Council, the British Psychological Society and the British Sociological Association ethical codes of conduct. Information was provided at the outset about the nature of the survey and consent was obtained before and after completion, from responsible adults and from the young people themselves. Each sub-section of the survey included an option to ‘exit’, that could be clicked at any time and that led to a page with contact information for relevant support organisations.

1.1.2 Safeguarding

A careful threshold for safeguarding was adopted for this research. A precautionary stance was taken whereby child protection encompassed both safeguarding and prevention of harm. The approach taken to safeguarding and promoting the welfare of children was rigorous and conducted with regular consultation between the research partners, commissioners and members of an independent advisory board. In line with child protection guidance, it avoided unnecessarily criminalising of children, whilst keeping their safety paramount.

---

\(^1\) The Delphi technique is ‘a method for structuring a group communication process so that the process is effective in allowing a group of individuals, as a whole, to deal with a complex problem.’ (Linstone & Turoff, 1975:3).
Information about the nature of the research was provided to all potential participants, schools, parents and legal guardians as part of recruitment and was reiterated before each young person participated. It was also made clear that safeguarding processes would be adopted and that these would be between the young people and appropriate providers of support/intervention, they would not be between the research team and parents.

At the beginning of each online focus group and the discussion forum, participants were reminded that they could leave the online platform at any time. In the online survey, each sub-section included an option to ‘exit’, that could be clicked at any point in the survey and led to a page with contact information for relevant providers of support. All respondents could also click a button to request follow up support and direct contact from ResearchBods, if they did not feel safe, or had an issue of concern to disclose. Additionally, the senior members of the academic research team worked closely with ResearchBods, commissioners and a senior child protection officer, to promote safeguarding best practice.

1.1.3 Methods of analysis
Quantitative data from the survey were imported into SPSS and recoded as necessary. Descriptive and inferential statistics are used in this report to highlight differences of statistical significance. Qualitative data were imported into NVivo and Excel and analysed using inductive thematic approaches and content analysis.

1.2 Key Findings

1.2.1 Which children reported seeing pornography?

Who has seen online pornography?

- More boys view online pornography, through choice, than girls;
- At 11, the majority of children had not seen online pornography (28% of 11-12 year olds report seeing pornography);
- By 15, children were more likely than not to have seen online pornography (65% of 15-16 year olds report seeing pornography);
- Children were as likely to stumble across pornography via a ‘pop up’ as to search for it deliberately or be shown it by other people.

1) Just over half of the stage 2 sample reported never having seen online pornography, they were more likely to be younger and female;
2) Just under half of the stage 2 sample had been exposed to online pornography by the age of 16 and of those who had seen it, 94% reported seeing it by age 14;
3) Of those who were still seeing online pornography, 47% (209/448) reported searching for it actively;
4) Young people were as likely to find pornography by accident as to find it deliberately;
5) Greater proportions of boys see online pornography than the proportions of girls who see it--this is whether deliberately or accidentally;
6) Boys continue seeing pornography, more often and more deliberately than girls;
7) Older children are more likely to see pornography, more often, than younger children, whether deliberately or accidentally.

1.2.2 Feelings and attitudes towards online pornography

**What do young people say that they feel?**

- On first viewing pornography, young people report a mixture of emotions, including curiosity, shock and confusion;
- Shock and confusion subsides on repeated viewing, whether pornography is deliberately sought out, or accidentally viewed;
- Younger children were less likely to engage with online pornography critically than older children and were more likely to report feeling disturbed by what they have seen.

1) Girls are more negative about pornography than boys;
2) Of the stage 2 participants who answered the question, a greater proportion of boys (53%) reported pornography was realistic than the proportion of girls (39%);
3) A minority of respondents reported sexual arousal on first viewing pornography (17%), rising to 49% at current viewing;
4) Older respondents (15-16 year-olds) who chose to view online pornography predominantly reported doing so for pleasure;
5) Some of the respondents felt curious (41%) shocked (27%) or confused (24%) on first viewing pornography;
6) The negative feelings subsided through repeated viewing of online pornography:
   a) When asked about how they now feel about online pornography that they still view, 30% reported that they remained curious (initially 41%), 8% remained shocked (down from 27%), and 4% remained confused (down from 24%);
7) When asked to rate their overall attitudes towards pornography, mixed responses included that it was unrealistic (49%), arousing (47%), exciting (40%), silly (36%), exploitative (38%) and scary (23%);
   a) Some of these attitudes varied by age and gender with more boys being more positive, particularly in older age groups.
1.2.3 Risks and harms

Some older children want to act out the pornography they have seen.

- Substantial minorities of older children wanted to try things out they had seen in pornography;
- A greater proportion of boys wanted to emulate pornography than the proportions of girls;
- Pornographic material has been received by a quarter of the stage 2 sample.

1) Most young people in the stage 2 sample had not wanted to emulate anything that they had seen in pornography. However, substantial minorities did report that online pornography has given them ideas that they wanted to try out;
2) The proportions wishing to emulate pornography increase with age—21% for 11-12 year olds; 39% for the 13-14 year olds and 42% for the 15-16 year olds;
3) Some 44% of males, compared to 29% of females, reported that the online pornography they had seen had given them ideas about the types of sex they wanted to try out;
4) Twenty-six percent of surveyed respondents had received online pornography or links to it and 4% reported sending others pornography online, or links to it.

1.2.4 ‘Sexting’

1) None of the children in focus groups described sexting as taking and sharing self-generated photographs of naked bodies or body parts. Rather, they interpreted sexting as writing and sharing sexually explicit or intimate words to people they knew, normally their boyfriend or girlfriend;

Young people’s definition of ‘sexting’ is textual, not visual.

- The vast majority of young people had not produced naked images of themselves;
- A minority of young people had generated naked or semi-naked images of themselves; some of them had shared the images further;
- Just over half of those who had taken intimate selfies had shared them with others, these are mainly, but not always, people they know;
- There was limited knowledge of how to remove online images of themselves.

2) The vast majority of survey respondents did not report having taken naked ‘selfies’, however:
a) One hundred and twenty-three young people (13% of the respondents) had taken topless pictures of themselves (88 boys, 33 girls and 2 young people who did not identify in a gender binary way);

b) Forty-one (4%) had taken pictures of themselves that showed their “bottom half naked” (26 boys, 14 girls and 1 young person who did not identify in a gender binary way);

c) Twenty-seven (3%) had taken fully naked pictures of themselves (13 boys, 13 girls and 1 young person who did not identify in a gender binary way);

3) In total, 135 young people (14%) had taken naked, and, or, semi-naked images of themselves. Just over half of them went on to share the images with others (i.e. 7% of the survey participants shared images). Forty-nine of them had been asked to share their pictures online:

a) Most boys who had shared their images reported not being asked to share the pictures online, (67 out of 96 boys who had generated and shared such images). Conversely, most girls who generated and shared naked or semi-naked images reported that they had been asked to share the pictures with someone (22/37) this difference may have implications for intervention;

b) The majority of respondents (30/49) who had taken and shared naked or semi-naked self-images online, reported that they knew the person they showed them to;

c) This leaves some who did not know the people with whom they shared intimate images of themselves, this was a matter considered in terms of child protection and safeguarding;

d) Twenty-five young people said that they had shared images of themselves performing a sexual act (12 boys, 12 girls and 1 young person who did not identify in a gender binary way);

4) During the stage 3 online focus groups, all participants were asked: “Would you be able to remove an intimate image of yourself or would you need to get help? (E.g. ChildLine/IWF partnership)”. Only the older children (15-16) knew about this possibility and all age groups felt that not enough information was available to children and young people;

5) Very few young people said they had:

a) created a fully-naked image of others--11/948 who answered the question (1% of all respondents);

b) taken top-half naked pictures of someone else 34/948 who answered the question (3% of the whole sample);

c) taken pictures of someone else, naked from the waist down 13/948 answering the question (1% of all respondents).
1.2.5 Young people as critical users of pornography

How do young people rate pornography?

- Most young people saw pornography as unrealistic however a minority rated it positively;
- More positive responses came from boys, younger respondents and those whose schools had not engaged with them about online pornography;
- Most young people thought pornography was a poor model for consent or safe sex and wanted better sex education, covering the impact of pornography.

1) As already noted, when reflecting back on their first encounter with online pornography, young people tended to be negative, reporting shock, shame, disgust, but also, curiosity;
2) Those who continued to view pornography tended to shift in their attitudes with lower percentages reporting negative feelings after continued exposure;
3) Young people’s assessments of pornography varied. At least three quarters of the stage 2 sample who had seen pornography (across ages and genders) felt that pornography was a poor model for consent or for safe sex. However, as also noted above, just over half the sample of boys saw pornography as realistic;
4) A few young people agreed that pornography had taught them about the roles that men and women could play in sexual relationships:
   a) The majority of young people disagreed with such statements but boys, particularly younger boys, were the group from whom the most positive assessments of pornography were reported;
   b) The main body of this paper considers what young people may be learning about sexual relationships and gender from pornography and how greater viewing of pornography, whether deliberate or accidental, might influence their behaviours;
5) Respondents from the online focus groups suggested that formal school education on the issues surrounding online pornography may help to challenge harmful attitudes towards women, or towards potentially harmful sexual relationships that can stem from exposure to online pornography;
6) Survey data indicated that young people have mixed experiences of PSHE classes. There is some evidence that more sex and relationship education and, or, education about online pornography, may help young people disentangle the competing emotions they experience when viewing pornography online;
7) Survey data also indicate that if young people have seen troubling material, it may help to have a parent to talk to, but the findings are somewhat equivocal;
8) Young people were creative and often enthusiastic about potential opportunities to improve their learning about sex and relationships and online interactions.
1.2.6 Young people’s views on intervention

Young people were keen to participate in this research and very few withdrew from the study (17 in total). In the focus groups, they commonly thanked the research team for giving them an opportunity to talk about pornography.

1. The online discussion led to consensus about the importance of education and the need for it to be relevant, and engaging;
2. Whether provided in the classroom, or digitally, young people wanted to be able to find out about sex and relationships and about pornography in ways that were safe, private and credible;
   a. This was modulated by recognition that it may not be the most popular subject or the easiest to deliver;
   b. They suggested that awkwardness or difficulty could be alleviated with specialist provision, particularly where young people are encouraged to co-create their learning;
3. Young people highlighted the need for materials that are age and gender appropriate. Some also touched on lack of teacher awareness of the potential additional vulnerabilities faced by young people who do not identify as either male or female in a binary manner;
4. The survey respondents were overwhelmingly heterosexual but there was some concern expressed that young people who identified as LGBTQ\(^2\) should not be excluded from sex and relationships education;
5. When asked in focus groups, what they would design if offered the chance to develop online materials of their own, young people suggested short videos, to be hosted on an easily accessible website or an app;
   a. However, some young people felt that resources should not be online only, or were concerned that access should be private;
6. When directly asked about age verification, young people were generally in favour but pointed out its limitations, this was also mentioned in focus groups.

1.3 Policy Implications

This section is intended to draw out implications of the research. It is hoped that this will prompt further discussion as to how best to support young people and facilitate their safe development, online and in the real world. There are potential opportunities for involvement of key stakeholders including the internet industry and NGOs, as well as for academics and government, the UK Council for Child Internet Safety should also play a role.

1) An important finding was reported at the outset of this report and is that approximately half of the young people who participated in this research did not report viewing online pornography at all. Pornography is not something that all secondary school children seek. It should be noted that the proportion of young people who did report seeing pornography is smaller than previous literature would predict and the lower proportion of those who indicated that

\(^2\) “LGBTQ is an acronym that stands for Lesbian, Gay, Bisexual, Trans and Queer, and is used to designate a community of people whose sexual or gender identities can create shared political and social concerns.” (Liberate Yourself, nd)
they actively seek it out may reflect the comparatively young age range.

2) Although not true for all, pornography is something that many young people do see, whether intentionally or not.
   a. Boys are more likely than girls to actively search for pornography and to do so more frequently and regularly;
   b. Although some girls do choose to use pornography, these are in significantly lower proportions than boys;
   c. Most young people saw pornography as being different from reality, yet there were some who saw it as realistic and something to be emulated;
   d. Older research participants were less likely to be shocked by pornography and more likely to use it for sexual stimulation;
   e. Attention needs to be paid to the messages that boys take from pornography, and what their expectations are for the girls with whom they subsequently interact;
   f. Similarly, attention needs to be paid to the messages that girls take from pornography and how they may be being influenced within potential or actual sexual relationships.

3) Young people who participated in the research highlighted variability in education provision and quality in relation to online pornography. Addressing this variability in safe, multi-faceted ways may enhance young people’s abilities to challenge and engage with pornography as critical users.

4) Regulation of pornography and measures to control access to it were considered by the participants and sometimes suggested as something for children who were younger than the respondents, or in some other way that would not limit their own access.
   a. Implications here are that a determined young person could well circumvent controls, but that better regulation may help to minimise accidental exposure, particularly via ‘pop-ups’.

5) The research suggests that some young people are concerned or worried by their exposure to pornography. These young people may require more proactive support and advice and include those who have been sent pornography that was not wanted as well as those who found material that was unexpected or otherwise troubling.

6) There is a definitional issue in respect of sexting in that young people do not recognise that the sending of intimate images is a form of sexting and that such images could be illegal. Children and young people seem to have a particular understanding of ‘sexting’ that is not shared by adults. This would imply that policy-making and education programmes in regard to young people exchanging naked/semi-naked pictures should be based on a clear and accurate understanding of what young people are doing, and the ways in which they describe their behaviours and should address legal issues;
7) Implications of this research that relate to gender and age can only be tested longitudinally. Also, if intervention is to be made or regulation introduced, then efficacy should be evaluated. This would include the impact of potential age verification measures and outcomes of educational awareness initiatives.

a. More research is needed that looks more directly at effects of young people’s viewing of pornography on their development and relationships.
2 Objectives and Methods

2.1 Research Objectives and Design

This is the final report of a study commissioned by the National Society for the Prevention of Cruelty to Children (NSPCC) and the Children’s Commissioner for England to explore the feelings and experiences of children and young people about online pornography, that would have been legal, had it been viewed by people over the age of 18. The study centred on the exploration of the potential socio-cognitive, behavioural and psychological impacts and experiences of UK adolescents’ (11-16) exposure to online pornography.

Throughout the study, the following definition was adopted:

By pornography, we mean images and films of people having sex or behaving sexually online. This includes semi-naked and naked images and films of people that you may have viewed or downloaded from the internet, or that someone else shared with you directly, or showed to you on their phone or computer.

This definition of pornography was developed by the research team, drawing on previous literature. The definition was designed to be clear and suitable for the age groups participating in the research. It was approved by the relevant ethics boards, universally endorsed by the children and young people who participated in stage 1 of the research and consequently adopted throughout. It is acknowledged, that this definition is slightly broader than others, such as Malamuth’s (2001), and that even with the provision of this definition, there may have been differences in what young people considered to be pornographic.

The rationale for the current research is threefold. Firstly, the extensive literature on mass communications has consistently shown that continued engagement with media can significantly shape people’s dispositional attitudes, tastes, knowledge and behaviours (Bryant & Zillmann, 2002; Parisier, 2012). This is particularly the case during adolescent physical, cognitive and social development (Escobar-Chaves, et al., 2005). Secondly, contemporary adolescents are so immersed in online media that it has been argued that there is no separation between, their “real” and “virtual” existences and that we cannot be certain of what effects this will have on their development (Carr, 2010). The internet is replete with explicit, easily accessible, sexual content. As Peter and Valkenburg (2006) note, “the Internet also offers numerous applications to engage in so-called cybersex, that is, suggestive or explicit erotic messages or sexual fantasies that are exchanged with others via the computer. […] Sex related words rank consistently at the top of terms used in search engines” (Ibid, 2006:178). Thirdly, a systematic examination of the impact of online pornography on UK pre-adolescent and young adolescents’ sexual attitudes and behaviours had not been published previously.
The methods and materials used in this study are summarised here and more fully articulated in Appendices 1-6. Stage 1 entailed use of an online discussion forum and four online focus groups that were conducted with 34 young people (18 females, 16 males). These were split by age group, but not by gender. An additional six focus groups were repeated at the third, final stage of this research, where 40 young people (21 females and 19 males) were interviewed. The stage 3 focus groups were stratified by age and gender.

