

How people assess online content and services

An exploratory qualitative research report for Ofcom by DUCKFoOT Research Ltd.



Research Document

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How people assess online content and services

Section 1

Executive summary

- The main purpose of this exploratory qualitative research is to examine how people assess the veracity, trustworthiness, independence and balance of online content and services. A secondary purpose is to explore how perceptions about the presence or absence of online regulation may underpin or influence people's online behaviour.
- Overall, 122 people¹ took part in the study which comprised group discussions, a
 diary study with follow-up interviews, and an eye-tracking exercise. The sample
 included a variety of home internet users: from light to heavy users, and recent
 adopters to long-term, everyday users of online content.
- The study found that the majority of participants value the internet highly and see it as something that has changed their lives. Participants also see its negative sides, and voice a number of concerns, primarily for their own and their family's online safety. Concerns include computer viruses, being 'ripped off', keeping their children safe online, as well as concerns about inadvertently doing something potentially illegal such as downloading copyrighted music from a file-sharing site. The research found that issues about the veracity of online content were not voiced as frequently, and were more likely to be mentioned in relation to activities such as homework or medical advice.
- Whether participants were evaluating a site in terms of either its safety or veracity, they were influenced by a range of factors including the amount of internet experience they have, their confidence online, their overall life experiences and their cognitive skills.
- In this study, most participants said they had bought and installed virus software.
 However, beyond this, most showed low levels of understanding and conscious use of the tools provided by internet service providers (ISPs) or search engines to make the internet safer.
- In relation to assessing the trustworthiness of online content, this study found that a
 perception of familiarity was the most important factor. Judgements were not always
 conscious or thought through. Familiarity appeared to come about in two ways; first,
 through consciously recognising cues (such as a known company name or logo)
 based on recalling previous online or offline experiences, and second, by a swift,

¹ The sample comprised of 48 people in 6 focus groups; 34 participants who were asked to keep a diary for two weeks, at the end of which they were interviewed, and 40 people who participated in an eye-tracking exercise to monitor what people looked at in the first 10 seconds of seeing a website.

intuitive judgement². For example, a new site may look similar to other sites known to the participants in terms of its layout or ease of use, or it may look similar to a real-world cue (such as a shop window, in the case of a travel website). In such cases, intuitive judgements could, on occasion, lead to a false perception of familiarity and subsequent trust.

- The study demonstrated how first impressions are not necessarily the end of the
 process. The initial intuitive responses may be followed by a more conscious
 evaluative process, using a range of functional and cognitive skills to interact with
 and evaluate online content. This process varied by individual and by online activity
 and incorporated a range of factors:
- These included **reading** the site for signs such as geographic contact details, evaluating the look and feel of a site, with participants reassured by a 'professional presentation', or checking to see if the information is up-to-date. For those aware of security symbols, these provided a sense of trust. However, few participants mentioned looking for a padlock symbol as a sign of security when carrying out an online transaction.
- Other factors incorporated ease of navigation and reputation. Many participants drew on off-line reputation or word-of-mouth recommendations from friends or family when deciding which sites to use and trust. Some participants, who were familiar with how search engines work, felt that popular websites provided a good indicator of what to trust, along the lines that what is popular is successful and what is successful can be trusted. Checking the popularity of a site in terms of number of users was frequently cited as a measure of trustworthiness.
- Only a small proportion of participants said that they undertook detailed research or cross-checking against other sources. For most participants, when **researching** and **checking** was undertaken, it was generally confined to price comparisons and reading fellow users' reviews.
- The study found that a site's URL³ is not generally checked when first visiting a site, nor is it used by many as a follow-up cue when looking around a new site and making a decision on whether to trust it.
- The research also highlighted how a participant's desire for content has the potential
 to override all other factors in establishing trust. Therefore the nature of a personal
 interest and the depth of emotional engagement with the content are factors that can

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² Intuitive judgement is associated with the psychological theory of 'heuristics' which relates to processing information and making decisions. Heuristics can be described as a rule of thumb shortcut that allows humans to make judgments quickly and efficiently. Such rule-of-thumb strategies allow people to operate without needing to constantly stop to think about the next course of action

course of action.

3 URL stands for Uniform Resource Locator. In everyday language it represents the address of a website and can be found in the address bar when visiting a website. For example, the URL for the Ofcom homepage is http://www.ofcom.org.uk.

- affect the evaluation process. The reward, for example a new purchase, may override the potential perceived risks involved in undertaking an online transaction.
- In terms of participants' awareness and understanding of regulation, most did not think that the internet was formally regulated. They understood and accepted the internet to be like the real world, with no universal mechanism to protect them. They felt that they have to decide for themselves what they can trust and take personal responsibility when online. However, a few participants were unsure as to whether the internet was regulated, with some saying they had assumed it must be.
- There was also a perception that the people or organisations that provide specific
 online services or content were responsible for making sure that users can trust sites
 and be safe online. In addition, users of sites who contribute content (such as
 Facebook) were expected to show common sense, integrity and respect towards
 other members of the online community.
- When discussing the idea of formal internet regulation, most participants felt that it
 was impracticable because of its global scale, complexity and diversity. There were
 mixed views on the idea: some felt regulation would be a positive aim, even if
 unrealistic, others felt it could restrict individual users' freedom as they thought that
 'anything goes' on the internet that as individuals we take personal responsibility
 and choose whether to go online and which sites to visit.
- In contrast, most participants were aware that television is formally regulated. They
 felt that television regulation is important because it involves mass and diverse
 audiences sharing public events and once broadcast it is too late to rectify if there is
 a problem. Television was perceived to be a public entity that reflects society's
 shared code of conduct and socially acceptable standards. As such, participants
 thought it warranted regulation for individual protection from uninvited intrusion and to
 protect viewers from potentially harmful or inappropriate content.
- Overall, the study found that participants used both intuitive judgements and explicit, conscious processes when evaluating which online content to trust. Participants thought that the provision of information and tools would be useful in helping them make decisions about online content and services.

Section 2

Research objectives

2.1 **Background**

Media literacy means individuals and society possessing the skills, knowledge and understanding to make full use of the opportunities presented both by traditional and by new communications services. Media literacy also helps people to manage content and communications, and protect themselves and their families from the potential risks associated with using these services.

Ofcom's definition of media literacy is 'the ability to use, understand and create media and communications'.

The promotion of media literacy is a responsibility placed on Ofcom by Section 11⁴ of the Communications Act 2003. Under Section 14 (6a) of the Act Ofcom has a duty to make arrangements for the carrying out of research into the matters mentioned in Section 11 (1).

Ofcom's work to promote media literacy is intended:

- to give people the opportunity and motivation to develop competence and confidence to participate in communications technology and digital society; and
- to inform and empower people to manage their own media activity (both consumption and creation).

The overall aim of this research study was to help Ofcom fulfil its duty to promote media literacy. To do this, we need to understand the strategies people use to evaluate different media and how these are affected by their understanding of regulation of different media platforms.

In the Review of Ofcom's Media Literacy Programme 2004-08⁵, Ofcom noted that UK society is becoming increasingly reliant on digital communications technology. The world around us is changing rapidly; the various media and communications technologies are becoming an integral part of everyday life. Knowledge of their use is increasingly a prerequisite to effective participation in society and in the economy. When the traditional models of content regulation become less effective in minimising potential harm and offence we must turn to parents, carers and individuals to take more responsibility for what they, and children, see and hear on television, radio and online.

Ofcom's research shows that the majority of UK adults recognise that television content is regulated – only 12% of adult viewers are unsure⁶. However, there is far less understanding

http://www.opsi.gov.uk/acts/acts2003/ukpga_20030021_en_3#pt1-pb4-l1g11

See http://www.ofcom.org.uk/advice/media_literacy/review0408/

⁶ UK Adults' Media Literacy, 2009 Interim Report.

of the position in relation to online content and services – 27% of adult regular internet users are unsure of the regulatory position⁷. This gap in understanding is of concern in the context of a move away from the traditional models of content regulation towards a more mixed ecology of statutory regulation, coupled with greater co-/self-regulation by site owners/content providers and ISPs and 'personal' responsibility by the general public⁸.

In order for Ofcom to support people in their assessment of online content, it needs to understand the personal strategies that people use to evaluate online content and services. A secondary objective for this study was to understand in what ways people's evaluation of online content was influenced by their perceptions of any regulation in place compared to other media in their lives.

2.2 Research objectives

In light of this, the research objectives were set as:

- To explore the strategies used by people to assess the veracity/trustworthiness/independence/balance of online content and services;
- To understand people's awareness and understanding of regulation in both the broadcasting and online environments; and
- To understand how regulatory perceptions (or lack of them) may underpin or influence these behaviours and strategies.

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Ibid

Regulatory approaches can range from no regulation at all, through industry self-regulation (where industry administers a solution without formal oversight), co-regulation (where a form of statutory control is present e.g. Broadcast Committee of Advertising Practice (BCAP), to full statutory intervention. For more background information on regulatory options see http://www.ofcom.org.uk/consult/condocs/coregulation/condoc.pdf.

Section 3

Research methodology

3.1 Research design considerations

The research design needed to acknowledge that participants' decisions when evaluating an internet site could comprise both implicit intuitive judgements and explicit conscious processes.

Psychological theories of information processing and decision-making argue that the human mind has evolved implicit mental processes or rule-of-thumb shortcuts in order to process information or solve problems quickly and efficiently, by automatically drawing on our bank of memories and associations. These automatic processes are called 'heuristics'.

The research was therefore designed to explore online content evaluation processes using techniques to identify both explicit and implicit processes.

