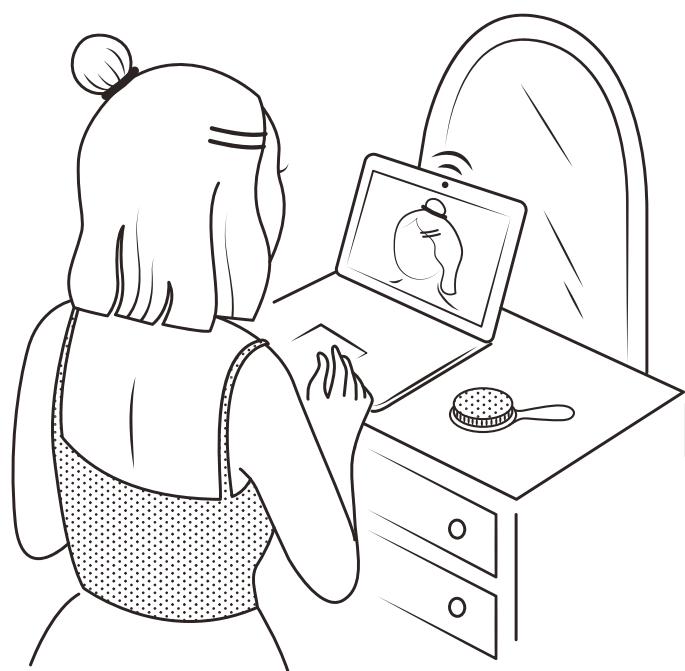


TALK TRUST EMPOWER

A report by Policing Institute for the Eastern Region



Building public resilience against self-generated indecent imagery of children through a public awareness campaign.

What works and what's next?

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In 2021, the Internet Watch Foundation (IWF) ran a public awareness campaign with the aim of building public resilience to the threat of self-generated indecent imagery of children.

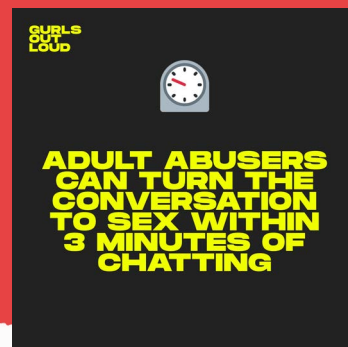


Two separate campaigns were run; one aimed at parents, and one aimed at girls aged 11 to 13:

GIRLS CAMPAIGN

Video playback is not supported in PDF format.
To view the Girls campaign, please visit:
<https://bit.ly/3vvdah3>

Social Media Campaign examples



As part of the monitoring and evaluation of the campaign, three surveys were conducted on the issue.

The Policing Institute for the Eastern Region at Anglia Ruskin University were funded by the Home Office to carry out secondary analysis of the data, with the purpose of producing insights into both parents' and children's awareness, understanding and behaviour in relation to self-generated indecent imagery.

METHODS

To understand how awareness campaigns for girls and their parents/carers may be made more effective, the following research questions were posed:



What are the most impactful ways to raise awareness and empower children to respond safely online to requests for self-generated imagery?



What are the most impactful ways to raise awareness and equip parents/carers to protect their children from requests for self-generated imagery?



What is the relationship between parents'/carers' self-reported attitudes, and protective behaviours and children's self-reported attitudes and online behaviour in relation to self-generated imagery?



3,126 UNIQUE RESPONSES

A total of 1,566 survey responses, comprising of 3,126 unique responses (1,566 parent/carer responses and 1,566 responses from their daughters aged 11-13) were analysed using qualitative and quantitative methods.

KEY FINDINGS

Raising awareness and empowering children

The overall message from the girls was that they want their parents/carers to help them feel empowered to manage their online world. A combination of talking and monitoring measures seems to be most effective, but the practical measures should not be overly restrictive and the talking must be meaningful. To ensure that talking is meaningful, conversations should involve girls being talked to rather than talked at, and should take place on an ongoing basis. Fostering open and trusting relationships between parent/carer and child plays a crucial role in this.

"We want our parents/carers to help us feel empowered to manage our online world."

Raising awareness and equipping parents/carers

Parents/carers reported using a mix of communicative and practical measures to help protect their children from online child sexual abuse, with communicative strategies largely considered more effective. While some parents reported that they felt well enough equipped to deal with the issue, many wanted to improve their knowledge of technology relevant to their children's online lives.

Some parents/carers expressed victim-blaming and parent-blaming attitudes. While these comments were in the minority, it nevertheless highlights the importance of tackling these attitudes in future prevention efforts. This is important because attitudes that mis-allocate blame can inhibit help-seeking behaviours of children who have been victimised and their parents/carers.

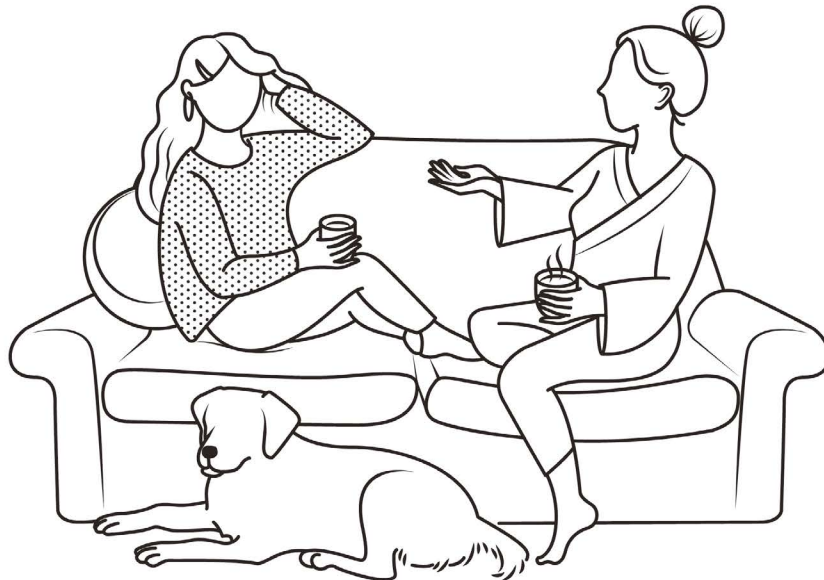
"Not surprising as children aren't taught how to protect themselves and parents don't check what the children are doing"

Relationships between parent/carer and daughter responses

Viewing more of the campaign materials was associated with more positive outcomes for both parents/carers and their daughters. The quantitative analysis supported the findings of the qualitative analysis. It emphasised the importance of better equipping parents/carers with skills and knowledge that will enable them to engage meaningfully with their children and offer them specific practical support. Likewise, it highlighted the importance of parents/carers ensuring open communication and taking an active interest in their child's online world. The findings suggested that parents/carers' attempts to talk to their child about the topic will be unlikely to backfire even if the talk does not go smoothly.



**12% OF ALL
CHILDREN
HAVE VIDEO
CHATTED WITH
SOMEONE
THAT THEY DO
NOT KNOW
IN PERSON**



TALK

TALK to your child about
online sexual abuse.

RECOMMENDATIONS

The following recommendations are made for future prevention campaigns and interventions:

PRIORITISE EMPOWERMENT MODEL OVER SAFETY MODELS.

This means acknowledging the value and benefits online spaces offer to children and young people while also providing them with the knowledge and skills they need to navigate these spaces. Focusing on teaching children and young people digital literacy and how to engage online using critical and ethical thinking.

ENCOURAGE PARENTS/CARERS TO PRIORITISE TALKING OVER STRICT CONTROLLING MEASURES.

Supportive strategies, such as talking, should be prioritised while also recognising practical measures do still play a role. Talking must be meaningful, which means parents/carers talking to rather than at their children, taking an active interest in their child's lives, and endeavouring to ensure their own knowledge on the matter is up to date. Encouraging openness in parents/carers is therefore crucial, both in terms of their relationship with their child and also in terms of being open to seeking new/additional information. Finally, parents/carers should be encouraged to talk to their children even if they cannot find the 'right time'—it is unlikely to backfire.

RAISE AWARENESS OF THE FULL RANGE OF MOTIVATIONS, OFFENDING TYPES AND HARMS.

This means acknowledging that adolescents will engage in consensual creation and sharing of images as part of normal, healthy exploration of their sexuality. Creation and sharing can move outside this consensual sphere in a number of ways, and the messaging and guidance for each will be different. For instance, online strangers as perpetrators requires a different response to peer-on-peer image-based abuse. The range of motivations and offending types should be understood and addressed specifically.

TAILOR INTERVENTIONS TO SPECIFIC AUDIENCES.

The two-pronged approach (targeting child and parents/carers) was effective and future campaigns should take this paired approach. However, it is clear that specific family contexts play a role in who interventions reach. In order to ensure prevention efforts reach all parents/carers and their children it will therefore be necessary to differently target interventions based on a consideration of a range of factors such as ethnicity, age, gender, faith/religion, nationality of families.

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**INTERACTIVE
DOCUMENT**



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1

INTRODUCTION

In 2021, the Internet Watch Foundation (IWF) ran a public awareness campaign with the aim of building public resilience to the threat of self-generated indecent imagery of children.

Two separate campaigns were run; one aimed at parents, and one aimed at girls aged 11 to 13. The parent and daughter campaigns were each comprised of a video and a series of images that were distributed via social media (see IWF, 2021, for the campaign materials). As part of the monitoring and evaluation of the campaign, three surveys were conducted on the issue: one before the launch of the campaign, one following the first six weeks of campaign activity and one at the end of a further six weeks' activity.

The Policing Institute for the Eastern Region at Anglia Ruskin University was commissioned by the Home Office to carry out secondary analysis of the data captured through the campaign's monitoring and evaluation activities.

The purpose of the secondary analysis was to produce insights into both parents' and children's awareness, understanding and behaviour in relation to self-generated indecent imagery.

Girls Campaign



Parents Campaign



'SELF-GENERATED' CARRIES IMPLICIT VICTIM-BLAMING CONNOTATIONS

1.1 A note on terminology

Throughout this report we have used the term 'self-generated' to refer to indecent imagery created by children of themselves.

We recognise the difficulties posed by this terminology, in that it is widely considered that the term 'self-generated' carries implicit victim-blaming connotations, and we note the recent recommendation to switch to 'first person produced' terminology (APPG on Social Media and UK Safer Internet Centre, 2021). However, to avoid confusion, we have chosen to use the 'self-generated' terminology because it accurately reflects the language used within the campaign and survey that are subject to analysis in this report.

METHODOLOGY

2.1 Research questions

To understand how awareness campaigns for girls and their parents/carers may be made more effective, the following research questions were posed:



What are the most impactful ways to raise awareness and empower children to respond safely online to requests for self-generated imagery?

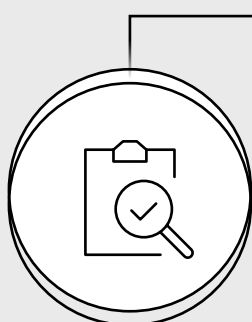


What are the most impactful ways to raise awareness and equip parents/carers to protect their children from requests for self-generated imagery?

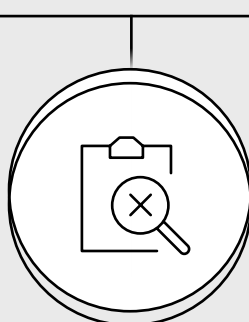


What is the relationship between parents/carers' self-reported attitudes, and protective behaviours and children's self-reported attitudes and online behaviour in relation to self-generated imagery?

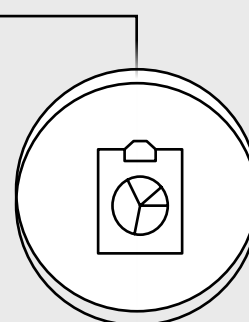
We hope that findings from this analysis can:



Provide an understanding of what works in awareness raising



Provide an understanding of what has not worked well in awareness raising



Inform improvements to the way awareness raising is undertaken in the future for girls aged 11-13 years and beyond to children in different age groups and genders and in different jurisdictions

2.2 The survey

The original survey was designed to evaluate how effectively the agency delivering the campaign on the IWF's behalf had achieved its agreed goals.

The original survey was completed by parent/carer and child pairs. A series of questions was first asked of the parent/carer who then passed the survey to their female child aged 11-13 to complete a further series of questions. Thus, the data comprised paired parent/carer and child responses.

The survey was run three times, with:

- 518 paired responses in wave 1
- 524 paired responses in wave 2
- 524 paired responses in wave 3

2.2.1 Survey data

For analysis purposes, the survey responses across the three waves were combined. A total of 1,566 survey responses, comprising of 3,126 unique responses (1,566 parent/carer responses and 1,566 responses from their daughters aged 11-13) were provided to PIER's research team in Microsoft Excel and SPSS format. The data consisted of 33 variables, 20 describing daughter responses and 13 describing parent/carer responses.

2.3 Data analysis

The research questions were answered using both qualitative and quantitative analysis. The complementarity of these methods provides a robust and more complete picture of survey responses, enhancing the strength of the analysis undertaken.