Focus groups and the online discussion forum provided the basis for the majority of qualitative data reported here, supplemented by qualitative responses provided in Stage 2. Stage 2 was implemented in between the focus groups, and comprised a national survey. This was completed in full by 1001 young people and generated the quantitative data underpinning this report. All research participants were recruited by a Research Agency, ResearchBods, who also hosted the online materials. Young people were recruited via existing family survey panels and school survey panels. All materials were designed by the academic research team and conformed to ethical guidance of the British Psychological Society, British Sociological Association and Health and Care Professions Council. Each research stage was approved by the Middlesex University ethics processes and by an independent advisory board, convened for this research project, further detail of ethics and safeguarding is provided in the subsequent section.

2.2 Ethics and Safeguarding

A careful threshold for safeguarding was adopted throughout this research. A precautionary stance was taken whereby child protection encompassed both safeguarding and prevention of harm. The approach taken to safeguarding and promoting the welfare of children, was rigorous and conducted with regular review and consultation between the research partners, commissioners and advisory board. In line with child protection guidance, the safeguarding processes were designed to avoid unnecessarily criminalising children, whilst keeping their safety paramount.

Information about the nature of the research was provided to all potential participants, schools, parents and legal guardians as part of recruitment, in a multi-stage process, first to parents and schools. After initial permission to contact a young person was obtained, information was provided to that young person. Each information sheet, to both young person and adult, made clear that safeguarding and child protection processes would be adopted and that these would be between the young people and appropriate sources of support/intervention, i.e. that safeguarding would not be between the research team and parents. If young people agreed to take part in the research, then information about the study, how to consent, withdraw and processes of safeguarding were reiterated before they participated.

Within the online focus groups and discussion forum, participants were reminded at the beginning of each session that they could leave the online platform at any time. In the online survey, each sub-section included an option to ‘exit’, that could be
clicked at any time and that led to a page with contact information for relevant support organisations. All respondents could also click a button to request follow up support and direct contact from ResearchBods, should they feel unsafe, or had an issue of concern to disclose. Additionally, the senior members of the academic research team worked closely with ResearchBods, commissioners and a senior child protection officer who is a member of the advisory board, to promote safeguarding best practice. As part of initial ethical approval, a protocol for responding to potential high risk, safeguarding cases was developed. Additional information on ethics and safeguarding for stage 2 is provided in Appendix 1.

Preliminary analysis of the survey data identified some responses that could have caused concern, particularly around the issue of young people sharing intimate images of themselves, which are illegal in the UK and may be classed as indecent images of children. In some cases, young people had shared naked images of themselves with people that they did not know. Three of the young people’s qualitative responses may have also indicated potential grooming. All such answers were examined in the context of all the responses given by the particular participant, to ensure that the team had not misunderstood that respondent’s intentions.

The need to maintain confidentiality was balanced against protective disclosure practices. Following the consultative process outlined above, it was agreed that two cases could be considered to be of low risk and that six were of low to medium risk. In line with the safeguarding policies of the research commissioners, advice from the child protection expert and following additional university ethical approval, a protocol was developed for responding to low risk cases and follow-up was made via ResearchBods.

Five of the cases were followed-up directly with the young person concerned via the family panel protocols in place, and three cases were made via school safeguarding staff. Furthermore, ResearchBods flagged up organisations that would be able to support young people and kept an open dialogue with all schools involved in the research to provide ongoing information and assistance (please see Appendix 5).

2.3 Analysis

Qualitative focus group findings were scrutinised using a mixed application of analytic induction, constant comparison and thematic data analysis methods (Attride-Stirling, 2001; Goetz & LeCompte, 1981). Broadly, this entailed the following procedure which was applied via NVivo and MS Excel software: 1) familiarisation with the data, 2) generating initial codes, 3) searching for themes among codes, 4) reviewing and refining themes, 5) validating, defining and naming themes and 6) analytical saturation.

Quantitative survey data were analysed using standard parametric hypothesis testing techniques. Following basic descriptive statistics, inferential tests were
utilised to gauge the extent to which observed findings were likely to be more generally applicable. The following tests were used:

- **Independent Samples T-tests**: used to determine if the (x̄) mean differences between two sample groups are statistically significant. These can only be used to test interval or ordinal data.

- **One-Way ANOVA\(^3\) tests**: used to determine if the (x̄) mean differences between three or more samples groups are statistically significant. These can only be used to test interval or ordinal data.

- **Pearson’s Chi-Square tests**: used to determine if there is a statistically significant difference between observed frequency distributions (generally measured as percentages) and expected ones, and/or to test the independence between categorical (nominal) variables, i.e. to determine if the occurrence of one event/variable affects the probability of the occurrence of another.

Additional information on analysis is provided in Appendix 1.

---

\(^3\) Analysis of Variance (ANOVA) is used to compare differences between means. In this study, this would typically be comparisons between age groups or gender.
3 Research Findings

The findings first provide an indication of the extent to which UK adolescents are exposed to online pornography. Following this, respondents’ affective (e.g. feelings, emotions) and cognitive (e.g. sexual attitudes, rationales) responses to online pornography will be discussed. The findings then move to a discussion of the potential risks and harms associated with online pornography (e.g. sexting), as well as educational factors, which may help to mitigate these negative possibilities.

3.1 Representativeness of the Survey Sample

As can be seen from the figures and tables below, the responses fairly accurately reflect the composition of the UK in most of the desired characteristics. This is with the exception of Wales (which was slightly over-represented) and Northern Ireland (which was under-represented, due to significant resistance from school “gatekeepers”) see Figure 1. However, these two countries are the smallest of the UK’s 4 constituent parts, with population percentages of 4.8% for Wales, and 2.9% for N. Ireland, compared to 8.3% for Scotland and 84% for England (ONS, 2014).

![Figure 1: Recruitment from the four nations, N=1001](image)

Most survey respondents lived in urban areas, 732 compared with 260 in rural areas.

The ages of the stage 2 sample are reported in Figure 2. Young people of 14 or 15 years old, comprised 49% of the entire sample and 16 year olds, made up the smallest group of participants, at 9% of the total. Differences in participation rates reflect recruitment challenges. For inferential statistics, three age categories were created: 11-12; 13-14 and 15-16. By reducing the total number of groups in this way, each was of a more comparable size to the other.
The gender of participants was fairly equally distributed, 472 (47%) were female, 522, (52%) were male and 7 (1%) did not identify in a binary manner. Participants were also asked about their sexuality, see Figure 3.

The survey sample overwhelmingly reported being heterosexual, 893 participants (89%). Young people were also asked about their relationship status and the vast majority (845) were single.

Table 1 reports the sample's family heritage. White British made up 84% of the respondents, which is slightly higher than the last Census return of 80.5% for this same category, although that proportion was only for England and Wales (ONS, 2012).
Table 1: Stage 2 family heritage, N=1001

<table>
<thead>
<tr>
<th>Family Heritage</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>White British</td>
<td>841</td>
</tr>
<tr>
<td>White Other</td>
<td>35</td>
</tr>
<tr>
<td>White and Black Caribbean</td>
<td>14</td>
</tr>
<tr>
<td>White and Black African</td>
<td>4</td>
</tr>
<tr>
<td>White and Asian</td>
<td>11</td>
</tr>
<tr>
<td>Any other mixed background</td>
<td>8</td>
</tr>
<tr>
<td>Indian</td>
<td>15</td>
</tr>
<tr>
<td>Pakistani</td>
<td>13</td>
</tr>
<tr>
<td>Bangladeshi</td>
<td>4</td>
</tr>
<tr>
<td>Any other Asian background</td>
<td>5</td>
</tr>
<tr>
<td>Caribbean</td>
<td>6</td>
</tr>
<tr>
<td>African</td>
<td>21</td>
</tr>
<tr>
<td>Any other Black Background</td>
<td>5</td>
</tr>
<tr>
<td>Chinese</td>
<td>10</td>
</tr>
<tr>
<td>Any Other (please tell us what)</td>
<td>3</td>
</tr>
<tr>
<td>Don’t Know</td>
<td>1</td>
</tr>
<tr>
<td>Prefer not to answer this question</td>
<td>5</td>
</tr>
</tbody>
</table>

The type of school that stage 2 participants attended is reported in Figure 4. This shows a slight under-representation from independent schools and from faith schools in the sample (included in ‘other’) the latter reflects a denial of access to faith schools for the research. One advantage of the family panels was that this became the only route by which to recruit young people attending faith schools.

3.2 Extent of Exposure to Online Pornography

3.2.1 Numbers of children who have ever seen porn and with whom
When directly asked whether or not they have seen online pornography, (survey question 13), 476 young people (48%) had seen pornography and 525 (52%)
reported not seeing online pornography. Figure 5, presents findings of whether or not young people were by themselves when they first saw online pornography and whether they expected to see it or not. Four hundred and sixty-four young people answered this question. Of these, 46%, reported viewing online pornography for the first time because it “just popped up” whether on their own (32%), or with others, (14%), 22% reported having online pornography shown to them by someone else without asking for/expecting it, and a further 22% searched for it on their own.

![Figure 5: Do children first view pornography alone? N=464 (some selected more than one answer).](image)

The older the respondent group, the more likely they were to have seen pornography (65% of 15-16 year olds cf 28% of 11-12 year olds), and proportionally more boys (56%) report having seen pornography than girls (40%, see section 3.4 for additional information on age and gender effects). The proportion reporting ever having seen pornography is relatively low and may reflect differences in sample composition when compared to other studies. This is most likely because this research asked young people to report on their experience, whilst they are still young, rather than asking older people to think back to their first encounters with pornography. Other studies have typically asked either older adolescents (e.g. 14-17) or young adults (e.g. 18-25) about their initial and current experiences of online pornography (see Horvath et al., 2013 for a review).

3.2.2 How many children and young people actively searched for online pornography?

Four hundred and seventy-six young people answered this survey question, 28 of whom preferred not to give a response, or said it did not apply to them. Of the 448 respondents who answered this question either ‘yes’ or ‘no’, 209 young people (47%) reported that they actively searched for pornography, and of those who had searched, 40% (N=83) were aged 15 followed by 28% (N=58) aged 14. It is worth bearing in mind that the 209 young people who had actively searched for
pornography represents 21% of the entire survey sample. Most young people did not report actively searching for pornography.

3.2.3 Frequency of encountering online pornography

Of the 476 respondents who answered question 22 (How often do you see pornography online these days?), 34% (N=161) reported seeing pornography once a week, or more. Only 19 young people were encountering pornography daily. This is four percent of the sub-set who reported seeing pornography ever, or just under two percent of the sample as a whole (see Figure 7).

3.3 Means of Exposure to Online Pornography

As can be seen in Figure 8, of the 476 survey participants who reported seeing online pornography, the greatest proportion (38%) first saw online pornography on a
portable laptop, although mobile phone access was also relatively common (33%) and just under a quarter first saw online pornography on a desktop computer (24%).

![Figure 8: Device used to view online pornography for the first time, N=476](image)

![Figure 9: Where pornography was seen for the first time, N=476](image)

**Figure 9** reports on the locations at which young people first view online pornography. Nearly two thirds (60%) of children and young people surveyed, who had seen online pornography, reported seeing it for the first time at home, followed by 29% who reported doing so at a friend’s house. In terms of whether this was volitional viewing, 32% reported that the first time they saw it they were alone and it just popped up, with 22% reporting that it was shown to them by someone else without them expecting it.

### 3.4 Age and Gender Differences in Exposure to Online Pornography

This section considers potential differences in experiences of boys and girls, depending on their ages. Subsets of the main, stage 2 sample are drawn on to consider differences in experiences of those who have encountered pornography.
3.4.1 Age differences in exposure to online pornography

Figure 10: Ever encountering online pornography (Yes=476, No=525) below provides a breakdown by age of whether survey respondents had ever seen pornography. As can be seen, at younger ages, considerably more young people had not encountered pornography than those who had encountered it, the difference starts to decrease by 13-14 and by 15-16, has been reversed. By age 15-16, young people were more likely to have seen pornography than not, a statistically significant finding (see Figure 10). When asked their age on first encountering pornography, 94% of those who reported an age, indicated that they had seen pornography by the time they were 14 years old (418/447).

Figure 10: Ever encountering online pornography (Yes=476, No=525)

Similar results were found for the question: ‘Do you still see pornography online’? (see Figure 11).

Figure 11: Current viewing of online pornography (Yes=227, No=219)

Whether first impressions of watching pornography were negative or positive, the data clearly show an increasing proportion of UK children actively searching for

---

4 $\chi^2(2, N=1001)= 86.62$, p<0.01, Phi=.29
5 $\chi^2(2, N=446)= 24.76$, p<0.01, Phi=.24
online pornography as they progress through their teenage years (see Figure 12), this is a statistically significant age effect\textsuperscript{6}.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure12.png}
\caption{Have you ever actively searched for and found online pornography? N=476}
\end{figure}

Finally, analysis of variance (ANOVA) revealed significant age differences in responses to the question "How often do you see pornography online these days?" (F=12.67, p<.01), with the older cohorts tending to see online pornography more frequently than the youngest cohort, as indicated in Figure 13.

It should be noted that in this ANOVA, it was not possible to control for differences in group sizes and thus observed statistical significance could be due to the uneven sample sizes between the three groups. This is the only analysis reported where uneven group size could not be controlled and it should be interpreted with extra caution.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure13.png}
\caption{Frequency by age of viewing online pornography, N=456}
\end{figure}

\textsuperscript{6}X^2(4, N=476)= 21.13, p<0.01, Phi=.21.
3.4.2 Gender differences in exposure to online pornography

Significant gender differences were observed in regards to the question: ‘Have you ever seen online pornography?’\(^7\), with males reporting a higher frequency of exposure than females. This explores whether young people had ever seen pornography, whether intentionally, or not. Although there are some gender differences, these are not extensive. The data in this research indicate that 40% (210/522) of girls have ever been exposed to online porn, while for males, it is 56% (264/472).

Similarly, when considering whether they still see pornography, and taking into account that this is both volitional and unintentional viewing, the picture is similar with 59% of those males who answered the question (145/244) still seeing online porn, and 40% (80/200) of females, who answered the question\(^8\). When considering these findings as proportions of the whole sample, 31% of the boys and 15% of the girls, reported that they still see pornography.

If looking at their intentional seeking of pornography, then the gender differences are predictably wider. The proportions actively searching for, and finding, online pornography, by gender are displayed in Figure 14.

\begin{figure}[h]
\centering
\includegraphics[width=\columnwidth]{chart.png}
\caption{Actively searching for online pornography- gender differences (Girls=210, Boys=264)}
\end{figure}

The proportions of young people who saw pornography and reported actively searching for it online, are 59% males and 25% females. This would imply that, following the viewing of online pornography, boys (11-16) are approximately twice as likely to report actively searching for it as girls.

Finally, an ANOVA test revealed significant gender differences to the question ‘How often do you see online pornography these days?’\(^9\) The differences in frequency are mainly at the most frequent end of the spectrum, where boys reported more daily usage; both males and females tended to report seeing online pornography at least a few times a month, whether intentionally or not. This finding can be contrasted with

\(^7\) \(\chi^2(1, N=994) = 24.49, p<0.01, \Phi=.16\)
\(^8\) \(\chi^2(1, N=444)= 16.59, p<0.01, \Phi=.19\)
\(^9\) \(F(1, 454)=29.82, p<0.01\)
the other half of the sample who reported never seeing pornography at all. It is possible that once a young person has encountered pornography, the likelihood increases of encountering it again, even unintentionally. This might be for a variety of reasons not tested in this research and could include the ways in which search algorithms, and bots ‘learn’ (e.g. Parisier, 2012).

In previous research, it has been estimated that male viewing proportions can be as high 83-100% (see Horvath, et al., 2013 for a review). The smaller proportions of boys and young men reporting viewing pornography in the stage 2 survey may reflect the younger age range considered within this study. It should also be noted that the current research explored pornography viewing, whether or not it was intentionally viewed, whereas previous research has not always considered this distinction. Some other studies where gender differences are wider than in this study have also taken a deliberate focus on regular, frequent consumption of pornography, (e.g. Stanley, et al., 2016) thereby considering the area in which the current data indicate there is the greatest discrepancy between two genders.