3.2 Research method

There were three elements to the methodology. Full details on recruitment, location and samples are given in the annex. In total 122 people took part in the study: 48 people in six focus groups; 34 participants who were asked to keep a diary for two weeks, at the end of which they were interviewed, and 40 people who participated in an eye-tracking exercise.

1. Diaries and follow-up interview

This element of the research involved 34 participants keeping an online diary for two weeks on the days they used the Internet. Participants were recruited from Manchester, Brighton, Birmingham, Glasgow, Edinburgh, Belfast and Cardiff.

They kept a record of the sites they visited in terms of:

- Feelings with regard to the veracity, trustworthiness, independence and balance of the content;
- Their sense of who was responsible for them being able to trust the site.

During the course of the diary fortnight, participants were asked to visit examples of specified categories of site that they were not so familiar with. They were free to choose which sites they then visited. We did not impose visits to specific sites, in case participants might feel compromised by the content they found, or concerned by the potential for viruses, etc.

The diary provided stimuli to raise self-awareness of existing behaviour and feelings that were then discussed in a follow-up, extended, face-to-face, in-home interview.

The sample consisted of participants aged 13 to 70 years old, representing a range of lifestages, socio-economic groups and with internet use ranging from light to heavy.

The fieldwork period was 27th March – 30th April 2009.

2. Group discussions

Six 90-minute sessions took place with 48 participants in and around London and Leeds. Four groups covered adults from BC1C2 socio-economic groups who were heavy or medium users of the internet, and belonged to the following life-stages: pre-family, young family, teen family, empty nesters and retired. Two groups consisted of light internet users; one group with participants aged 18-25 and the other with participants aged 55+.

Stimuli for these discussions consisted of images from different websites, selected to represent the different ways of interacting online that were of interest to this study. These were: accessing information; entering personal data onto a website; communicating; entertainment; undertaking transactions (e.g. making payments via a website); and usergenerated content.

The fieldwork period was 25th March – 9th April 2009.

3. Eye tracking

The first two stages of the research found that participants made rapid intuitive judgments about a website on the basis of whether it "just feels right" or not. Some also said they looked for certain specific information. Eye-tracking research was then carried out to explore the eye movements that people made when asked to evaluate how much they trusted various sites.

The eye tracker used, an *Eye link II*, takes a recording of eye position every millisecond. As such, it provides actual behavioural data and a level of detail that participants would not be able to report. The purpose of this part of the research was to see if the kinds of cues people used to make trust judgments could be identified when presented with a web page.

Forty participants took part in this part of the research. The sample consisted of participants aged 18 to 70 years old, representing a range of life-stages, socio-economic groups and with internet use ranging from light to heavy. The research took place in Croydon and Brighton on 28th and 29th April 2009.

Section 5 provides full details on the methodology and findings.

Section 4

Perceptions about the internet

4.1 Internet user profiles

The study recruited people on the basis of low, medium or high levels of internet usage. These criteria led to talking to people with a variety of internet usage patterns, ranging from recent adopters to the long-term, confident enthusiast of online content.

The following short profiles of some of the participants help to illustrate this diversity in terms of online activities and evaluation of content:

Laura⁹(Female, 46, Edinburgh) is not particularly confident with computers or the internet. She works in a shop and computers are not part of her job. Her children have left home and she lives on her own, but a boy across the road helps with any questions. She enjoys the internet but takes things slowly. She has only made a few small purchases online and enjoys researching them, using Tripadvisor to plan holidays, but would not book one online as she is too nervous about being 'ripped off' to make a large purchase. She is also not sure that you get the best deal online. She feels that for holidays, talking to an expert is preferable as "they will know all the special offers available."

Don (Male 32, Birmingham) is a graduate engineer and, with his technical background, feels informed and confident about computers. He uses the internet mainly for information about his hobbies (sports and cars) and only shops at well-known brand sites, as he is very concerned not to catch any computer viruses. He believes less well-known sites would expose him to viruses because they will not have such sophisticated protection integrated.

James (Male, 66, Belfast) is a retired businessman who lives alone and keeps in touch online with his two daughters who live overseas. He's an avid internet surfer, satisfying his interests in a wide range of subjects and researching talks he gives in the community. He's a big downloader of file-shared music and films, as well as the cover artwork to mock up cases. He sees no crime in this as his tastes are for very old music that he argues is long out of copyright. He feels

⁹ All names used in the report are pseudonyms, participants are identified by sex, age and city.

secure because he only visits download sites that his IT expert neighbour says are okay.

Andy (Male, 38, Cardiff) has installed Wi-Fi so he and his young teenage children can access the internet on each of their own laptops anywhere in the house. After 10 years of using the internet he feels, "I know where I'm going, 95% you can trust." He has a friend who feeds him what he considers to be good security software. Andy says extreme material is too easily available, and he had to talk to his son about not accessing such sites. He suggests, "Put it in that corner, go and find it" i.e. he's happy for it to be available so long as it is not accessible through mainstream sites. He is happy to use file-sharing sites to download, not upload, but at the same time feels 'spied on' by some software.

Anne (Female, 67, Brighton) is retired and enjoys using the internet, particularly for eBay, family history, shopping and keeping in touch (MSN and now Skype). She has just started using a webcam. She thinks that the internet is a great thing, and too much fuss is made about the risks – her first piece of advice would be 'enjoy yourself'. She does not consider herself reckless and feels aware of what dangers to look out for. She considers that many of her generation tend to be over-concerned and too cautious about innovations such as the internet, with the result they are missing out on gains that she has experienced such as talking to her grand-children in Australia.

George (Male, 13, Manchester) has dyslexia and learning difficulties. The net is liberating as a way of finding out about things that interest him, such as lizards. He has found some sites are frustrating as he struggles to frame searches or spell accurately. His mother helps and both find the net useful if frustrating. They're fearful of what they might turn up, or getting a virus or falling victim to a scam. This meant that George was happy to explore new sites that might come recommended via Facebook friends, but would hesitate to visit unknown sites that came up through Google searches.

4.2 Attitudes towards the internet

The study found that for most users the internet is highly valued as a life-transforming experience. Its scale, multiple functions and interactive mechanisms make online life potentially as broad and diverse as real life; it could feel like the entire world has arrived into their home. It represented a whole world of individual opportunities to be discovered.

"It's not got power over me, it empowers me." Male, 30s, London

It has brought aspects of participants' 'real-world' closer and more accessible. For example, participants talked about now being able to keep in touch with friends far away and sharing the small details of life on a daily basis. Global shopping had made them aware of greater choices and where products come from.

Some participants enjoyed sharing their knowledge with those who share a hobby or special interest. Others valued getting a different perspective on world affairs and how they are reported. An illustration of this was given by one of the diarists.

Vivien, 57, is a housewife in West London with a grown-up family. She has been an internet user for some years and her uses for it include keeping up with the news. She thinks the nature of news reporting has been changed by the immediacy and accessibility of the internet, ". . . everybody with their cameras, in the end they are helping to stop things staying as hidden as they used to be."

Users' ability to navigate across the World Wide Web from one site to another through links found on a page has meant that they have discovered sites to visit they could not have imagined for themselves. This could be specialist information about a topic of personal interest such as a hobby, or for many participants, places to go on holiday.

Most participants valued the breadth of content on the internet:

"The internet is the new library." Male, 45, Leeds

"If you want to find anything out at all, it's there. It doesn't matter what it is, it's just there." Male, 35, Scotland

In the online diaries individuals wrote about the variety of benefits they personally experienced which included shopping, pursuing hobbies/interests and as a cultural source. For example, one participant's comments included the entertainment value of accessing archive music and TV clips:

"It was great. I was able to watch old music videos, TV clips, virtually anything." Male, 40s, Cardiff

Others talked about using the internet as a pastime such as searching on Google Earth, or praised its ability to help them pursue existing hobbies such as collecting porcelain, now made easier via sites such as eBay.

Some expressed satisfaction with how easy it was to shop online:

"It was just like browsing through a catalogue but easier."

"It was just like going to a real shop, although in a real shop, items may take longer to find or they won't carry so much stock."

Male, 40s, Cardiff

And also how beneficial it could be in terms of saving money:

"I bought a dishwasher for two quid!" Male, 20s, London

"I bought a bed off there a few months ago, I went to [a high street store] and this man was talking all the time and the bed on [the online store] was a thousand pounds cheaper!" Female, 20s, London

Participants who took part in diaries were asked to select words which reflected their feelings and experiences when visiting different sites. The findings showed that most participants were much more likely to select positive words than negative ones, in line with the findings from the discussion groups that experiences were generally positive.

There was a small minority of participants for whom, overall, the internet was not a positive experience. For example, an older recent adopter did not see the value of internet activities such as online shopping and preferred to continue to undertake such activities in the real world. A younger person who had grown up with the internet preferred the real world for socialising and did not see the appeal of social networking, although it was popular with his friends and peers.

Across the range of internet users in the overall sample, the research found that most participants thought the internet was a positive experience, with most generally carrying out activities that they felt comfortable with.

In a world of this scale, it did not surprise participants that there is negative content on the internet too.

"When you're on a computer you're in the outside world in your own living room, so you have to remember that the dangers when you walk outside your front door are there the other side of the screen." Female, 60s, Cardiff

Most, if not all, participants had either had a personal negative experience online or knew someone close to them who had. However, for most participants the collective benefits were considered to outweigh any negatives they perceive or have personally encountered. Most participants said that they could not imagine life without it now and that there was no going back, not least because of the perceived benefits of easy and instant access to any aspect of their cultural or commercial interests.

4.3 Participant concerns

The types of concerns that participants raised spontaneously are described below. The main primary concerns aired can be summarised as:

'Will my computer get a virus?'

'Will I get defrauded?'

And for parents/carers: 'Will my children be safe?'