2.3.1 Research questions 1 and 2

To understand the most impactful ways to raise awareness, equip parents/carers, and empower children to respond safely online to requests for self-generated indecent imagery (RQ1 and 2), qualitative analysis was undertaken using four open-ended questions contained in the survey: two for parents/carers and two for daughters. These questions were:

PARENTS/CARERS

Following provision of a definition of self-generated indecent imagery ([see 4.1](#)):

"Now you have seen this definition, what is your reaction? Does it surprise you that this is happening?" 828 free-text responses provided

"Do you have any final thoughts you would like to share with us?"
405 free-text responses provided

DAUGHTERS

"How do you think your mum, dad or carer could best help keep you safe online?"
237 free-text responses provided

"Do you have anything you would like to add about the things we have discussed today?" 90 free-text responses provided

The qualitative data obtained through these questions were analysed thematically. Thematic analysis is a method used to systematically identify patterns of meaning throughout a dataset (Braun and Clarke, 2012). The analysis was conducted using an inductive approach to coding (Thomas, 2006).

Descriptive statistical analysis was also undertaken to understand, from the respondents, how social media platforms might be leveraged to target awareness raising for children and their parents/carers. Descriptive statistical analysis was also undertaken to understand what measures parents/carers used to help protect their children from online requests for explicit imagery, what measures they considered effective and what tools would help them feel more confident in addressing the issue with their child.

2.3.2 Research question 3

To answer research question three, correlational and regression analyses were undertaken. Firstly, bivariate correlational analyses were conducted to examine factors associated with daughter outcomes¹. Following this, a series of regression analyses was undertaken to clarify the strongest predictors of a few key outcome measures, controlling for other factors. We used separate logistic regression models to examine how well parent/carer behaviours and beliefs predicted three daughter responses: 1) willingness to tell (if received a request for self-generated imagery), 2) positive emotional reactions to parent/carer communication attempts, and 3) negative emotional reactions to parent/carer communication attempts.

2.3.3 Limitations

While secondary analysis of survey data has significant advantages, particularly in terms of the resources required, there are nevertheless some distinct limitations that must be acknowledged. For instance, the wording of survey questions and responses reflect the original purpose of the questionnaire (Johnston, 2014). The most significant limitation was that the survey data being analysed was not designed with this project's research questions in mind. This meant that the variables were not operationalised or measured in the same way they would have been had a primary data collection tool been designed specifically for this purpose (Kiecolt and Nathan, 1985). That said, the aims of the original survey were not dissimilar to the aims and objectives of the present project—both broadly aimed to understand the impact of the campaign and consider implications for future practice—and as such the research team were able to obtain valuable insights from the secondary analysis.

THE ORIGINAL RESEARCH WAS SUBJECT TO ETHICAL SCUTINY

2.4 Ethics

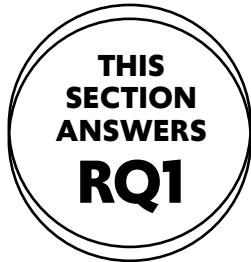
Ethical approval to conduct the secondary data analysis was received from Anglia Ruskin University's School Research Ethics Panel on 2nd February 2022. The PIER research team had sight of a report prepared by the agency responsible for the primary data collection, within which their process of ethical consideration and approval was outlined. The original research was subject to ethical scrutiny from the IWF Board, their data collection partner's legal team, and an Ethicist. No personal data were collected in the surveys and as such there is no identifying information about the original participants. Informed consent for the surveys was gained from the original participants, with parents/carers and their children able to view the survey questions prior to giving their consent.

¹ All computed measures of daughter perceptions about online sexual abuse and of parental beliefs and attitudes about online sexual abuse can be found in Appendix A.



3

RAISING AWARENESS AND EMPOWERING CHILDREN



What are the most impactful ways to raise awareness and empower children to respond safely online to requests for self-generated imagery?

It first sets out what girls said they wanted from their parents/carers to help them navigate online spaces safely. It then goes on to explore what girls had to say about the awareness campaign.

3.1 What girls say they want from their parents/carers

Girls in survey wave one (n=518) were asked “how do you think your mum, dad or carer could best help keep you safe online?”, with 237 providing a free-text response.

The overall message from the girls’ responses to this question was that they want their parents/carers to help them feel empowered to manage their online world.

This was largely articulated through comments that said they wanted their parents/carers to talk to them, to educate them, and to trust them. For some girls, feeling protected by their parents/carers taking practical measures was also part of this.

This section is therefore set out according to the following themes:

- Talk to them
- Educate them
- Trust them
- Take practical measures

While each of these themes is set out separately, there is naturally some overlap between them.

3.1.1 Talk to them

When asked “how do you think your mum, dad or carer could best help keep you safe online?”, the most common response the girls gave was that they wanted their parents/carers to talk to them about it. For example, there was a sense that some girls wanted their parents/carers to be curious; to ask about their online life, what they are doing, and who they are talking to:

“Ask about what I am doing”

“By being interested and checking on me”

Some girls pointed to ‘talking’ as being about having an ongoing conversation, rather than a one-off talk:

“Tell you how serious it is every now and again, remind me to tell people if anything happens”

“By talking 2 me evry day & trusting me [sic]”

These comments reflect findings from research elsewhere which highlighted that adolescents want information and guidance on ‘sexting’ and ‘online safety’ on an ongoing basis (Jørgensen et al., 2018). It has also been noted elsewhere that the style and content of communications is key in engaging young people in these conversations and that these should aim to speak to and not at them (Patterson et al., 2022). Indeed, for the respondents in the present survey, being ‘talked to’ was also about developing or maintaining an open and trusting relationship between parents/carers and daughter.

“By being honest and open with me and talking regularly”

“Being open, so that I can talk openly”

“By trusting me to do the right thing by talking to them and being open”

Likewise, some girls framed this as being about their parents/carers listening to them and hearing their concerns.

“Being always ready to listen to my experiences and my feelings and discussing them with me”

"They could talk to me and listen to me"

"Just do what they are, asking me if anyone had sent me messages, and if I'm worried help, listen"

Indeed, adolescents in Jørgensen et al.'s (2018) research emphasised the importance of having open conversations about these issues and creating a space where they can feel comfortable asking questions. Importantly, then, responses in the present survey indicated that 'listening' also seemed to be about making sure that girls can be confident their parents/carers will be receptive to those conversations and hearing their daughter's concerns in a non-judgemental way. For instance, one girl simply stated that she would be in trouble if she raised the issue with her parents/carers:

"They would tell me off"

Indeed, as the results set out in section 4.2.3 demonstrate, there were a small number of parents/carers responses that included victim-blaming language.

3.1.2 Educate them

Many of the girls' responses highlighted their desire to feel educated about engaging online and how to respond to requests for images:

"By talking with me about the dangers"

"By talking to me about how to protect myself from strangers online"

"Tell me what to be careful of"

"Let me know what I should do about it."

"Talk to me about things that could happen"

This could mean talking to them about practical steps they can take (e.g., blocking), making sure they know what things they should tell someone about and who they can tell about it and being specific about dangers and responses for each type of website/platform. Indeed, previous research has repeatedly highlighted the need for specific guidance, which means parents/carers and educators must have adequate and up-to-date knowledge on technologies (Adorjan and Ricciardelli, 2019b). This also reflects the need for conversations to be ongoing rather than one-off (see also section 3.1.1).

In line with previous research, girls in the present survey expressed differing wants and needs in the type of guidance they sought. For instance, some girls wanted to know 'dos and don'ts':

"My father is better at speaking with me about dos and don'ts and I know I can trust him to give me the right advice at the right time."

"Tell me what not to do and how to avoid these situations"

"Help me to know what's good and bad"

"Tell me what is ok and what isn't so I know what to do"

Whereas others seemed to want more nuanced information and guidance:

"Share situations that may arise"

"To educate me. To make me more understanding of the causes"

"Tell me what to look out for when I am online and when I need to be worried"

This desire for nuanced information and guidance echoes what young people have said elsewhere; that prevention education should not just be 'preaching' about cyber-security and 'sexting', but rather it should aim to develop digital literacy and critical thinking skills that help empower young people to navigate online spaces safely and manage their digital privacy (Johnson, 2015; Ricciardelli and Adjoran, 2018; Albury et al., 2020).

As noted in section 3.1.1, it is important that approaches to educating girls are not comprised of one-off conversations. One reason for this, clearly articulated by some of the girls, related to the fast-paced change of online technologies:

"Keep me up to date with things happening"

Young people have frequently highlighted the lack of understanding parents/carers and teachers have about technology, social media and the internet, and the need for them to become more informed and knowledgeable in order for communication to be fluid and to foster a shared understanding (Redondo-Sama et al., 2014; Jørgensen et al., 2018; Adjoran and Ricciardelli, 2019a; Muncaster and Ohlsson, 2019; Zauner, 2021). That said, while technology can be complicated and confusing for parents/carers and educators as well as children, it is also important to 'keep it simple' in these conversations:

"Explain everything as simply as possible"

Some girls also talked about wanting their parents/carers to give them practical support, which is discussed in section 3.1.4.

Notably, some girls' responses indicated that they thought of being safe as being about not talking to strangers. While this was the offender group portrayed in the campaign materials (this was a conscious decision by the IWF), it does suggest that there could be a need for future campaigns to address a broader range of offending types. Indeed, one girl's comment highlighted the levels of sexualised behaviours they face within their peer group:

"Boys in my class turn conversations to sex in 3 minutes too"

This, along with comments from parents/carers set out in section 4.2.4, suggests that peer-on-peer image based abuse needs to be addressed specifically. Previous research with young people in the UK suggested that this may best be achieved through a broad programme of education interventions, such as within the Personal, Social, Health and Economic Education curriculum (Jørgensen et al., 2018).

3.1.3 Trust them

Many of the girls' comments reflected the feeling that they wanted to be trusted to manage their online worlds.

"Just trust me that I won't do anything stupid"

"They could trust me a bit more"

"Trust me to do the right thing"

"I don't like it if I think that they are spying on me or don't trust me. I know that they are trying to protect me, but I want them to trust me and know that I won't do anything wrong."

"No way, they should keep their nose out of my private life and stay out of my business unless I have an issue and have asked them."

The contrast within these comments demonstrates the fine line between perceptions of supportive curiosity versus snooping or spying. The comments indicate that these girls feel confident that they know what to do and so want their parents/carers to trust them to come to them if something happens. Indeed, several girls said that they have a trusting relationship with their parents/carers. For some this was about trusting that their parents/carers know what to do and can help them if needed, demonstrating the importance of building trust both ways:

"Keep advising me like they always do. The trust I share between my parents and I is very important."

"They trust me and I would tell them if anything did happen"

"They trust me"

Such responses are also reflective of the comments set out in section 3.1.1 about girls wanting their parents/carers to be open and receptive.

3.1.4 Take practical measures

Many of the girls said they wanted their parents/carers to 'help' or 'protect' them, but a lot of these were generalised comments that did not indicate how they wanted their parents/carers to do this. What these comments did nevertheless demonstrate was that they do want help with and protection from online risks.

The girls who provided more detailed comments frequently talked about practical measures they wanted their parents/carers to take (or that their parents/carers already took), which broadly involved parents/carers supervising or checking-in on their daughters and parents/carers implementing physical or digital restrictions.

"Look after me and check what is happening"

"Keep an eye on me"

"Keep checking in on me"

More specifically, girls wanted their parents/carers to monitor what they were doing online, for instance by checking chat histories and looking at the apps and websites they use.

"Check in with me now and again and review my history"

"Keep an eye on my apps"

"By checking my social media regularly"

"To know who I am talking to and check on me regularly"



Comments such as “Look after me and check what is happening”, suggest that for some girls the practical steps their parents/carers take help them to feel safe. It is crucial, however, that parents/carers are mindful of their daughter’s privacy when taking these monitoring measures, because as was outlined in section 3.1.3, there can be a fine line between actions being perceived as supportive and actions being perceived as invasive. Considering these comments alongside the comments about girls wanting to be talked to and educated (sections 3.1.1 and 3.1.2), it seems that it is important parents/carers are open about the measures they take and clearly communicate why they are monitoring.

Some of the practical help that girls said they wanted included help with blocking people and apps, as well as help with adjusting privacy settings.

“Make sure that randoms can’t contact me”

“Block apps and tell me how to block people”

“Keep me anon”

“Make sure privacy mode is always turned on.”

The latter comment above is, however, slightly unclear and could refer to ‘incognito’ type modes, which has been identified by Ofcom as a feature that some children use which could actually decrease their safety through circumventing parents’/carers’ protective measures (Ofcom, 2022).

Other girls talked about wanting their parents/carers to restrict (or continue restricting) their use of technology, either by implementing digital restrictions such as parental controls or by having restrictions on screentime.

“Keep talking to me and keep the restricted use of technology in place”

“Parent controls and talking to me”

“Not as much screentime”

Many of the girls’ responses highlighted that a range of practical measures were used by individual parents/carers and that these were often combined with a talking approach. It is also important to note that while some girls talked about things their parents/carers could do for them, others talked about things their parents/carers could support them to do, which again speaks to the value of taking an empowerment approach.

Overall, these findings reflect those of Rutkowski et al., (2021), who also surveyed teen-parent/carer pairs and found that teens did value parent/carer involvement and did not necessarily want complete independence within the online sphere.

3.2 What girls said about the campaign

At the end of the survey in waves one and two, girls were asked whether there was anything else they wanted to say (n=1,042). Very few of them made any comments here (n=90), however those that did comment had largely positive things to say about the campaign materials. Girls recognised the importance of the topic, and some said that viewing the materials and/or taking part in the survey had helped them. The video seemed to resonate particularly well.