Potential gender differences in the rates of seeking out pornography were also explored during the focus groups. The findings support the quantitative data considered above. For example, a common answer given by male respondents was that they actively search for online pornography:

“With friends as a joke” (Male, 14)

“Yeah, we all do” (Male, 13)

However, none of the girls in focus groups claimed they actively searched for online pornography:

“No, I personally never searched for it” (Female, 15)

During the focus groups, the motivations as to why children and young people view online pornography were also explored; common reasons given related to curiosity and peer pressure. As these respondents claimed:

“Young people are curious about sex - and they are probably influenced by older people to view it” (Female, 15);

“Well - they sort of want to seem more grown up than they are” (Female, 16);

“I think it would be peer pressure - as young people do it as a joke” (Male, 13);

“Wonder what other peoples\(^{10}\) bodies look like” (Male, 11)

\(^{10}\) Please note that all extracts from online focus groups and surveys are inserted as typed by the original respondent, including typographical errors.
“Sometime accidentaly you type in something and it takes you somewhere else” (Female, 14)

However, when the curiosity element was further explored, it was found that pornography may be thought to help children and young people, particularly from the older groups, to understand further how sexual relationships work:

“probably - i think they want to know how it works” (Female, 15);

“Yeah - if they were uncomfortable with asking someone…” (Female, 15);

“there is a huge stigma about sex when you’re a teenager so they want to know” (Female, 15);

“to have a better understanding of things” (Male, 14)

In sum, the findings suggest that about half the UK adolescent participants reported having been exposed to online pornography at the time of the survey. Initial and continued differences in exposure to online pornography between males and females are relatively minor but statistically significant; with males on average reporting slightly higher frequencies of exposure and approximately twice as much deliberate access. Lastly, these age and gender differences resonate with similar studies, such as Peter and Valkenburg's Dutch study (2006) of 13-18 year olds, which found that:

“Seventy-one percent of the male adolescents and 40% of the female adolescents had been exposed to some kind of online sexually explicit material […]. Adolescents were more likely to be exposed to sexually explicit material online if they were male, were high sensation seekers, were less satisfied with their lives, were more sexually interested, used sexual content in other media more often, had a fast Internet connection, and had friends that were predominantly younger.” (Peter & Valkenburg, 2006:178).
3.5 Summary of Key Findings: Encountering online pornography

1) Just under half of the stage 2 sample had been exposed to online pornography; of those who had seen it, 94% were exposed by age 14;

2) Young people were as likely to find pornography via a ‘pop up’ as to deliberately search for it or be shown it by other people;

3) The majority of the respondents first viewed pornography on either a portable laptop or mobile phone;

4) The majority of the respondents first saw online pornography at home;

5) The age 15-16 respondents were more likely to have seen online pornography than not. Of those who answered the question, 28% aged 11-12 had seen pornography, compared with 46% of children aged 13-14 and 65% aged 15-16;

6) Of those who have ever viewed pornography, just under half actively searched for it;

7) The older respondents had seen online pornography more frequently than the younger respondents;

8) In terms of exposure to online pornography, some gender differences exist across the whole age-range 11-16:
   a) Forty percent of females had been exposed to online pornography compared to 56% of males;
   b) Whether intentionally or not, 59% of males still see online pornography after first viewing in comparison to 40% females;
   c) When directly considering intentionality, males (59%) were more likely than females (25%) to seek online pornography deliberately.
4 Affective and Cognitive Responses to Online Pornography: Young people’s feelings and attitudes

4.1 Affective Responses: How young people feel about pornography

Given the levels of exposure to online pornography found, one possible concern may be that young people are becoming desensitised (i.e. developing a diminished emotional responsiveness to a negative or aversive stimulus after repeated exposure to it). Some of the respondents’ statements could support this notion:

“Definitely different. At first, it might’ve shocked me but due to the increasing use of sex and sexual themes in the media and music videos, I’ve grown a sort of resistance against it, I don’t feel disgusted or turned on” (Female, 13-14).

“1st time was strange - I didn’t really know what to think. But now it’s kinda normal; sex isn’t as taboo” (Male, 13-14);

“At first I wasn’t sure it was normal to watch it, my mates have talked about watching it so I don’t feel bad watching it now” (Male, 15-16);

“Because young people are now open to seeing this kind of stuff you get used to it so it’s not as shocking but is still think it’s disgusting and degrading” (Female, 13-14);

“Before I was confused about how and why, but now I understand more as my friends have told me, sex ed classes. So I know why” (Female, 15-16).

Survey data are reported in Table 2, and show the percentages for the sentiments that participants reported feeling the first time they saw online pornography. Of these, the sentiment most selected by participants was curiosity at 41%, followed by shock at 27% and confused at 24%.

Curiosity may have been selected frequently as it seems to be morally more neutral than other options. Additionally, curiosity could be related to the possibility that some children access pornography to find out more about sex and/or relationships. The theme of children seeking more information about sex through online pornography emerges in the data across the 3 stages of fieldwork.

More negative responses of shock (27%) and confusion (24%) and related feelings of disgust (23%) and nervousness (21%) highlight the proportion of responses that were adverse and potentially anxiety provoking. However, the data also indicate that 17% were prepared to acknowledge that they became sexually stimulated by what they had seen, and a further 11% reported feeling excited. Data from a follow up question regarding how participants now feel are presented in Table 3.
When considering pornography that they still view, Table 3 shows that 30% of the stage 2 sample, answering the question, remained curious (down from 41%), 8% remained shocked (down from 27%), and 4% remained confused (down from 24%). Conversely, sexual arousal reported by current viewers more than doubles in proportion, rising from 17% to 49% and is a likely motivation for viewing pornography. Furthermore, online pornography seems to make 16% of current child viewers feel sexy, quadrupled from 4% who felt this way when they first saw online pornography. This is still irrespective of whether they have deliberately looked for the online pornography or not.

These mixed findings are also supported by the qualitative data already mentioned and by excerpts such as these:

“Sometimes [I feel] disgusted - other times alright” (Male, 13);

“A bit uncomfortable because of the way they act in the videos” (Male, 14);

“Bad for watching it. Like I shouldn't really be seeing it” (Female, 14);

“Yes I was upset and felt sick” (Female, 14)

“I didn’t like it because it came on by accident and I don’t want my parents to find out and the man looked like he was hurting her, he was holding her down and she was screaming and swearing. I know about sex but it didn’t look nice. It makes me feel sick if I think about my parents doing it like that” (Female, 11-12).

Although some degree of curiosity was apparently satiated by the time respondents returned to online pornography, at three in ten responses, this remains part of how
children feel about viewing online pornography. The proportion reporting feeling ashamed from first time online viewing (11%) to current online porn viewing (12%) remain largely stable; while, those feeling disgusted by current viewing falls to 13%, from 23% upon first exposure and feeling nervous fell from 21% on first viewing, to 15% on current viewing. Yet, just over one in ten children who reported still seeing online pornography, continued to react with shame and disgust. This minority provides a partial counterweight to those respondents who reported finding positive aspects to pornography.

To try to summarise the position from first time to current viewing, it should first be noted that fewer young people report currently seeing pornography than having ever seen it. The data do not permit robust conclusions to be drawn about motivations for continued viewing or avoidance of pornography. However, the data do indicate that for those who continue to view it, young people report being less negative and generally less anxious or disgusted by pornography. It should also be noted that this research gathered no data as to whether they are seeing something different when currently viewing pornography than that which they first saw. We can see however that as a group, young people’s attitudes are shifting. How this finding is interpreted is important both in understanding young people’s development and their responses to online pornography. The qualitative responses indicate that there is some peer sharing of pornography and that, particularly for boys, there is a common idea that pornography is ubiquitous and “normal”. This positive reinforcement may play some part in their shifting attitudes.

The data may also reflect growing sexual maturation, as well as potentially higher levels of resistance to the initial negative impacts of online pornography, as children move towards adulthood. The data suggest that more positive responses toward online pornography increase, both with age, from the 11-12s, to the 15-16s, and with increased acclimatisation to repeated viewings; and commensurately, negative responses decline. This could mean that some young people are demonstrating a degree of resilience that they have developed, or it could show that they are becoming habituated, or desensitised to shocking material. Unfortunately, the nature of this cross sectional survey means that it is not possible to test any of these explanations. If more can be ascertained about how this shift in attitudes comes about, then more can be surmised also, about the implications for young people’s future behaviours and for potential interventions.

As the data stand, there are some tentative conclusions that can be drawn for the ways in which young people’s access to pornography are potentially controlled. If successfully implemented, then increasing restrictions on children’s access to online pornography, without concomitant educational awareness could potentially leave them ill prepared for the (fewer) occasions when they do see it, assuming that it can never be entirely filtered out. Raising the issue as part of sex and relationship education, under the remit of improving sexual health and online safety, could
counter this by providing information and education on the topic that is appropriately tailored and that does not leave them to build maladaptive coping strategies.

These data can be further elaborated through examination of the respondents’ replies to the question: ‘How much do you agree with the following statements? Most online porn that I have seen was…’ The respondents were asked to evaluate most of the online pornography they had seen, in terms of 14 different categories, using a 5-point Likert scale (the combined Agree Strongly/Agree percentages are displayed in Table 4).

<table>
<thead>
<tr>
<th>Affective responses</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unrealistic</td>
<td>49%</td>
</tr>
<tr>
<td>Arousing*</td>
<td>47%</td>
</tr>
<tr>
<td>Shocking</td>
<td>46%</td>
</tr>
<tr>
<td>Exciting</td>
<td>40%</td>
</tr>
<tr>
<td>Exploitative*</td>
<td>38%</td>
</tr>
<tr>
<td>Silly</td>
<td>36%</td>
</tr>
<tr>
<td>Amusing</td>
<td>34%</td>
</tr>
<tr>
<td>Degrading/Humiliating*</td>
<td>34%</td>
</tr>
<tr>
<td>Repulsive/Revolting</td>
<td>30%</td>
</tr>
<tr>
<td>Fun</td>
<td>29%</td>
</tr>
<tr>
<td>Scary</td>
<td>23%</td>
</tr>
<tr>
<td>Upsetting</td>
<td>21%</td>
</tr>
<tr>
<td>Boring</td>
<td>20%</td>
</tr>
<tr>
<td>Informative/Educational</td>
<td>19%</td>
</tr>
</tbody>
</table>

Table 4: Views about pornography seen, N=447
* For these items, N=368 and the age range was 13-16

When interpreting these data, it is important to keep in mind that none of these categories are mutually exclusive and that it is possible for one young person to both be aroused and troubled by the content they view (or indeed by their own arousal). This would mean that one possible interpretation of the data is that adolescent online pornography viewers may be trying to cope with a degree of dissonance in their responses to pornography. They realise it is not realistic and that it can be very negative, but they are also sexually aroused by it and may find the transgressive aspects exciting. Alternatively, the apparently contradictory responses may reflect splits in the group, possibly along gender or age lines, with some sub-groups more prone to being positive towards pornography and others tending to be negative.

Accordingly, potential age and gender effects were tested on the answers to this question. The older respondents were significantly more likely to agree that pornography was unrealistic or exploitative\(^1\). Across all age groups, survey respondents were more likely to be neutral or to disagree with the idea that pornography was fun, or exciting than they were to agree with it, but the differences diminish with age (i.e. it is the older children who are most likely to find it fun, or

\(^1\) Unrealistic F(2, 444)=11.63, p<0.01; Exploitative F(1, 366)=4.23, p<0.05
exciting, but it is still a minority overall)\textsuperscript{12}. Consistent with earlier findings, older children are less likely to report finding pornography upsetting\textsuperscript{13}. No other age differences reached statistical significance.

Some gender effects were also found. Boys were more likely to agree that pornography was fun or amusing\textsuperscript{14}, arousing\textsuperscript{15} and exciting\textsuperscript{16} and girls that it was shocking\textsuperscript{17}, scary or upsetting\textsuperscript{18}, although the majority of both boys and girls found it to be neither scary, nor upsetting. Just under a third of the boys agreed or strongly agreed with the idea that pornography is exploitative (59/207 or 29\%) in comparison to half of the girls (80/160). This is a statistically significant difference\textsuperscript{19} and is repeated in their responses to ideas relating to whether pornography is boring, degrading or humiliating, repulsive or revolting. In each case, girls are proportionally more likely to concur than boys\textsuperscript{20}. Where scepticism exists, it would seem to be split along gender lines. This has potentially concerning implications for their behaviours and expectations of one another within sexual relationships.

The level of amusement (34\%) that young viewers report towards online pornography could be seen as a less concerning finding that is reinforced by the finding that 36\% regard most of the online porn they have seen as silly. However, the gender differences imply that boys’ flippancy may not be matched by girls’ experiences.

Although age and gender differences were found, it would not be appropriate to entirely dichotomise young people’s responses, whether on age, gender or just between those who do seek out and are aroused by online pornography compared with those who find it boring or exploitative and so forth. This is because, as already noted, the survey data are not derived from mutually exclusive items and analysis could not have been undertaken to attempt to make such separation. It is perfectly possible for any one young person to have identified problematic sexual scenarios depicted within pornography, yet to report finding online pornography arousing.

\textsuperscript{12} Fun $F(2, 444)=7.21, p<0.01$; Exciting $F(2, 444)=8.56, p<0.01$

\textsuperscript{13} $F(2, 444)=3.06, p<0.05$

\textsuperscript{14} Fun $T(444)=6.9, p<0.01$, Mean for males is 2.91 and females 3.66; Amusing $T(444)=5.4, p<0.01$, Mean for males is 2.92 and females 3.5

\textsuperscript{15} $T(365)=6.0, p<0.01$ Mean for males is 2.42 and females 3.14. Please note that the smaller sample size for two items reflects the research design in that 11-12 year old children were not asked about those items.

\textsuperscript{16} $T(444)=8.22, p<0.01$ Mean for males is 2.64 and females 3.58

\textsuperscript{17} $T(444)=4.29, p<0.01$ Mean for males is 3.01 and females 2.54

\textsuperscript{18} Scary $T(444)=3.35, p<0.01$ Mean for males is 3.55 and females 3.18; Upsetting $T(444)=3.999, p<0.01$ Mean for males is 3.62 and females 3.19

\textsuperscript{19} $T(365)=3.98, p<0.01$ Mean for males is 3.09 and females 2.60. Please note that the smaller sample size for two items reflects the research design in that 11-12 year old children were not asked about those items.

\textsuperscript{20} Boring $T(444)=3.21, p<0.01$ Mean for males is 3.46 and females 3.13; Degrading or Humiliating $T(365)=4.598, p<0.01$ Mean for males is 3.22 and females 2.65; Repulsive or Revolting $T(444)=5.29, p<0.01$ Mean for males is 3.42 and females 2.82
4.2 Cognitive Responses: What can we learn from young people’s attitudes?

As well as asking young people about their feelings, questions were employed to assess their attitudes towards pornography. A statistically significant gender difference\(^{21}\) was found that indicated that higher proportions of boys (53% or 127/241) agree that pornography is realistic than girls (39% or 76/195). Significant age differences were not found for this question.

Whether boys are more susceptible to a fantasised ideal, remains open to question and we have no data about whether boys in the survey were more likely to be more sexually active than the girls. Related findings include that a number of girls in both Stages 1 and 3 say they were worried about how boys would see girls, in comparison to the online porn models viewed, and how they were expected to behave during sex. For example:

“\textit{It teaches people about sex and what it is like to have it} - \textit{but I think it teaches people a fake understanding of sex} - \textit{what we see on these videos isn’t what actually happens in real life}” (Female, 14);

“\textit{It can make a boy not look for love just look for sex} and it can pressure us girls to act and look and behave in a certain way before we might be ready for it” (Female, 13);

“\textit{Yes and can learn bad things like watching anal sex} and then some boys might expect anal sex with their partner” (Female, 13).

Although female anxiety was clear, the respondents in the online focus groups provided very little evidence of seeing, or hearing of such behaviour actually occurring. Only one respondent indicated that:

“One of my friends has started treating women like he sees on the videos - not major - just a slap here or there” (Boy, age 13).

This minimisation of violence is concerning, but the low incidence of such comments must be borne in mind.

The report now turns to responses to a series of 10 items following the question: ‘How much do you agree with the following statements? Seeing online pornography has…’. These items were asked of 13-16 year olds and measured with Likert scales where lower mean scores indicated more agreement with the statements made and vice-versa. Please note that these findings are considered further in the section below on critical use of pornography. T-tests showed some statistically significant (\(\bar{x}\)) mean gender differences, with males reporting marginally more positive interpretations of their online pornography experiences than females. Examples are given below and, as is noted in the footnotes, it should be remembered that differences are not large although they are all in the same direction. In Figure 15,

\(^{21}\) \(\chi^2(1, \text{N}=436)= 8.158, p<0.01, \text{Phi}=.14\)

37 Martellozzo et al., 2017
about a quarter of all young people are neutral and just under a third agree with the proposition that seeing online porn had led them to believe that sexual activities should be enjoyable for all. However, girls are more likely to disagree with this than boys and proportionally more boys (25% cf 16%) strongly agree with the sentiment\textsuperscript{22}.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{chart.png}
\caption{How much do you agree with the statement: Seeing online pornography has led me to believe that sexual activities should be enjoyable for everyone, (Males=224, Females=167)}
\end{figure}

Figure 16 shows the findings related to the proposition that online pornography had led to a belief that sexual activity should be safe for everyone involved.

