

National contexts for the risk of harm being done to children by access to online sexual content

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Abstract

This article

explores an international comparative case study of children's experiences of online sexual content. It suggests that the dominant 'risk' framework commonly used to understand these experiences is not the most useful way to construct the uses to which young people put these materials, or the role that online sexual content may play in young people's healthy sexual development. The EU Kids Online survey interrogated the internet access and experiences of a representative sample of approximately 1,000 children aged 9-16 in each of 25 selected nations, plus allied research in Australia with 400 children (country 26). Children were asked if they had been 'bothered' by anything encountered online in the 12 months prior to the interview. In terms of the proportion of children who said they had been bothered by sexual images seen online, the order is (from the highest proportion): Estonia, Turkey, Romania, Ireland, Australia, Germany, Poland, Spain*, France*: Spain and France tied at 32%, and this was the average likelihood that a child that had seen sexual images online would judge themselves to have been bothered by them. The countries that follow this watershed have children that are less likely than average to say they have been bothered by encountering online sexual images: Austria, Belgium, Hungary, Denmark, Cyprus, Italy, Sweden, UK, Czech Republic, Lithuania, Netherlands, Norway, Portugal, Finland, Bulgaria, Greece, Slovenia. This data offers interesting insights with respect to 'risk'. It demonstrates that children from different national contexts react in different ways when they encounter sexual materials online. It suggests that conceptualising 'risk' for young people as necessarily negative and as something to be avoided is counterproductive, and that the national and cultural context will impact the likelihood of 'risk'. Material that might risk bothering a child in one national context might be constructed differently by a child from another country. This particular example also indicates that risk itself might be positioned as something to be embraced; as a necessary part of learning personal boundaries and behaviours. It also contributes to the development of resilience, one of the key aspects of healthy sexual development.

Keywords: adolescents, children online, sexual content, cultural contexts, risk

1. Introduction

This article explores an international comparative case study of children's experiences of online sexual content. It suggests that the dominant 'risk' framework commonly used to understand these experiences is not the most useful way to construct the uses to which young people put these materials, or the role that online sexual content may play in young people's healthy sexual development. Exposure to risk is increasingly accepted as an important

51 component of building resilience, and risk behaviour need not be equated with negative
52 outcomes, or with harm (Chrisman and Couchner, 2002, p3). Indeed, in western nations
53 where sexual imagery may be common place in popular culture, the capacity to process such
54 images may well be an important skill, as this article suggests. This case study draws
55 attention to the findings of a rare example of cross-national research designed to compare
56 children's experiences of online sexual content in 26 separate national contexts. Although the
57 data were first published in 2011 (Livingstone et al., 2011, p. 51; Green et al, 2011, p. 62),
58 this is a new analysis that has not been previously reported. The size and scale of the face-to-
59 face research conducted in the EU Kids Online project (25,142 children from 25 European
60 nations), and the associated AU Kids Online project (400 children from Australia), means
61 that these data remain the best available evidence to inform discussions of the potential
62 influence of national contexts upon children's negative experiences around accessing sexual
63 content online. The children concerned were aged 9-16.

64
65 The dominant model for conceptualising young people's exposure to sexual material online is
66 one of 'risk' (see for example Stulhofer et al, 2008; Baker, 2016), where riskiness is
67 presented as necessarily negative and undesirable. This project did not assume, however, that
68 children's engagement with online sexual content was necessarily accidental or harmful.
69 Rather than imposing this external paradigm onto their experiences, the ways in which the
70 young people made sense of their encounters with this material became part of the research
71 project itself. Researchers asked the children whether they had been bothered by their
72 engagement with online sexual content. By using this language – designed to be meaningful
73 to the young people themselves – the project was able to explore how upsetting these
74 encounters were to young people in a variety of national contexts. This suggests that if
75 researchers wish to continue using the term 'risk' as a means of understanding young
76 people's practices it should be reconceptualised as a neutral, or even actively positive,
77 category.