"I liked the video"

"It was really easy to understand the video"

"It made me feel uncomfortable but its stuff I need to know"

"Thank you, now I feel more secure and confident of what I can do if these things happen to me"

"Seeing these three [campaign materials] has made me think I should be more open with my mum and dad about the things I see online."

This is especially important when considered against findings of previous research in which young people have lamented on how education campaigns and interventions fail to resonate with them (Albury et al., 2013; Ricciardelli and Adjoran, 2018; Aljuboori et al., 2021).

The less-positive comments within the responses were mostly not to do with the campaign materials, instead they reflected frustration at the existence of the problem or their parents'/carers' responses to it:

"It's because of all this that Mum will not let me have a proper smart phone yet so it's not fair"

One girl, however, did express frustration at the gendered aspect of the campaign:

"Why is everything always about girls? Like why is it called Gurls Out Loud when males and boys suffer from the same kind of abuse on a daily basis?"

This reflects some parents'/carers' comments in section 4.3. It demonstrates the need for further campaigns that address the wide-ranging typologies of this offending, but also that the gendered nature of the problem could be communicated more clearly in education. It is imperative that this is done with careful consideration, however, because previous research with adolescent girls has revealed that they feel frustrated by the gendered double standard within many prevention interventions, and this can contribute to a perception of victim-blaming (Naezer and van Oosterhout, 2020; Zauner, 2021).

3.2.1 Where girls saw the campaign

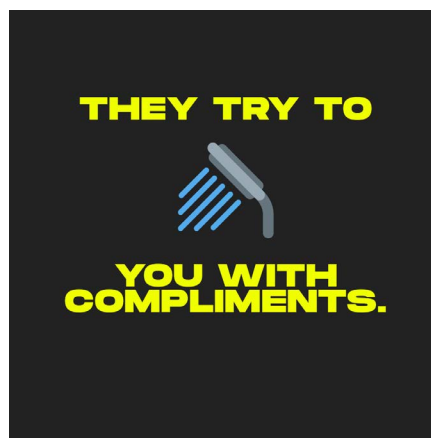
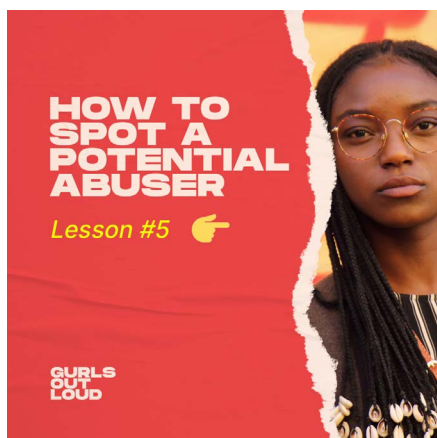
The vast majority of girls had not seen any of the campaign materials before taking part in the survey (80%), but as part of the survey all girls were shown the campaign video that was targeted at girls along with two of the associated images.

To understand how social media platforms might be leveraged to target awareness raising for adolescents and their parents/carers, an analysis was undertaken of which social media platforms campaign materials were most often viewed on. As part of the survey, girls aged 11-13 were asked to identify which online platform they had seen two images and one video on. These platforms were: TikTok, Instagram, Snapchat, YouTube, Google search, Facebook, Twitter and Hangouts.

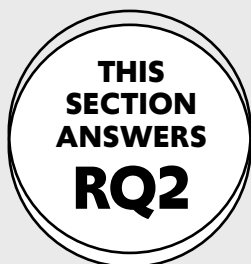
In relation to the first image, Facebook was the online platform where the image was viewed most, whilst Hangouts was the online platform where the image was viewed least. Broken down by age, across all age groups, image one was seen most on Facebook. This was followed by Instagram for 11-year-olds, YouTube for 12-year-olds and Twitter for 13-year-olds.

Just like the first image, Facebook was the online platform where the second image was viewed the most, and Hangouts was the online platform where the image was viewed least. When broken down by age, differences in the online platforms where the second image was viewed became slightly more pronounced. For 11-year-olds and 13-year-olds, image two was seen most on Facebook, while for 12-year-olds this was YouTube.

In relation to the video, YouTube was the online platform where the video was viewed the most, followed by Facebook and Tik Tok. Hangouts was the online platform where the image was viewed least. Across all age categories the video was seen most on YouTube. This was followed by Instagram and TikTok for 11-year olds, Facebook and TikTok for 12-year-olds and Facebook and Instagram for 13-year-olds.



RAISING AWARENESS AND EQUIPPING PARENTS/CARERS



What are the most impactful ways to raise awareness and equip parents/carers to protect their children from requests for self-generated imagery?

It first sets out parents'/carers' awareness of self-generated indecent imagery. It then goes on to explore what parents/carers had to say about the issue, including what they said would help them talk more comfortably about it with their children. Finally, it sets out what parents had to say about the campaign.

4.1 Parents'/carers' awareness about self-generated indecent imagery

DEFINITION PROVIDED TO PARENTS/CARERS AND CARERS DURING THE SURVEY:

'Self-generated online child sexual abuse' is when children are groomed, deceived or extorted into producing sexual images and / or videos (pre-recorded or live-streamed via webcam) of themselves and sharing them online. These images or videos are usually produced using laptops or tablets in the child's own home, with their parents or carers oblivious to what's going on.



The IWF, the UK charity responsible for finding and removing images and videos of child sexual abuse from the internet, has seen a dramatic 77% increase in the amount of 'self-generated' abuse material as more children, and more criminals spent longer online in 2020. Parents/carers in waves one and two (n=1,042) were given the above definition and were asked "Now you have seen this definition, what is your reaction? Does it surprise you that this is happening?", with 828 providing a free-text response. The responses to this question included a range of vocabulary describing their reactions to reading about the issue of self-generated indecent imagery, including:

Angered

Appalled

Concerned

Disgusted

Horrified

Saddened

Scared

Shocked

Sickened

Worried

Due to the framing of the question, the most common type of response involved parents/carers commenting on whether or not they found the definition or behaviour surprising. Most of these parents/carers said that they were not surprised. Similarly, many parents/carers stated that they were aware of the issue, with some additionally commenting that they had not known there was a term for it.

“Not at all, have heard of cases where this has happened”

“No I have heard of it I just did not know that was what it was called”

“Not a surprise. I had heard of this before”

For others, there was a sense of surprise or shock because they had not been aware of the issue, but at the same time they were not surprised to hear that it happens:

“Well my reaction is shocked but not surprised”

“No surprise but it’s shocking”

“Shocked but not surprised. The internet is getting worse. I wish I could take my kids devices away but I just have to trust and hope they will be safe and have knowledge to keep safe.”

A sizeable minority, however, did state that they were surprised, and this often seemed to be about being unaware the issue existed:

“I do find this surprising and shocking”

“This is very surprising as I didn’t know that this happened”

Although for some the surprise was not related to the existence of the behaviour, but to the scale of the issue:

“I’m not surprised it is happening, just surprised about the volume”

“Already knew of it, find it disgusting that it happens and surprised how often”

“This is not good, yes am surprised by the numbers”

Following the information contained within the definition parents/carers were provided with, several of them linked the increasing scale of the problem to the ubiquity of the internet in children’s lives and the intensification of this caused by pandemic lockdowns:

“I’m actually not surprised at the statistics because due to the pandemic we have mostly all been idle at home and this I imagine created the opportunity for criminals and kids to spend more time online than they normally would”

“It doesn’t surprise me with being in lockdown”

“No it doesn’t as they have been at home so much.”

There were similar comments from parents/carers who considered that the internet exacerbated existing social problems, such as grooming, by providing more opportunities for perpetrators:

“Unfortunately it doesn’t surprise me and technology can facilitate this”

“Not at all. The internet is amazing and a source of many wonderful things. However, it also a place where adults can prey on children, as they hide behind fake profiles.”

“Society has always had individuals who aim to exploit others and the fact that they’re now using the web to do this isn’t a surprise.”

The responses set out within this section show that parent/carers’ awareness of self-generated indecent material was mixed. Thus, increasing awareness among parents/carers remains a crucial task in prevention efforts.

4.2 What parents/carers say about the issue of self-generated indecent imagery

Across the two open response questions, parent/carers provided comments about their thoughts on the issue of self-generated indecent imagery. The majority of these comments mirrored those set out in section 3.1, in which daughters said they wanted their parents/carers to talk to them, to educate them, to trust them, and in some instances take practical steps to protect them. Additionally, the comments from parents/carers touched on issues of blame (both regarding girls and their parents/carers) where victimisation occurs and issues relating to who are perceived to be potential perpetrators.

This section is therefore set out according to the following themes:

- **Importance of talking with children**
- **Taking practical measures**
- **Diverging allocations of blame**
- **Perpetrators as the deviant ‘other’**

4.2.1 Importance of talking with children

Parents/carers were asked to identify, from a predetermined list, which solutions they currently used to help them protect their child(ren) from self-generated online child sexual abuse (they were asked to tick all that apply). Table 1 sets out this list and how many parents/carers said they used each option.



The three most common actions taken by parents/carers were: making sure their child knows they can come and talk to them; engaging their child in conversations about online safety; and engaging their child in conversations about online risks and what is safe to share. Some of the least popular options were the most restrictive, such as removing all technology from children or only allowing them to use devices in the same room as parents/carers.

ACTION	Number of parents/carers % (n)
Making sure your daughter/child knows she can come and talk to you about something or someone that is making them feel uncomfortable online	66.8 (1,046)
Engaging your daughter/child in conversation about how to keep themselves safe online	64.4 (1,008)
Engaging your daughter/child in conversation about the risks of being online, including what is safe to share	61.3 (960)
Making sure your daughter/child knows it is never too late to tell you about something*	59.0 (614)
Proactively engaging in general conversations with your daughter/child about her life*	57.0 (594)
Inputting parental controls online	43.9 (687)
Restricting screen time	38.8 (607)
Find out what your daughter/child has learned at school on the subject	35.6 (558)
Disciplining your daughter/child	20.5 (322)
Only allowing use of devices when your daughter/child is in the same room as you	14.3 (224)
Contacting the school to see if your daughter/child is being taught about online safety at school	13.3 (209)
Removing all devices and tech	12.6 (197)
None	3.3 (51)
Other	1.2 (19)
Prefer not to say	1.0 (15)

Table 1: Number of parents/carers who took each protective action. Respondents could select multiple options. *Response was only an option in waves 1 and 2 (n=1,042)



Parents/carers were then asked to rank which of the solutions they considered to be the most effective. They were able to choose up to three and were told their choices would be ranked the most, second most, and third most effective, according to the order in which they selected them. The three actions with the most votes and therefore ranked most effective by parents/carers were:

1

Making sure your daughter/child knows she can come and talk to you about something or someone that is making them feel uncomfortable online
(820 of 1,566 parents/carers chose this option)

2

Engaging your daughter/child in conversation about how to keep themselves safe online
(719 of 1,566 parents/carers chose this option)

3

Engaging your daughter/child in conversation about the risks of being online, including what is safe to share
(683 of 1,566 parents/carers chose this option)

The options with the fewest votes, and therefore considered least effective, were contacting the school to see whether they are teaching online safety (77 of 1,566 parents/carers selected this option) and removing all devices and tech (80 of 1,566 parents/carers selected this option).

Indeed, the qualitative responses provided by parents/carers strongly reflected the preference for communication over restrictive practical measures. Their comments highlighted the importance of talking and reiterated the importance of fostering an open and trusting relationship between parent/carer and child.

“Education is the key. As is a trusting relationship and an open door policy to any problems in life.”

“Honest conversations and open family life”

“Making sure your children talk openly to you is the best thing!”

“This threat depends on the relationship you have with your children, the more open and honest about these things the better.”

Some parents/carers expressed that taking part in the survey had inspired them to be more open with their daughter (see also section 4.3):

“It enhanced my confidence and now I will be more open to my daughter.”

“From today I’ll be more friendly with my daughter. I will always take care about her online world.”

In highlighting the importance of discussing the issue openly with their children and helping to educate them about it, these comments reflect two of the prevalent themes within the daughters’ qualitative responses (see sections 3.1.1 and 3.1.2). This again emphasises that an empowerment approach is valued.



Two parents/carers also noted that there can be difficulty in finding a balance between respecting their daughters' privacy and taking steps to protect them:

"It's hard to balance the freedom and right to privacy my daughter has with the risks online"

"This is a tricky subject. I consciously attempt not to monitor/spy on my daughter's online activity so that she feels trusted and has some privacy of her own, but the dangers obviously exist. I think she is smart enough and aware enough to keep out of trouble."

Once more, this is reflective of some of the responses from daughters who said they want to feel trusted (see section 3.1.3). Several parents/carers said that they believed their child was already well equipped enough to deal with online requests and felt confident that their child knew what to do and would speak to them about it:

"My daughter is very up to date with the knowledge she needs to be safe online. She know to come and talk to me if she is worried about anything unusual"

"Thank goodness we have taught our daughter well and she is well aware of the dangers of online sites"

"My/out [sic] daughter is totally confident to talk about all sorts of abuse/ racism and the dangers of todays world."

"She understands that she should always come and show me anything she's uncomfortable with and I will deal with it without any judgement."