\textsuperscript{22} T(352)=3.31, p<0.01) Mean for males is 2.26 and females 2.66. NB, Non Applicable answers were excluded from significance testing.
Figure 16: Seeing online pornography has led me to believe that sexual activities should be safe for everyone involved, (Males= 224, Females=167)

When considering this sub-sample, it would seem that under half (44 percent or 171/393) of the young people agreed or strongly agreed that online pornography has encouraged them to believe that sex should be safe for all involved. However, when this is broken down by gender, then a higher proportion of the males agree with the statement (54% agree or strongly agree 121/224) than the female respondents (30% or 50/167)\(^\text{23}\). This finding is difficult to interpret as we do not have data that would indicate what young people believed without accessing pornography. We can however learn more from the focus group data, which reminds us that some girls also reported potentially positive aspects:

“*It was helpful in some ways. I wanted to know what sex is. At least now I know.*” (Female, 12)

When considering whether online pornography led young people to believe that sex should be ‘agreed to by everyone involved’, 55% (123/224) of the boys agreed or strongly agreed with the proposition whereas again, a smaller proportion of girls agreed or strongly agreed, at 35% (68/167)\(^\text{24}\). When considering the statistically significant gender differences here, it is also worth noting that 11% (25/224) of males, and 24% (40/167) of females either disagreed or strongly disagreed with the statement, i.e. showing that they did not believe that pornography had portrayed positive images about consent.

Whether or not the production and dissemination of pornography is inherently misogynist, (e.g. Dworkin, 1989 or Mackinnon, 1991) these data are showing that

\(^{23}\) T(349)=5.31, p<0.01) Mean for males is 2.27 and females 2.95 NB Non applicable answers excluded from significance tests.

\(^{24}\) T(351)=3.97, p<0.01) Mean for male is 2.18 and females 2.71.
when asked, young people found both positive aspects to pornography and negative ones. Opinions garnered now, may be tempered by age and subsequent experience. However, these research responses cannot be matched with any kind of real world data on the sample’s potential future or possible current sexual activity. We will return to these findings in the section on young people as critical users.

4.3 Summary of Key Findings: Affective and cognitive responses to online pornography

1) A greater proportion of boys (53%) concurred with the option that pornography was realistic than the proportion of girls (39%);

2) Older boys (15-16 year-olds) were more likely to report using online pornography for pleasure and less likely to report negative attitudes towards its use than girls of any age and younger boys;

3) A minority of respondents initially reported feeling sexually stimulated by viewing pornography (17%), this is in comparison to 49% after repeated viewing;

4) Younger children were less likely to engage with online pornography critically than older children and are more likely to report feeling upset by what they have seen;

5) Some respondents felt curious (41%) shocked (27%) or confused (24%) on first viewing pornography;

6) Repeated viewing of online pornography may have had a desensitising effect upon some respondents:
   a) When asked about how they now feel about online pornography that they still view 30% remained curious (down from 41%), 8% remained shocked (down from 27%), and 4% remained confused (down from 24%);

7) Respondents reported seeing online pornography in mixed ways; greater proportions of boys were positive and greater proportions of girls were negative:
   a) For example, 44% of the 13-16 year olds agreed that online pornography has encouraged them to believe that sex should be safe for all involved but significantly larger proportions of males than females agreed or strongly agreed (54% cf. 30%).
5 Risks and Harms

5.1 Emulating Behaviours

One of the possible negative consequences of exposure to online pornography is that it can lead young people to believe that they should emulate the practices they have observed. This idea emerged frequently during the online focus groups with the older groups (13-14 and 15-16). When children and young people were asked about what the risks may be when watching online pornography, some said:

“People may try things that can lead to harm” (Male, 13)

“It will make people look as women as objects and start treat them as objects” (Male, 14)

“People will try to copy what they see” (Female, 11)

“A few of my friends have used it for guidance about sex and are getting the wrong image of relationships” (Female, 13)

“Its give a unrealistic view of sex and our bodies makes us self consious and question why are bodies are not developed like what we see online” (Female, 13)

Statistically significant age differences were found in response to the question: “Has the online pornography that you have seen given you ideas about the types of sex you want to try out?” As can be seen in Figure 17, a higher proportion of the older cohort reported that online pornography has given them ideas of wanting to act out sexual practices. This may be related to the greater likelihood of sexual activity as they reach the age of consent although in all age groups, more young people did not endorse this idea than those agreed with it.

![Figure 17: Online pornography has given me ideas about types of sex to try out, by age groups, N=437](image)

21% (N15) 79% (N58) 39% (N58) 61% (N91) 42% (N90) 58% (N125)

11-12yrs 13-14yrs 15-16yrs

---

25 $x^2(2, N=437)= 10.84, p<0.01, \text{Phi=.16}$
Returning to the qualitative findings, we can see:

“I only try things that suit me and my girlfriend. We don’t force anything. If didn’t watch some porn I wouldn’t know what to do. My girlfriend enjoys what I do” (Male, 15-16);

“I think I am bi-sexual but I’m not sure. I might like boys a little more but some girls are really nice and I can talk more to some of them. I think I would like to try some of these things out with a boy” (Male, 13-14).

If pornography viewers are learning about safe, considerate, consensual sex, then these figures do not appear to be problematic. However, when the sexual activities that young people contemplate copying include behaviours like: Rough-sex; copying the illegal activities defined as extreme pornography in the UK, (for example actions which are likely to cause damage to breasts or genitalia); yielding to pressure from boyfriends and girlfriends to have sex earlier; or indulging in risky online sexual practices such as posting self-generated material, then the data are concerning. Add in the potential dangers of ‘sextortion’ and falling victim to online sexual predators, then the darker area of online behaviour emulation takes on crucial child protection and safeguarding aspects (Martellozzo, 2015). The key age group for intervention is 13-14, who reported nearly double the rate of assimilating ideas from online pornography, when compared with ages 11-12 (21% to 39%).

Statistically significant gender differences were also found in response to the same question (see Figure 18). Some 44% (106/241) of males, compared to 29% (56/195) of females, reported that the online pornography they had seen gave them ideas about the types of sex they wanted to try out. Again, it is wise to exercise caution when interpreting this finding, particularly as gender roles in initiating or engaging in sexual activity may be at play here both in terms of the young people’s beliefs and how these were reported to the research team.

![Figure 18: Has the online pornography given your ideas about types of sex you want to try out?](image)

<table>
<thead>
<tr>
<th>Has the online pornography given your ideas about types of sex you want to try out?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>Male (N106)</td>
</tr>
<tr>
<td>Female (N56)</td>
</tr>
<tr>
<td>No</td>
</tr>
<tr>
<td>Male (N135)</td>
</tr>
<tr>
<td>Female (N139)</td>
</tr>
</tbody>
</table>

Figure 18: Online pornography has given ideas about types of sex to try out, by gender, N=436

26 χ²(1, N=436)= 10.75, p<0.01, Phi=.16
The focus group findings were broadly consistent with these data. When male respondents were asked if they knew anyone who had tried something they saw on online pornography, they stated:

“Yes. She tried kinky things - like tying to the bed and Punishing” (Male, 13)

“Yes, they tried to have sexual intercourse” (Male, 14)

When the question became more personal (Has pornography ever made you think about trying out something you have seen?), most respondents said no, with very few exceptions:

“Occasionally – yes” (Male, 13)

“Made me think but not actually do it” (Female, 13)

“I sometimes try a thing but it doesn't seem nice but it might just be that you need someone else to do it to you.” (Male, 11)

“If me and my partner like it then we did more but if one of us didnt like it we didnt carry on” (Male, 15-16).

The last two excerpts highlight the different likelihood of engagement in consensual sexual activity with others when comparing the youngest and oldest participants. Age differences were also found when considering whether pornography had influenced their ideas about how women and men should behave sexually. ANOVA findings indicated significant age differences27 where the older respondents were more willing than younger ones to disagree with this proposition and younger participants were most likely to select the neutral option (see Figure 19). Please note that this item was not asked of the 11-12 year olds.

27 F(1, 353)=9.43, p<0.01 mean for 13-14 year olds is 3.29 and for 15-16 year olds is 3.67; ‘not applicable’ results cut from significance tests.
Figure 19: Seeing online pornography has led me to believe that women should act in certain ways during sex, by age groups (N=165, 13-14 year olds and N=228, 15-16 year olds).

Similar results were found for the question asking respondents about how men should behave (see Figure 20). Again, please note that this item was not asked of the 11-12 year olds.

Figure 20: Seeing online pornography led me to believe that men should act in certain ways during sex, by age groups (N=165, 13-14 and N=228, 15-16)

---

28 F(1, 354)=7.8, p=0.01 mean for 13-14 year olds is 3.32 and for 15-16 year olds is 3.67; ‘not applicable’ results cut from significance tests.
These results are evidence of some adolescents’ assimilation of ideas about male and female expected behaviours during physical sex. What the data cannot tell us is whether the ideas that they are assimilating relate to safe, considerate, mutually enjoyable, sexual activities with a consenting partner, or coercive, abusive, violent, exploitative, degrading and potentially harmful or illegal sex. Here too, we cannot know whether their ideas would change with experience.

These findings were elucidated further by the qualitative data which tended to be more negative:

“Well you see what is happening in porn and you almost get worried about other peoples relationships and it puts me off having any future relationships as it is very male dominated and not romantic or trusting - or promoting good relationships” (Female, 13);

“It would put pressure to do things you dont feel comfortable with” (Female, 14);

“They (boys) become a different person - and begin to think that it is alright to act and behave in such ways. The way they talk to others changes as well. When they look at a girl they probably only thinking of that one thing - which isnt how women should be looked at” (Male, 14).

“I feel pornography does not show any consent in the act only shows sex and nothing else to do with mutual relationships” (Female, 12-13).

5.2 Shared Materials

One aspect of pornography’s ubiquity is the ease and speed with which it can be shared and self-generated. Most young people in this sample had neither received, nor sent pornographic material however, 26% (258/1001) of respondents had received online pornography/links, whether or not they had asked to receive them. Much lower proportions reported that they had ever sent pornographic material to someone else 4% (40/918). The discrepancy is clear although hardly surprising as initiating and sending pornographic material to other people is different from either requesting it or receiving it, particularly when it was unsolicited. When the materials are self-generated, this would mean the distribution of images of under 18-year-olds that would be illegal in the UK both to send and to receive.

Other potential explanations for this discrepancy include that some of the pornography received will be have been sent by automated processes (bots) and some by adults and young people not included within the sample but received by those who completed the survey. Nevertheless, the disparity between the sending/receiving figures was something considered further in the stage 3 fieldwork. Most respondents in stage 3 concurred with the proposition that feelings of shame and, or, embarrassment may preclude young people from admitting to sending online pornography, even when guaranteed anonymity and confidentiality as part of
the research process, or even in admitting that they had seen pornography to friends:

“Some people will say they haven’t seen it but they probably have” (Female, 14);

“Yeah - scared of being judged - or being in trouble because they are only young” (Male, 14)

An attitudinal gap may have opened up between those children watching, or seeking online pornography, and those forwarding on links to it, or initiating sending it on. The former has to some extent, shed its social stigma, while the latter, still seems unacceptable to many. Unsolicited receipt of pornography may also be associated with some of the negative responses reported above:

“Often when on Tumblr, someone would have reblogged a post, or a post leading to recommendations of pornographic .gifs. Normally, these take me by surprise and make me feel quite uncomfortable” (Female, 13-15).

“On facebook peoples accounts get hacked and then the hackers post pornographic videos and tag my friends in them and it pops up on my news feed” (Male, 11-12).

“On popular hashtags on Instagram, which younger children can access, there are some explicit pictures. Makes me feel irritated that people can come across these when they don’t want to or have tried to” (Female, 13-14).

During stage 3 of the online focus groups, the question “how does pornography affect children and young people” was asked. Young people were also prompted to think about whether someone they knew may watch too much pornography or if it can become a problem; ‘addiction’ was a recurrent concept, across gender and age:

“they become addicted and they expect what is seen - in real life” (Male, 14)

“they start to become unhealthy and addicted” (Male, 14)

“yes bcus it can become a addiction so i worry about some of my friends spending too long online watching porn than going out being social” (Female, 13)

Young people were also asked who they would speak to if they were worried about using pornography too often. The majority said that they would speak to their friends:

“i would speak to some of my best friends at shcool or some cousins”

“Noone really - id get over it myself - maybe a close friend” (Male,13)

Very few would speak to their parents about it:

“I wouldn’t talk to my family I would be too scared” (Female, 13)

“yes i would be shy to talk to family” (Female, 13)
A couple of respondents said they would seek help online:

“Probably an online service” (Girl, age 15)

“nspcc or child line” (Female, 16)

“I would probably speak to someone who doesn’t know me - so like a service which you can call or online where they won’t ever know me. This way I wouldn’t feel like they would be judging me” (Female, 15)

5.3 Self-Generated Images: ‘Sexting’

In stages 1 and 2 of the research, self-generated imagery emerged as a potential area that warranted further investigation. In stage 3, this was followed up directly and all participants across the research stages have now been sent information regarding the removal of self-generated imagery that they may have inadvertently, or intentionally, posted online (or may have been posted about them).

During the stage 3 focus groups, the question “What does sexting mean to you?” was asked and there seemed to be an agreement among children and young people from all age groups that sexting meant:

“Texting about sex” (Female, 13)

“Texting with sexual comments” (Female, 14)

“Texting someone dirty things” (Male, 14)

“Talking about sex by text” (Female, 12)

It was noted during the interviews that none of the children referred to sexting as “self photographing nude body or body parts and sending to others” (Jaishankar, 2009:21). They seemed to interpret sexting more as writing and sharing explicit messages with people they knew. When asked whether they had ever photographed themselves fully or partially naked, qualitative responses included:

“I filmed myself masturbating and their response made me feel good about myself” (Male, 13-14);

“I fingered myself and sent it to a boy” (Female, 15-16)

“I was horny and sent a picture of myself to my boyfriend at the time. I regretted it the day after; it was dumb. I broke off the relationship because of it. He didn’t pressure me into it” (Female 15-16)

The survey data indicated that the vast majority of children and young people did not report having taken such ‘selfies’, see Table 5. Of the 135 who reported that they had, 123 had taken topless pictures of themselves (13% of the 948 who answered this question) and 27 (3% of those answering the question) had taken fully naked
pictures of themselves. As can be seen in Table 5, boys were more likely to engage in this activity than girls and the most common form of this kind of selfie is “top half naked”. However, there is a more even gender split when it comes to the few young people who have sent fully naked images. One or two young people who do not identify in a gender binary way also reported engaging in this activity.

<table>
<thead>
<tr>
<th></th>
<th>Fully naked</th>
<th>Top half naked</th>
<th>Bottom half naked</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>No Total</td>
<td>97.2%</td>
<td>921</td>
<td>87</td>
</tr>
<tr>
<td>Yes Total</td>
<td>2.8%</td>
<td>27</td>
<td>13.0%</td>
</tr>
<tr>
<td>Boys Yes</td>
<td>1.4%</td>
<td>13</td>
<td>9.3%</td>
</tr>
<tr>
<td>Girls Yes</td>
<td>1.4%</td>
<td>13</td>
<td>3.5%</td>
</tr>
<tr>
<td>Non-Binary Yes</td>
<td>0.1%</td>
<td>1</td>
<td>0.2%</td>
</tr>
</tbody>
</table>

Table 5: Photographing yourself naked or semi-naked, N=948, (some selected more than one answer).