78 79 **2. Material and methods**

80 **2.1 Participant selection and recruitment**

81 The EU Kids Online survey was funded by the European Commission's Safer Internet plus
82 Programme (SIP-2005-MD-038229) and, in Norway, by the Norwegian government; and in
83 Australia by the Australian Research Council via the ARC Centre of Excellence for Creative
84 Industries and Innovation. The project was planned, trialled and refined during 2009. Its
85 purpose was to interrogate the internet access and experiences of a representative sample of
86 (approximately 1,000) children aged 9-16 from within each of 25 selected nations: Austria,
87 Belgium, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France,
88 Germany, Greece, Hungary, Ireland, Italy, Lithuania, the Netherlands, Norway, Poland,
89 Portugal, Romania, Slovenia, Spain, Sweden, Turkey and the UK. Consistency was ensured
90 by the use of IPSOS-Mori and affiliate market researchers across all the participating
91 countries. IPSOS-Mori employed established methods to deliver a representative sample in
92 all the countries concerned. Generally, IPSOS-Mori recommended use of the 'random walk'
93 method to identify target research households. The random walk method starts with a
94 randomly generated address which can potentially identify any dwelling in the nation. From
95 that starting point, an on-the-ground researcher would walk in a pre-set pattern, ignoring a set
96 number of residences and then selecting a set number of residences for attention.

97
98 Selected residences were subject to multiple call-backs in an attempt to contact inhabitants
99 who were asked if there were children in the household aged 9-16 next birthday, who had
100 used the internet at any time in the previous year. If children were present in the household,

101 and the parent and child both agreed to participate, the family was included in the research.
102 Both the parent most involved in overseeing the child's internet use, and the child in the
103 family with the next birthday (between 9 and 16) were interviewed separately, generally
104 using computer-assisted data collection but sometimes with paper-based prompts and
105 resources, depending upon usual practice in market research in that country. Each random
106 address starting point was used to identify ten participant households. The recruitment
107 continued until all ten households for that area had been identified and surveyed. In Australia,
108 because of the size of the country and expenses that ran at four times the European average,
109 the participant pool was capped at 400 children, rather than the 1000 per country aimed for in
110 the European nations.

111
112 A headline ethics application was made by Professor Sonia Livingstone, the EU Kids Online
113 Project Leader, to the host institution for the research, the London School of Economics and
114 Political Science. That ethics application was granted. Other institutions across the 25
115 remaining countries then decided whether the headline ethics approval was sufficient for their
116 purposes or whether further information was required before ethics could be granted. All
117 participating researchers in all participating countries were required to obtain ethics approval.
118

119 **2.2 Data collection**

120 Data collection was by face-to-face interview-based survey supported by participant access to
121 a computer or prompt cards. Children were interviewed separately from their parents, but
122 with one or more parents in the house. Similarly, children were not present when their parents
123 were interviewed. The interview questions were originally written in English but then double-
124 translated: first into the target national language, and then back into English to check that
125 appropriate meanings had been captured. Where there were significant minority language
126 groups in a country, questionnaires were available in more than one language and specialist
127 researchers were used. This helped capture a diverse range of experiences. Cognitive testing
128 was used in each national context to test the comprehension of children in the target age
129 group, drawn from potential participants. At the start of the research it had already been
130 decided that children in the youngest age group (9-10) would be less able to cope with the
131 length and content of the full survey, and therefore not all questions asked of children aged
132 11-16 were asked of 9-10 year olds. All children of the same age group were asked the same
133 questions across the different country contexts.
134

135 Amongst other aims, the research sought to identify any discomfort experienced by children
136 as a result of their experiences online. Consequently the survey set a low threshold for
137 recording children's concerns. Children were asked if they had been 'bothered' by anything
138 they had encountered online in the 12 months prior to the interview, and were offered a range
139 of responses. The prompt question used was:

140
141 In the PAST 12 MONTHS, have you seen or experienced something on the internet
142 that has bothered you in some way? For example, made you feel uncomfortable,
143 upset, or feel that you shouldn't have seen it.
144

145 Possible responses comprised YES / NO / DON'T KNOW / PREFER NOT TO SAY. If the
146 child said 'Yes', they were asked further questions about how frequently they were bothered
147 by online material (Every day or almost every day / Once or twice a week / Once or twice a
148 month / Less often / Don't know). These data were used to identify headline comparisons
149 between countries as to whether children had been bothered by material or interactions they
150 had encountered online. Whether or not they said they had been bothered by material

151 encountered online, all children were subsequently asked about whether they had seen sexual
152 images.