"My child knows they can tell me anything"

"[I] am confident my daughter would not feel [sic] prey to this"

"I trust my children to be safe and sensible"

Again, these comments reflect the qualitative responses from daughters who said they valued (or wanted) their parents/carers educating them and trusting them. This aligns with previous research, which has highlighted the importance of engaging with young people and helping them feel empowered (Wurtele, 2017; Ricardelli and Adjoran, 2018; Albury et al., 2020).

Many parents/carers noted the need for the issue to be more widely discussed in order to increase awareness of both parents/carers and children. For some this meant wider or regular distribution of the campaign materials, with television and billboards being specifically mentioned as places they would like to see the campaign. Several parents/carers noted that schools should (or already do) play an important role in raising awareness, educating and supporting children and their parents/carers:

"There needs to be more liaison between parents and school safeguarding officers in terms of preventative measures."

"I know the secondary school she has recently started has had visits from the police regarding safety and awareness in the area."

Furthermore, the internet industry was implicated in a few comments, with some parents/carers viewing the industry as not doing enough to protect children who use their services. Likewise, some parents/carers considered other institutions, such as the Government and the criminal justice system, as being slow and/or inadequate in their responses to this type of offending.

“I think there should be more done to protect children in this digital age, by the government, schools, police, and more education about it for parents and children, a lot of parents like myself don't understand new technology like our children do”

Indeed, reflecting the latter part of the comment above, several other parents/carers said that they would like to have more information and resources available to them to help them keep themselves and their children informed and to aid in having these ongoing conversations.

4.2.1.1 What would help parents/carers talk with their children

Parents/carers were asked what, from a predetermined list, they would need to aid them in feeling more comfortable talking to their child(ren) about self-generated online child sexual abuse material. Table 2 sets out this list and how many parents/carers chose each option.

AID	Responses % (n)
Finding the right time and place to talk about it	32.3 (273)
Learning how other parents are doing this	29.1 (246)
A clearer idea of what girls are doing online	28.4 (240)
Knowledge that allows me to deal with or appropriately react if my daughter/child revealed she had been affected by self-generated online sexual abuse	28.2 (238)
A better understanding of the tactics of sexual offenders online	27.4 (231)
More support/materials from schools or charities	26.3 (222)
A better understanding of the risks	25.2 (213)
Age related parents' guidance	23.8 (201)
Clearer signs my daughter/child is at risk	22.3 (188)
Evidence of cases where this has happened to share with my daughter/child	22.0 (186)
Understanding how to manage their timings/access online	20.4 (172)
More support (e.g. from partner, friend or family member)	18.7 (158)
I would like my daughter/child to be a little older before I talk about this	18.2 (154)
Confidence that I would not be judged	14.6 (123)
Nothing	4.5 (38)
Don't know	5.6 (47)
Other (specify)	0.5 (4)

Table 2: Number of parents/carers who selected each aid. Respondents could select multiple options. All parents/carers were asked this question and 844 of them provided responses therefore % is of 844.



The most commonly selected answer was that parents/carers would feel more comfortable talking to their child if they could find the right time and place. The second and third most common options were learning how other parents/carers approached it and having a clearer understanding of what girls are doing online.

The responses here indicate that many parents/carers recognise a deficit with regards to their knowledge on the issue of self-generated online child sexual abuse material, but also that they have a desire to actively learn more about it and strategies they could take to address it with their child. Research elsewhere has suggested that parents of girls aged 12-15 are more likely to say they feel unsure whether they know enough to protect their child online (Ofcom, 2022) and that adults' lack of awareness and comprehension of digital media and technologies acts as barrier to talking to children about online safety, and particularly 'sexting' (Jørgensen et al., 2018; Finkelhor et al., 2020). This points to the need for adults, i.e., parents/carers and teachers, to receive education and support to be able to feel confident in their knowledge and understanding of relevant technologies and to enhance their communication with children (Finkelhor et al., 2020).

4.2.2 Taking practical measures

Parents/carers also talked about the practical measures they took (or planned to take) in order to try to protect their daughters from online requests for explicit material. There were far fewer of these comments than there were comments relating to having conversations (**see section 4.2.1**).

"Mine can't download any apps without parental authorisation. I also won't allow her to add anyone I don't know. She knows I will check and if needed, I would take away any devices."

"Constant monitoring of my child's online activities"

"My daughters Internet activity is highly monitored"

Some parents/carers said that they wanted a wider range of tools that could help increase their ability to control or monitor their daughter's online activity:

"There should be more tools that can restrict online access across the multiple devices my child has access to"

"Better controls that kids cannot take off their devices would be a great help"

"There needs to be better tools available to monitor online activity"

While these comments do in part reflect the desire some of the daughters expressed for their parents/carers to take practical measures, the level of monitoring, restriction and control implied within these parents'/carers' comments seems at odds with the desire for empowerment that was expressed by most daughters. Previous research has indicated that it is ineffective for parents/carers to try to strictly control internet usage and that, instead, emotional support is a protective factor as it can boost self-worth and resilience (Whittle et al., 2013; Muncaster and Ohlsson, 2019; Aljuboori et al., 2021). Indeed, as Rutkowski et al., (2021) found, it seems that a combination of monitoring (rather than restriction) and active communication between parent/carer and child presents an effective strategy.

4.2.3 Diverging allocations of blame

Within the qualitative responses from parents/carers there were a small but not insignificant number of comments that construed a sense of parent-blaming with regards to this issue.

"I'm not surprised it is happening. I feel some parents do not do enough to ensure their children are safe"

"Wouldn't know how you didn't know your child would do that. It doesn't surprise me as computers are used to keep children entertained so parents don't have to"

"Not surprising as children aren't taught how to protect themselves and parents don't check what the children are doing"

"No as some parents never check to see what their children get up to"

"I know a lot of parents who don't control what platform of social media their kids use and don't monitor it so it makes it so much easier for paedophiles to gain access that way"

"It does not surprise me at all. There's a severe lack of clued-up parenting with regards to online content"

Parent-blaming narratives such as these are unhelpful and can contribute to feelings of guilt and shame that parents/carers may feel when their child is victimised, which may in turn restrain parent/carers' help-seeking behaviours (Zagrodney and Cummings, 2020).

Additionally, there were some victim-blaming comments from parents/carers with regards to girls who may send explicit material in response to online requests. These comments framed children as "willing" participants or as "naïve" and "stupid".

"It surprises me that children are willing to do this so freely without understanding what harm it could cause to them"

"Some children have such a low opinion of themselves that this type of behaviour feeds into their insecurities."

"It does surprise me this is happening and children are taking these photos/videos willingly."

"And I worry about children who are maybe not as sensible as my daughter who can get pulled in because of their vulnerability"

Comments such as the latter one above suggest that some parents/carers do not perceive it as an awareness/education issue, but instead as something linked to an inherent vulnerability, which ignores that online abuse is increasingly understood as a manifestation of broader social issues (e.g., misogyny and sexism; Fairbairn, 2015; We Protect Global Alliance, 2021). As with parent-blaming narratives, victim blaming narratives can contribute to feelings of guilt and shame and thereby inhibit help-seeking behaviours (Kennedy and Prock, 2018).

On the other hand, some parents/carers recognised that children and young people are under an enormous amount of pressure (including from peers) to conform to sexualised norms and expectations, thus locating blame away from children and their parents/carers.

"I don't think my daughter is sexualised yet but worry this may not be too far into the future"

"Everything is sexualised nowadays, young people are desensitised into accepting it as normal"

"Nudity and sexualisation are becoming the norm as smart phones are in use more and more"

Relatedly, a couple of parents/carers drew links between this topic and so-called 'revenge porn', which highlights that educating girls on this topic is also about preparing them for what they will continue to face into adulthood.

"It does not surprise me at all. I am an adult and get groomed all the time by certain individuals to do exactly that, so nobody is free from potential harm."

Indeed, this reflects arguments elsewhere that position these experiences as part of a continuum of violence and abuse against women and children (Fairbairn, 2015; Zauner, 2021; McGlynn et al., 2017).

4.2.4 Perpetrators as the deviant 'other'

Several comments from parents/carers across both qualitative questions used language such as "sick people", "predators" and "paedophiles" and seemed to position perpetrators as deviant 'others' rather than people potentially known to them or their child:

"There are lots of dodgy people online"

"Sick paedophiles will always find a way to target vulnerable children."

"Very much aware that there are vile predators online trying to entice vulnerable children"

These comments could indicate that some parents/carers think of this issue as being about threats posed by strangers, which can obscure potential risks arising from people their child knows, including those within their peer group. This was also demonstrated through comments suggesting parents/carers did not consider their children to be at risk because they only speak to people they know:

"My child does not chat or leave comments on social media. She only speaks with people in her class."

"I would like to think my daughter only talks to people she knows."

This is interesting when considered against recent research by Ofcom which indicated that many children have multiple profiles on social media sites, with the primary reason given for this being that they kept a separate profile for parents/family to see (Ofcom, 2022). This may affect parents'/carers' awareness of their child's online activity.

The campaign deliberately focused on strangers as the offenders, and this framing likely acted as a primer for the comments outlined above, as could the mention of 'grooming' in the definition parents/carers were provided with. Nevertheless, the issue of peer-on-peer abuse was specifically mentioned by several parents/carers who wanted to see interventions for this:

"I'm so pleased this campaign is happening but could it be expanded to include school children being groomed by other school children as this is also a real area of concern"

"As well as teaching parents to talk to their girls, we should be teaching our boys not to ask. Not all sexual abuse and images are asked for by older men, a lot are young boys who think its [sic] funny to put them online which is just as dangerous."

"Not all sexual predators are male, as portrayed. There are innumerable accounts of abuse perpetrated by females, e.g. female teachers and young male students"

"I am most concerned about peer on peer exploitation now as it is rife in my children's school and beyond."

Indeed, it is increasingly recognised that there are a range of motivations for children creating and sharing these images and for offending behaviours related to such images (We Protect Global Alliance, 2021).

Furthermore, Finkelhor et al., (2020) have posited that the focus of prevention efforts on perpetrators as strangers met online can be misleading and neglects the fact that most sexual exploitation happens at the hands of acquaintances.

4.3 What parents/carers said about the campaign

Most parents/carers had not seen any of the campaign materials before taking part in the survey (72%), but as part of the survey all parents/carers were shown the campaign video that was targeted at parents/carers along with two of the associated images.

Throughout the open responses, many parents/carers commented on the campaign materials. The video was perceived as especially hard-hitting. Some described it as "creepy" or "scary" and indicated that they did not like it, however the more common response was for parents/carers to note that this was what made the campaign effective:

"That was really creepy and horrible - a good way to raise awareness"

Indeed, most parents/carers who provided comments about the campaign viewed it very positively. For instance, several parents/carers described the campaign materials as "thought provoking" and stated that it covered an important issue. It should be noted that the survey

itself was an important part of this because the vast majority of parents'/carers respondents had not seen the campaign materials before taking part in the survey.

"Grateful for this survey helped me understand the wording and meaning and what to look for thanks so very much"

"Very informative and has certainly made me think in detail about the subject and discussing it with both my son and my daughter - thank-you. This is why I enjoy doing surveys."

"This was very informative, and will help me and my child a lot, thank you"

Moreover, many parents/carers said that they learned something from the campaign/survey and some said it had increased their confidence:

"I think it's a great initiative. As parents sometimes we do struggle to talk about these sensitive issues to our children. But this information have given me a confidence booster [sic]"

"It enhanced my confidence and now I will be more open to my daughter."

"It boosted my confidence so that I can now talk more freely to my daughter"

A lot of parents/carers commented that the campaign/survey had inspired them to do more to protect or educate their children. This included parents/carers who wanted to talk more with their children and those who wanted to monitor/control their online activities more, and some said they wanted to do more of both.

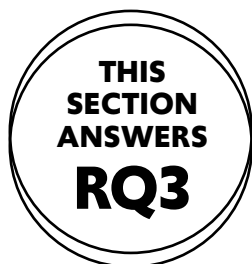
"This survey has reinforced me to talk to my daughter regarding grooming and safe use on the internet"

"I am going to take a much more involved attitude to what my daughter does online and what she is taught at school about this problem."

"Sit down and have another chat with her and also look again at the parental controls that I have in place"

Finally, a small number of parents/carers said they were uncomfortable with the campaign's portrayal of perpetrators as being male (although interestingly, one of the actors portraying the perpetrators in the video was actually female). While this was only a small number of comments, it suggests that there is some work to be done around communicating the gendered nature of this issue. It does also, however, arguably reflect the complexities in the motivations in creating, sharing, and requesting these images, and that a range of campaigns are needed to tackle different aspects, which is an area that would benefit from more research.

RELATIONSHIP BETWEEN PARENT/ CARER AND DAUGHTER RESPONSES



What is the relationship between parents/carers' self-reported attitudes and protective behaviours and children's' self-reported attitudes and online behaviour in relation to first person generated imagery?

Having separately examined daughters' and parents'/carers' awareness, attitudes, and responses to self-generated indecent material, this section explores the relationships between them. To achieve this, two analyses were conducted.

- Firstly, correlational analysis was carried out to measure the strength of the associations (relationships) between all variables.
- Secondly, regression analysis was conducted to examine the predictive power of parent/carer beliefs and behaviours on three different outcome measures, 1) daughters' willingness to tell, 2) daughters' positive emotional reactions to parent/carer communication attempts and, 3) daughters' negative emotional reactions to parent/carer communication attempts. All analyses were controlled for parent/carer demographics and daughter online activity level.

Further detail on how the variables were grouped and coded can be found in [Appendix A](#).