It is illegal for children to create such pictures, transmit them to others, and for others to possess, download, store or view them. Follow-up questions indicated that 41% (55/135) kept the images to themselves, although 55% (74/135) shared the images. This latter figure is concerning as more than half of the children who took naked photos of their bodies or body parts, had either physically shown the images to someone else, or had transmitted images online to one or more contacts. This is despite a shrewd understanding of the potential consequences, in school at least:

“Our rep will be ruined: (Male, 14)

“They could save it. And its illegal as its classed as distribution of child pornography if your under 18 - even if its yourself” (Male, 13)

“You have no control over it once sent” (Female, 13)

“Blackmail” (Female, 15)

“If you send it to one person - the entire school will have seen it by the next day” (Female, 16)

When trying to extrapolate from these data, it is important to note that those reporting having taken a fully naked image of themselves constituted less than 3% of the entire sample (27/1001), a proportion that declines if asked whether they had sent it online to another person, or shown it physically to anyone else. To gauge the extent of a potential problem, it may be useful to consider that there are approximately 2.7 million schoolchildren aged 11-15 in England alone (Department of Education, 2015). The proportions considered in the survey data might therefore equate to approximately 72,900 young people potentially taking fully naked images of themselves. If some of them lost an insecure device, or had it stolen, or hacked, then those images may be circulated further afield.
During the online focus groups, the question: “Would you be able to remove an intimate image of yourself or would you need to get help? (E.g. ChildLine/IWF partnership)” was asked across all age groups and only the older children (15-16) knew that this was possible:

“no there should be more help” (Male, 11)

“if reported early enough, it is possible” (Male, 16)

“I think it is something [removing the photos] you can do yourself” (Male, 15)

However, nobody knew how to institute take down actions and where to go should they become worried about their own intimate images. They all felt that not enough information is available to children and young people on this issue. This finding prompted the research team to revise debriefing materials to ensure that both young people and schools received clear guidance on how to institute “take down” requests regarding self-generated naked images.

The survey also asked respondents why they created naked and semi-naked pictures of themselves. Of the 135 young people who reported self-generating naked or semi-naked images, 69% (93/135) reported that they wanted to do so, although 20% (27/135) did not. Again, the latter figure is the more worrying, with one in five self-taken naked/semi-naked pictures of children, seeming to derive from some form of pressure or coercion. Two credible external sources of such pressure may be: Boyfriends or girlfriends pushing for sexually explicit images of their adolescent partners; or, online contacts seeking to extract indecent images of children from victims, potentially as part of their online grooming or sexual abuse activities. Such possibilities are perhaps supported by the finding that 36% of children, who took naked or semi-naked self-photographs (49/135), reported that they had been asked to show these images to someone online, presumably to be transmitted to the requester, over the internet. Although numbers are low, there is a significant gender difference. Girls reported sharing images after being asked to (22/37) whereas boys reported sharing images without being asked (67/96)\(^\text{29}\). When respondents who had taken naked or semi-naked self-images were asked if they knew the person to whom they showed the images, 61% of those who shared them (30/49) replied that they did, indicating that the bulk of these images probably remained localised within the child-producer’s social circle, or boyfriend/girlfriend (Figure 21).

\(^{29}\chi^2(1, \text{N=129})= 12.61, \text{p}<0.01, \text{Phi}=.31 \) (excluding those who said that they would prefer not to answer the question)
Figure 21: Did respondents know the people to whom they transmitted naked or semi-naked images? N=49

This leaves 31% (or 15 young people) who did not know the person to whom they showed the image. These findings can be considered in the context of other research. For example, one study suggests that the original recipients, even if known to the young people, may not be the last recipient as up to 60% of sexually explicit ‘sexts’ have been estimated to be disseminated beyond the original recipient (Bowlin, 2013). Also, Stanley et al. (2016) have specifically considered the roles of potential coercion in sexting. Their large-scale, multi-country study indicates that the more boys use pornography and the more often that they use it, the more likely they are to put pressure on girls to send them self-generated materials.

Each naked image passed on potentially constitutes a criminal act, that of possessing, transmitting, viewing or downloading indecent images of children. Of those young people who had taken naked or semi-naked pictures of themselves, 14% (19/135), reported that they had shared the image with another person without asking the recipient’s permission first, this has the potential to draw the recipient into illegal behaviour. Also, this is a gross breach of ‘netiquette’, exactly the kind of inappropriate (and here illegal too) online behaviour that invades children’s privacy, and exacerbates their negative feelings towards online pornography.

Widening the scope beyond taking naked/semi-naked photographs of themselves, into the sphere of taking similar pictures of others, Table 6 reveals that approximately 4% of all who answered the question (34/948) had taken topless pictures of someone else. Numbers are too low to disaggregate who they took pictures of, but from a risk and harm perspective, if they had taken a picture of another child of similar age to themselves then, they could have created indecent images of children. Even if this was of a boy’s bare chest, such an image could constitute a Level 1 prohibited image in UK law (with level 5 being the most serious), constituting erotic posing with no sexual activity (Sentencing Council, 2012). Thirteen of the 948 respondents had taken pictures of someone else naked from the waist down. Again, although the percentage is low (just over 1%), it still represents 13
children potentially committing an illegal act when the subject in the image was a similarly aged child under the age of 18.

<table>
<thead>
<tr>
<th>Fully naked</th>
<th>Top half naked</th>
<th>Bottom half naked</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>No</td>
<td>98.8</td>
<td>96.4</td>
</tr>
<tr>
<td>Total</td>
<td>937</td>
<td>914</td>
</tr>
<tr>
<td>Yes</td>
<td>1.2</td>
<td>3.6</td>
</tr>
<tr>
<td>Total</td>
<td>11</td>
<td>34</td>
</tr>
<tr>
<td>Boys Yes</td>
<td>0.5</td>
<td>2.1</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>20</td>
</tr>
<tr>
<td>Girls Yes</td>
<td>0.4</td>
<td>1.3</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>Non-Binary Yes</td>
<td>0.2</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

Table 6: Photographing someone else naked or semi-naked N=948

This paper now turns to more sexually explicit and kinetic material, that of sending someone online, a picture of a young person performing a sexual act, either solo or with others. The qualitative extracts have already touched upon this activity but we turn here to responses when young people were asked directly about such activity. The vast majority (95%) did not report sharing sexually explicit material. However, 25 (2.5% of the sample) stated that they had sent a picture of themselves performing a sexual act to an online contact and 23 young people indicated that they would prefer not to answer the question. As already noted, all the under 18s who sent on those materials are technically guilty of disseminating an indecent image of a child. Current police guidance (Home Office, 2016) and Crown Prosecution Service policy (CPS, 2016) are not to prosecute consensual transmission or possession between older children. The emphasis is one of safeguarding, health and online safety promotion, rather than the criminalizing of young people and placing those involved onto the sex offenders register. However similar cases have been prosecuted in the USA. This reinforces the view that sharing self-generated images has become a more normal part of modern growing-up, even if it is not all pervasive (Espinoza, 2016).

When asked if respondents had ever seen a naked body or intimate body part of someone they actually knew, the results are displayed in Table 7. Seventy-three (8% of those who answered the question) had seen such an image of a close personal friend; 15% (144/961) had seen that of an acquaintance; 3% (31/961) saw images of their partners and 8% (77/961), of someone they knew as an online only contact.

<table>
<thead>
<tr>
<th>A close personal friend</th>
<th>An acquaintance</th>
<th>Your partner</th>
<th>A person you know only online</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>No Yes</td>
<td>73</td>
<td>7.6</td>
<td>144</td>
</tr>
<tr>
<td>No</td>
<td>864</td>
<td>89.9</td>
<td>788</td>
</tr>
<tr>
<td>Doesn’t apply</td>
<td>24</td>
<td>2.5</td>
<td>29</td>
</tr>
</tbody>
</table>

Table 7: Seen an image of a naked body, or private body part, that belonged to someone else, N=961

30 Paragraph 50, CPS Guidelines on prosecuting cases involving communications sent via social media
These findings do not show that sharing naked images of themselves or of others is prevalent in the 11-16 year-old cohort. The 15% who had seen a sexual or intimate image of one of their acquaintances is the highest proportion for all the combinations of ‘sexting’ investigated. Many activities around self-generated images are reported in much lower proportions. The activity may be more associated with the older children considered here and, or, may be more likely once they are sexual active. It is also important to note that the findings reported earlier indicated that young people’s definition of ‘sexting’ was more about erotic text than it was about images. Finally, it is noteworthy that the proportion of young people reporting that they have sent or received sexually explicit text messages is lower in the current study than in the recent large survey of young people aged 14-17 in five EU countries (Stanley, et al., 2016). This is almost certainly because that study concentrated on heavy users of pornography so the differences here are likely to be methodological but the combined findings suggest that more research is required.
5.4 Summary of Key Findings: Risks and harms

1) Older respondents were more likely to report that online pornography had given them ideas about sexual practices that they wanted to act out;

2) Nearly double the proportion of 13-14 year olds (39%) reported assimilating ideas from online pornography compared to the 11-12 year olds (21%);

3) Some 44% (106/241) of males, compared to 29% (56/195) of females, reported that the online pornography they had seen had given them ideas about the types of sex they wanted to try out;

4) Twenty-six percent (258/1001) of respondents had received online pornography or links to it;

5) Four percent (40/918) reported that they had ever sent pornography online, or links to it;

6) Young people seemed to interpret ‘sexting’ more as writing and sharing sexually explicit or intimate words to people they know than as the sharing of intimate images;

7) The vast majority of children and young people did not report having taken intimate ‘selfies’, however;
   a. Thirteen percent (123) had taken topless pictures of themselves (boys and girls), and three percent (27) had taken fully naked pictures of themselves;
   b. Forty-one percent (55/135) kept these images to themselves, 55% (74/135) shared them with others;
   c. When respondents who had taken naked self-images were asked if they knew the person who they showed them to, the majority of respondents who had taken naked self-images 61% (30/49) reported that they knew the person they showed them to;
   d. Some reported passing them on to people they did not know (31% or 15/49). This was a matter considered in terms of child protection and safeguarding;

8) Just over a third of children, who took naked or semi-naked self-photographs (49/135), reported that they had been asked to show these images to someone online;

9) Very small proportions of young people in the sample overall reported that they had:
   a. taken a fully naked photograph of others 1% (11/948);
   b. taken top-half naked images of others 4% (34/948);
   c. taken pictures of someone else naked from the waist down 1% (13/948);

10) Twenty-five children had sent a picture of themselves performing a sexual act;

11) Few young people in the focus groups were confident about how to institute “take down” actions to remove online intimate images.
Young People as Critical Users of Online Pornography

The research gathered opinions, attitudes and experiences from over 1000 young people, in three separate stages. The design and implementation of measures was closely monitored and the over-riding concern throughout was for young people’s rights and sensitivities as research participants. Yet, it should be noted that this research is about young people’s experiences of materials that are not intended for their use and are not aimed at an audience of 11-16 year olds. As such, the decision was taken very early in the research that this project would not ask young people about any specific types of pornography, nor would the research describe any types of pornography that young people may not otherwise have known about. This means that nothing can be said about what those who have reported viewing pornography have actually seen. This must be borne in mind when trying to interpret the research, particularly in attempting to unpick findings that seem at first glance to be contradictory. Readers should also keep in mind the developmental, cognitive and social changes that are at play within the young people who participated in this sample. For example, there is an increasing body of evidence to suggest that risk taking behaviours may be more likely in adolescents, particularly when social and emotional arousal are high (e.g. Blakemore & Robbins, 2012; Wolf et al., 2013).

This section returns to items regarding how pornography may have influenced young people’s beliefs. Participants were given 10 statements to consider and rate according to how much they agreed or disagreed with each. The mean scores for that question are reported in Table 8, broken down by gender. The lower the mean score, the more agreement there is for the particular item (rated from 1—strongly agree to 5—strongly disagree). As can be seen, there were some positive ideas about sexual behaviour that were endorsed by young people and some negative ideas about sexual behaviour that were largely rejected, irrespective of gender. For example, both boys and girls rejected the idea that either men or women should be coerced into sex and they are both generally positive about the notion that sex should be safe and enjoyable for all.

On their own, such attitudes are relatively uncontentious. However, this question asked young people about whether pornography had led them to believe these things. If taken at face value, this would point to some potentially redeeming features of pornography found as young people explored their developing sexuality. Alternatively, it is possible to argue that by asking young people to consider what they feel about pornography, the research has itself required them to rationalise and think about it in ways that they might not otherwise have done.

It is thus possible that whether positive or negative, part of what we are seeing in these findings is a post-hoc rationalisation, superimposed to explain their previous behaviour and activity. At a time in their development when adolescents have much to learn and are keen to experiment, their ideas and responses may be in part, a way to justify their desire to explore pornography further (this justification could have
been for themselves and for the researchers). This section provides additional context for those findings, starting with the table below.

<table>
<thead>
<tr>
<th>Item</th>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decreased my respect for women that have sex with many people.</td>
<td>Male</td>
<td>200</td>
<td>3.43</td>
<td>1.16</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>151</td>
<td>3.35</td>
<td>1.28</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>351</td>
<td>3.39</td>
<td>1.21</td>
</tr>
<tr>
<td>Decreased my respect for men that have sex with many people.</td>
<td>Male</td>
<td>198</td>
<td>3.55</td>
<td>1.08</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>150</td>
<td>3.37</td>
<td>1.22</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>348</td>
<td>3.47</td>
<td>1.15</td>
</tr>
<tr>
<td>Helped me to learn about safe sex.</td>
<td>Male</td>
<td>204</td>
<td>3.46</td>
<td>1.16</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>156</td>
<td>3.90</td>
<td>1.05</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>360</td>
<td>3.65</td>
<td>1.13</td>
</tr>
<tr>
<td>Led me to believe that women should act in certain ways during sex.</td>
<td>Male</td>
<td>201</td>
<td>3.59</td>
<td>1.14</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>153</td>
<td>3.42</td>
<td>1.20</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>354</td>
<td>3.52</td>
<td>1.17</td>
</tr>
<tr>
<td>Led me to believe that men should act in certain ways during sex.</td>
<td>Male</td>
<td>200</td>
<td>3.55</td>
<td>1.16</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>155</td>
<td>3.49</td>
<td>1.15</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>355</td>
<td>3.52</td>
<td>1.16</td>
</tr>
<tr>
<td>Led me to believe that women should sometimes be pressured into having sex in certain ways.</td>
<td>Male</td>
<td>201</td>
<td>4.15</td>
<td>1.07</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>156</td>
<td>3.94</td>
<td>1.16</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>357</td>
<td>4.06</td>
<td>1.11</td>
</tr>
<tr>
<td>Led me to believe that men should sometimes be pressured into having sex in certain ways.</td>
<td>Male</td>
<td>199</td>
<td>4.18</td>
<td>0.96</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>154</td>
<td>4.10</td>
<td>0.93</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>353</td>
<td>4.15</td>
<td>0.95</td>
</tr>
<tr>
<td>Led me to believe that sexual activities should be enjoyable for everyone involved.</td>
<td>Male</td>
<td>203</td>
<td>2.26</td>
<td>1.06</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>151</td>
<td>2.66</td>
<td>1.21</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>354</td>
<td>2.43</td>
<td>1.14</td>
</tr>
<tr>
<td>Led me to believe that sexual activities should be safe for everyone involved.</td>
<td>Male</td>
<td>201</td>
<td>2.27</td>
<td>1.15</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>150</td>
<td>2.95</td>
<td>1.23</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>351</td>
<td>2.56</td>
<td>1.23</td>
</tr>
<tr>
<td>Led me to believe that sexual activities should be agreed to by everyone involved.</td>
<td>Male</td>
<td>203</td>
<td>2.18</td>
<td>1.16</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>150</td>
<td>2.71</td>
<td>1.31</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>353</td>
<td>2.41</td>
<td>1.25</td>
</tr>
</tbody>
</table>

Table 8: Beliefs affected by pornography from 13-16 year olds who had seen it.

Firstly, it should be noted that the neutral score of neither agreeing nor disagreeing, was three. Thus, anything lower than three indicates movement towards agreement with a statement and anything over three indicates movement towards disagreement. The statistically significant gender differences shown in bold were explored earlier in this paper. Although differences are relatively modest, they generally show that boys are more positive and girls more ambivalent or negative towards online pornography. For example, 25% (59/241) of the males compared to
8% (16/195) of females reported that the online pornography they have seen has shown them about safe sex although these are clearly a minority in both groups (see Figure 22).

![Figure 22: Cross-tabulation between gender and ‘has the online pornography that you have seen shown you about safe sex?’ N=241 males; N= females 195](image)

Significant gender differences were also found in regard to the related question asking about giving consent. The results show that 23% (55/241) of the males answering the question compared to 13% (25/195) of females, reported that online pornography has shown them about giving consent. Again, it should be noted that in both cases, the majority of young people did not think that pornography had shown them about consent. This was also considered in the focus groups:

“Consent is not shown [in online pornography] the man just does as he pleases without gaining consent” (Female, 13);

“Both the man and woman have always seemed happy with what is happening when I have seen anything” (Female, 14);

“They [both men and women] just go ahead and do it” (Male, 16);

“It’s not usually [shown] - they just have sex or the man usually dominates the woman” (Male, 15)

Other explanations for the findings reported in Table 8 can be considered in the context of what else may have informed young people’s attitudes towards sex and relationships. In particular, the potential influence of schools and families. There was limited evidence about the roles of parents when young people reported experiencing problems with pornography and we cannot know whether the

---

31 Giving consent χ²(1, N=436)= 7.20, p<0.01, Phi=.13. Similar findings were observed when young people were asked about gaining consent, however these did not reach statistical significance.
conversations or reported problems came first. Whether or not they had spoken with parents made no difference to the answers reported above. In contrast, there were statistically significant relationships with what had happened in school and young people’s beliefs about pornography, these are presented next.