Other concerns included keeping personal details safe and identity theft as well as concerns about potentially inadvertently 'getting into trouble' by, for example, downloading music from a file-sharing site. The research found that concerns over the veracity of online content were not as top of mind, nor voiced as frequently.

Computer viruses

Greater usage and exploration of the internet tended to correlate with greater direct experience of computer viruses or encountering fraudulent content providers.

Participants said that there were some experiences they feel they should be wary of, citing a number of potential sources that are largely perceived as beyond their control. Spam emails were a constant, sometimes daily, reminder of being vulnerable to unscrupulous people or organisations. Pop-ups were felt to be a source of viruses or capable of extracting data from their computer in some kind of way. Some participants had received unsolicited pornographic files, disguised as innocent files, which they thought likely to be infected.

"What I'd say is that when you have no control over what's coming on your computer, that's what worries me, you know you turn it on, and there's a pop-up for this and a pop-up for that. I want to be in control of what comes on my own computer which you can never be." Female, 60s, London

Participants in general were pragmatic about these hazards, accepting that when using the internet, things might go wrong, but reasoning that it is no different to any other aspect of their lives, and that you have to look after yourself.

"There's no doubt in my mind - I think you take a risk as soon as you turn your computer on sometimes but at the end of the day my computer's a calculated risk and it's safer to do that than go out and buy something without researching it." Male, 35, Scotland

It appears that over time people's pragmatism grows.

"You learn from your mistakes." Female, 40s, Leeds

Participants felt that computer viruses have become part of computer culture.

"I opened up some mail – should've been more wary, and when I did it downloaded a virus. It cost me £80 with the pc guy who said he'd had 15 that week." Female, 58, London

"The kids used my husband's laptop from work, and it picked up something. He was in a strop about it, but to be honest it wasn't such a big deal. Just run a program and it sorted it." Female, 39, Leeds

Certain language has been picked up and become familiar, such as 'Trojan', but understanding of what such a virus actually is or does was generally vague. Participants spoke quite frequently of their computers "slowing down" because of viruses and on a few occasions even deciding to throw a computer away.

Most participants said they had some kind of virus protection software.

"I won't run a machine without an antivirus." Male, 40s, Leeds

"I've installed AVG . . . has a pop up saying if a site is safe, so I know I'm safe." Male, 32, Birmingham

For a number of participants, their computer was now just another one of their household electrical goods that can be replaced at no great cost. The machine itself has become less of a precious object to protect; rather, the emphasis is on personal, irreplaceable content.

Fraud and financial loss

Most people also expressed concerns about being "ripped off", something that is also perceived as having become an intrinsic part of internet culture.

Front-of-mind are concerns about "dodgy" or "fake" traders and the non-arrival of goods or credit card details being exploited. In the study several participants talked about their first-hand experiences, albeit with fraud of low financial value.

Others cited friends, or friends of friends, who had suffered financial loss, sometimes quite substantial.

"Friends who have, ordered a whole kitchen, I wouldn't have thought that he would and bought online, his wife was surprised, and the company went bust. After a lot of hassle he did get his money back." Female, 58, London The research underlines how the wide range of responses to online money matters seem to be a reflection of personal character, as much as direct experience. A few of the more regular users of the internet had so far resisted buying online in the belief that it was inherently risky. For example, one woman described her suspicions when asked for her credit card details:

"I'm very apprehensive and reluctant to give my credit card, sometimes it's a free service, just put your credit card details in! I'm immediately off, I won't do it!! If it's a free service it's a free service." Female, 60s, London

Other participants had set aside a specific credit card with a low spend limit to use online, or relied on others to carry out transactions for them:

"I have ordered one thing...and I used my card but I'm not keen on using my card. I get so far and I'm scared to go any further. If I want anything I'd go over to my friend's because she's used it and has PayPal." Female, 47, Glasgow

Those participants who were successfully using online banking were the least anxious about money online overall. They tended to be confident about going online and were least anxious about fraud.

"Even the banking site I was a wee bit wary of it at first, because you hear of people being hacked into but touch wood I've not. I only put one account on at first - I've got four accounts - to see. Then maybe two months later, I thought so far so good, just go for it." Male, 35, Glasgow

For those who undertook transactions online, experience or rumour of fraud had not curtailed their use of the internet for financial transactions. Most participants tended to feel that the onus was on them to be careful. For example, one woman who had lost £60 on a music site which used a fake iTunes logo, commented:

"Probably my mistake for not checking." Female, 30s, Leeds

Concern about fraud tended to mirror wider concerns about honesty and safety in society as a whole. Participants expressed concerns about trust and financial worries generally, (driven by fears of recession, the banking crisis, credit squeeze and bonus culture) and this atmosphere of decreased trust meant that they felt they needed to know who they were dealing with. The internet was seen as particularly impersonal in this respect, so internet trade and the risk of fraud was seen as an important issue.

However, many also felt that the ease of exploring alternative offers on the web meant that in some ways it was a more honest medium and that traders could not get away with being out of line on price.

Personal details and identity theft

Participants also talked about their concerns over having personal details they have entered into sites being exploited by unscrupulous or unrecognised companies; finding themselves for example the recipient of unsolicited 'Viagra' emails or simply on someone's legitimate, but un-requested, mailing list. Such unsolicited mail is seen as a source of viruses, but it also invokes fears of identity theft.

A number of participants, across age and experience, mentioned using a separate email address to help protect their identity and divert what is felt to be the inevitable spam that revelation of an email address will generate.

"You can do that sort of stuff under a pseudonym." Male, 31, Milton Keynes

"To register I use a separate account, people sell your data, it's a valuable piece of data." Male, 29, Manchester

Welfare of children

Parents/carers also have the welfare of their children front of mind and are concerned about whether the internet is a safe environment. Parents/carers in the study voiced three areas of concern:

- paedophile grooming;
- inappropriate images: inadvertently or mischievously downloaded; and
- emotionally upsetting communications: e.g. chain emails or bullying.

Parents/carers of younger children said that they directly monitor what is allowed and used – for example by having the computer in their view, or checking the websites that their children have been on.

Parents/carers with older children or teenagers tended to say that their children are more knowledgeable than themselves about computers and the internet. Consequently, some parents/carers question the value of filters, saying that they would rather trust their children, and see their role as a parent being to give advice and moral guidance.

4.4 Accuracy of content

Except for concerns about the risk of fraud when undertaking a transaction online, concerns about the accuracy of content were less frequently voiced by participants. Nonetheless, participants spontaneously mentioned and discussed sites relating to homework, health concerns, topics of personal interest/hobbies and professional use, where the impact of inaccurate data can have significant consequences. In such instances, participants were concerned about the veracity and trustworthiness of a site in terms of whether they can reliably act on the information.

Wikipedia was the most often cited example of a site where reliability of content had to be considered (although it was also praised as a useful and reliable tool). This view came about either through personal experience of incorrect data, or by reputation.

"My daughter was doing a project on World War Two and the information on Wiki didn't look right" Male, 39, Leeds

Unqualified endorsement tended to be from those occasional users who had not understood who authors Wikipedia, and who considered it a free encyclopaedia. There were also those in the sample who were simply not inclined to pause to consider the accuracy of the information they came across online. In the diary interviews, this tended to be younger participants. One participant, a 13 year-old girl, said she would take what she came across at face value. She had never been given cause to doubt the veracity of her sources, as no teacher had challenged her homework.

4.5 Independence and balance in online content

Most participants did not expect internet content in general to be independent or balanced. Indeed, participants expected to find a diversity of opinion and sources, as internet sites could be provided by a range of sources, with participants mentioning individuals, corporations, governments, lobbyists and anyone else with an opinion to promote or a product to sell. When considering the internet as a whole, its scale, diversity and character left participants asking 'Independence from what or whom?'. Participants thought that every kind of opinion is allowed for on the world wide web, so long as it is not perceived as harmful.

That said, some 'brands' are associated with the ideas of independence and balance, and the BBC was cited as a case in point. One respondent, however, discussed how the internet had changed her perceptions of how news can be reported by established providers.

Vivien¹⁰ (Female, 58, London) said, "I was one of these who that if it was on the BBC it must be true . . . my son showed me something when they moved into Baghdad." She then described her son taking her to an online site that showed the toppling of Saddam's statue very differently when filmed to include the US army cordon. "I was quite shocked. When you pan back it was a different photo altogether."

Participants felt that the issues of independence and balance were particularly relevant when the subject is personally resonant, for example relating to health. Two participants described how they were using the internet to investigate cancer concerns.

Nadine, 62, Milton Keynes, is a retired teacher and has been using the internet for over 10 years, and says she would never go back to life without it. Recently her husband had a health scare and they have done a lot of online research. That showed her that there were a lot of different opinions and that some sites were unreliable, but the sheer volume of information was reassuring.

Susan, 48, Belfast is married, not working with two grown up sons still living at home while studying for their degrees. She is cautious of the internet over matters of security and leaves using credit cards to the rest of the family, but it has become her job in the family to look up specific information for holidays leaving her husband to buy online what she finds. Developing a confidence as a 'researcher' she began helping a friend with cancer and cross-referenced sources to be confident she was passing on sound advice.

Another participant had strong feelings about the identity of certain kinds of site provider, because of issues that had arisen through her work and passion for animals.

Siobhan, 23, Belfast is a dog groomer studying to be a vet's assistant. Through her work and studies she has visited a lot of pet food and drug company sites. She had concluded that much of the information found on the sites is deliberately misleading and contradicting professional healthcare knowledge, though it purports to be expressing a balanced viewpoint. She thinks such deception should be prevented and companies made to declare their commercial bias as the bottom line is that animals' lives are at risk.