5.1 Associations between exposure, daughter and parent/carer behaviour and perceptions

Bivariate correlations were conducted between all 33 variables (see [Appendix B](#) for the correlation matrix). The results are organised under four main headings:

- Campaign exposure
- Responses to requests for explicit material
- Emotional reactions to parent/carer communication attempts
- Receiving requests for explicit material

The relationships/associations between each variable grouping and other daughter-parent/carer variables are discussed and statistically significant relationships are denoted². The strength of each relationship is indicated by the *r* value in brackets. Values can range from -1 (a perfect negative relationship) and 1 (a perfect positive relationship) and where zero represents no relationship.

² * *p* < .05, ** *p* < .01, *** *p* < .001, ns - non-significant

THE MORE CAMPAIGN MATERIALS DAUGHTERS REPORTED SEEING, THE LESS UPSET THEY REPORTED FEELING BY REQUESTS FOR EXPLICIT MATERIAL

5.1.1 Campaign exposure

There was a strong positive relationship between daughters' and parents'/carers' exposure to the campaign materials ($r = .72^{***}$) meaning that both parties were highly likely to have seen the same material, suggesting that reaching one group made it likely to reach the other, perhaps because they shared the media with one another. Therefore, we present only the correlations relating to the daughters' exposure (see Appendix B for equivalent parent/carer associations).

We found that the more campaign materials daughters reported seeing, the less upset they reported feeling by requests for explicit material ($r = -.11^{*}$).** They were, however, not more likely to tell authorities (ns) or close others about requests (ns). This is reflective of previous research which has found that online child sexual abuse interventions with adolescents tend to improve knowledge but are less effective in changing behaviours (Patterson et al., 2022). Girls that reported seeing more campaign materials reported both that they were more likely to consider sending explicit material ($r = .23^{***}$) and more likely to ignore such requests

($r = .12^{***}$). This is perhaps in part because these girls reported spending more time online, talking to friends and family as well as strangers, and were more likely to report that their friends and they themselves had personally received requests for explicit material. Therefore, they had more opportunity to receive such requests, but they also seemed better equipped to deal with the requests. However, Patterson et al.'s (2022) analysis of online child sexual abuse interventions did highlight an intervention that had potentially increased "risky online behaviours". It is not possible to say whether that was the case with the present campaign, but it is something that future campaigns and prevention efforts should carefully test and measure.

The more campaign materials daughters reported seeing, the more positive feelings they reported towards parent/carer attempts to discuss the topic with them ($r = .21^{*}$),** with no greater negative feelings (ns). When daughters had seen interventions, parents/carers reported greater confidence in how to act ($r = 0.14^{***}$), greater knowledge of the problem ($r = .43^{***}$) and were more likely to report recently talking with their daughters ($r = .20^{***}$). When daughters had seen interventions, parents/carers were slightly more likely to report that they use practical strategies (e.g., restrictions; $r = .09^{**}$) but not supportive strategies (e.g., talking; ns), to report that the problem is common ($r = .16^{***}$), and report their daughters were vulnerable ($r = .27^{***}$).

Finally, male parents/carers ($r = -.19^{***}$) and parents/carers with higher household incomes ($r = .29^{***}$) were more likely to have daughters who had seen the interventions. The data cannot tell us why this was the case, but it highlights that campaigns and other prevention efforts need to be carefully targeted to ensure that all groups of parents/carers are reached. This would require interventions to be evidence-based, ideally using research with an intersectional framing in order to understand how campaigns might better reach, for example, female parents/carers with lower household incomes or families from ethnically minoritised communities.

5.1.2 Responses to requests for explicit material

5.1.2.1 Tell someone about requests

Daughters were asked to report the ways they would be likely to respond to requests for explicit material, including telling authorities such as the police or websites, or telling close others such as friends or family. Daughters who indicated they would tell authorities were more likely to report feeling surprised by ($r = .26^{***}$), upset by ($r = .83^{***}$), and more likely to report that they would block those making requests ($r = .45^{***}$). Likewise, daughters who indicated they would tell a close other were more likely to report feeling surprised by ($r = .36^{***}$), upset by ($r = .42^{***}$), and more likely to report that they would block those making requests ($r = .30^{***}$). Daughters who reported they would tell authorities and daughters who reported they would tell a close other reported both more positive ($r = .17^{***}$ and $r = .21^{***}$, respectively) and more negative ($r = .10^{***}$ and $r = .17^{***}$, respectively) reactions to parent/carer attempts to talk about the topic. This perhaps suggests stronger emotions overall, or moderation by an unmeasured factor, with some people more positive and others more negative.

Those who said they would tell authorities were slightly more likely to spend time on the internet ($r = .09^{**}$) but less likely to contact strangers ($r = -.14^{***}$), and those who said they would tell close others were more likely to contact strangers online ($r = .21^{***}$) but were less likely to receive a request ($r = -.08^{**}$). The likelihood of telling authorities was positively associated with perceptions that both sexual and nonsexual behaviours were both grooming ($r = .40^{***}$ and $r = .27^{***}$, respectively) and as abuse ($r = .33^{***}$ and $r = .34^{***}$, respectively). The likelihood of telling a close other was also positively associated with perceptions that both sexual and nonsexual behaviours were both grooming ($r = .42^{***}$ and $r = .29^{***}$, respectively) and as abuse ($r = .37^{***}$ and $r = .39^{***}$, respectively).

Parents/carers of daughters more likely to tell authorities or close others were more likely to report that they knew what their daughters were doing online ($r = .08^{**}$ and $r = .07^*$, respectively) and that they had recently spoken with their daughters about this topic ($r = .16^{***}$ and $r = .09^{**}$, respectively). They were somewhat more likely to report using practical strategies ($r = .11^{***}$ and $r = .18^{**}$, respectively) but were especially likely to report using supportive strategies ($r = .32^{***}$ and $r = .33^{***}$, respectively). This suggests that **supportive strategies may encourage daughters to tell someone when they receive requests for explicit material.**

Parents/carers of daughters who said they would tell authorities or close others were slightly more likely to view the problem as pervasive ($r = .07^{**}$ and $r = .05^*$, respectively), but less likely to view their daughters as personally vulnerable ($r = -.08^{**}$ and $r = -.14^{***}$, respectively). Perhaps the assurance that their daughters would tell them helps buffer parent/carer anxiety about this situation occurring. Moreover, parents/carers of daughters who said they would tell authorities or close others were also less likely to report the conversation would be difficult ($r = -.19^{***}$ and $r = -.23^{***}$, respectively) but were more likely to report the need for information ($r = .21^{***}$ and $r = .26^{***}$, respectively). They also reported lower household income ($r = -.11^{***}$ and $r = -.09^{**}$, respectively) and were more likely to be female than male caregivers ($r = .08^{***}$ and $r = .07^{***}$, respectively).

Overall, these results suggest that telling someone—whether a close other or authority figure—may be a good strategy for daughters, as it was generally associated with more positive and fewer negative experiences, with a few exceptions (e.g., negative reactions to parent/carer talk and parents/carers reporting the conversation was difficult and the need for information). This pattern suggests that perhaps arming parents/carers with information, helping them navigate the conversation, and promoting supportive strategies, may ameliorate the negative aspects of telling someone and help this strategy generally produce positive results for daughters.



5.1.2.2 Consider sending explicit material

Daughters could also report the possibility they would consider sending explicit material in response to requests. Those who said they would consider it reported feeling a little more surprised by ($r = .09^{***}$) and less upset by ($r = -.13^{***}$) than others, and a little more likely to ignore such requests ($r = .06^*$). They reported more positive reactions to parent/carer attempts to talk about this topic ($r = .17^{***}$) and no more negative reactions ($r = .05$), suggesting that **parent/carer attempts to communicate are unlikely to backfire even if they do not go smoothly.**

This may be reassuring information for parents/carers who said the thing that would most help them feel comfortable talking to their child would be finding the right time and place (see section 4.2.1.1), and could therefore be useful to communicate this in future prevention efforts. Daughters considering sending material reported that they and their friends were more likely to receive requests for material ($r = .16^{***}$ and $r = .21^*$, respectively), and to spend more time online overall ($r = .15^{***}$), talking to friends and family ($r = .12^{***}$), and to strangers ($r = .26^{***}$). They were somewhat less likely to perceive sexual and nonsexual behaviours as grooming ($r = -.09^{***}$ and $r = -.01$, respectively) or as abuse ($r = -.09^{***}$ and $r = -.07^{**}$, respectively).

Parents/carers of daughters considering sending material were more likely to report seeing interventions ($r = .25^{***}$), possibly in part due to purposely seeking out such information. They were also more likely to report higher confidence in taking action ($r = .11^{***}$), having knowledge about the problem ($r = .20^{***}$), and having recent talks with their daughter ($r = .09^{**}$). These parents/carers were more likely to report practical (e.g., restrictions; $r = .08^{**}$) but not supportive (e.g., talking; $r = -.01$) solutions, and were no more likely to report knowing what their daughters were up to online ($r = -.01$). These parents/carers perceived the problem as common ($r = .08^{**}$) and their daughters as vulnerable ($r = .15^{***}$), but also reported that the conversation was difficult ($r = .12^{***}$) and that they needed information ($r = .10^{***}$). They tended to have higher household income ($r = .19^{***}$) and were more likely to be male than female parents/carers ($r = -.09^{***}$).

5.1.2.3 Ignoring requests

Daughters could also report the possibility they would ignore requests for explicit material. Those reporting they would ignore requests also reported they were less likely to tell someone ($r = -.08^{**}$) and were more likely to report the emotion of ignoring ($r = .20^{***}$). Additionally, they reported higher negative ($r = .12^{***}$) but not positive emotions (ns) in response to parent/carer communication attempts. These daughters also reported that they ($r = .18^{***}$) and their friends ($r = .13^{***}$) were more likely to receive requests for material and to spend more time online overall ($r = .10^{***}$), talking to friends and family ($r = .08^{**}$), and to strangers ($r = .19^{***}$), but their parents/carers were less likely to report they knew what their daughters did online ($r = -.08^{**}$). They were less likely to report sexual behaviours as grooming ($r = -.08^{**}$).

Parents/carers of daughters who reported ignoring requests tended to view their daughters as vulnerable ($r = .11^{***}$), conversations as difficult ($r = .09^{**}$) and reported the need for information ($r = .10^{***}$); few other variables were significant. They also reported slightly higher household income ($r = .11^{***}$) and likelihood of being male caregivers ($r = -.07^{***}$).

Overall, these results suggest that ignoring requests may not be an ideal strategy as it was generally associated with less positive and more negative experiences. This should be investigated further to ensure that prevention efforts are not providing counter-productive, or even harmful, guidance.

5.1.2.4 Blocking requesters

Daughters could also report the possibility they would block those sending requests for explicit material. Those doing so reported feeling more surprised by ($r = .20^{***}$) and upset by ($r = .33^{***}$), less likely to consider sending explicit material ($r = -.07^{**}$) and more likely to tell authorities or a close other ($r = .45^{***}$ and $r = .30^{***}$, respectively). They also reported more positive ($r = .08^{**}$) and somewhat more negative ($r = .11^{***}$) reactions to parent/carer attempts to talk about this topic.

Blocking strategies were not associated with oneself (ns) or one's friends receiving requests (ns), with spending time online generally (ns), or with online time with family and friends (ns), though it was negatively associated with time spent talking to strangers ($r = -.19^{***}$).

Blocking was associated with higher ratings of perceiving sexual and nonsexual behaviours as abuse ($r = .25^{***}$ and $r = .29^{***}$, respectively) and as grooming ($r = .36^{***}$ and $r = .18^{***}$, respectively), but a lower likelihood that either daughters or parents/carers had seen interventions ($r = -.07^*$).

Blocking was unrelated to parent/carer knowledge of what their daughters were doing online (ns) or confidence in taking action (ns) and was negatively related to parent/carer knowledge about the problem ($r = .07^*$). However, parents/carers of daughters who considered blocking were more likely to report having recent talks ($r = .08^{**}$), and that talks were less difficult ($r = -.17^{***}$). These parents/carers were also more likely to report taking supportive ($r = .32^{***}$) (but not practical; ns) solutions and had lower perceptions that their daughter was vulnerable ($r = -.14^{***}$)—perhaps correctly, as these daughters were not spending more time online nor were they likely to report requests. These parents/carers did report higher informational needs ($r = .15^{***}$), lower household income ($r = -.07^*$), and a higher likelihood of being female rather than male caregivers ($r = .08^{**}$).

Overall, it seems the strategy of blocking is associated with a mixture of positive and negative outcomes. Again, this warrants further investigation in future research to ensure prevention efforts are not providing counter-productive advice.

5.1.3 Emotional reactions to parent/carer communication attempts

Daughters reported their emotional reactions to parent/carer attempts to talk about online child sexual abuse. We grouped reactions into measures of both positive and negative emotions, which were negatively correlated but also showed somewhat distinct patterns of relationships with other variables, so we consider them separately.