6.1 Educational Mitigations

Young people’s assessments of what they have learned from pornography may be expected to be associated with their general awareness and experiences online. Potentially, they may also be influenced by material considered in school. The first noteworthy finding here is that not all young people had formal school education on these areas and it did not appear to be a frequently taught subject anywhere:

“There’s been a total lack of sex education in my school.” (Female, 16)

“I think it does yes, as I’m not going to lie, porn really opened my eyes - I have never been taught sex ed. in school so it was kind of up to me to find out all about it.” (Male, age 15)

“I had about 4 lessons in 5 years of school.” (Male, 16)

Individual T-tests were run using participants who reported that their teachers had talked to them about online pornography during sex education or PSHE classes in comparison with those young people whose teachers had apparently not run such lessons. The T-tests were used to assess whether beliefs ascribed to pornography were related to whether or not young people remembered teachers talking with them about pornography at all, as well as the extent of education they may have received about sex and relationships. The findings begin to highlight the impact that teaching may be having on young people as critical users, facilitating their development and safety online. Influences by teachers were observed among the children who had seen online pornography. Fifty-four percent (101/186) of 13-16 year olds who had been spoken to by teachers about online pornography agreed that sexual activity should be enjoyable versus 46% (59/129) not spoken to (this fell just short of statistical significance).

Figure 23 shows a cross tabulation of two key questions: Firstly, ‘have any of your teachers ever talked with you about online pornography, during sex education or PSHE classes?’ Secondly, ‘seeing online pornography has led me to believe that sexual activities should be ‘agreed to by everyone involved’’. It shows that 55% (102/186) of participants whose teachers had talked to them about online pornography agreed that sexual activity should be enjoyable versus 46% (59/129) not spoken to (this fell just short of statistical significance).

---

32 T(285)=1.91, p=0.057 mean: had lessons=2.35 mean: not had lessons=2.62; “not applicable” excluded from analysis.  
33 T(285)=2.07, p<0.05, mean: had lessons=2.29, mean: not had lessons=2.60 ; “not applicable” excluded from analysis
A statistically significant result was also found with a similar comparison on the item ‘...led me to believe that sexual activities should be safe for everyone involved’\(^{34}\). In this case, 48% of participants whose teachers had talked to them about online pornography (90/186) either agreed or strongly agreed with this sentiment compared to 37% whose teachers had not (48/129). Statistically significant results were also found for the potential impact of teachers on whether pornography had decreased young people’s respect for women who had multiple partners. This was less evident for young men (just short of statistical significance). The research participants tended to disagree with the idea that online pornography had decreased their respect for people who had sex with many others. Being neutral about the concept was more common among those who had had some lessons\(^{35}\).

Before interpreting these findings further, it is important to note related findings. These include that participants whose teachers had talked to them about online pornography during sex education or PSHE classes also reported receiving a significantly higher number of school sexual education lessons\(^{36}\) than their counterparts, see Table 9.

---

\(^{34}\) T(282)=2.21, p<0.05, mean: had lessons=2.46, mean: not had lessons=2.79 ; “not applicable” excluded from analysis

\(^{35}\) Decreased respect for women with multiple partners, T(282)=2.16, p<0.05 mean: had lessons=3.30, mean: not had lessons=3.62; Decreased respect for men with multiple partners, T(279)=1.91 p=0.058 mean: had lessons=3.41, mean: not had lessons=3.67 ; “not applicable” was excluded from analyses.

\(^{36}\) \(\chi^2(3, N=651)= 76.72, p<0.01, \text{Phi}= .34\)
Formal Sex and Relationships Lessons Received

<table>
<thead>
<tr>
<th>Had lessons on pornography</th>
<th>None to Few Lessons (0-2)</th>
<th>Few to Medium (3-5)</th>
<th>Medium to Many (6-7)</th>
<th>Many Lessons (8-11+)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N = 361</td>
<td>68</td>
<td>109</td>
<td>74</td>
<td>110</td>
</tr>
<tr>
<td>%</td>
<td>18.8%</td>
<td>30.2%</td>
<td>20.5%</td>
<td>30.5%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No lessons on pornography</th>
<th>None to Few Lessons (0-2)</th>
<th>Few to Medium (3-5)</th>
<th>Medium to Many (6-7)</th>
<th>Many Lessons (8-11+)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N=290</td>
<td>133</td>
<td>94</td>
<td>33</td>
<td>30</td>
</tr>
<tr>
<td>%</td>
<td>45.9%</td>
<td>32.4%</td>
<td>11.4%</td>
<td>10.3%</td>
</tr>
</tbody>
</table>

| Total                      | 201                       | 203                 | 107                  | 140                  |
| % of all respondents       | 30.9%                     | 31.2%               | 16.4%                | 21.5%                |

Table 9: Teachers talking about online pornography, during sex education or PSHE classes, N=651

Messages that young people may take away from pornography and how they interpret it are also related to their age and possible maturity. Statistically significant age differences\(^\text{37}\) were found in response to the question “has the online pornography that you have seen shown you about safe sex?” The findings show that the older cohorts reported that the online pornography they have seen has shown them about safe sex in higher proportions than the youngest group, i.e. six percent of 11-12 year olds, 22% of 13-14 year olds and 18% of 15-16 year olds (Figure 24).

![Figure 24: Cross-tabulation between age group and 'has the online pornography that you have seen shown you about safe sex?' N=73, ages 11-12; N=149, ages 13-14; N= 215, ages 15-16](image)

Does this mean that younger children are more likely to be critically aware about pornography than older children? It is possible that as older children are more

\(^{37}\) \(\chi^2(2, N=473)= 9.64, p<0.01, \Phi=.15\)
exposed to pornography, they become more desensitised to it and thus less likely to be negative about it. This would be an indication of harmful attitude formation with potential serious ramifications for behaviour. It is also possible that with maturity, comes more selectivity in what is seen and what messages are taken from pornography. Thus, it might be possible to interpret the age findings here as demonstrating greater critical awareness, particularly if young people have also received more lessons about relationships and have more direct experience in general. This might be a more positive outcome. However, neither possible interpretation can be tested in the current data set. It would require prospective, longitudinal information, richer data about what is being viewed and how it is assimilated. Such research would pose significant practical and ethical challenges.

The current dataset does give us some indications of the importance of the context in which pornography is taught in the classroom, both in terms of gender differences and possible maturation effects. Firstly, it should be noted that of the overall sample, 737 participants remembered some sex education lessons, 254 (25% of the sample as a whole or 34% of this sub-set) reported that they have received an average of 3-5 school sex education lessons, 60 (6% of the whole sample) reported that they had received none at all, and 186 (19% of the whole sample) were not sure of how many, if any lessons they had received.

Next, we need to consider potential impacts of teaching about online pornography specifically and sex education in general, in the context of young people’s responses to online pornography. This is not a simple matter and reflects the participants’ different experiences and attitudes. In some respects, they seem to be generally critical about pornography, with most of them feeling that it does not provide a good model for gaining consent, nor of safe sex (Figure 22). Relatedly, gender differences that are consistent with the wider literature were also found and indicate that the young people who do think that pornography has taught them about consent and safe sex are more likely to be male than female. Conversely, about half the sample believed that online pornography had helped them to believe that sexual activity should be safe, enjoyable and agreeable to all concerned. These positive beliefs were somewhat more likely when online pornography had reportedly been considered in a classroom setting (Figure 23).

One interpretation of the findings could be that by teaching about pornography, a greater proportion of pupils are likely to find positive aspects to it, and presumably will find it more acceptable as a result. This may be a concern similar to one felt by some parents and could lead to reluctance to discuss online pornography or healthy sexual relationships at all. It is suggested that it is not the most plausible response to the findings presented here and to simply ignore online pornography would do young people a disservice. As one young person said in the stage 3 focus groups:

“thank you for inviting me its helped me learn that I’m not the only person with the same thoughts about this topic.” (Female, 13-14)
The prevalence of online pornography means that it is very unlikely that young people will be unaware of its existence, nor that it can be filtered out of their lives entirely (Nash, et al., 2016). This is further reinforced by the findings reported earlier in this report indicating that many young people find pornography by accident, or that it is sent on to them. With well-considered educational interventions and properly supported public health information, it may be possible to help young people to become more critical users of online pornography between first viewing it and subsequently seeing it. Without such education and intervention, it is possible that they will become increasingly inured to online pornography and that gendered interpretations and expectations will go unchallenged.

6.2 Do Children and Young People Favour Intervention?

In the first two stages of the research, participants made a number of comments that warranted further exploration. For example, this was an additional comment made during the stage 2 survey:

“I don't think that online pornography should be dismissed as the internet becomes more accessible to everyone as such a young age, I do think that stricter guidelines should be placed and that people should learn about the effects of pornography before and after being exposed to the content' (Male, 16)

As a form of triangulation, and as part of the Delphi informed approach taken, several of these ideas were tested during the third stage focus groups. The opportunity was also taken to ask young people directly about whether they felt pornography access should be limited and they were asked about age verification:

“yes its needs to be more regualted now everybody has phones and tablets u can go past a wifi hotspot and access any thing” (Female, 13)

Young people in focus groups generally supported age verification but pointed out its limitations in terms of being able to access their parents’ credit cards and also asked:

“why can people have sex at 16 and get married but can not legally access porn at 16” (Female, 13)

The online discussion led to consensus about the importance of education. Many participants emphasised the need for a radical revision of their school sex and relationships curriculum, in order to take better account of their burgeoning needs for knowledge, to satisfy their curiosity and to help them to stay safe, both physically and online.

“I think it would seem more secret/temping if you didnt talk about it at school” (Female, 12)

“My mum had me when she was young and always says she wishes more information was available” (Female, 14)
A strong view that was voiced across both genders and all age groups was related to open discussion on online pornography in all schools, religious and secular:

“It should whatever type of school - whetehr catholic protestant muslim or jewish should have pshe” (Female, 14)

This was modulated somewhat by recognition that it may not be the most popular subject or the easiest to deliver:

“Sex ed doesnt really mention porn so I think it should be but no one would take it seriously and find it awkward” (Male, 15)

“No. It is a joke at our school. No-one pays attention as everyone sees it as a bunk lesson - as there is no exam” (Male, 13)

“yeah - but each year they just tend to repeat information - making the class become useless” (Male, 14)

“I think at this age - were all just immature about this sort of thing” (Male, 14)

The respondents demonstrated a keen awareness of the difficulties that addressing sex and pornography raise for teachers and children and in terms of how discussions about pornography should be run. So that it is not too awkward for children and teachers, the respondents suggested:

“I think it would start awkward but would help to be told that things you see arent always normal or expected” (Male, 13)

“[It would help to] have a specialist person do the classroom discussion and not a teacher that you see all the time” (Female, 13)

“Once our teacher did a lesson about sexting and made us come up with a rap about the dangers - we worked it groups and it was a fun lesson with a positive outcome; I think a similar thing could be done with porn” (Male, 15)

“Maybe they should call it sex not pornography so kids dont go looking for it” (Female, 12)

“I think both boys and girl should be in same group” (Female, 12)

This last comment expressed a counter veiling view within the focus group concerned and was in response to other suggestions that such education should be in groups divided by male/female:

“But then if they have the genders in different classes - their education may vary (also non-binary people would feel awkward)” (Female, 15)

“Maybe get some famous youtuber to give out advice as people such a zoella have been a big inspiration to many teenage girl” (Female, 14)
“You don’t learn how to have bisexual/Lesbian sex in a sex ed class. It is hard for gay girls or guys to learn things, so reading a blog or watching a few porno’s you can at least learn a basic move or see how it is actually done if you had no idea” (Female, 13-14).

Participants were also asked what they would design, if they were offered the chance to develop online materials of their own. Short videos were suggested, to be hosted on an easily accessible website or an app:

“different info for different ages. Have short videos and info on who to contact if you need more help or have questions” (Female, 12)

“but with someone presenting it from tv” (Male, 11)

“im not sure about the look but it would be accessible to everyone - but maybe just teenagers to make sure they are ready” (Female, 15)

Some young people felt that the resource should not be online or were concerned that it should be:

“private so no one know what question you asked” (Male, 12)

“It shouldn’t be on internet” (Female, 12)

“i think a website would just add more to the web that young people can get confused with” (Male, 14)

These findings demonstrate that young people have clear ideas about how interventions could be constructed and delivered and perhaps most importantly, that they would welcome such interventions.
6.3 Summary of Key Findings: Young people as critical users of pornography

1) Focus group participants suggested that formal school education on issues surrounding online pornography can help to mitigate the harmful attitudes towards women and sexual relationships that can stem from exposure to online pornography;

2) Young people who have had education about online pornography within school may be less likely to be negatively influenced by online pornography than young people who have not had lessons about online pornography;

3) Sex and relationships education may be associated with greater awareness of the issues surrounding pornography;

4) The online discussion led to consensus about the importance of education and the need for it to be relevant and engaging;

5) Young people wanted access to information on sex and relationships and about pornography in ways that would be safe, private and credible;

6) This was modulated somewhat by recognition that it may not be the most popular subject or the easiest to deliver;
   a) Awkwardness could be mitigated against with specialist provision, particularly where young people are encouraged to co-create their learning, e.g. young people suggested short videos, to be hosted on an easily accessible website or an app;
   b) Materials need to be age appropriate and to take into account young people’s gender identities;

7) When directly asked about age verification, young people were generally in favour but suggest that it was likely to be of limited efficacy.
7 Dataset Limitations

Having presented the key research findings, this report now considers some of the limitations of the dataset, then moves on to implications of the findings.

The research was rigorously designed and conducted and stage 2 is based on a large sample that is fairly representative of the UK’s 11-16 year olds. This is the first such study, to our knowledge. These data were supplemented and enhanced by rich qualitative findings from a smaller, cross UK set of online focus groups and an online discussion forum. However, all the data are cross sectional, provide limited access to causal pathways and rely on self-report.

Young people were asked to reflect back on their first exposure to online pornography and to judge its verisimilitude. They were asked to think about how they felt about pornography initially and currently and what they think that they may have taken from it/feel about it overall. The research team are grateful to the young people who genuinely seem to have answered honestly and openly about their feelings and experiences. However, there was no follow up over time and there is no way to assess either, whether their feelings or experiences change, nor how they might change in the future. Additionally, by asking children about how they felt on first exposure to pornography and how they feel now, they may have inferred that they were expected to feel differently and to rationalise in ways that they may not otherwise have done.

Self-report requires both self-insight and self-disclosure. The breadth of comments made and general care with which the survey was filled out were positive indicators of young people’s engagement. Their online etiquette during focus groups likewise showed an enthusiasm and willingness to engage openly with the research. However, it is possible that they may have been unwilling to disclose activity in response to some of the more intrusive questions asked.

These limitations are acknowledged to help maintain a cautionary note in drawing inferences from this research report. The research has enabled conclusions to be drawn about associations between young people’s attitudes, experiences and responses to online pornography. These are further elucidated by children’s own insights into how their cognitive and affective responses may have influenced their behaviours, both as individuals and with one another. The research cannot talk about observable outcomes or impacts of online pornography. That would require longitudinal data, ideally within a cohort or other prospective study. If new educational tools and other interventions were to be considered, then these would be amenable to testing via a randomised control trial, or matched comparison design.
8 Policy Implications

This section is intended to draw out implications of the research. It is hoped that this will prompt further discussion about how best to support young people and facilitate their safe development, online and in the real world. There are potential opportunities for involvement for key stakeholders including the internet industry and NGOs, as well as for academics and government. There is a role for UKCCIS in co-ordinating a stakeholder response and actions.

1) An important finding was reported at the outset of this report and is that approximately half of the young people who participated in this research did not report viewing online pornography at all. Not all secondary school children seek out pornography, irrespective of how they identify in terms of gender. The comparatively low proportion who actually viewed pornography in this study may be related the younger age range of this sample, 11-16 rather than older adolescents e.g. 14-17 or rather than surveys of young adults, e.g. 18-25 year olds.