Discussion around the subject of balance would often resolve with participants saying,

"The point is getting the views and thinking for yourself." Male, 40s Leeds

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¹⁰ Pseudonyms are used in the report.

Section 5

Intuitive judgement of online content

The previous section described the ways in which participants value the internet, and the types of concerns they have when using it. Sections 5 and 6 focus on the ways in which the participants in the study made decisions about the trustworthiness of the websites that they visit.

This section documents the results from a study using an "eye tracker" methodology. It is designed to understand the relationship between initial trust judgements made about a website and what elements participants look at on the site. The first two parts of the study, based on focus groups, diaries and interviews, identified that participants can make rapid, intuitive decisions about whether to stay on a new site. This part of the study was designed to try to understand what cues participants use when making initial quick decisions. When evaluating the results, it is important to bear in mind that the sample incorporated a range of internet users, from recent adopters to regular internet users. Internet skills and experience are likely to influence how participants evaluate websites.

Participants were asked to look at a range of websites and make a decision within ten seconds about whether they trusted the site or not. An eye tracker¹¹ was used to capture people's eye movements when asked to make these rapid judgements.

5.1 Intuitive decisions made about sites

A key aim of this study was to understand what participants check or look for, either consciously or unconsciously, when making trust judgements about websites. The first two parts of the research study (diaries and focus groups) had revealed that when consciously recollecting factors behind their processes for evaluating new sites, participants talked about intuitive decisions. This eye-tracking part of the study was particularly concerned with understanding what lies behind these kind of comments:

"You just get a nose for it." Female, 40s, London

"It just feels right when you are buying." Female, 40s, London

Participants talked about how at a glance they will have an intuitive feeling whether a new site they had not come across before could be trusted. They mentioned often using a new site based on intuition alone, especially because of the fast pace of using the media. But participants can only provide a limited commentary to their actions and the reasons for their decisions:

¹¹ An Eye Link II tracker device was used to track participants' eye movements when looking at the home page of websites on a computer monitor.

"If it looks dodgy, it probably is..." ...

"...If something looks too good to be true it normally is." Male, 30s, London

5.2 The psychology of decision-making

A decision can be the result of two separate mental processes:

- Reasoned decision-making: the bringing to mind of previous examples and their conscious evaluation:
- Intuitive decision-making: decisions based on a 'rule of thumb' or 'heuristic¹²'

Research which entails interviewing participants may not be able to reveal the influences of initial intuitive decision-making, as by its very nature this is unconscious. Asking people to describe how they reach an initial intuitive decision is likely to be influenced by their recollections of any reasoned conscious decision-making, for example based on evaluation of previous examples that come to mind to help inform the new decision.

A different kind of research method is required in order to explore what elements influence initial intuitive decision-making when judging new sites.

5.3 An eye-tracking study to explore intuitive judgements

An eye-tracking study was designed to observe the eye movements that participants made when asked to evaluate how much they trusted various sites. The eye tracker used in this study was an *Eye-Link II* eye tracker commonly used in academic study of eye movements.

By observing participants' eye movements it was intended to find out whether there were specific elements or cues on a website that they used when deciding whether a site was trustworthy or not. The research aimed to explore whether there were differences in trust judgements based on particular kinds of cues on web pages, such as real world physical contacts details, visitor numbers, brand name etc.

Key to the study was that participants were asked to make a judgment quickly (within ten seconds) so that they were more likely to make the trust judgments based on their intuitive, implicit judgement rather than on longer conscious rational evaluation. Given that most participants made judgements in much less time than ten seconds, it is reasonable to

¹² Intuitive judgement is associated with the psychological theory of 'heuristics' which relates to processing information and making decisions. Heuristics can be described as 'rule-of-thumb' shortcuts that allow humans to make judgments quickly and efficiently. Such rule-of-thumb strategies allow people to operate without needing to constantly stop to think about the next course of action.

assume that in this part of the study participants made judgements more through their intuitive feelings than through an extended rational evaluation.

5.4 Study stimulus, design and methodology

Study stimulus and design

Forty websites were used as stimulus, from seven categories, as shown in Table 1 below:

Table 1

Site type	No of sites per category
E-commerce	5
Entertainment	6
Finance	8
Health	5
News	5
Opinion	6
Travel/holidays	5

The seven categories were chosen in order to represent the range of activities that people undertake on the internet, as explored in the focus groups: accessing information; entering personal data onto a website; communicating; entertainment; undertaking transactions (e.g. making payments via a website); and user-generated content.

In the Finance category, two of the sites included were 'spoof' sites. One was created by the researchers, representing a page from a well-known UK high street bank with data entry points asking people to type in their bank sort code and account number. The other was a 'genuine' spoof phishing site for an American bank.

The websites were chosen so that they contained various elements that people might use as a cue when judging whether a site is trustworthy or not. These elements are listed below. Not all sites contained every element but represented a broad cross section of these elements overall.

These elements were as follows:

- Brand name;
- Popular sites/past experience (sites that were likely to have been seen before);
- Familiarity of name (both online and offline);
- · Well maintained and designed;
- Ease of use/navigation;
- Up to date information;

- Clear details on who the content provider is;
- Visitor numbers:
- URLs:
- Real world contact details, .i.e. physical address.

Methodology

Participants were informed that they were going to be looking at websites and reporting on how much they trusted each site. After a short calibration exercise, participants were shown the forty websites individually and were asked to state how much they trusted each site on a scale of 1 to 10, where 1 was 'not trust at all' and 10 was 'trust completely.'

The sites were shown in the categories with a brief pause after each category so that the instructions for the following category could be given. The order in which the categories were shown was rotated. The instructions for what was meant by "trust" varied by category in order to fit the type of content being assessed. The instructions are provided in Table 2 below:

Table 2

Ecommerce	How much would you trust this site to do a financial interaction? i.e.
	Make a purchase via this site
Entertainment	How much do you trust this site to be safe for your computer?
Finance	How much would you trust this site to do a financial interaction? i.e.
	Use a service or act on information from this site
Health	How much do you trust the information on this site to be accurate?
	i.e. Take advice or act on information from this site
News	How much do you trust the information on this site to be accurate?
Opinion	How much do you trust the information on this site to be accurate?
Travel /	How much would you trust this site to do a financial interaction? i.e.
holidays	Make a purchase via this site

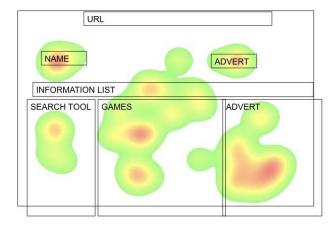
Each site appeared for ten seconds; no time limit was given to the participants in which they had to report their trust judgment. Their responses were recorded as was the time in seconds (after the initial presentation of the site) that they took to report how much they trusted the site shown. Eye-tracking measures were taken up to the point of giving a trust score.

After the eye-tracking session had taken place, participants were interviewed by a second interviewer and were asked to give reasons for the trustworthiness scores they gave each website. For example, participants were asked why they had given some sites a high trustworthy rating and others a low trustworthy rating.

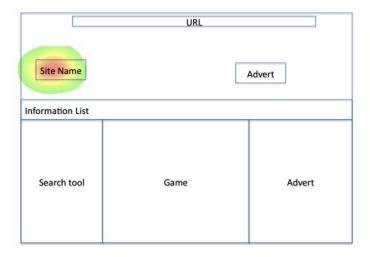
Following the research sessions the participants were debriefed as to the nature of the study.

During the research, participants were fitted with an eye-tracking device and their eye movements were recorded as they looked at the computer monitor. One of the outputs of the eye-tracking research was heat-maps. These illustrate where people were looking during the period before they made any decision. The red indicates where most time was spent looking and green the least amount of time. The times participants took looking at certain elements of a page (dwell time) was used to understand any differences in trust judgements.

The diagram below illustrates the type of output provided by the eye-tracking.



In the analysis heat-maps for the first second (1000ms) of viewing were generated for each website. This is illustrated in the diagram below.



5.5 Findings (eye-tracking and follow-up interviews)

The eye-tracking results allowed us not only to identify which elements (or cues) participants looked at, but also for how long these cues were looked at. The time participants took looking at certain elements of a page (dwell time) could be used to understand any differences related to trust judgements. Although participants had initially been allowed ten seconds to make a decision about whether they trusted the website or not, the vast majority chose to take much less time. This suggests that decisions were being made based on participants' intuitive judgement rather than on any reasoned assessment.

Overall, the study found that participants' decisions were based on a range of factors for each website and were complex and varied. As such, across the whole sample of websites chosen there were no elements (see list above) that reliably and consistently predicted whether a site was rated as trustworthy by participants. The study found that certain elements did seem to have an influence for some sites, under some conditions. For example, in some contexts and circumstances, adverts for well-known brands on information sites appeared to be taken as a cue that the particular site was trustworthy, with follow-up interviews showing that this was on the basis that, otherwise, that brand would not spend money advertising there. However, in other contexts, such as game sites, an advert for another game site did not appear to be taken as a cue of whether the content was trustworthy or not.

Given this, a qualitative analysis of the information was conducted to see if there was any indication of the cues being used by participants when making trust judgments, and the circumstances under which certain elements may have an influence on trust judgements. The section below explores the potential contribution of various website elements or cues to participants' judgements about trustworthiness.

The study found two general observations, which while potentially self-evident, are valuable to see how actual eye movements underscore assumptions about how people evaluate websites. The first observation was that a significant negative correlation existed between response time and trust measurement. In other words, participants rated sites as being very trustworthy more quickly than in the cases when they judged a site to be untrustworthy. These quick judgments were associated with higher levels of trust than decisions that were made over a longer part of the ten second time allowed. This observation supports the original assertion that decisions to trust a site are made quickly and intuitively.