5.1.3.1 Positive emotional reactions

Daughters reporting more positive reactions to parent/carer talks were more likely to have seen the campaign ($r = .21^{***}$), were more likely to tell authorities ($r = .17^{***}$) or a close other ($r = .21^{***}$) about requests, and reported feeling more surprised by ($r = .13^{***}$) and upset by ($r = .15^{***}$)—but they were also more likely to report considering sending explicit material ($r = .17^{***}$). They and their friends were more likely to receive requests ($r = .10^{***}$ and $r = .12^{***}$, respectively), and to use the internet generally ($r = .16^{***}$), to contact friends and family ($r = .09^{**}$), and to contact strangers ($r = .08^{**}$). They were also more likely to perceive most sexual behaviours as grooming ($r = .12^{***}$) and sexual and nonsexual behaviours as abuse ($r = .11^{***}$ and $r = .12^{***}$, respectively).

Parents/carers of daughters reporting more positive reactions to parent/carer talks were not only more likely to have seen interventions ($r = .21^{***}$), but they also scored higher on nearly every relevant measure: they knew more about their daughter's online activity ($r = .15^{***}$), felt more confident in taking action ($r = .16^{***}$), felt more knowledgeable about the problem ($r = .20^{***}$), and to have more recently engaged in a talk ($r = .28^{***}$) (which they viewed as less difficult; $r = -.23^{***}$) but had slightly elevated informational needs ($r = .07^*$). They reported using both more practical ($r = .20^{***}$) and more supportive ($r = .19^{***}$) solutions and perceived the problem as more common generally ($r = .17^{***}$). However, they did not perceive their own daughter as more vulnerable (ns), perhaps due to the proactive strategies they employed and the good rapport between them and their daughters. These parents/carers reported slightly higher household incomes ($r = .08^{**}$), but male and female caregivers were equally likely to evoke such positive reactions in their daughters (ns). Together, these findings suggest that parent/carer interest and engagement with daughters, along with both willingness and skill in having this conversation, predicted positive emotional reactions. Therefore, it may be that arming parents/carers with additional knowledge and skills to have this difficult conversation could be effective. Indeed, previous research has emphasised the importance of open communication and equipping parents/carers with relevant technological knowledge (e.g., Finkelhor et al., 2020).



5.1.3.2 Negative emotional reactions

Daughters reporting more negative reactions to parent/carer talks were not more likely to have seen the campaign (ns) (nor were their parents/carers; ns). However, they were more likely to report the strategies of telling authorities and a close other ($r = .10^{***}$ and $r = .17^{***}$, respectively), ignoring ($r = .12^{***}$), and blocking ($r = .11^{***}$) requests, and also reported feeling more upset by ($r = .15^{***}$), surprised by ($r = .25^{***}$), and willing to emotionally ignore requests ($r = .13^{***}$). Like daughters reporting positive emotions, they and their friends were more likely to receive requests ($r = .08^{**}$ and $r = .07^{**}$, respectively), and to use the internet generally ($r = .08^{***}$), to contact friends and family ($r = .07^{**}$), and to contact strangers ($r = .06^*$). They were also more likely to perceive sexual behaviours as grooming ($r = .12^{***}$) and sexual and nonsexual behaviours as abuse ($r = .07^*$ and $r = .07^{**}$, respectively).

However, important differences emerged in parent/carer behaviour between daughters who reported negative versus positive emotions in response to parent/carer attempts to talk. Parents/carers of daughters reporting negative emotions were less likely to know what their daughters did online ($r = -.23^{***}$), felt less confident taking action ($r = -.08^{**}$), felt less knowledgeable about the problem ($r = -.06^*$), had less recently engaged in a talk ($r = -.10^{***}$) (which they also viewed as more difficult; $r = .18^{***}$) and reported elevated informational needs ($r = .28^{***}$). These parents/carers also reported using slightly more practical ($r = .07^*$) and more supportive ($r = .05^*$) solutions, but notably less so than parents/carers of daughters who reported positive emotions ($r = .20^{***}$ and $r = .19^{***}$, practical and supportive respectively). Household income did not predict this outcome (ns), and male and female caregivers were equally likely to evoke such negative reactions (ns).

Together, these findings suggest that when parents/carers are less engaged in their daughter's life, know less about her activity, and feel less confident in their knowledge or ability to have a conversation, daughters feel more negative about such attempts. These findings suggest that arming parents/carers with additional knowledge and skills in navigating such a conversation may pay dividends in terms of better outcomes for daughters.

5.1.4 Receiving requests for explicit material

Daughters reported whether they had ever received requests for explicit material. Daughters reporting that they received requests were more likely to have seen the campaign ($r = .35^{***}$). They were not more likely (indeed, slightly less likely) to report that they would tell a close other ($r = -.08^{**}$). Instead, they were more likely to consider sending material ($r = .16^{***}$) or ignoring the request ($r = .18^{***}$). One interpretation of these patterns is that parents/carers of daughters at particular risk have shared the campaign materials with their daughters. Such requests were slightly associated with feeling less upset (ns) and more surprised ($r = .05^*$) and with the emotional response of ignoring ($r = .08^{**}$); they were also associated with increased positive ($r = .10^{***}$) as well as somewhat increased negative ($r = .08^{**}$) reactions to parent/carer attempts to talk about this topic. Daughters reporting that they received requests tended to spend more time on the internet overall ($r = .21^{***}$), both contacting friends and family ($r = .26^{***}$) and contacting strangers ($r = .37^{***}$). Such requests were largely unrelated to perceptions of behaviours as grooming or abuse.

Parents of daughters reporting that they received requests were more likely to report seeing the intervention ($r = .29^{***}$), but less likely to know what their daughters did online ($r = -.16^{***}$). Nonetheless, they reported somewhat higher confidence in taking action ($r = .06^*$), knowledge of the problem ($r = .20^{***}$), as well as recent talks ($r = .21^{***}$)—however they did report these talks to be more difficult ($r = .07^{**}$). Their parents/carers reported slightly higher practical ($r = .05^*$) and supportive (ns) solutions, reported their daughter to be specifically vulnerable ($r = .20^{***}$), and reported higher informational needs ($r = .14^{***}$). Finally, such parents/carers reported higher household income ($r = .17^{***}$) and were more likely to be male than female caregivers ($r = -.13^{***}$).



5.2 Predicting daughter responses to requests for self-generated imagery and to parent/carer communication attempts

Considering that many variables were correlated, and that daughters reporting higher vulnerability to requests and reactions to them also reported (for example) higher internet usage and different household income levels, we conducted a series of regression analyses to clarify the strongest predictors of a few key outcome measures controlling for other factors. We used separate logistic regression models to examine how well parent/carer behaviours and beliefs predicted three daughter responses: 1) willingness to tell (if received a request for self-generated imagery), 2) positive emotional reactions to parent/carer communication attempts, and 3) negative emotional reactions to parent/carer communication attempts. In all analyses, we controlled for parent/carer demographics and daughter online activity levels.

In each regression model, we regressed each outcome first on control variables at step 1: parent/carer gender, household income, daughter internet usage, daughter time contacting family and friends, and daughter time contacting strangers. Then at step 2 we added theoretically relevant predictors of parent/carer thoughts, feelings, and actions that may impact daughters' outcomes: parent/carer knowledge of daughter online activity, parent/carer confidence taking action, parent/carer general knowledge, the recency of talking about the topic, use of practical and supportive solutions, conversation difficulty, and informational needs³.

5.2.1 Daughter willingness to tell

As the pattern was similar, we took the average of items contributing to willingness to tell authorities and close others and regressed this combined measure on parent/carer beliefs and behaviours as well as control variables. Table 3 presents the results of the regression analysis to examine the ability of parent/carer beliefs and behaviours to predict daughters' willingness to tell. Significant predictors are shown in bold. At step 1, daughters reported greater willingness to tell someone the more time they spent contacting friends and (Reference here: 3 Full model results reported in Appendix C) family, and the less time they spent contacting strangers online. At step 2, daughters reported greater willingness to tell someone the more parents/carers reported employing both practical and supportive solutions, and when parents/carers reported greater informational needs. This pattern suggests that daughters are more willing

³ Full model results reported in Appendix C

to tell someone about a request for explicit material when they have stronger ties with friends and family and weaker ties with strangers, and when parents/carers appear open to seeking information and employing multiple strategies to deal with such situations. This supports previous studies which have highlighted the importance of open communication between parent/carer and child (e.g., Finkelhor et al., 2020).

STEP 1	β	t	p	95% CI Lower Bound	95% CI Upper Bound
Parent/carer gender (1=m, 2=f)	0.05	1.49	.136	-0.009	0.067
Household income	-0.04	-1.03	.304	-0.009	0.003
Daughter internet usage	0.07	1.96	.051	0.000	0.011
Contacting friends & family	0.09	2.21	.027	0.002	0.033
Contacting strangers	-0.26	-6.30	.000	-0.049	-0.026
STEP 2					
Parent/carer knowledge of daughter online activity	0.05	1.32	.187	-0.009	0.046
Parent/carer confidence taking action	-0.10	-2.51	.012	-0.073	-0.009
Parent/carer knowledge about problem	0.00	0.06	.950	-0.022	0.023
Recent talk with daughter	0.05	1.32	.188	-0.006	0.031
Practical solutions	0.10	2.65	.008	0.006	0.039
Supportive solutions	0.23	6.30	.000	0.026	0.049
Conversational difficulty	-0.02	-0.67	.507	-0.019	0.009
Parent/carer info needs	0.18	4.89	.000	0.015	0.035

Table 3: Regressing daughters' plan to tell someone (authority or close other) upon receiving a request for explicit material on parent/carer beliefs and behaviours, controlling for parent/carer demographics and daughter internet activity. **Note:** Significant effects presented in bold.

Surprisingly, once shared variance with other measures was controlled, daughters also reported lower willingness to tell someone when parents/carers reported confidence in taking action. This pattern could reflect daughters' reluctance to inform someone of requests for explicit material if they fear restrictions on their freedom or access to the internet. That said, this effect emerged only when controlling for practical parent/carer strategies to manage daughters' access to the internet, which positively predicted willingness to report. This pattern suggests daughters may face mixed emotions when alerting parents/carers to requests for explicit material, as they may encounter both support and possible restrictions.

5.2.2 Daughter positive emotional reactions to parent/carer communication attempts

Table 4 presents the results of the regression analysis to examine the ability of parent/carer beliefs and behaviours to predict daughters' positive emotional reactions to parent/carer communication attempts. Significant predictors are shown in bold. This analysis revealed that daughters reporting more positive reactions to parent/carer talks reported spending more time on the internet at step 1; no other control variable significantly predicted such emotions (see Table 4). At step 2, daughters reported more positive emotions when parents/carers reported greater knowledge of their daughter's online activity, greater general knowledge about the problem, had recently talked to their daughter about the problem, employed supportive (but not practical) solutions, and reported lower conversational difficulty. No other effects were significant. These findings suggest that daughters experience positive outcomes when parents/carers take an active interest in their daughters' online activity and engage knowledgeably and supportively in talks about requests for explicit material. Therefore, by arming parents/carers with information and strategies for navigating this difficult conversation, daughters may experience better outcomes. Again, this complements previous studies which have drawn attention to a lack of parent/carer participation, interest, and contribution in their child's lives can increase victimisation risks (e.g., Naezer and van Oosterhout, 2020).

STEP 1	β	t	p	95% CI Lower Bound	95% CI Upper Bound
Parent/carer gender (1=m, 2=f)	-0.01	-0.30	.764	-0.029	0.021
Household income	0.02	0.46	.643	-0.003	0.005
Daughter internet usage	0.09	2.34	.020	0.001	0.008
Contacting friends & family	0.02	0.53	.594	-0.007	0.013
Contacting strangers	0.04	0.88	.377	-0.004	0.011
STEP 2					
Parent/carer knowledge of daughter online activity	0.12	3.13	.002	0.011	0.047
Parent/carer confidence taking action	0.03	0.70	.485	-0.014	0.028
Parent/carer knowledge about problem	0.10	2.72	.007	0.006	0.036
Recent talk with daughter	0.18	4.53	.000	0.016	0.040
Practical solutions	0.03	0.87	.383	-0.006	0.016
Supportive solutions	0.09	2.42	.016	0.002	0.017
Conversational difficulty	-0.09	-2.38	.017	-0.021	-0.002
Parent/carer info needs	0.02	0.47	.636	-0.005	0.008

Table 4: Regressing positive emotional reactions to parent/carer communication attempts on parent/carer beliefs and behaviours, controlling for parent demographics and daughter internet activity.

Note: Significant effects presented in bold.



5.2.3 Daughter negative emotional reactions to parent/carer communication attempts

Table 5 presents the results of the regression analysis to examine the ability of parent/carer beliefs and behaviours to predict daughters' negative emotional reactions to parent/carer communication attempts. Significant predictors are shown in bold. The results of this analysis revealed that daughters reporting more negative reactions to parent/carer talks also reported spending more time on the internet at step 1; no other control variable was significant. At step 2, daughters reporting more negative emotions when their parents/carers knew less about their online activity, had not had a recent talk, employed supportive (but not practical) solutions, reported greater conversational difficulty and greater informational needs. In other words, daughters had worse outcomes in conversations with parents/carers when they did not take an active interest in their daughters' online activity, avoided talks about this topic, were under informed, and lacked strategies for navigating this difficult conversation. Under these conditions, it seems parent/carer attempts to support daughters may be ineffective. Therefore, to improve outcomes, it may be useful to arm parents/carers with information and strategies for navigating this difficult conversation.