153

154 The research team believed it was important to frame children's online encounters with
155 sexual images within the context of all sexual images encountered by children. Before being
156 asked about online experiences, children were first asked about whether they had seen any
157 sexual images in the previous twelve months and where they might have seen those sexual
158 images. The word pornography was never used. As with the experience of feeling 'bothered',
159 a low threshold of 'sexual image' was used, and the question was designed to be delivered in
160 an open and non-judgemental, matter-of-fact way (Livingstone et al., 2011, p. 49):

161

162 In the past year you will have seen lots of different images – pictures, photos, videos.
163 Sometimes, these might be obviously sexual – for example, showing people naked or
164 people having sex. You might never have seen anything like this, or you might have
165 seen something like this on a mobile phone, in a magazine, on the TV, on a DVD or
166 on the internet. Have you seen ANYTHING of this kind in the PAST 12 MONTHS?

167

168 The same question was asked of 9-10 year olds and of 11-16 year olds. Possible responses to
169 this question were YES / NO / DON'T KNOW / PREFER NOT TO SAY. If a child said
170 'Yes', they were asked how often they had seen such images (Every day or almost every day
171 / Once or twice a week / Once or twice a month / Less often / Don't know), and where they
172 had seen such images (In a magazine or book / On television, film or video/DVD / By text
173 (SMS), images (MMS) or otherwise on my mobile phone / By Bluetooth / Other / Don't
174 know).

175 Only after answering the general question about seeing sexual images in any context were
176 children asked 'Have you seen these kind of things on any websites in the PAST 12
177 MONTHS?' Where older children (11-16) responded 'Yes', they were offered a range of
178 descriptions of sexual content that they might have seen on the internet in the past 12 months
179 (Images or video of someone naked / Images or video of someone's 'private parts' / Images
180 or video of people having sex / Images or video of movies that show sex in a violent way /
181 Something else / Don't know / Prefer not to say): multiple responses were permitted. It was
182 only after gathering data about whether the child had seen sexual images online (all children
183 9-16), and what kinds of images these were (older children 11-16), that children were asked
184 whether they had been bothered by the sexual images they had seen online:

185

186 Seeing sexual images on the internet may be fine or may not be fine. In the LAST 12
187 MONTHS, have you seen any things like this that have bothered you in any way? For
188 example, made you feel uncomfortable, upset, or feel that you shouldn't have seen
189 them. (Livingstone et al., 2011, p. 49)

190

191 Where a child responded 'Yes', there was a follow up question (9-10), or two (11-16), to
192 explore the extent to which the child had felt bothered. All children (9-16) were asked about
193 their most recent bothersome online encounter with sexual images in terms of the intensity of
194 feeling 'Thinking about the LAST TIME you were bothered by something like this, how
195 upset did you feel about it (if at all)?' Responses offered were 'Very upset / Fairly upset / A
196 bit upset / Not at all upset / Don't know'. Older children were also asked about duration –
197 how long the feeling of being bothered had lasted. In terms of the data reported below, these
198 comprise the proportion of children who indicated that they had been bothered in any way,
199 and for any length of time, by the sexual images that they encountered online.

200

201 **2.3 Data processing**

202 The datasets applicable to each of the countries concerned were checked and made consistent
203 and inter-operable as part of the IPSOS-Mori contract, and were subsequently further
204 checked by relevant members of the EU Kids Online research team, including co-author
205 Kjartan Ólafsson. The resulting datasets are available for further interrogation by interested
206 researchers at the UK Data Archive (Livingstone, 2011). Analysis of the data reported here is
207 limited to a frequency analysis, to reveal the proportion of children in each of the national
208 contexts identified that had been bothered in any degree by their encounter with online sexual
209 images. This paper assumes that differences in responses between children from different
210 nations who have seen sexual images online reflect, in at least some part, the national and
211 cultural contexts in which these children have been raised. It may also reflect differing
212 perceptions of risk concerning children's online access to sexual images. Accordingly, this
213 paper addresses the cultural context that frames the way that children process online
214 experiences of sexual images. Such an approach might help identify strategies for minimising
215 harm experienced by children, and also assist in supporting the development of resilience
216 through children's management of risk in response to such materials.

217
218 Data analysis was by the overarching research team of the EU Kids Online project –
219 Professor Sonia Livingstone (project leader), Dr Leslie Haddon (project manager), Anke
220 Görzig and Kjartan Ólafsson. Their final report is available at <http://eprints.lse.ac.uk/33731/>
221 (Livingstone et al., 2011). A number of individual countries wrote their own reports,
222 including Australia (Green et al., 2011). Those reports sometimes also included inter-country
223 comparisons, as was the case with the Australian report. This paper builds on that work to
224 draw attention to the diversity in children's responses to online sexual material and critiques
225 the importance of national and cultural contexts as one way of accounting for such
226 differences.