The second general observation that we noted was that for a sub-sample of the sites (mainly those that were not rated either high or low on trust) there was a positive correlation between the size of the eye movement and the judgement of trustworthiness. In other words, participants who looked at points on these web pages that were far apart from each other (which indicates scanning a broad cross-section of what was on the page), made higher trust

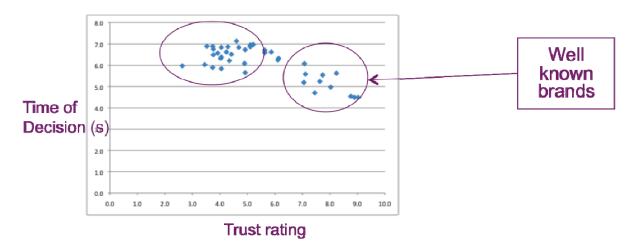
¹³ Tested at 95% level.

judgements than those who focused on a narrower area of the page. Observations of small eye movements suggest that these participants were focusing in on specific elements and reading them. It may be the case that participants looked at particular elements, in effect 'read the small print', when they were initially unsure about the site. As such, this correlation could be accounted for by participants reading detail when they were not sure whether to trust a site.

Based on the amount of time participants spent looking at different elements on each site, the following section explores the potential contribution of various website elements or cues to participants' judgements about trustworthiness.

Site name/brand name

Analysis of the first second of the participants' scrutiny of a site showed that identifying the name of the site was the first priority for participants when they were asked to make a trust judgment. This suggests that site name/brand is the most important determiner of whether the site is considered trustworthy or not. It was also noted that two clusters of sites¹⁴ appeared when trust ratings were plotted against decision times. One cluster comprised sites that were highly likely to be known to the participants. These were either websites from media companies or commercial organisations with a strong off line presence, or well-known web-based traders or auction sites. These sites elicited strong trust scores, and trust decisions were made quickly. It is likely that participants were making these quick judgments of trust based mainly on viewing the site name/brand name, and what they therefore believed was the owner/origin of the site or the organisation responsible for the site content. In other words, participants sought out the logo or name of the website and then based their trust judgment on it being familiar to them or not. Unsurprisingly, the study found that previous experience of websites was a strong factor in trust judgements, i.e. participants would trust a site if they had used it before or were familiar with the organisation it represented.



¹⁴ The chart shows two clusters of sites: one is comprised of sites less likely to be known to participants and the other is comprised of sites highly likely to be known.

This finding could be seen most clearly with the responses to the two "spoof" bank sites that were used in the study. A site that was a composite of parts of a well-known UK high street bank site was given an average rating of 7.7 on the scale of trust (ranked 9/40 of the sites used), compared to a rating of 3.7 (ranked 35/40 of the sites used) for the spoof American bank site. The fact that the high street bank was a known name to the participants in this study is likely to be contributory factor to this difference in scores.

The relationship between trust and brand familiarity was also observed in two other instances. First, when viewing the e-commerce site that sold computer and electronic equipment, participants who subsequently rated the site as 'low-trust' tended to look at the website name for longer. The most probable explanation of this is that people who know the site or have heard of it do not dwell on the name, but instead look to see what it sells, whereas those who do not know the brand name, spend longer looking at it.

Second, one travel website was rated as being trustworthy despite being potentially unfamiliar to participants. Many participants initially said in the interview afterwards that they had used this site before. However, the logo used was very similar to a logo used by a much larger, well-known online travel agent with a large offline advertising presence. When this was pointed out to the participants, many became unsure as to whether they had used the lesser-known site before, or whether they had mistaken it for the more well-known travel site.

In the interview after the eye-tracking exercise, after being made aware of the similarity between the logos of the lesser known and well know travel companies, one participant said:

"Now that you mention it I might not have used this site before it just felt familiar." Male, 34, Brighton

It is possible that some participants had made this mistake and that this misidentification had led to the lesser-known site being rated as trustworthy. This mistaken familiarity effect was also probably compounded by the name of the site which was considered by participants as a very common term. The name was a composite of two words that people would be very likely to put into a search engine when they were looking for the service the website offered (e.g. budget travel). This would indicate that both the use of logos that resembled those of better known organisations, and the use of site names that were highly relevant to the topic being searched for, may lead to the perception that a website is familiar, and consequently be rated as more trustworthy.

URLs

As described above, in the first second of viewing, participants nearly always looked towards the logo or name of the site, using this to identify the site owner/content provider, rather than looking at the URL. This observation was considered somewhat surprising, as the URL is often a better indicator of the origin of the site.

The spoof sites included in the research were those where the URL was in a form that might raise suspicion. It is of note that only three of the 40 participants looked at the URL for the spoof UK high street bank, and recognised from this that it was likely to be a spoof site. These participants then asked if they could change their initial trust score once they had seen the URL. They were informed that they were allowed to do this and all revised their trust score downwards. (These were the only occasions that this occurred within this research. No other participants who gave a trust rating before the ten seconds had elapsed asked to change their scores on further viewing of the site.)

In two cases, participants who said that they did not trust a site spent longer looking at the URL than those who said that they trusted it. In the case of a travel site, the URL was particularly long, so may have been mistaken for a 'spoof' site. However, this was also the case for a games site where the URL was only <a href="https://www."sitename".com. It is possible that these participants were unfamiliar with games sites, or perceived them as associated with a potential virus threat.

In the interviews, we noted that some participants knew to look at the URL of a site as an indication of trustworthiness. Some participants knew that anything that was not www.rsitename".com and especially if it started with a series of numbers (e.g. "http://203.119.23.180") was an indication that a site was likely to be unsafe. Despite this, some of these participants had not looked at the URL when making trust judgements of the sites within the eye-tracking study itself.

Telephone number

For a site that reported information about green activism, people who trusted the site tended to have looked at the telephone number for longer, suggesting that the ability to contact the organisation offline influenced their trust judgement. Geographic contact details were also mentioned by some participants in the interview after the eye-tracking exercise as a factor that contributes to trust.

Site content – general

Participants tended to report in the interviews that they trusted sites with content that was relevant or of interest to them, even if the site itself was new to them. For example, a site that sold electrical / computer equipment was rated as more trustworthy by participants with an interest in that topic, and the site that sold women's clothing and accessories tended to be rated as more trustworthy by the women to whom it appealed. This would suggest that an interest in what a website offered can contribute to the judgement of whether a site was considered as trustworthy.

Site content - general usability

The websites that participants felt looked easy to use were rated as more trustworthy than those that looked harder to use. In other words, merely feeling confident about how to navigate a site appeared to contribute to participants' perceptions of how trustworthy it was.

Site content - similarity to the offline world

Of all the sites in the eye-tracking exercise that were likely to be unfamiliar to participants, one travel website was consistently rated the most trustworthy. When asked in the follow-up interviews, participants reported that the site looked like the window of a real-world travel agent. In other words the matrix of holiday offers on the site looked similar to what would be in a travel agent's window. It is possible that resemblance to the real world can lead to a feeling of familiarity, and hence the website being rated as trustworthy.

Site content – explicit guarantees

When viewing an e-commerce site that provides trust seals and online feedback for other online shops, participants who trusted the site looked at the money-back guarantee for longer. This suggests that a guarantee stated on a site (in this case, money-back) may influence trust ratings.

Use of adverts

In the case of a site designed to help people with their health needs, there was a notable difference in time spent looking at an advert that appeared on the site between those who rated the site high on the scale of trustworthiness and those who rated it low.

Those who spent more time processing the advert were more likely to trust the site. The advert was for a major pharmaceutical brand. Our interpretation would be that participants believed that a respected pharmaceutical brand would advertise only on sites that provided good-quality information. It is possible that familiarity with a site advertiser influences decisions about trust of the site.

5.6 Conclusions from the eye-tracking study

The research indicated that initial trust decisions were generally made based on whether the participant felt that the site was familiar. This familiarity was generally derived from two elements. First, it could come from conscious recognition of the site name or brand logo, either due to visiting the website itself before or by knowing the brand name or logo, either on or offline:

"You tend to feel better if you have heard of them." Male, 40s London

Second, when recognition failed (such as in instances where the site was new to the participant), the study suggests that there is an intuitive decision process. On occasion, this led to participants feeling that the site was familiar to them, when in fact it was not. The study found that a range of factors, including site content such as images, logos and adverts, can all potentially act as cues in providing a sense of familiarity, even though the site itself may be unfamiliar. Other elements that appeared to provide a sense of familiarity included ease of use of the site, and similarity to known brands or logos or to the offline world.

This research indicates that a sense of familiarity, whether conscious or implicitly derived, was an important influencing factor in making intuitive judgements about the trustworthiness of a site.

The research found that participants did not tend to look at the URL when making trust judgements. This observation was considered somewhat surprising, as the URL is often a better indicator of the origin of the site than the name/logo.

It is possible to infer from these findings that spoof sites that provide a sense of familiarity, such as through mimicking a well-known logo, or providing an easy-to-navigate site, can potentially engender a false sense of trust.

The implications of these findings are covered in Section 8: Conclusions.

Section 6

Functional skills

Building a rapid intuitive sense of trust on arrival at a site does not mean that a person makes no further critical judgement while on the site. In this study, participants reported how they continue to assess a site as they engage in its detail and progress through the pages. This was especially evident for those who kept a diary over a two-week period and had spent time observing and reflecting on their own behaviour.

"I suppose it's like anything in life, you get a gut reaction about something, and it either says 'yes' or 'no', and sometimes you get the, 'I'm not sure or possibly.' and then you go and see whether your instincts are right or not." Female, 40, Cardiff

The study found that decision-making appears to continue to be a mix of explicit (conscious) and implicit (unconscious) processes relating to:

- 1 The initial level of trust formed about a site.
- 2 The extent to which participants interact with the content through:
 - reading;
 - navigation;
 - reputation; and
 - o research and checking.
- 3 How important the outcome is to the user (reward).