2) Although the proportions were lower in this sample than in others, pornography was still something that many young people reported seeing, whether intentionally or not:
   a. Older research participants were less likely to be shocked by pornography and more likely to be aroused by it;
   b. In keeping with other literature, this study indicates that boys are more likely than girls to actively search for pornography and to do so more frequently and regularly;
   c. Although some girls do choose to use pornography, these are in significantly lower proportions than boys;
   d. Proportionally more of the boys were likely to be positive about pornography or to see it as a normal part of their lives than the proportions of girls;
   e. Proportionally more of the girls were likely to be concerned about pornography and more negative about it than the proportions of boys;
   f. Although most young people saw pornography as being different from reality, there were some who saw it as realistic and something to be emulated;
   g. Attention needs to be paid to the messages that boys take from pornography, and what their expectations are for the girls and other boys with whom they subsequently interact;
   h. Similarly, attention needs to be paid to the messages that girls take from pornography and how they may be being influenced within potential or actual sexual relationships;

3) If intervention is to be considered, then young people wanted approaches that:
   a. foster safe, secure online engagement;
   b. are private and not entirely online;
c. are gender and age appropriate;

d. help teachers and, or, specialised staff to co-create learning with young people;

e. support them in ways that acknowledge their social-sexual development and perceived peer group expectations;

4) Young people also highlighted variability in educational experiences in relation to online pornography. Improving their access to relevant sex and relationship education in safe, multi-faceted ways may enhance young people’s abilities to challenge pornography as critically developed viewers. Specialist PSHE teachers, and ways to enhance online confidentiality, safety and security, could be better incorporated within educational provision in ways that challenge disjointed deficiencies of current practices;

5) Approaches telling young people to just not look, or that try to prevent them from accessing pornography via age verification were considered by the participants and sometimes suggested as something for children younger than the particular participant, or in some other way that did not affect individual respondents directly;

   a. Implications here are that a determined young person could circumvent controls, but that better regulation may help to minimise accidental exposure;

   b. The research suggests that some young people are concerned or worried by their exposure to pornography. These young people may require more proactive support and advice and include those who have been sent pornography that was not wanted as well as those who found material that was unexpected or otherwise troubling;

8) There is a definitional issue in respect of sexting in that young people do not recognise the sending of intimate images as the predominant form of sexting, nor that such images could be illegal. Children and young people seem to have a particular understanding of ‘sexting’ that is not shared by adults. This would imply that policy-making and education programmes in regard to young people exchanging naked/semi-naked pictures should be based on a better understanding of what young people are doing, and the ways in which they describe their behaviours;

6) There are a number of implications of this research that can only be tested longitudinally. Also, if intervention is to be made, then such intervention should be evaluated for efficacy;

   a. More research is needed, centred on young people, to test directly the impacts and outcomes of their viewing of pornography on social, sexual and cognitive development.
9 References


Horvath, M. A. H., Aly, L., Massey, K., Pina, Scally, M. & Adler, J. R. (2013). “Basically... porn is everywhere” A Rapid Evidence Assessment of the effects that
access and exposure to pornography have on children and young people.
http://www.childrenscommissioner.gov.uk/publications/basicallyporn-everywhere-
rapid-evidence-assessment-effects-access-and-exposure

Content. Retrieved from
https://www.iwf.org.uk/assets/media/resources/Emerging%20Patterns%20and%2
0Trends%20Report%201%20Youth-Produced%20Sexual%20Content.pdf

of Cyber Criminology, 3(1), 21-25.


Liberate Yourself (nd) Defining LGBTQ. Retrieved from
http://www.liberateyourself.co.uk/lgbtq/what-is-lgbtq/

Linstone, H. A. & Turoff, M. T. (2002). The Delphi Method: Techniques and

Harvard University Press.

Encyclopedia of Social and Behavioral Sciences. Amsterdam & New York:

European Journal of Policing Studies European Journal of Policing Studies, 3(1),
32-52.

Nash, V., Adler, J. R., Horvath, M. A., Livingstone, S., Marston, C., Owen, G. &
Wright, J. (2016). Identifying the routes by which children view pornography
online: implications for future policy-makers seeking to limit viewing report of
expert panel for DCMS. Technical Report. Department of Culture, Media and
Sport. http://eprints.mdx.ac.uk/18878/

http://www.ons.gov.uk/ons/guide-method/compendiums/compendium-of-uk-
statistics/population-and-migration/index.html

from http://www.ons.gov.uk/ons/rel/census/2011-census/key-statistics-for-local-
authorities-in-england-and-wales/rpt-ethnicity.html

Penguin.

material on the Internet. Communication Research, 33(2), 178-204.


10 Appendices

10.1 Appendix 1: Methodology

Stage 1 Methods: Online focus groups and discussion forum

The aim of stage 1 was to inform stage 2 (the survey) and to ensure that the questions designed were pertinent to the aims and objectives of the research. Furthermore, this stage also identified a number of significant and contemporary themes regarding online pornography that are present in children and young people’s milieu. The online focus groups and each discussion forum were conducted through a non-video and non-audio chatroom interface. As a result, participants’ emotive reactions and corresponding valence strength—which could otherwise have been partly gauged via a documentation of their facial expressions, postures, hand gestures and vocal tonality--could not be ascertained. As such, qualitative analysis is of purely textual data.

Stage 1 Data and Sample

Findings for stage 1 were obtained from a discussion forum, implemented in age segmented variants and from four, in-depth qualitative focus groups with 34 young people (18 Females, 16 Males). These groups were also segmented according to 3 age groups. Their age and gender breakdowns are as follows:

<table>
<thead>
<tr>
<th>Group</th>
<th>Age</th>
<th>Size</th>
<th>Gender Composition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1</td>
<td>Ages 11-12</td>
<td>N=3</td>
<td>2 Females</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 Males</td>
</tr>
<tr>
<td>Group 2</td>
<td>Ages 13-14</td>
<td>N=14</td>
<td>9 Females</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5 Males</td>
</tr>
<tr>
<td>Group 3</td>
<td>Ages 15-16</td>
<td>N=9</td>
<td>7 Females</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2 Males</td>
</tr>
<tr>
<td>Group 4</td>
<td>Ages 15-16</td>
<td>N=8</td>
<td>0 Females</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>8 Males</td>
</tr>
</tbody>
</table>

Table A1: Focus group stage 1 age and gender

The young people who participated in stage 1 were recruited via ResearchBods, drawing on their UK wide family panels. ResearchBods also provided the online platform for implementation of each discussion forum and the focus groups. It should be noted that they provided invaluable access and useful technological support for participants and the academic research team. The materials used were designed by the academic team, and vetted via Middlesex University’s ethics procedures. The researchers who facilitated the online discussion and focus groups were all from Middlesex University.

Stage 1 Overview of Materials

All materials for the research are available in the following appendices. Due to developmental differences, the focus group schedules used for each age group were slightly different. For example, regarding the question: “Do you think that online pornography has any effects on young people’s relationships with girlfriends, boyfriends, parents, siblings and friends”, the subsequent questions given to the
older group (15-16 years old) included all three of the following items whereas the younger groups were only asked 1 and 2:

1. What do you think the effects (positive and negative) are?
2. How do you think pornography has had the effects you’ve described?
3. Which relationships are most often affected?

Barring a few semantic tweaks, particularly to follow up questions, all participants were asked about the same broad areas.

**Stage 1 Analysis and NVivo Coding Procedure**

The focus group findings were analysed using a mixed application of analytic induction, constant comparative and thematic data analysis methods (Attride-Stirling, 2001; Goetz & LeCompte, 1981). Broadly, this approach includes a systematic examination of qualitative data, which consists of identifying, organising, classifying/coding, cross comparing and validity testing of dominant contextual themes and categories. The procedure entails: 1) familiarisation with data, 2) generating initial codes, 3) searching for themes among codes, 4) defining, reviewing and refining themes, 5) testing the reliability and validity of each theme and 6) analytical saturation. This procedure was supported by the use of NVivo software, for the following chronological actions.

1. All 4 focus group transcripts were uploaded onto an NVivo file, and separated by their respective groups;
2. All participants were coded with a male or female category, as well as with an age and respective focus group number;
3. After further familiarisation with the data, the second level of coding was based on participants’ answers to all of the questions in the forum variants and focus groups. That is, each set of answers was coded to find broad, contextual, common themes, which were then further evaluated, refined and validated;
4. A matrix coding query was then run to examine how each of the three age groups concurred in their answers to the following questions, which were asked of all participants:
   - What reactions did you have to online pornography the first time you saw it?
   - What reactions do you have to online pornography now?
   - Does online pornography seem realistic to you?
   - Does online pornography make young people want to try things out?
• Do young people learn anything from online pornography (e.g. pornography as pedagogy)?

• Do you think that viewing online pornography has any positive effects on young people?

• Do you think that viewing online pornography has any negative effects on young people?

5. Differences and similarities between age and gender were then compared and analysed. Overall, this led to the development, refinement and validation of 7 recurring themes, which represented the main findings of this initial analysis.

6. Steps 1-5 were then applied to an analysis of the online discussion forum data. These findings were then used to inform development of the stage 2 survey.

Stage 2: The Online survey

Stage 2 Methodology

The stage 2 survey was informed by the findings from stage 1 and the currently available evidence base on the impact of online pornography on children and young people, including Horvath et al (2013) and IWF (2015). Skip Logic and filtering were used in the construction of the online survey to allow answers from specific questions to direct participants to relevant follow up items, also to allow for age-appropriate variants. This was particularly relevant to questions that were phrased with harder or more adult concepts such as those concerning the creation or distribution of self-generated pornographic images online.

The stage 1 online discussion forum variants and focus groups were facilitated and closely monitored by three members of the research team. Their embeddedness within the research process allowed for a rapid yet thorough initial analysis of the material generated by the young people who participated. Areas that were included in the stage 2 survey, from stage 1 included: the amount and quality of sex education that respondents had received at school; the demographic representativeness of the participants in the survey; the sexuality of some of the older participants (in the 15/16 forum) and the extent of seeing or producing self-generated images of themselves or contemporaries. Given the proximity of designing stage 2 to the running of stage 1, the language used by the participating young people, and their experiences were readily absorbed into the stage 2 survey.

The stage 2 survey was submitted to the commissioners and the advisory board for their feedback at the design stage. Suggestions and requests were incorporated into an amended draft that was subsequently submitted for ethical review.

Stage 2 Participants
Within stage 2, ResearchBods was commissioned to implement the online survey; this was to obtain a nationally representative sample of 11-16 year olds. This market research company has extensive access to over 50,000 people, including children and young people, via panels of families and of schools. The same organisation also facilitated access for the stage 1 and stage 3 focus groups. As with stage 1, all research materials and ethical matters were designed and dealt with by the research team at Middlesex University, supported by the independent advisory board and the commissioners of the research. One thousand and one children aged 11-16, fully completed the survey and consented to their data being used for analysis.

Stage 2 Overview of Materials

Before young people participated in the research, information sheets were provided and initial consent was obtained. In line with best practice for online research, final consent was also obtained prior to submission of data. The information sheets contained a definition of pornography as defined in section two of this report.

The survey consisted of 44 questions most of which were ‘closed’ where participants selected from options provided (the full survey can be accessed on request). There were however free text boxes provided and several open-ended questions to allow young people to respond in ways that better reflected their situations or experiences and to facilitate richer findings. All questions explored children’s direct experiences and attitudes towards online legal pornography.

The first ten questions were demographic. The remainder of the survey was divided into separate sections, specifically: ‘How you use the internet; Have you ever seen online pornography; Your experiences the first time you saw online pornography; Your on-going experiences with online pornography; Your attitudes and feelings towards online pornography; Your behaviour around online pornography’; and finally, ‘The effects of online pornography on young people’.

Stage 2 Ethics

The research was conducted in line with HCPC and BPS ethical codes of conduct. As noted above, information was provided at the outset about the nature of the survey and consent was obtained before and after completion from young people and from legally responsible adults. Each sub-section of the survey included an option to ‘exit’, that could be clicked at any time and that led to a page with contact information for relevant support organisations. Of the 1018 survey respondents who provided initial consent, 17 did not give final consent; their data have been excluded from analysis (leaving 1001 responses in the final dataset).
Stage 2 Safeguarding

All respondents could also click a button to request follow up support and contact from the team at ResearchBods, this was if they did not feel safe, or had an issue of concern to disclose. No respondents clicked on the button. Additionally, the senior members of the research team worked closely with ResearchBods in safeguarding. A preliminary sift of the data found some responses that could have caused concern. These answers were examined in the context of all the responses given by the participant, to ensure that we had not misunderstood each respondent’s intention. The team initially identified approximately a dozen cases that warranted additional consideration. In some cases it may have been a misplaced attempt at humour on the part of the young person filling out the questionnaire, but there was also limited evidence of illegal or potentially risky online activity (e.g. participants claimed they had been sharing indecent pictures/videos of themselves masturbating and/or naked online).

The team took advice from a senior child protection officer who was a member of the independent advisory board and from the research commissioners. It was agreed that two cases could be considered to be low risk and that six were of low to medium risk. Mindful of the need to protect potentially vulnerable young people, but also to avoid the risk of criminalising or stigmatising them unnecessarily, steps were taken to ensure that information was shared, in line with the safeguarding policies of the commissioners of the research. Additional ethical approval was sought for responding to low risk cases and follow up was made, via ResearchBods. Five of the cases were followed up directly with the young person concerned via the family panel protocols in place and three referrals were made to school safeguarding staff. Furthermore, ResearchBods signposted organisations who would be able support young people and kept an open dialogue with all schools to provide support at any point after the research, in case they needed further information or assistance.

In addition, the team were mindful of responses relating to ‘sexting’ (see findings). It was thus decided to send out a repeat of the debriefing to all participants (including those for whom safeguarding steps were taken) and to provide both the young people and schools, with additional specific information on ‘sexting’.

Stage 2 Analysis

Quantitative data from the surveys were imported into SPSS and recoded as necessary. Descriptive statistics were generated for all of the demographic, categorical, ordinal and attitudinal data. Following this, inferential statistical methods were used to determine if the observable differences in respondents’ answers were statistically significant or the result of chance.

Qualitative responses to the open-ended questionnaire items were imported into NVivo and analysed using inductive thematic approaches as well as some basic content analysis. These methods have been consistently shown to generate valid
and contextualised findings from large textual databases (Krippendorff, 2012), and provided a form of methodological triangulation that helped to validate findings.

**Stage 3: Online Focus Groups**

This final stage of the research was conducted with children and young people (11-16) from across the four UK nations. The questions were informed by the findings of the survey and were crafted using vernacular and idiomatic language style, used by the different aged children about their experiences with online pornography. Given that the online discussion forum variants had yielded limited data, these were not repeated in stage 3.

**Stage 3 Data and Sample**

<table>
<thead>
<tr>
<th>Group</th>
<th>Ages</th>
<th>Gender</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1</td>
<td>Ages 11-12</td>
<td>Females</td>
<td>N=7</td>
</tr>
<tr>
<td>Group 2</td>
<td>Ages 11-12</td>
<td>Males</td>
<td>N=6</td>
</tr>
<tr>
<td>Group 3</td>
<td>Ages 13-14</td>
<td>Females</td>
<td>N=7</td>
</tr>
<tr>
<td>Group 4</td>
<td>Ages 13-14</td>
<td>Males</td>
<td>N=6</td>
</tr>
<tr>
<td>Group 5</td>
<td>Ages 15-16</td>
<td>Females</td>
<td>N=7</td>
</tr>
<tr>
<td>Group 6</td>
<td>Ages 15-16</td>
<td>Males</td>
<td>N=7</td>
</tr>
</tbody>
</table>

*Table A2: Focus group stage 3 age and gender*

Please note that the remaining appendices include examples of materials used with participants in the research. Information sheets, consent forms and debriefs were created for participants, their parents or legal guardians and schools. These are available from the authors.
10.2 Appendix 2: Materials- Online Discussion Forum

All participants were pre-screened to confirm that they had seen pornography.

Preamble

Thank you for agreeing to take part in the discussion forum, this forum is being run by (INSERT NAMES). As you know we’re going to be talking about pornography that you may have come across online and in the media. There are no right or wrong answers to the questions, we just want your opinion. Please remember that within this forum, you may have different opinions, which is fine. You can agree or disagree with each other, please just be polite and kind whilst you are discussing the questions.

Please remember that if you reveal something to us that may indicate risk to yourself or another identifiable person, or illegal activity, we need to make sure you are ok and will pass your details to an organisation who can offer assistance.

If you disclose something, we (the researchers running the discussion forum or focus group) will let ResearchBods know and they will have to contact you directly via email to check on your wellbeing, provide you with information about sources of help and support and to let you know that they are passing your details to an organisation who can offer you assistance. This is to protect you and all others who participate in this research. If you do disclose something, we will not inform your parents, and they have given their permission for you to take part knowing that they will not be told if you disclose something that makes us concerned. Please see Table A3 for the questions asked.