227 228 **3. Results**

229 The results presented here take the form of comparative tables across all 25 nations
230 participating in the EU Kids Online study plus the results from the AU Kids Online project.
231 Figure 1 compares the 26 nations involved in the research in terms of the percentage of
232 children identifying that they have seen sexual images anywhere in the past 12 months,
233 compared with the percentage identifying that they have seen sexual images online.
234 Naturally, the children who have seen sexual images online are a subset of the children who
235 have seen sexual images in any location. There is also some indication that the countries
236 where more children have seen sexual images online are also the same countries where more
237 children have seen sexual images in any location. Figure 1 is arranged in order of the country
238 where the greatest proportion of children say they have seen sexual images online to the
239 country where the least proportion of children say this.

240
241 In terms of recording the proportion of children who have seen sexual images online, from
242 highest proportion to lowest proportion, the order discerned via this project is: Norway,
243 Estonia, Finland, Australia, Denmark, Czech Republic, Sweden, Lithuania, Slovenia,
244 Netherlands, Bulgaria, France, Romania, Belgium, Austria, Poland, Greece (at 14%, Greek
245 children have the same likelihood as the average child in the EU Kids Online study of saying
246 that they have seen sexual images online), Portugal, Turkey, Cyprus, Ireland, Hungary,
247 Spain, Italy, Germany.

248
249 Figure 1: Child has seen sexual images online or offline in past 12 months and child had been
250 bothered after seeing sexual images online, by country

251
252 Left hand side: QC128: Have you seen anything of this kind [obviously sexual]? And QC131:
253 Have you seen these kinds of things on any websites in the past 12 months? Base: All
254 children who use the internet. (Green et al., 2011, p. 62)
255 Right hand side: QC131: Have you seen these kinds of things on any websites in the last 12
256 months? And QC134: In the LAST 12 MONTHS have you seen any things like this that have
257 bothered you in any way? For example made you uncomfortable, upset, or feel that you
258 shouldn't have seen them. Base: All children who use the internet. Only children who have
259 seen sexual images online. (Green et al., 2011, p. 31)

260
261 The colour bars and lines on the figure have been used to highlight the ranked order
262 differences between the percentage of children who have seen sexual images online and the
263 proportion of those children who say that they have been bothered by this experience,
264 arranged according to national context. The coloured bars allow the ready identification of
265 circumstances where those children from countries that are more likely to have seen sexual
266 images online are sometimes also the children who are least likely to say that they are
267 bothered by this; and where the contrary is also true.

268
269 In terms of the proportion of children who said they had been bothered by sexual images seen
270 online, the order is (from the highest proportion to the lowest): Estonia, Turkey, Romania,
271 Ireland, Australia, Germany, Poland, Spain*, France*: Spain and France tied at 32%, and this
272 was also the average likelihood that a child that had seen sexual images online would judge
273 themselves to have been bothered by them. The countries that follow this watershed have
274 children that are less likely than average to say they have been bothered by encountering
275 online sexual images: Austria, Belgium, Hungary, Denmark, Cyprus, Italy, Sweden, UK,
276 Czech Republic, Lithuania, Netherlands, Norway, Portugal, Finland, Bulgaria, Greece,
277 Slovenia.

278
279 If we take higher exposure countries as being above the European average (14%, where this
280 is the proportion of children who say they have encountered online sexual images in the past
281 12 months) and cross-compare them in terms of the countries where a higher proportion of
282 children say that they are bothered by the sexual images they have seen online (more than
283 32% of respondent children in the country that have seen sexual images), the following
284 matrix results:

285
286 Table 1: cross referencing national rates of incidence of children encountering sexual images
287 online with the likelihood that an above average proportion of such children will say that they
288 have been bothered by the encounter.

289
290 Children's likelihood of being bothered by their encounter with sexual images online is also
291 related to gender and to age, with girls and younger children more likely to say that they feel
292 bothered by an encounter with sexual images and boys and older children more likely to say
293 that they are not bothered by such an encounter. As Livingstone et al. comment, "in the
294 Europe-wide study, those who encounter most risk online (often, teenagers, boys) are not
295 necessarily those most bothered or upset by the experience (often, younger children, girls)"
296 (2011, p. 58). The rigour of the recruitment method, however, means that there is no reason
297 to believe that any country will have had a disproportionate sample of young children, or of
298 girls than boys, or vice versa. It is reasonable to assume that differences in these children's
299 experiences partly reflect the cultural context in which children encounter and process sexual
300 images, including adults' attitudes to the perceived risks around such encounters.