6.1 Reading

Visual presentation

As the eye-tracking research highlighted, participants applied the standards of visual presentation and language, that they have learnt both online and in the real world, to unfamiliar sites. They continued to look for the familiar in the unfamiliar to tell them if it was safe to progress.

This could be observing nothing more specific than familiar mainstream style imagery associated with the subject in hand:

"Style Holidays was mentioned at the travel agent ... I got what I was expecting a travel company to look like." Female, 40, Cardiff, on a successful online holiday booking

Therefore, participants might be reassured simply by seeing mainstream imagery appropriate to the subject.

Trust was also linked to the standard of the written language on a site. Most participants said that they have learned to be alert having received numerous fake bank emails using poor written English.

"Didn't trust it because the writing looked too low tech." Male, 20s, Brighton

Participants were reassured by what is typically described as "a professional presentation", such as clear typography/layout, or good colour aesthetics. For participants, such elements imply that a site is "well cared for" and must have people behind it who are reputable. For example, one of the discussion group stimulus sites was described as looking "very homemade". Since the site was purporting to offer important medical advice it was consistently thought to be of dubious value.

Within the sample, differences of aesthetic judgement occurred. Younger users, having grown up with online aesthetics and language styles, were more comfortable than older users with what might be deemed online styles, such as those used on game sites.

The influence of familiarity with aesthetic styling was demonstrated by responses to the homepage for a bit torrent site explored in the focus groups. Many in the groups (particularly women) were unaware of the terminology 'bit torrent' 15. (The few users of such sites were able to explain their function as a way of downloading music and films. Users as well as non-users were uncertain about the legality of such sites.) The bit torrent homepage, shown as stimulus in the discussions, had a very basic style, which was spontaneously disconcerting to non-users of such services. However, users of these services were not put off by such graphics and were able to focus on detailed symbols of trust, in this instance a panel of corporate logos that they assumed were genuine endorsements.

Up-to-date information

Judgements were also based on the quality of the content on a site. For example, participants asked questions about whether it was up-to-date. A sense of being "well maintained" is felt to signify that a reputable organisation is behind the site.

¹⁵ Bit torrent is a peer to peer file sharing protocol which allows users to download large files.

"Would you go to a shop with little on the shelves, that was a bit old fashioned, looked rubbish, had a sign hanging off, little known brand name?" Female, 46, Edinburgh

Brand logos

Familiar logos were seen by some participants as indicators that they were on a trustworthy site. Some inexperienced users said that seeing credit card symbols they recognised was a reassuring sign. For them, it implied that other reputable organisations are willing to interact with the site. However, others noted that any imagery could be easily duplicated. Overall, logos that are familiar, especially from the real world, could readily invoke feelings of reassurance when interacting with a site.

When discussing making transactions online, for most of those who have used it, Paypal was a reassuring intermediary which they would also readily recommend to friends and family.

Security symbols

The security padlock symbol and 'https' were also indicators of a degree of security - for those aware of them.

"I think I would trust that because it says, "Secured by..." and has a wee padlock there... my friend told me that's what you look out for." Female, 60, Glasgow

However, the study found that many participants were unaware of the significance or even the presence of such symbols.

"The padlock thing and the https are news to me - I don't understand why someone isn't promoting them as it makes you feel more secure." Female, 39, Leeds

Some of the older, low-usage internet users appeared resistant to the requirement for them to learn the language of this new environment, including the use of symbols.

"I wish the computer could talk to me, I'd think I'd be fine, but I don't want to have to read and understand all those symbols." Female, 60s. London

Personal details

Participants felt that being asked by a site to provide personal details at too early a stage in the interaction was a barrier to further investigation or use of the site. They tended to see such requests as a sign that the site owners could exploit them at some level. They felt

similarly when what they perceived as too many inappropriate or unnecessary details were requested. Those who were least familiar with this kind of site environment tended to retreat soonest.

Some participants spontaneously referred to "cookies" as another way in which they felt their personal details were being tracked or stored. However, it was clear that many did not have a clear understanding of what the term really meant to their privacy and security. Some were not aware of cookies or their functions at all.

Some participants discussed and asked questions about the level of privacy that was possible on the internet, and were unsure about how private or secure their personal details and activities were, as illustrated by the quotes below:

"People used to sit in their little living room and think Ah! No one else is aware of what I'm looking at, and now people are starting to be aware, 'Perhaps Big Brother does know what I'm looking at."

Female, 60s, Cardiff

"You really don't know. The internet is a great thing, but you just don't know. Google and AOL obviously can see what you're doing, they must be able to. I mean you go in their search engine and you've got your own IP address so there is obviously someone that can see what you're doing. They are reputable companies but can they [be] accessed or have they got the top security?" Male, 35, Glasgow

Real-world physical location

When undertaking transactions online, the abstract, intangible nature of the Web amplifies the need for reassuring signs of more traditional means of contact with a trader, especially one that is new to the user. In practical terms, this means a landline and/or a geographical address. It indicated to participants that the trader was not hiding: that they were trustworthy enough to be transparent about who they are.

"Anything on the High Street if they've done something concerning your money, you know if you've had to return something. With the internet you don't know who they are, where they are in the world, and it's cyberspace." Male, 20s, London

"If it has a 0870 number it's a problem." Male, 30s, London

"Clear way to speak to a person is a key factor, even on established sites it takes ages to get to a phone number. Calms you down if you know a number." Male, 30s, London

"Having a feedback section means that you can find a wee bit more about them and maybe ask questions." Female, 46, Edinburgh

The geographic location of the provider could also shape assumptions about the trustworthiness of a site. For example, concerns arose based on the perceptions of different countries:

"The way the web is presented I know I'm taking a chance. I bought the boots - I thought they were coming from Australia but they came from Hong Kong." Female, 50s, London

6.2 **Navigation**

The study found that trust can also be influenced by the ease of use of a site. However, a well-structured site was not generally sufficient in itself for participants to say that they trusted it.

"I suppose if you trust yourself to use the site, you trust the site itself a bit more." Female, 50s, Brighton

On the other hand, if a site was hard to navigate through, or poorly designed, then this could lead to participants stopping to consider if a site could be trusted. Key barriers to progression through a site that were mentioned by participants included:

- no natural logical progression through the site, exacerbated by pop-ups appearing that were beyond the control of the user;
- being unable to exit from a mistake;
- not providing checks to help avoid errors; and
- no visible help to hand.

These issues were particularly important for low-confidence users, as this type of navigation was a new interactive experience that has no precedent in the real world. Some users feared that their inexperience would result in misunderstanding and mistakes. Some inexperienced users in the study said they tended to delegate tasks to friends or family members as a result of such unfamiliarity. As a group of older low-confidence female users in London acknowledged:

"I get bored on it."

"So I make a cup of tea and watch them do it"

"I stand behind them and wish I could do that ... I would love to do it but I'm totally confused by it."

6.3 Reputation

Users of all levels of experience and competence repeatedly said that they visited many new sites on the recommendation of friends and family. In addition recommendations could also come from familiar trusted sites, with links from one site to another.

Word of mouth is perhaps the most often cited reason to visit a new site.

"I have to hear a new site is good 5 or 6 times before I bother to go." Female, 17, Cardiff

The focus group discussions demonstrated participants' enthusiasm to expand their internet experience (as well as their interest in hearing warnings from other people). This reflected home-user computer culture in general; participants said they and their friends passed on know-how about general management of a PC's operating system, how to make a specific software programme do what you want it to do, or what bits of kit to buy.

The research study found that word-of-mouth can potentially also influence participants' use of sites of questionable security. If someone reported using a site without encountering computer viruses, then, for some, this was felt to be sufficient to investigate themselves. For example, one participant explained to a group how she had signed up, paying £6.50 to be a VIP member of a bit torrent site. Others in the group asked for the website address, satisfied that her experience made it safe to investigate.

"How do you know it's a safe site?" Female, 50s, London

"Because I have used it for 2 years!" Female, 40s, London

In relation to using search engines, the research found that those less informed about the way such sites work felt that some kind of evaluation has to have taken place for a site to appear on the first page:

"I trust the top 10 on Google." Female, 30s, Leeds

Others consider that page 1 of a Google search represented popularity and that, in itself, was a strong endorsement of a site's quality and integrity. In other words, what is popular is successful and what is successful must be right, and so can be trusted.

The study found that older, less confident, users rely on others, for example a grandparent asking their children or grandchildren to search for information on their behalf. For some 'googling it' generated an unmanageable amount of time-wasting data perceived as irritating and largely irrelevant to their quest.

"I'd rather just pick up the phone and ask someone." Female, 60s, London

The study found that prior knowledge and experience of a topic could reduce dependency on external recommendation, whether from friends, family or search engines.

"I'm safer if I've got this invisible bubble around me of knowing what I'm looking for." Female, 40s, Cardiff

6.4 Research and checking

For many participants in the study, the internet was used mainly for online shopping, entertainment and basic information, such as finding travel directions. Research was generally confined to price comparison and reading fellow users' ratings/reviews.

"I use Trip Advisor, every time it's spot on, tells you about hotels and surroundings." Male, 30s, London

The relative popularity of a site was frequently cited as an important measure of appeal and trustworthiness. One of the diarists put this in the context of making rapid judgments about sites:

"There are nine and half thousand people online just now, so you know it can't be a bad site if there are 9,421 people on it just now. All that amount of people are not going to be wrong." ...