STEP 1	β	t	p	95% CI Lower Bound	95% CI Upper Bound
Parent/carer gender (1=m, 2=f)	-0.01	-0.21	.834	-0.025	0.020
Household income	-0.01	-0.28	.783	-0.004	0.003
Daughter internet usage	0.08	2.11	.028	0.000	0.007
Contacting friends & family	0.07	1.53	.126	-0.002	0.016
Contacting strangers	-0.04	-0.81	.416	-0.010	0.004
STEP 2					
Parent/carer knowledge of daughter online activity	-0.13	-3.64	.000	-0.045	-0.014
Parent/carer confidence taking action	-0.06	-1.46	.144	-0.033	0.005
Parent/carer knowledge about problem	-0.06	-1.68	.093	-0.025	0.002
Recent talk with daughter	-0.09	-2.30	.022	-0.023	-0.002
Practical solutions	0.04	1.02	.307	-0.005	0.015
Supportive solutions	0.09	2.51	.012	0.002	0.015
Conversational difficulty	0.10	2.73	.006	0.003	0.020
Parent/carer info needs	0.23	6.06	.000	0.012	0.024

Table 5: Regressing negative emotional reactions to parent/carer communication attempts on parent/carer beliefs and behaviours, controlling for parent/carer demographics and daughter internet activity. **Note:** Significant effects presented in bold.

6

KEY FINDINGS, IMPLICATIONS AND RECOMMENDATIONS

This section answers set outs the key research findings and their implications for future prevention efforts, along with some key recommendations for future prevention campaigns and intervention work.

6.1 Key findings and implications

6.1.1 Raising awareness and empowering girls

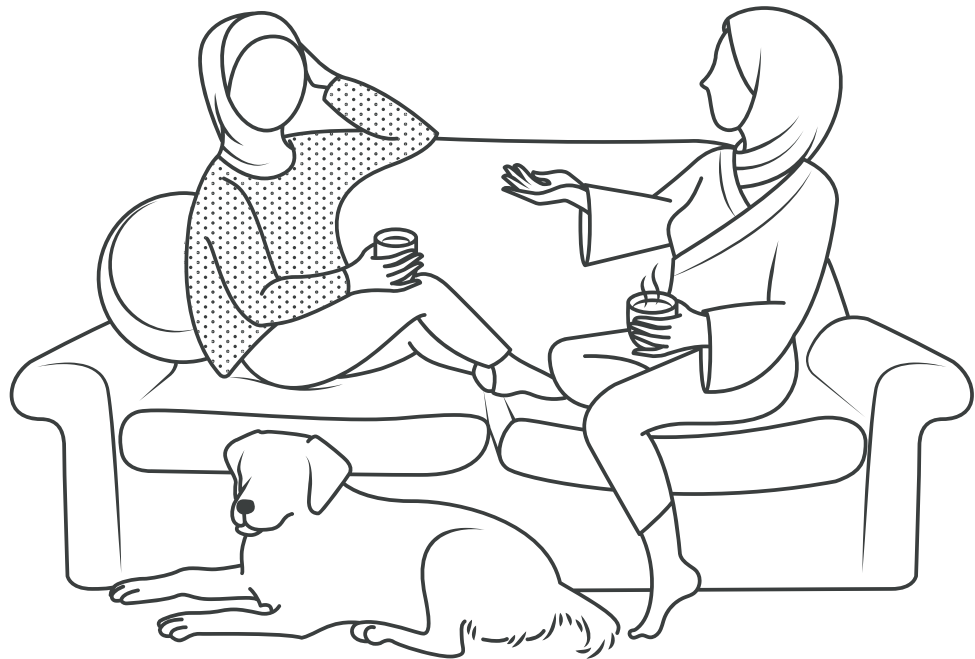
Our findings suggest a combination of talking and monitoring measures are effective, but that practical measures should not be overly restrictive and that talking must be meaningful. To ensure that talking is meaningful, conversations should involve being talked to rather than talked at and should take place on an ongoing basis. Positive family relationships are vital in this, particularly because fostering open and communicative relationships enables parents/carers to know and understand their child better, which in turns helps them know and understand what their child needs.

Girls want to be provided with the tools they need to manage their online lives and to be trusted to do so. While specific practical advice and support is wanted and important (e.g., how to have a private account and block people on specific sites/platforms), broader skills and knowledge are of equal, if not higher, importance. Interventions should therefore aim to enhance girls' critical thinking and digital literacy skills.

The disparity between which platforms girls had seen the campaign on reinforces what previous research has highlighted regarding the importance of interventions being relevant to young people's lives (Patterson et al., 2022). Recommendations from previous studies have emphasised that engaging young people in the planning and creation of campaigns helps increase their validity (Albury et al., 2013; Redondo et al., 2014), and part of this can include determining which platforms would be most effective to disseminate the content on. This could also improve cost-efficiency.

Practical measures should not be overly restrictive and that talking must be meaningful

BE OPEN TO HAVING THESE DIFFICULT AND SENSITIVE CONVERSATIONS IN A **NONJUDGEMENTAL WAY**



6.1.2 Raising awareness and equipping parents/carers

The importance of talking was highlighted again through analysis of parents/carers' responses. The findings indicate that parents/carers need to be open to having these difficult and sensitive conversations in a nonjudgemental way and that they should take an active interest in their child's online world.

Technology change is fast-paced, and parents/carers therefore need (and, indeed, want) to keep their knowledge up-to-date, which is an ongoing process. This is important because the girls' responses showed that they want specific advice and support with regards to some practical elements of online spaces (e.g., 'how to' help and advice), and parents/carers cannot provide this without the required knowledge. Being up to date also helps give their children confidence that their parents/carers can offer said support, which can aid in making conversations more meaningful.

It is also important to note that some parents/carers expressed victim-blaming and parent-blaming attitudes. While these comments were in the minority, it nevertheless highlights the importance of tackling these attitudes in future prevention efforts. This is important because attitudes that mis-allocate blame can inhibit help-seeking behaviours of children who have been victimised and their parents/carers.

6.1.3 Relationships between parent/carer and daughter responses

Analysis of the relationships between parents/carers' and daughters' responses revealed several useful findings and identified important areas for further research. First, viewing more of the campaign materials was associated with more positive outcomes. However, this did not increase the likelihood that girls would tell someone if they received a request for explicit material; further research with young people could provide useful illumination on this issue.

In line with existing research on this topic, the quantitative analysis emphasised the importance of fostering open and positive communication between girls and their parents/carers, and that equipping parents/carers with the technological skill and knowledge required to support their child is a vital part of this. Interestingly, the findings suggested that parents/carers' attempts to talk to their child about the topic will be unlikely to backfire even if the talk does not go smoothly. This could be an important message to deliver to parents/carers in future prevention efforts, because finding the 'right time' to talk to their child is something that parents/carers considered important in fostering comfortable conversations. Therefore, parents/carers could be informed that even if the time does not feel right, it is still better to talk than not.

The quantitative analysis also explored girls' reported emotions for different reported responses to requests for explicit materials. Interestingly, the results indicated that ignoring requests may not be an ideal strategy because it was associated with more negative emotions. Similarly, blocking was associated with mixed emotions. Further research is important here in order to understand what may cause the negative responses and thus establish what advice future prevention interventions should be providing and what messaging should be delivered alongside that advice.

Finally, the quantitative analysis supported findings from the qualitative analysis which emphasised the importance of better equipping parents/carers with skills and knowledge on the issue of self-generated indecent imagery so that they are able to engage meaningfully with their children and offer the specific practical support their children need. Likewise, the importance of parents/carers ensuring open communication and taking an active interest in their child's online world was supported by the quantitative analysis.

Even if the time does not feel right...

...it is still better to talk than not

6.2 Recommendations

The following recommendations present the lessons from the analysis that should be considered in future prevention campaigns and interventions:

PRIORITISE EMPOWERMENT MODEL OVER SAFETY MODELS.

This means acknowledging the value and benefits online spaces offer to children and young people while also providing them with the knowledge and skills they need to navigate these spaces. Focusing on teaching children and young people digital literacy and how to engage online using critical and ethical thinking.

ENCOURAGE PARENTS/CARERS TO PRIORITISE TALKING OVER STRICT CONTROLLING MEASURES.

Supportive strategies, such as talking, should be prioritised while also recognising practical measures do still play a role. Talking must be meaningful, which means parents/carers talking to rather than at their children, taking an active interest in their child's lives, and endeavouring to ensure their own knowledge on the matter is up to date. Encouraging openness in parents/carers is therefore crucial, both in terms of their relationship with their child and also in terms of being open to seeking new/additional information. Finally, parents/carers should be encouraged to talk to their children even if they cannot find the 'right time' - it is unlikely to backfire.

RAISE AWARENESS OF THE FULL RANGE OF MOTIVATIONS, OFFENDING TYPES AND HARMS.

This means acknowledging that adolescents will engage in consensual creation and sharing of images as part of normal, healthy exploration of their sexuality. Creation and sharing can move outside this consensual sphere in a number of ways, and the messaging and guidance for each will be different. For instance, online strangers as perpetrators requires a different response to peer-on-peer image-based abuse. The range of motivations and offending types should be understood and addressed specifically.

TAILOR INTERVENTIONS TO SPECIFIC AUDIENCES.

The two-pronged approach (targeting child and parents/carers) was effective and future campaigns should take this paired approach. However, it is clear that specific family contexts play a role in who interventions reach. In order to ensure prevention efforts reach all parents/carers and their children it will therefore be necessary to differently target interventions based on a consideration of a range of factors such as ethnicity, age, gender, faith/religion, nationality of families.

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APPENDICES

Appendix A: Survey items/variables

Results were computed for all participants who responded to each question, treating responses Prefer not to say, Don't know, and the absence of responses as missing values. Where variables were available across three time points, we took the average across all three times.

VARIABLE NAME	VARIABLE DESCRIPTION	CODING
Daughter Variables		
Daughter Seen Campaign	Whether daughter had seen each of the three ad campaigns	1 = yes, 0 = no, and summed across responses for scores from 0-3
Response: Tell close Other	How daughters would respond if they received a request: Tell a parent or carer, Tell a teacher, Tell a sibling, Tell a friend, and Tell another trusted adult	1 = selected 0 = not selected, and summed responses for a score from 0-3 for each item.
Response: Tell authority	How daughters would respond if they received a request: Report to the platform or website or to the police	1 = selected 0 = not selected, and summed responses for a score from 0-3 for each item.
Response: Consider Sending Photos	How daughters would respond if they received a request: Seriously consider sending a nude photo or video of themselves	1 = selected 0 = not selected ^[1] , and summed responses for a score from 0-3 for each item.
Response: Ignore	How daughters would respond if they received a request: Ignore it / do nothing	1 = selected 0 = not selected, and summed responses for a score from 0-3 for each item.
Response: Block	How daughters would respond if they received a request: Block the person who suggested sending photos or videos	1 = selected 0 = not selected, and summed responses for a score from 0-3 for each item.
Emotional Reaction: Upset	How daughters would feel upon receiving a request: Sad, Angry, Uncomfortable, Disgusted, Amused (reverse coded), Happy (reverse coded)	1 = selected 0 = not selected
Emotional Reaction: Surprise	How daughters would feel upon receiving a request: Shocked, Want to ask why they wanted it, Surprised, Confused	1 = selected 0 = not selected

VARIABLE NAME	VARIABLE DESCRIPTION	CODING
Emotional Reaction: Ignore	How daughters would feel upon receiving a request: I would ignore it, I wouldn't feel anything	1 = selected 0 = not selected
Reaction to Parents/carers: Positive	How daughters would respond to if their parents/carers wanted to talk to them about online sexual abuse: Proud, Interested, Willing to learn	1 = selected 0 = not selected
Reaction to Parents/carers: Negative	How daughters would respond to if their parents/carers wanted to talk to them about online sexual abuse: Embarrassed, Prefer to talk to others (not mum, dad or carer), Worried, Like they do not trust me, Bored, Uninterested, Annoyed, Reluctant - but it is important, Awkward	1 = selected 0 = not selected
Friend Received Request	Whether daughters knew anyone who had received a request for semi-nude or nude photos or videos	1 = yes, 0 = no
Personally Received Request	Whether daughters have ever received a message or request that made them feel uncomfortable from somebody they don't know well	1 = yes, 0 = no
Daughter Internet Usage	How many hours per day do daughters spend alone on each of device without their mum, dad, teacher or another adult present	1 = up to an hour, 2 = 1-2 hours, 3 = 3-4 hours, 4 = 5-6 hours, 6 = 7+ hours, and summed across the categories Smartphone, laptop, PC, Tablet, and Smart-watch
Messaging Friends and Family	How often daughters message, live stream or videocall: Older family members, Friends from school that I know in real life, Friends of friends, Family members the same age as me	1 = Never, 2 = Less often than every four weeks, 3 = Once every three or four weeks, 4 = Once every two weeks, 5 = Once a week, 6 = Once every two or three days, 7 = At least once a day
Messaging Strangers	How often daughters message, live stream or videocall: Friends that I have made online but never met in real life, People I do not know who try to speak to me	1 = Never, 2 = Less often than every four weeks, 3 = Once every three or four weeks, 4 = Once every two weeks, 5 = Once a week, 6 = Once every two or three days, 7 = At least once a day
Perceived Nonsexual Abuse Behaviours	Non-sexual behaviours daughters conceive of as abuse: Name calling/bullying in a personal chat, Being teased/bullied where other people can see, Sharing of people's photos without their agreement, Strangers messaging you wanting to be your friend, Requests for photos from people you know	1 = selected 0 = not selected