301
302 Indeed, this is one conclusion of the EU Kids Online headline attempts to classify different
303 countries on the basis of the way they (and parents within them) approach children’s risk-
304 taking online. In a publication examining a range of risks, not solely risks arising from
305 encounters with sexual images, Helsper, Kalmus, Hasebrink, Sagvari and De Haan’s (2013)
306 take out executive summary notes nonetheless that “clusters of countries are most clearly
307 distinguished in terms of sexual content risks” (2013, p. 4). Further, analysis of the 25
308 European nations in terms of “classification of online opportunities, risks, harm and parental
309 mediation clusters” identifies the existence of a cohort of where the children are characterised
310 by high-risk-encounter behaviours, but a low-risk-of-feeling-bothered. Helsper et al. call the
311 children within this group of nations the “supported risky explorers” (2013, p. 4), because
312 parental practices (“parental mediation”) and the cultural context support children’s risk
313 taking but also support the healthy processing of the impacts of such risk taking where a child
314 might be bothered by an encounter. This group of nations are predominantly Scandinavian
315 (Norway, Finland, Denmark, Sweden and the Netherlands) and all of them are located in the
316 ‘High exposure country – Less likely to be bothered’ quartile in Table 1 above.

317
318 An earlier EU Kids Online publication investigated different parents’ mediation styles and
319 concluded that the parents in these five countries were more likely to “practice above active
320 mediation of use but below average restrictive mediation” (Duerager & Livingstone, 2012 p.
321 5). Active mediation in this context is defined as:

322
323 parents talk to their child about the internet, stay nearby or sit with them while they go
324 online, encourage them to explore the internet, and share online activities with them.
325 These activities [...] tend to reduce children’s exposure to online risks without
326 reducing online opportunities, and they also reduce young children’s (9-12 years)
327 reports of being upset when they encounter risks online (Duerager & Livingstone,
328 2012 p. 1)

329
330 Such mediation is the opposite of “restrictive mediation”, which operates through rules and
331 prohibitions, and which “reduces online risks [for children], but it also reduces their online
332 opportunities and skills” (Duerager & Livingstone, 2012 p. 1). These connections could be
333 investigated since research with children aged 9-16 was paralleled by research with the
334 child’s parent or domestic caregiver most involved in supporting their internet use. Children’s
335 risks, opportunities, skills and experiences were matched with what they and their caregiver
336 said about the domestic rules and environment that supported their activities online. It is to be
337 expected that children’s parents’ mediation strategies and their wider cultural context interact
338 and interrelate in complex but important ways.

339 340 **4. Discussion**

341 **4.1 Key findings**

342 This data informs discussion around the risks that young people encounter online. Being
343 ‘bothered’ or more strongly upset by online sexual content is one specific risk that
344 researchers might be concerned about as they seek to understand young people’s engagement
345 with a variety of online materials. But this data demonstrates that children from different
346 national contexts may react to similar encounters in different ways. Children from the
347 countries in this study differ significantly in the rates at which they report encountering
348 sexual content online, and the sense of ‘botherment’ they feel upon such an encounter. It
349 would appear that the national and cultural context in which such material is encountered
350 might help explain something of the impact of that material. This is Helsper et al.’s thesis

351 with respect to the “supported risky explorers” (2013, p. 4) group of child respondents. The
352 comparative capacity of children in these countries to encounter sexual content and not to be
353 bothered by it may reflect societies which are more open to nudity, discussion about sexuality
354 and sexual self-expression (Wentland, Herold, Desmarais, & Milhausen, 2009). Such national
355 contexts may also be less concerned about children’s interest in sex (and maybe see this as
356 natural), and they may adopt a ‘children’s rights’ approach to policy (Livingstone & Third,
357 2017).

358

359 In a number of countries, and in the framework of the Safer Internet Plus Programme that
360 funded the EU Kids Online study, exposure to sexual content is categorised as a risky
361 behaviour. The reported impact of such exposure in terms of a child (aged 9-16) feeling
362 bothered or not is constructed as one indicator of a health outcome of such behaviour.
363 Exposure to risk is increasingly accepted as an important component of building of resilience,
364 however risk behaviour need not be equated with negative outcomes or with harm. Indeed, in
365 western nations where sexual imagery may be common place in popular culture, the capacity
366 to process such images may well be an important skill. Such an open parental approach may
367 also be valuable for some children since a range of studies have identified circumstances in
368 which young people’s access to sexual content can be constructed as beneficial and health
369 promoting (McKee, 2007; Smith, 2013).