"I would click on the first one ... and I would look at it and go 'Nah', just if I didn't fancy it, I liked another one because it has pictures and ... comments that people have put in and you think other people have tried it so must be alright." Male, 29, Manchester

A minority of participants used the internet for more in-depth information-gathering, in support of a hobby, cultural interest, or more advanced or academic study. These participants said that they used processes they would use offline to evaluate information or opinion, for example cross-referencing sources, checking authorship, and seeking out well-regarded expert opinion. For them, the popularity of a given site was not the point:

Ben¹⁶, (Male, 20s, Cardiff) is interested in martial arts and world religions – subjects that he avidly researches online. He feels that most people need to be reminded that what's popular is not necessarily what's right. "Most people get the tourists' view of China – what comes top of a Google search - but the quality book is on the second page which most people never get to."

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¹⁶ Pseudonyms are used in this report.

One high-confidence internet user talked about cross-checking information across multiple sites:

"I'd look at 8 or 10 sites to get a feel for the answer of what it is you're trying to find – depends what you are researching, how important it is. I might do 20 or 30 sites for something I didn't know anything about – never rely on one site." Male, 32, Birmingham

6.5 Reward

The study found that some participants visited sites which they felt were risky, but the desire to obtain what is on offer outweighed their concerns about the risk.

A desire to obtain the best price was the most common example mentioned by participants. For many participants, internet culture was felt in part to be about beating the High Street on price. Participants said they tended to start with a familiar or reputable site (those they claim to stick with) then felt they would be foolish not to check further afield for the best price, and could end up buying from an unknown supplier which in some instances led to them being "conned".

"My sister-in-law bought two Nintendos from a site that promised £20 cash back. She got them but they spent £100 on her card." Male, 36. Cardiff

Participants talked of experiences where they or their friends or family prioritised their desires (e.g. for a cheap deal) over concerns for their financial security and safety.

Some participants had a strong sense of anonymity on the internet, which appeared to be linked to being more likely to take risks or to behave illegally than in other walks of life.

"Imagine you'd have to be a seriously nerdy person, downloading loads, to get nicked." Female, 19, London

Some talked about downloading films or music from the internet and made a distinction between activities in the online and offline worlds.

"I would not buy from those illegal DVD people (on the street)." Male, 30s, Brighton

Some also validated their decision by the fact that "everyone else does it". Others did not make a distinction between getting a copy from a friend and downloading from a file-sharing site and did not think it was a big deal either way.

"I'm not worried about pirate film, you could ask your next door neighbour to tape it for you." Male, 40s, Cardiff Prioritising one's desires over one's concerns for safety or legality is an example of the psychological process of de-individuation. This state of mind occurs when participants feel that they are unlikely to be individually identified (e.g. in a crowd, in the dark, sitting at home on their computer) and therefore unlikely to be caught.

Some younger participants also excused their actions by criticising the film and music industries.

A view that sticking to the law on music copyright is "so pc, just stupid laws." Female, 19, London

"You look at the music and movie industry, and they're making loads of money, so what's the problem." Female, 18, London

Or simply ignored the issues:

"I love bit torrent for movies – not clear about the legal position and rather not know!" Female, 17, Cardiff

Section 7

Responsibility for online content

The study aimed to explore participants' awareness and understanding of regulation in both the broadcasting and online environments in order to understand how such perceptions may underpin or influence participants' online evaluation processes.

Participants were asked who they thought was responsible for making sure a user could trust the site they had visited. This was asked about each site the diarists recorded, and was also discussed in the focus groups.

In the diary part of the study, participants were asked to make a note of who they felt was responsible for content on each site that they visited in the two week period. Their responses were captured on a multi-code questionnaire which gave them the response options of: me (i.e. the individual user); users of site (as a collective group); site owner – a company or individual that owns and maintains the site; content provider – a company or individual that uploads content to the site; ISP (the provider of the individual's internet service by which they can access the web); independent regulator; government; police; public opinion.

These options had been pre-determined in discussion with Ofcom. Participants had a choice of indicating, for each of the above, whether those they considered responsible were 'completely', 'partly', or 'not at all' responsible. Diarists could give multiple answers for any one site.

7.1 Responsibility for online content

Personal responsibility: individual users

Most diarists recorded site owners and content providers as being those most likely to be responsible for their being able to trust a site. However, participants also thought that responsibility should be shared and did not rest solely with the site owner or content provider.

Participants felt that users of a site, and the individual visitor themselves must take some responsibility for being able to trust a site. Some diarists, on occasion, felt that they personally could be considered responsible, alongside site owners. This was most relevant when using social networking or online gaming sites that exist through the contributions of users. It was felt that integrity and respect towards the community must be shown if the particular online community is to thrive. This point was emphasised by two internet users who were site owners and content providers:

Jean (Female, 60, Cardiff), is semi-retired and, with her husband, makes and sells craft materials via a website their daughter created. She also founded and trains moderators for the local Freecycle

forum on Yahoo. Having been "led a dance" in the past she's become very security conscious and feels well-versed in how to advise forum members on taking care for yourself, but considers this does not absolve site owners and ISPs of any responsibility. The Freecycle site is thriving and Jean is training up more moderators, instructing them in good online etiquette as much as good security to ensure people feel they can trust the site.

Johnny (Male, 50, Cardiff) owns a jewellery store on and offline. Thinking about his own approach he said, "There's no rules or regulations about my site, I could have topless girls selling my jewellery, kids could go and just look at it, I never thought about it but I've regulated it myself."

There were some participants for whom life online is also about being a citizen of a community and this entails responsibilities to that community. For a minority in this research this meant being part of a special interest group, participating in forums such as craft toolmakers or car enthusiasts. The more common example was Facebook, with some younger users also referencing Bebo.

"You should complain if anything is wrong but at the same time I think it's the people that set it up that shouldn't be allowed to....the person that made that particular website should be made responsible." Female, 56, Manchester

The idea of the users' responsibilities extending beyond their own internet use was also raised, with a few participants talking more as responsible citizens than as concerned consumers:

"It would be nice to have one body that can set something up worldwide to say this is happening. It's up to the individual as well. I think we have a moral responsibility to report anything, whether it be through the local police so they can investigate or whether it be like a helpline to say that something's not right." Male, 30s, Glasgow

"Unless they get complaints they can't police it. Female, 50s, London

"The question who is responsible made me think for most sites it's the public, like their opinion shapes everything on the internet. Like the Google street thing." Female, 15, Birmingham Overall, participants voiced the belief that the complexity of the internet means that individuals must take responsibility for deciding which sites and people they meet online to trust.

"Individuals have got the most to answer for, there's nobody forcing you." Male, 30s, Leeds

"You visit what you want to visit, what suits, so what you don't visit doesn't apply to you." Male, 48, London

"[I] see something and make my own judgement and take my own risk." Male, 20, London

Young parents/carers see it as part of their responsibility to educate their children in what is safe and socially acceptable.

"I think there is a lot of responsibility on the individual. It does come down to parenting and making your own mind up on a site, are you willing to take a wee risk... millions of people can't be wrong." Male, 35, Glasgow

Self-regulation: site owners and content providers

Most diarists recorded site owners and content providers as being those most likely to be 'completely responsible' for being able to trust a site. This was the case across the different types of site, but was felt most strongly when financial transactions were involved. In discussion with participants across the research, it was evident that this expectation of the responsibility of the site owner, especially if it was a business, is no different to expectations of real-world standards of conduct and responsibility for actions. Participants felt that well-known brands that exist offline are expected to comply with exactly the same standards online.

Although most diarists tended to think that content providers were 'completely responsible' for the trustworthiness of their site, some diarists felt that there was a need for additional controls or regulation to protect consumers.

Self-regulation: internet service providers (ISPs)

Most participants did not spontaneously assume their ISP to be responsible for the trustworthiness of sites. Either they had not consciously thought about it before, or they had not considered the potential of the technology of ISPs; for them, their broadband is just part of their telecoms bundle. Many saw an ISP only in terms of being a distributor of others' content and had little appreciation of the technical nature/capacity of ISPs. Very few participants reported engaging with any of the other services ISPs can offer, for example the tools they can provide to filter sites.

Others felt that ISPs could have a role in regulating content and not allowing unsuitable sites. Only one respondent with direct experience and online responsibilities had sufficient awareness of how web services are constructed to be confident that ISPs could take action.

When filtering services were mentioned this was in the context of PC software or using a filter on a search engine¹⁷. Some participants mentioned a problem with filters on searches; it was felt that these can be too blunt an instrument and limit the options offered; or there is a sense that this might be the case.

In this research no explicit reference was made by participants to website host-only companies (ISP or otherwise).

Statutory regulation

The study found that most participants thought that the internet was not formally regulated.

"I don't think there is a full regulation but I would hope that individual companies would police sites. But I don't think there's a Government or worldwide sort of thing to govern it; I think it's too big." Male, 35, Glasgow

However, some participants thought there must be regulation, although they were unclear as to the nature of it:

"Just assumed there must be something." Female, 40, Cardiff

"There must be some sort of person that watches the site somewhere down the line." Female, 48, Belfast

Very few participants mentioned any kind of a current role undertaken by the government or police. When the subject was brought up in the focus groups and in-depth interviews, some participants mentioned these institutions in relation to preventing criminal activity online, i.e. fraud, obscenity and paedophiles. However, most had not thought about it.

In the focus groups and in-depth interviews the idea of responsibility at a government level through formal regulation of the internet was explored. The responses revealed how complex an issue this is for participants who juggled their desire for protection with mixed views on state control and a desire for freedom of choice and expression. This is compounded by a lack of detailed understanding of what the technology enables and what safeguards are already in place. Differences of opinion were apparent across all life-stages.