VARIABLE NAME	VARIABLE DESCRIPTION	CODING
Perceived Sexual Abuse Behaviours	Sexual behaviours daughters conceive of as abuse: Requests for nude photos from adults you know, Requests for nude photos from adults you do not know	1 = selected 0 = not selected
Perceived Nonsexual Grooming Behaviours	Non-sexual behaviours daughters associate with grooming: Asking how your day at school was, Asking what films and music you like, Asking about your life at home, Paying you compliments, Asking to meet in real life	1 = selected 0 = not selected
Perceived Sexual Grooming Behaviours	Sexual behaviours daughters associate with grooming: Asking to be your boyfriend even though you've never met, Asking you what you're wearing, Asking for photos/videos of your private parts, Asking you to keep your conversation secret	1 = selected 0 = not selected
Parent/carer variables		
Parent/carer seen campaign	Whether parent/carer had seen each of the three ad campaigns	1 = yes, 0 = no, and summed across responses
Parent/carer Knowledge of Daughter Online Interactions	Parent/carer knowledge of who their daughters interact with online: I feel confident I know what my daughter/child is doing online, I have met in real life most of the people my daughter/child interacts with online, I feel confident I know who my daughter/child is talking to online, I worry about who my daughter/child is coming into contact with online (reverse coded)	Scaled from 1 (strongly disagree) to 5 (strongly agree)
Parent/carer Confidence Taking Action	Parent/carer confidence talking action to protect their daughters from online sexual abuse: If I was concerned, I would check my daughter's/child's devices without them knowing, Sometimes it is necessary to take a child's device away to protect them, I know how to restrict the sites, platforms or apps my daughter/child can visit online, My daughter/child comes and talks to me about anything that is worrying her online, I regularly use internet monitoring apps to see what my daughter/child is up to online	Scaled from 1 (strongly disagree) to 5 (strongly agree)
Parent/carer Knowledge of Problem	Parent/carer knowledge of self-generated child sexual abuse imagery: Before today had you heard of the term 'self-generated online child sexual abuse'?, Do you feel you have a clear understanding of what constitutes self-generated online child sexual abuse?	1 = yes and 0 = no, and combined



VARIABLE NAME	VARIABLE DESCRIPTION	CODING
Recent Talk	How recently parents/carers had spoken with their daughters about online sexual abuse	1 = I have never spoken to my daughter/child about the risks from sharing nude or sexual images or videos, 2 = Yes- within the last year, 3 = Yes – within the last six months, and 4 = Yes – within the last months
Parent/carer Practical Solutions	Practical solutions taken by parent/carer: Disciplining your daughter/child, Restricting screen time, Only allowing use of devices when your daughter/child is in the same room as you, Using parental controls, Taking away devices/ access to technology	1 = selected and 0 = not selected, and combined
Parent Supportive Solutions	Supportive solutions taken by parent/carer: Talking to your daughter/child about online grooming and child sexual abuse, Talking to your daughter/child about how to stay safe online, Making sure your daughter/child knows she can come and talk to you about something or someone, Making sure your daughter/child knows it is never too late to tell you about something, Proactively engaging in general conversations with your daughter/child about her life, Find out what your daughter/child has learned at school about online grooming and child sexual abuse, Contacting the school to see if your daughter/child is being taught about online grooming and child sexual abuse at school	1 = selected and 0 = not selected, and combined
Perceived Commonness of Problem	How common parents/carers think self-generated online child sexual abuse is	Scaled from 1 = Very uncommon to 4 = very common
Perceived Daughter Vulnerability	How vulnerable parents/carers think their daughter was to self-generated online child sexual abuse	Scaled from 1 = not at all vulnerable to 4 = very vulnerable
Parent Conversation Difficulty	How difficult parents/carers [would] find it to talk to their daughter/child about self-generated online child sexual abuse ^[2] And How comfortable or uncomfortable parents/carers would feel about talking to their daughter/child about self-generated online child sexual abuse	Scaled from 1 (strongly disagree) to 5 (strongly agree). And Scaled from 1 = Very uncomfortable to 4 = Very comfortable (reverse coded). Then, standardized both items and combined them such that higher scores reflected more difficulty having this conversation.

VARIABLE NAME	VARIABLE DESCRIPTION	CODING
Parent/carer Informational Needs	What parents/carers would need to feel more comfortable talking to your daughter/child about self-generated online child sexual abuse: A better understanding of the risks, An understanding of how girls are responding to online grooming/ requests for child sexual abuse material, A better understanding of the tactics used by sexual offenders online, Evidence that my daughter/child is at risk, More support/materials/tips from schools or charities on how to start the conversation with my child, A better understanding of how to manage my child's use of devices online, Learning how other parents are doing this, Examples of where this has happened to other teenage girls to share with my daughter/child, Age-specific parental guidance	1 = selected and 0 = not selected, and summed
Household income	Household income	Scaled from 1 = £19,999 or under to 15 = £150,000 or more
Parent/carer gender	Parent/carer gender	1 = male, 2 = female

¹ At one point this question was instead phrased as Consider sending photos or videos.

² We combined responses across two different versions of this item, as some people saw a version with the word would and some did not.



Appendix B: Correlations Between All Measures

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32		
1. Daughter seen interventions	-																																	
2. Response: tell authority	-.01	-																																
3. Response: tell close other	.06	.45***	-																															
4. Response: consider sending	.23***	-.02	-.02	-																														
5. Response: ignore	.12***	-.08**	-.08**	.06*	-																													
6. Response: block	-.04	.45***	.30***	-.07**	-.03	-																												
7. Emotion: upset	-.11***	.83***	.42***	-.13***	-.03	.33***	-																											
8. Emotion: surprise	.05	.26***	.36***	.09***	.04	.20***	.30***	-																										
9. Emotion: ignore	.11***	.02	.07**	.03	.20***	.01	-.04	-.03	-																									
10. Reaction to parental talk: positive	.21***	.17***	.21***	.17***	.02	.08**	.15***	.13***	.05	-																								
11. Reaction to parental talk: negative	.03	.10***	.17***	.05	.12***	.11***	.15***	.25***	.13***	-.38***	-																							
12. Friend received request	.43***	.04	-.03	.21**	.13***	.03	-.06*	.05	.07*	.12***	.07**	-																						
13. Personally received request	.35***	.01	-.08**	.16***	.18***	.04	-.02	.05*	.08**	.10***	.08**	.53***	-																					
14. Daughter internet usage	.28***	.09**	.03	.15***	.10***	.03	.00	.04	.17***	.16***	.08***	.26***	.21***	-																				
15. Contacting friends & family	.25***	-.03	.00	.12***	.08*	-.02	-.02	-.01	.03	.09**	.07**	.26***	.26***	.22***	-																			
16. Contacting strangers	.42***	-.14***	.21***	.26***	.19***	-.19***	-.23***	-.04	.06*	.08**	.06*	.37***	.37***	.27***	.51***	-																		
17. Perceived nonsexual abuse	-.15***	.34***	.39***	-.07**	-.03	.29***	.35***	.19***	.05	.12***	.07**	-.05	-.03	-.28***	.03	-.28***	-																	
18. Perceived sexual abuse	-.11***	.33***	.37***	-.09***	-.01	.25***	.34***	.20***	.06*	.11***	.07*	-.06	.03	.05	.06	-.22***	.52***	-																
19. Perceived nonsexual grooming	-.03	.27***	.29***	-.01	-.02	.18***	.25***	.17***	.10***	-.01	.04	.04	.01	.00	.00	-.09***	.48***	.34***	-															
20. Perceived sexual grooming	-.16***	.40***	.42***	-.09***	-.08**	.36***	.46***	.26***	.02	.12***	.12***	-.07*	-.05	-.01	-.06	-.30***	.59***	.59***	.46**	-														
21. Parent/carer seen interventions	.72***	.00	-.07*	.25***	.10***	-.07*	-.12***	.04	.07*	.21***	.00	.36***	.29***	.29***	.26***	.38***	-.14***	-.11***	-.05	-.18***	-													
22. Parent/carer knowledge of daughter online	.05	.08**	.07*	-.01	-.08**	.03	.01	-.06*	-.03	.15***	-.23***	-.14***	-.16***	-.03	-.03	.15***	.08**	.02	.10***	.00	.08**	-												
23. Parent/carer confidence taking action	.14***	.02	.06*	.11***	.03	-.03	.04	.01	.01	.16***	-.08**	.09**	.06*	.05	.15***	.11***	.02	-.01	.07*	-.01	.20***	.25***	-											
24. Parent/carer knowledge about problem	.43***	-.01	-.04	.20***	.03	-.07*	-.07*	.01	.03	.20***	-.06*	.27***	.20***	.18***	.23***	.30***	.07*	-.05	.05	-.11***	.09**	.09**	.21***	-										
25. Recent talk with daughter	.20***	.16***	.09**	.09**	.02	.08**	.07*	.08**	.03	.28***	-.10***	.24***	.21***	.14***	.18***	.15***	.14***	.17***	.20***	.14***	.22***	.11***	.26***	.26***	-									
26. Practical solutions	.09**	.11***	.18***	.08**	.04	.02	.11***	.14***	.02	.20***	.07*	.08**	.05*	.01	.04	.03	.12***	.11***	.16***	.11***	.14***	.02	.38***	.13***	.10***	-								
27. Supportive solutions	-.01	.32***	.33***	-.01	.03	.32***	.29***	.21***	.02	.19***	.05*	.05*	.04	.07**	-.01	-.17***	.36***	.33***	.26***	.40***	-.02	.10***	.08**	-.04	.30***	.13***	-							
28. Perceived common problem	.16***	.07**	.05*	.08**	.02	.00	-.02	.05	.07**	.17***	-.03	.18***	.14***	.11***	.10***	.16***	.05	.11***	.03	.04	.19***	-.07**	.16***	.16***	.24***	.09**	.03	-						
29. Perceived daughter vulnerability	.27***	-.08**	-.14***	.15***	.11***	-.14***	-.12***	-.01	.00	.05	.03	.20***	.20***	.16***	.21***	.40***	-.15***	-.08*	-.04	-.22***	.28***	-.20***	.17***	.23***	.13***	.08***	-.16***	.32***	-					
30. Conversational difficulty	.05	-.19***	-.23***	.12***	.09**	-.17***	-.21***	-.10***	.03	-.23***	.18***	.09***	.07**	.02	.05	.21***	-.25***	-.29***	-.18***	-.29***	.07*	-.20***	-.07*	.00	-.31***	-.01	-.31***	-.16***	.13***	-				
31. Parent/carer info needs	.07	.21***	.26***	.10***	.10***	.15***	.22***	.23***	.11***	.07*	.28***	.16***	.14***	.14***	.07	.05	.18***	.15***	.11***	.16***	.06	-.13***	.11***	.02	.10***	.30***	.34***	.11***	.08*	.09**	-			
32. Household income	.29***	-.11***	-.09**	.19***	.11***	-.07*	-.09**	.01	.08**	.08**	.01	.29***	.17***	.19***	.16***	.23***	-.14***	-.11***	-.05	-.18***	.27***	.05*	.09**	.18***	.09**	.02	-.02	-.05	.13***	.14***	.07*	-		
33. Parent/carer gender (1=m, 2=f)	-.19***	.08***	.07***	-.09***	-.07**	.08**	.04	.04	-.12***	-.04	-.04	-.17***	-.13***	-.08**	-.11***	-.14***	.08**	.09**	.02	.10***	-.14***	.01	-.02	-.06*	.02	.02	.09**	.12***	-.04	-.21***	.00	-.28***		

Appendix C: Full regression model statistics

Positive Emotional Reactions to Parental Communication Attempts.

At step 1 when we entered only control variables, the model just excluded significance and explained only a small amount of variance, $R = .12$, $R^2 = .01$, $F(5, 773) = 2.21$, $p = .051$. However, at step 2 when we added theoretical predictors the model was significant and accounted for over ~13% of the variance, $R = .36$, $R^2 = .13$, $F(13, 773) = 8.83$, $p < .001$. The increase in model fit from step 1 to step 2 was significant, $R^2\text{change} = .12$, $F(8, 760) = 12.80$, $p < .001$.

Negative Emotional Reactions to Parental Communication Attempts.

At step 1 when we entered only control variables, the model was not significant and explained only a small amount of variance, $R = .10$, $R^2 = .01$, $F(5, 773) = 1.65$, $p = .143$. However, at step 2 when we added theoretical predictors the model was significant and accounted for over ~15% of the variance, $R = .39$, $R^2 = .15$, $F(13, 773) = 10.23$, $p < .001$. The increase in model fit from step 1 to step 2 was significant, $R^2\text{change} = .14$, $F(8, 760) = 15.43$, $p < .001$.

Willingness to Tell Someone.

At step 1 when we entered only control variables, the model was significant and explained ~6% of the variance, $R = .25$, $R^2 = .06$, $F(5, 773) = 9.83$, $p < .001$. However, at step 2 when we added theoretical predictors the model remained significant and accounted for over ~19% of the variance, $R = .44$, $R^2 = .19$, $F(13, 773) = 13.90$, $p < .001$. The increase in model fit from step 1 to step 2 was significant, $R^2\text{change} = .13$, $F(8, 760) = 15.54$, $p < .001$.

TALK TRUST EMPOWER

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**THANK YOU
FOR READING**