370

371 There is no reason to assume that, at the time the research was conducted (in 2010-2011),
372 children accessing sexual content in one country had a very different experience to children
373 accessing sexual content in a different country. The internet itself was comparatively
374 accessible and the verbal and linguistic component of sexual content is unlikely to have been
375 an organising factor in terms of children’s responses. The use of English as a second
376 language across most of Europe adds some homogeneity for children who might have sought
377 out sexual content in their own language or in English, yet children from the three English
378 speaking countries in the 26-nation study (UK, Ireland and Australia) all recorded very
379 different responses to sexual content. (UK was low access/low rates of feeling bothered;
380 Ireland was low access/high rates of feeling bothered; Australia was high access/high rates of
381 feeling bothered). Thus the language of the material that children judge as being sexual
382 content does not appear to determine the proportion of children engaging, or the nature of
383 children’s response.

384

385 Children in some countries that are generally constructed as socially and sexually
386 conservative (such as Ireland and Turkey) were less likely to encounter sexual images online
387 but more likely to say they were bothered when they did so. This might reflect the negative
388 impacts of guilt, or feeling uncomfortable at the breaking of implicit or explicit taboos.
389 Further, children and adolescents in these national contexts may be less able to speak to
390 adults about online sexual content that might have bothered them, and they may feel that it is
391 less acceptable to construct their own sexuality as a pleasurable part of their identity (Baćak
392 & Štulhofer 2011). They may well fear getting into trouble because of their cultural
393 transgression, and this concern would be separate from and an exacerbating factor in terms of
394 the impact of negotiating the content itself. Studies indicate that active mediation where
395 parent and child can talk openly and easily about the child’s online activities is a protective
396 factor in the context of risks online (Duerager & Livingstone, 2012).

397

398 Although there was no exploration of children’s self-identified sexual orientation as part of
399 the EU Kids Online research project, in other research contexts same-sex-attracted young
400 people have been identified as benefiting from sexual content that presents same-sex-

401 attraction as an acceptable orientation. Such materials and experiences can support the child's
402 positive development as a sexual agent in a country where heterosexuality is dominant and
403 queer sexualities are marginalised or discounted (Kubicek, Beyer, Weiss, Iverson, & Kipke,
404 2010). In such circumstances, it is generally argued that material that supports queer and
405 same-sex-attracted sexualities can help a young person feel that they are part of a larger
406 community and that there are places and communities where their sexuality and sexual
407 orientation will be welcomed and supported. In contrast to this positive reading of the
408 potential impacts of sexual content relating to same-sex-attracted adolescents and young
409 people, sexual content may often be constructed as a troublesome influence for children who
410 identify with mainstream heteronormative sexuality.

411
412 The material in this paper lifts the focus of analysis from the content of the sexual material
413 encountered by the child; the particular characteristics of the child him- or herself; and
414 considers instead the cultural context and associated parental attitudes within which the
415 encounter with sexual content takes place. It is reasonable to suggest that where sexual
416 content is made problematic, or a matter of guilty access, that cultural overlay could be part
417 of what causes the negative impact. In Australia, for example, there was considerable talk at
418 the time of the research about a review of the National Classification Standards for media
419 content, and about the sexualisation of children (Lumby & Albury, 2010). There has also
420 been an Australian Senate select committee investigating "the harm done to Australian
421 children through access to pornography on the internet" (Australian Senate, 2016). Generally,
422 such studies investigate ways in which to prevent children coming into contact with sexual
423 material, but the negative construction of such material might explain part of the reason why
424 children might have a negative reaction when such content is encountered.

425
426 The findings in this study suggest that conceptualising 'risk' for young people as necessarily
427 negative and as something to be avoided is counterproductive. Material that might risk
428 bothering a child in one national context might have no such effect on a child from another
429 country. This particular example also makes clear that risk itself can be seen as something to
430 be embraced, as a necessary part of all learning, and as a contribution to the development of
431 resilience: one of the key aspects of healthy sexual development (McKee et al, 2010). Much
432 research using the language of risk seems to suggest that identifying risk is the first step
433 towards removing it entirely. The differing responses of children in different national
434 contexts to encountering sexual materials online suggest quite a different approach: that one
435 way to build resilience and minimise any harm experienced by some children in their
436 encounters with sexual materials online, and in other contexts, is to follow the examples of
437 the "supported risky explorers" (2013, p. 4) countries. Such a strategy would help remove
438 some of the taboos and prohibitions around acknowledging children's interest in and
439 engagement with sexual content. This would open up a conversation around sexual content in
440 which both adults and children could participate, and which would help children feel more
441 comfortable with their sexual identities as they move towards the chronological benchmarks
442 used by societies to identify adulthood.