Closing remarks

That’s all the questions and discussion we have for this forum, thank you all very much for taking part, you have been brilliant. When the forum is closed, we will send you an email that gives you some more information about the project we are running. The information will also contain the team's contact details and some other information about people you can contact if you’d like to talk to someone about any of the issues we’ve covered today. Please do read the email.
**Stage 1 Online Discussion Forum Questions for 11-12 year olds**

<table>
<thead>
<tr>
<th>Date question introduced to Forum (2015)</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>20\textsuperscript{th} April</td>
<td>1) What are the things that you enjoy doing the most online? What is so fun about them?</td>
</tr>
<tr>
<td>20\textsuperscript{th} April</td>
<td>2) Do you have a smartphone to go online? If you do, are you allowed to take it to school with you? Do you use your phone at school? Are you allowed to?</td>
</tr>
<tr>
<td>20\textsuperscript{th} April</td>
<td>3) What does the phrase “online pornography” mean to you?</td>
</tr>
<tr>
<td>22\textsuperscript{nd} April</td>
<td>4) For the rest of this forum we are going to be discussing pornography and what we mean is: “images and films of people having sex or behaving sexually online. This includes semi-naked and naked images and films of people that you may have viewed or downloaded from the internet, or that someone else shared with you directly, or showed to you on their phone or computer”. Some pornography is not online e.g. magazines and videos, but we are only discussing online pornography. What do you think of our definition? Does it make sense? What would you change about it? How can you tell if something is pornography or is not pornography? Please give examples of the specific things that help you to tell the difference.</td>
</tr>
<tr>
<td>24\textsuperscript{th} April</td>
<td>5) Do young people watch pornography on their own or with someone else? Why do you think they watch it on their own or with someone else?</td>
</tr>
<tr>
<td>27\textsuperscript{th} April</td>
<td>6) Do you think that other young people should be protected from pornography? How would you protect them from it? How do you think pornography affects young people?</td>
</tr>
<tr>
<td>27\textsuperscript{th} April</td>
<td>7) Who do you think should talk to young people, like you, about pornography and why would you choose these people?</td>
</tr>
<tr>
<td>30\textsuperscript{th} April</td>
<td>8) Do you think parents should talk about pornography to their children?</td>
</tr>
<tr>
<td>30\textsuperscript{th} April</td>
<td>9) Do you think that schools should explain what pornography is and how it effects young people and do more to help you keep yourself safe online? If you think schools should be involved, who should speak directly to the young people like you (e.g. someone brought in from outside, one of your teachers, a school counsellor, etc.)?</td>
</tr>
</tbody>
</table>

Table A3: Discussion Forum Questions
10.3 Appendix 3: Materials- Stage 1 Focus Groups

Stage 1 Online Focus Group Questions for 11-12 year olds

All participants were pre-screened to confirm that they had seen pornography.

Main questions are numbered, prompts are alphabetized.

Preamble/icebreaker

Thank you for agreeing to take part in the focus group today, this group is being run by (INSERT NAMES) and we will be taking you through the session. As you know we’re going to be talking about pornography that you may have come across online and in the media. There are no right or wrong answers to the questions, we just want your opinion. You don’t have to disclose information about your own experiences, you can talk in the third person. Please remember that within this focus group, you may have different opinions, which is fine. You can agree or disagree with each other, please just be polite and kind whilst you are discussing the questions.

Please remember that if you reveal something to us that may indicate risk to yourself or another identifiable person, or illegal activity, we will need to make sure you are ok and pass your details to an organisation who can offer assistance.

If you disclose something, we (the researchers running the discussion forum or focus group) will let ResearchBods know and they will have to contact you directly via email to check on your wellbeing, provide you with information about sources of help and support and to let you know that they are passing your details to an organisation that can offer you assistance. This is to protect you and all others who participate in this research. If you do disclose something, we will not inform your parents, and they have given their permission for you to take part knowing that they will not be told if you disclose something that makes us concerned.

Let's start by you all briefly introducing yourselves. Please note that you can use any name you like here, it can be your own, or it can be one you've made up.

Does anyone have any questions before we start?

1) **What are the things that you enjoy doing the most online? What is so fun about them?**

2) **Do you have a smartphone to go online?**
   a. If you do, are you allowed to take it to school with you?
   b. Do you use your phone at school? Are you allowed to?

3) **What is “online pornography”?**

   For the rest of this focus group we are going to be discussing pornography and what we mean is “images and films of people having sex or behaving sexually online. This includes semi-naked and naked images and films of people that you may have viewed or downloaded from the internet, or that someone else shared with you directly, or showed to you on their phone or computer”. Some
pornography is not online e.g. magazines and videos, but we are only discussing online pornography.

4) Does our definition of pornography make sense to you?
   a. What is good/bad about our definition?
   b. What would you change about our definition?

5) What reactions do you have to online pornography?
   a. The first time you saw it?
   b. And now?

6) Why do young people look at online pornography?
   a. Does it seem real?
   b. Does it make young people want to try things out?
   c. Do young people learn anything from it?
   d. What messages do you think it gives out to young people?

7) Do you think that online pornography has any effects on how young people are with people (girlfriend/boyfriend/mum/dad/brother/sister/friends)?
   a. What do you think the effects (positive and negative) are?
   b. How do you think pornography has done this?

8) What would you say to another young person who was thinking about viewing pornography for the first time?
   a. Would you like your brother or sister to see pornography?

9) Have your parents ever talked with you about online pornography?
   a. If they did talk to you, how did you feel (Embarrassed? Interested? Shamed? Mature? Guilty? Happy?)
   b. If they did talk to you, when and where did they talk to you about online pornography?
   c. If they didn’t talk to you, would you like your parents to talk to you about online pornography?
   d. When and where should they talk to you about it?

10) Do you think your teacher at school should talk to you about pornography?
    a. Why do you/don’t you think teachers at school should talk about pornography?
    b. Is there anything you would like teachers to address in particular?
    c. Is there anyone else you think could talk to young people about pornography?

Closing remarks

That’s all the questions and discussion we have time for today, thank you all very much for taking part, you have been brilliant. When we sign off from this chat, we will send you an email that gives you some more information about the project we are running. The information will also contain the team's contact details and some other information about people you can contact if you’d like to talk to someone about any of the issues we’ve covered today. Please do read the email.
10.4 Appendix 4: Post Survey Email to Young People

Stage 2 additional e-mail sent to all young people who participated in the survey

Thank you for completing the survey about online pornography. About 1000 young people have now completed the survey and we're very grateful to you all. Many of you said really interesting things. Some of you said things that show us you may be concerned about online pornography or about naked pictures of people you know being online.

This note is to remind you that there are people you can talk to for a bit more information. If you want to talk with anyone about the survey or things it’s made you think about, then we can be reached by phone or e-mail either to ResearchBods or Middlesex University and our contact details are at the end of this message.

You may remember that we provided you with a list of places where you could also find more information or some support if you have had bad experiences with online pornography. We also wanted to remind you that you can get in touch with Childline, their contact details are also at the bottom of this message.

If you are concerned about what is happening to you or has happened to someone you know, please follow this link to the Child Online Protection Centre website for help and advice [www.thinkuknow.co.uk](http://www.thinkuknow.co.uk)

Lastly, there are a couple of places where you can find out more about what to do if you’re worried about ‘sexting’: this is a short flyer: [swgfl.org.uk/products-services/esafety/resources/So-You-Got-Naked-Online/Content/Sexting-Sml-Flyer booklet.aspx](http://swgfl.org.uk/products-services/esafety/resources/So-You-Got-Naked-Online/Content/Sexting-Sml-Flyer booklet.aspx) or this link gives you more information: [swgfl.org.uk/products-services/esafety/resources/So-You-Got-Naked-Online/Content/Sexting-Toolkit](http://swgfl.org.uk/products-services/esafety/resources/So-You-Got-Naked-Online/Content/Sexting-Toolkit)

ChildLine can be contacted either by phone (0800 1111) or online [www.childline.org.uk](http://www.childline.org.uk)

The Middlesex Research team can be contacted via Dr Elena Martellozzo, phone: 020 8411 5269, Email: e.martellozzo@mdx.ac.uk

To reach ResearchBods, then the phone number is: 0113 246994 (ask to speak to any on the ‘Middlesex Project Team’) or the Email is: hello@surveybods.com (with the subject line ‘Middlesex’)

Thanks again for taking part in the research.
10.5 Appendix 5: Safeguarding Email to survey respondents

Stage 2 Safeguarding Email

Safeguarding Email (sent by ResearchBods in medium or high risk safeguarding cases or low risk cases where information needed to be shared as a matter of safeguarding practice)

Dear *

During the survey you took part in, you mentioned something about _ which caused the researchers to feel worried about you or someone else, they let us know and have asked us to check how you are doing. Because of what you mentioned, we are going to pass your details on to (insert organisation name) who will get in touch to offer you support and help.

We wanted to let you know that there are lots of sources of support and help available if you need them. After this paragraph, you will find contact details for a number of support agencies. Asking for help and support can feel really difficult, but there are lots of people out there who are trained in talking to people like you about issues of pornography, the internet and sex.

**Childline**
Free and confidential helpline for children and young people, no problem too big or too small.
If you're feeling worried, scared, stressed or just want to talk to someone you can contact Child Line by telephone, 1-2-1 webchat or email.
Calls don’t show up on phone bills.
Phone: 0800 1111 (FREE)

**Get Connected**
Free, confidential helpline for young people who need help but don't know where to find it. You can contact them by phone, email and webchat.
Phone 0808 808 4994 (1pm-11pm every day) Email: www.getconnected.org.uk/email-us/
Webchat: www.getconnected.org.uk/#livechat (1pm-11pm every day)

**CEOP’s thinkuknow**
A website with the latest information on the sites you like to visit, mobiles and new technology. Find out what’s good, what’s not and what you can do about it.
https://www.thinkuknow.co.uk/

**What to do if you're worried about 'sexting'?**
There is a short flyer available here: www.swgfl.org.uk/products-services/esafety/resources/So-You-Got-Naked-Online/Content/Sexting-Sml-Flyer-booklet.aspx or this link gives you more information: www.swgfl.org.uk/products-services/esafety/resources/So-You-Got-Naked-Online/Content/Sexting-Toolkit
The Hideout
A space to help children and young people to understand domestic violence, and how to take positive action if it's happening to you. www.thehideout.org.uk/over10/default.aspx

Young Minds
Website with information and advice for young people about abuse, anger, anorexia, anxiety, ADHD, Autism & Asperger's, bipolar disorder, bulimia, bullying, depression, OCD, post-traumatic stress, schizophrenia and self-harm. www.youngminds.org.uk

Rape Crisis national helpline
Free, confidential helpline for young women aged over 14 who have experienced sexual violence or abuse. Open every day between 12 - 2.30pm and 7 - 9.30pm. Calls don’t show up on phone bills.
Phone: 0808 802 9999

National domestic violence helpline
Free helpline that offers support and information to women and children experiencing domestic violence. Open 24 hours a day.
Phone: 0808 2000 247

Stop it Now!
Stop it Now! UK and Ireland is a child sexual abuse prevention campaign. They support adults to play their part in prevention through providing sound information, educating members of the public, training those who work with children and families and running our freephone confidential helpline available to:

- adults worried about the behaviour of other adults or children and young people
- those worried about their own sexual thoughts or behaviour towards children, including those with concerns about their online behaviour
- friends and relatives of people arrested for sexual offending, including internet offending
- any other adult with a concern about child sexual abuse – including survivors and professionals

Phone: 0881000900 Email: help@stopitnow.org.uk Web: www.stopitnow.org.uk

You can also always contact us:
The research team at Middlesex University:
Dr Elena Martellozzo, phone: 020 8411 5269, Email: e.martellozzo@mdx.ac.uk
or ResearchBods: Email: hello@surveybods.com (with the subject line 'Middlesex').
Tel: 0113 246994 (ask to speak to any on the 'Middlesex Project Team')

Best wishes
The ResearchBods team
10.6 Appendix 6: Materials- Stage 3 Focus groups

Focus Group Questions 11-16 year olds

All participants were pre-screened to confirm that they have seen online pornography. The focus groups were divided by gender (binary) and age (11-12, 13-14 and 15-16)

The main questions are numbered, prompts are alphabetized.

Icebreaker

1. Did any of you take part in our study before?
   a. If so, what did you think of it? (Researchers to briefly remind all participants what stages 1 and 2 involved)

Today, we’re going to ask you a little bit more about how young people and children view pornography, what they think about it and what they feel about it. We’re interested in what you think and feel yourself and what you think other people might think and feel. Before we go any further, we’d also like to remind you that this is a confidential and secure site. Please do still show respect to one another during this conversation and of course, if you want to leave the group at any time, you are free to do so. Also, please do not ask other young people in the group for personal contact information.

2. Why do you think children and young people view pornography?
   (Once open-ended question has been answered, then…)
   a. If not already mentioned, then: Do you think that they might want to know more about sex and relationships?
   b. Have you ever deliberately searched for online pornography to find out more about sex and relationships?
   c. Where did you look for online pornography?
   d. How useful was the information you found?
   e. Have you found useful sex and relationship education (that wasn’t pornography)?
   f. Was some of the information that you found pornography?
   g. Was any of the useful information pornography (if applicable)?
   h. Did you search for pornography deliberately for sexual and relationship educational purposes?
   i. Are you ever concerned about the type of pornography you have found others using?
   j. How about the pornography you have seen? Has it concerned you?

3. What do you think are the risks of watching online pornography?

4. Do you know anyone who has tried something they saw in online pornography?
   a. Has pornography ever made you think about trying out something you have seen?
5. Do you ever worry that someone you know might be using online pornography too often?
   a. If so, in what way?
   b. Would you say you are/or someone you know is, addicted to porn?
   c. Who would you speak to if you were worried about using pornography too often?

6. How are women generally treated in most of the online porn that you watched?
   a. How do you think this may influence people of your age?
   b. How does this make you feel?
   c. What do you think sexual consent is? (for the older group only)
   d. How is consent shown in the online pornography that you have seen? (for the older group only)

7. What, if anything, have you learned from watching online pornography?

8. How, if at all, do you think watching online pornography influences a girl or boy your age?
   a. Does it depict some people or types of people in a unrealistic way?
   b. Do you think that online pornography puts young people under pressure to have sex earlier?
   c. Have you ever felt regret, or been upset about what you have seen in online pornography in any way?

9. How do you feel when you watch online pornography?

10. Do you think that anything needs to ‘be done’ about pornography?
    a. Do you think that PSHE should be compulsory for all secondary school children, whichever type of school they go to?
    b. Do you think online pornography should be discussed in class?
    c. How could classroom discussion be run so that it is not too awkward for you or for your teachers?
    d. Do you think that any children, their parents or schools should be able to opt out of sex, relationship education and online safety?
    e. If you could create an online resource that would help young people learn about sex and relationships, what would it look like and who would you like to access it?
    f. Do you think that there should be stricter controls about who accesses online pornography (e.g. age verification)?

Self-generated images

11. Have you heard of ‘sexting’?
    a. What does sexting mean to you?
    b. Do you think it’s pornography if you produce a naked picture (or intimate part) of yourself?
    c. What do you think are the risks involved of taking a naked picture or video of yourself?
    d. If you did send a naked picture, then how would feel if it was shared with other people without your permission?
    e. Did you know that it is possible to remove intimate images that have
been shared online?
f. Would you be able to remove an intimate image of yourself or would you need to get help? (E.g. ChildLine/IWF partnership)
g. Do you think there is enough information for children and young people on the issue of sexting?
h. Do you think that everyone should be told about how and when to remove information they regret posting online?

Sending and Receiving online porn

12. Do more people send online pornography and links to it, than will admit it?
   a. Do some people say they haven’t sent it when they have?
   b. Do you think that young people may be scared to say that they have sent on links to online pornography?

13. Is there anything else that you’d like to add?
If you would like to know more about this research or to contact the authors, please e-mail us:
CATS@mdx.ac.uk
FPS@mdx.ac.uk

This report may be cited as: Martellozzo, E., Monaghan, A, Adler, J. R., Davidson, J, Leyva, R. and Horvath, M. A. H. (2017). “I wasn’t sure it was normal to watch it…” A quantitative and qualitative examination of the impact of online pornography on the values, attitudes, beliefs and behaviours of children and young people. London: Middlesex University doi:10.6084/m9.figshare.3382393

www.mdx.ac.uk/fps
www.cats-rp.org.uk

©The authors, all rights reserved.