443 444 **4.2 Limitations and shortcomings**

445 This paper has a range of limitations and shortcomings. Firstly, the EU Kids Online study is
446 now some years old and was mainly conducted with children who did not have access to
447 mobile internet-connected media. Studies have demonstrated that accessing material via
448 mobile media can be associated with an increased incidence of harm. The study is thus likely
449 to underestimate the incidence of children's exposure to sexual content and may also
450 underestimate the proportions of children who feel bothered by such materials. At the same

451 time, there has been no study of equivalent breadth and depth, conducted in such a robust
452 methodological environment and it is difficult to see how the advent of mobile media might
453 undermine the impact of the national and cultural context.

454

455 Secondly, although it is possible to use this data to identify that the national and cultural
456 context of children exposed to sexual content is likely to impact upon each individual child's
457 response, only broad brush conclusions can be drawn from such a general study. The data
458 raises a range of issues in this respect. For example, Germany is not generally positioned as a
459 sexually conservative country yet very few German children identify themselves as having
460 encountered sexual content online. Those that do say that they have done so are likely to say
461 that they were bothered by the experience. This places Germany in the low likelihood/high
462 botherment quartile of results, alongside Turkey, Ireland and Spain. The parameters that
463 separate these individual nations would seem to be at least as significant as those factors that
464 they have in common.

465

466 Thirdly, apart from acknowledging that constructing sexual content as negative might be part
467 of the process that creates a child's sense of being bothered, the material presented in this
468 paper lacks the specificity required to develop and validate strategies for minimising harm
469 beyond repeating work elsewhere (Duerager & Livingstone, 2012) that notes that active
470 parenting helps develop resilient children who are confident internet users.

471

472 **4.3 Advancing the field**

473 This paper suggests that the concept of 'risk' has been used in too homogenous a manner in
474 studies of children's development, and particularly in relation to their encounters with sexual
475 materials online. It has often been presented as necessarily negative and as something to be
476 avoided. By drawing attention to the national and cultural contexts and the relevant social
477 constructions within which children encounter sexual content it clarifies that the usual focus
478 on the child/children and the materials they access might miss an important component
479 underlying the child's response. The opportunity presenting itself is to investigate one or
480 more countries in each of the matrices of particular relevance to children's response to sexual
481 content. Thus a high exposure country such as Australia might explore that national and
482 cultural context of children's high reported incidence of feeling bothered in terms of a high
483 exposure low botherment country (such as Norway, at the country with the largest proportion
484 of children encountering sexual content) and Ireland (which is low encounter but with a high
485 incidence of children feeling bothered). Such a study might help investigate the high access
486 and the high botherment aspects of the case study since each of the comparison countries
487 (Norway, Ireland) have one aspect of their children's response in common with Australia, but
488 not both.

489

490 An investigation of possible costs and benefits of reduced encounters with sexual content and
491 the costs and benefits of decreased response to sexual content might help inform policy
492 settings and developments that would support an appropriate and healthy outcome for this
493 specific risk behaviour in sexually curious children and adolescents in the 9-16 year old age
494 range. It may also help develop a more sophisticated understanding of the concept of 'risk'
495 that includes its positive elements. This could have important implications for the
496 operationalising of such research by practitioners and policymakers.

497

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505

506 **Conflict of interest statement**

507 The authors affirm that they have no conflict of interest with regards to this paper, although
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510

511 **References**

- 512 Australian Senate (2016). *Harm being done to Australian children through access to*
513 *pornography on the internet*, Parliament of Australia: Senate Standing Committees on
514 Environment and Communications, Environment and Communications References
515 Committee
516 [https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Environment_and](https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Environment_and_Communications/Onlineaccesstoporn45/Report)
517 [d_Communications/Onlineaccesstoporn45/Report](https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Environment_and_Communications/Onlineaccesstoporn45/Report)
- 518 Baćak , V., & Štulhofer , A. (2011). Masturbation among sexually active young women in
519 Croatia: associations with religiosity and pornography use. *International Journal of*
520 *Sexual Health*, 23(4), 248-257. doi: 10.1080/19317611.2011.611220
- 521 Baker, K. E. (2016). Online pornography - should schools be teaching young people about
522 the risks? an exploration of the views of young people and teaching professionals, *Sex*
523 *Education* 16(2), 213-228
- 524 Chrisman, K., & Couchenour, D. (2002). *Healthy sexual development: A guide for early*
525 *childhood educators and families*. Washington, DC: National Association for the
526 Education of Young Children.
- 527 Duerager, A., & Livingstone, S. (2012). *How can parents support children's internet safety?*
528 LSE, London: EU Kids Online <http://eprints.lse.ac.uk/42872/>
- 529 Green, L., Brady, D., Ólafsson, K., Hartley, J., & Lumby, C. (2011). Risks and safety for
530 Australian children on the internet, full findings from the *AU Kids Online* survey of 9-
531 16 year olds and their parents. *Cultural Science*, 4(1).
532 <http://www.cci.edu.au/reports/AU-Kids-Online-Survey.pdf>
- 533 Helsper, E. J., Kalmus, V., Hasebrink, U., Sagvari, B., & De Haan, J. (2013). *Country*
534 *classification: Opportunities, Risks, Harm and Parental Mediation*, LSE, London:
535 EU Kids Online
536 [http://www.lse.ac.uk/media@lse/research/EUKidsOnline/EU%20Kids%20III/Classifi](http://www.lse.ac.uk/media@lse/research/EUKidsOnline/EU%20Kids%20III/Classification/Country-classification-report-EU-Kids-Online.pdf)
537 [cation/Country-classification-report-EU-Kids-Online.pdf](http://www.lse.ac.uk/media@lse/research/EUKidsOnline/EU%20Kids%20III/Classification/Country-classification-report-EU-Kids-Online.pdf)
- 538 Kubicek, K., Beyers, W. J., Weiss, G., Iverson, E., & Kipke, M. D. (2010). In the dark: Young
539 men's stories of sexual initiation in the absence of relevant sexual health information.
540 *Health Education & Behavior*, 37(2), 243-263. doi: 10.1177/1090198109339993
- 541 Livingstone, S., & Third, A. (2017). Children and young people's rights in the digital age: An
542 emerging agenda, *New Media & Society*, 19(5), 657-670
- 543 Livingstone, S. (2011). *EU Kids Online: Enhancing Knowledge Regarding European*
544 *Children's Use, Risk and Safety Online, 2010*. [data collection]. UK Data Service. SN:
545 6885, <http://doi.org/10.5255/UKDA-SN-6885-1>
- 546 Livingstone, S., Haddon, L., Görzig, A., & Ólafsson, K. (2011). *Risks and safety on the*
547 *internet: The perspective of European children. Full findings*
548 <http://eprints.lse.ac.uk/33731/>
- 549 Lumby, C. & Albury, K. (2010), 'Too Much? Too Young?' The Sexualisation of Children
550 Debate in Australia", *Media Information Australia*, 135, 141-152.

551 McKee, A. (2007). 'Saying you've been at dad's porn book is part of growing up': youth,
 552 pornography and education. *Metro*, 155, 118-122

553 McKee, A., Albury, K., Dunne, M., Grieshaber, S., Hartley, J., Lumby, C. and B. Mathews
 554 (2010). Healthy sexual development: a multidisciplinary framework for research,
 555 *International Journal of Sexual Health*, 22(1), pp14-19.

556 Smith, M. (2013). Youth viewing sexually explicit material online: addressing the elephant
 557 on the screen. *Sexuality Research and Social Policy*, 10(1), 62-75.

558 Štulhofer, A., Jelovica, V., & Ružić. J. (2008). Is early exposure to pornography a risk factor
 559 for sexual compulsivity: findings from an online survey among young heterosexual
 560 adults, *International Journal of Sexual Health*, 20(4), 270-280

561 Wentland, J. J., Herold, E. S., Desmarais, S., & Milhausen, R. R. (2009). Differentiating
 562 highly sexual women from less sexual women. *The Canadian Journal of Human
 563 Sexuality*, 18(4), 169-182.

564
 565 **Table 1**

Countries compared	Highly likely to be bothered	Less likely to be bothered
High exposure country	Estonia, Romania, Australia, Poland, France (5)	Austria, Belgium, Denmark, Sweden, Czech Republic, Lithuania, Netherlands, Norway, Finland, Bulgaria, Slovenia (11)
Low exposure country	Turkey, Ireland, Germany, Spain (4)	Hungary, Cyprus, Italy, UK, Portugal, Greece (6)

566