Overall, the nature of the internet's global scale, diversity, and complexity leave the majority of participants spontaneously saying that truly effective regulation is impossible. However,

¹⁷ Many operating systems, ISPs, mobile and games providers offer access controls to help protect children and young people from inappropriate or potentially harmful content. There are also commercially available products. Some search engines also offer 'safe search' options that can be set for children and younger people.

as the quote below illustrates, for some participants it was seen to be a good thing, albeit unrealistic.

"Regulation? Protect people from stuff they don't want. An honourable goal but not realistic" Male, 22, Cardiff

Many participants were unaware that activities such as online fraud were already illegal according to the laws of most countries. When informed of this in the discussions, participants saw this as a baseline of protection against, for example, paedophiles or fraudsters, that was no different to the rules operating in the offline world, although far harder to manage in a global context.

Beyond the issue of illegal activity, there were a range of views on the role of government and statutory regulation, varying by life-stage, age and attitude. Older users and parents/carers were more inclined to express a desire for a degree of state-level regulation in terms of restricting offensive material and/or providing consumer protection:

"I would like it if they could clamp down more - it should be regulated" Male, 31, Milton Keynes

"There's got be controls of some sorts, legalities about things regarding children and adult stuff and I suppose the police and Government would have to be involved." Female, 62, Edinburgh

Some rejected it, citing its real-world corollaries:

"Why should they regulate me putting a page on the internet compared to me putting a sign in my window." Male, 40s, Leeds

Others argued that the internet is an opportunity for personal empowerment and freedom of expression.

"No regulation is the beauty of it... be an incursion on free speech, you can put on your website you are regulated by anyone when you are not, banks were regulated look at them." Male, 20s, London

Some were undecided. For example they were keen to protect their children from unacceptable content, but at the same time they did not want their own activities to be compromised or restricted. Attitudes towards the benefits of formal regulation were complex: for example, moving towards what some participants called a 'Big Brother' society, was felt, for some, too great a price to pay to address the concerns they had about their personal safety from fraud, etc, and consumer protection.

Participants' generally limited understanding of how the internet is technically constructed left them largely bemused as to how the technology of ISPs, search engines, and so on, can be put to use to protect them as consumers.

Overall the study identified a range of views towards the idea of statutory regulation of the internet.

7.2 Regulating television content

Participants considered that the internet offers a very different experience to other media, as it is perceived to be both private and public, both passive and participatory in nature.

In the focus groups and the diaries, when asked who is responsible for being able to trust television programme content, responsibility was seen to lie with the content producers/providers, such as the broadcasters and programme makers. However, unlike the internet, television is understood to be formally regulated. Most participants knew, when prompted, that the regulator was Ofcom¹⁸ which was seen as a "watchdog" to step in as an adjudicator when problems occur. There was a perception of some kind of agreed code of conduct which television providers are expected to abide by, with the 9pm watershed often quoted as an example. Such an approach was considered possible because there are dramatically fewer content providers compared to the internet.

"The stuff on TV has to pass certain guidelines where as anything goes on the internet and no one wants to regulate."

"It's just too big." Exchange between two men, 40s, Leeds

A broadcast media "watchdog" is felt to be important because television involves mass and diverse audiences sharing public events, and once a programme is broadcast it is too late to rectify it if there is a problem.

Regulation in the context of television is associated with socially acceptable standards, in contrast to the front-of-mind consumer protection associated with the internet. Television regulation is seen to serve a role as moral arbiter, protecting the minds of the innocent and the vulnerable. For most participants, this was an essentially positive aspect of UK society.

Participants also noted the shifting nature of television regulation, which in part reflected shifts in society's cultural boundaries:

"I like to think it is totally regulated, there's the watershed, mind you they do seem to be getting away with more these last few years." Male, 60s, London Many participants in the study were unaware of, or un-engaged with, mechanisms that already exist to help address concerns about online safety, whether this is applying effective software or filters on their computer, using search engines, or using the facilities offered by an ISP.

¹⁸ The research was conducted shortly after the Ross/Brand news story, which may have influenced participant awareness of Ofcom.

Section 8

Conclusions

8.1 **Media literacy**

Participants thought that the provision of information and tools would be useful in helping them make decisions about online content and services, including:

- advice on protecting computers from viral attack and information on PC viral software, and liaising with manufacturers;
- protection from offensive or harmful online content, for example by advising people on search engine filters; and
- raising awareness of existing symbols, signs and signals to trust in, as well as those to avoid.

Many participants thought organisations such as Ofcom could play a role in helping support people assess online content. Many also reacted positively to suggestions about a 'walled web world' of limited, but secure, choices on the internet.

"Someone like a national institution like the BBC or BT, to say this is the site for the future, this is the site you can trust . . . I'm not sure if that can be done or not. Maybe I'm speaking in the minority and a lot of people want the freedom to explore the whole system completely." Male, 50s, Belfast

But such ideas returned the 'consumer' to the dilemmas of excessive bureaucracy and loss of choice, and the 'citizen' to the issue of freedom of expression and censorship. Participants also thought such schemes could be defrauded. Overall, participants saw a general need for people to be well-informed about how to look after themselves, and care for their young children, the vulnerable or those with low functional internet skills.

8.2 Key learnings from the study

The study included a range of internet users from daily users to participants who went online less than once a week.

The study found that participants expressed concerns about online safety and consumer protection and were aware of online risks. Overall, participants thought it important to take personal responsibility when going online, but that site owners and content providers should also take responsibility.

Many participants in the study were unaware of, or un-engaged with, mechanisms that already exist to help address concerns about online safety, whether this is applying effective software or filters on their computer, using 'safe search' on search engines, or using the facilities offered by an ISP.

The study found that most participants tended to base their decisions about what sites can be trusted on what immediately feels familiar, as detailed below. The research found that this could mislead people - just because a site looks familiar, feels easy to use, or has a name which participants think they recognise - this does not mean that a site can be trusted.

Familiar looking content – logos, content, adverts

The study found that participants tend to look first at a website logo or name to identify where the site is from. Recognition of a familiar-looking logo can quickly lead to high levels of trust. Adverts from well-known companies or credit card symbols can have a similar effect, even if the site itself is unfamiliar.

"A big company would not advertise on a small site." Female, 20s, London

Sites may use logos or content that are designed to look familiar to users, even if the site itself is new. For example a site might base its logo, content, or adverts, on those belonging to reputable companies which are familiar to the public. In such cases a false sense of familiarity might be engendered.

Familiar sounding/looking name /logo

Another way in which a site might gain people's trust undeservedly is by using a name that sounds familiar. Domain names consisting, for example, of words that are likely to be used as search terms, are potentially more likely to lead people to trust them than are sites with domain names that appear to be unusual. And, if a site uses a logo or colour scheme that is similar to a larger competitor, people may think that they have contacted it previously.

Familiar looking content /style and comparison to other websites or offline world

Familiarity of content also extends further than obvious imagery, such as logos and adverts, as it also can be the result of a site resembling what might be seen in the real world. An example of this was seen in the eye-tracking research: the 'new' travel site that was most trusted was the one that looked most like an offline travel agent.

Familiarity due to ease of use

Participants reported that ease of use influenced their attitudes towards trusting a site. The study found that some participants expressed a false sense of familiarity due to the ease of use of a site and consequently were more likely to trust such sites.

Contact details

Participants undertaking online transactions tended to look for geographical contact details as a means of reassurance and building trust.

Visual design

Participants also tended to look at the layout and design of a website when making trust judgements. If it looked well designed and maintained, this tended to act as a cue to trust the site.

URLs

Participants in this study did not tend to look at the URL when making a decision about whether to trust a site. Raising awareness of what the URL is and what to check in the address may help participants stay secure online. Only a few more technically knowledgeable users mentioned checking a site's URL.

8.3 Improving functional skills and understanding of how the internet works

At a deeper level, the functional skills required to benefit from the internet are no different to those required in the real world. The critical evaluation of information and opinion, in order to make our own judgements, is described in the quotes and descriptions below:

John, 51, Belfast, works in education and has experience of helping to train young men to become plumbers. He was concerned for their prospects in the trade, because they had emerged from school semiliterate and with no appreciation of how essential the internet now is as a commercial tool (sourcing prices, parts, customers etc) and lacked the skills to exploit it. His frustrations were compounded by the fact that they had learnt to use the internet to watch porn, and were capable of accepting, without question, bigoted opinions expressed online.

"I think the education side of it is about making people at a very early age aware of that fact, that not everything on the internet is necessarily what is seems, and it could be a piece of drama that someone has created out of nowhere, and it could be someone has written because they felt they wanted to have a rant about some issue. They don't base that on fact, they base it on personal feeling, and so it doesn't actually relate to the facts of the matter." Male, 40s, London

Overall, the study found that participants used both intuitive judgements and explicit, conscious processes when evaluating what online content to trust. Participants thought that the provision of information and tools would be useful in helping them make decisions about online content and services.

Annex 1: Research samples

1. Peer group discussions

These six 90-minute sessions were run to help explore how those around us influence our own intuitions and behaviour in the context of our personal strategies for critical evaluation of online content. The stimulus for this discussion was a diverse set of websites that covered the different ways of interacting of interest to this study.

The table below shows the recruitment matrix.

	Gender	Lifestage	SE Group	Internet Usage	Location	
1	М	Pre-family/Young Family	C1C2	High / Medium	North London	
2	F	Young family/Teen Family	BC1	High/ Medium	Leeds	
3	М	Teen Family/Empty Nest	C1C2	High / Medium	Leeds	
4	F	Empty Nest/Retired	ABC1	High / Medium	North London	
5	Mix	18-25	All	Low	West London	
6	Mix	55+	All	Low	West London	

Participants were recruited by:

- Gender;
- Life-stage;
- Age;
- Socio-economic group;
- Internet use (High, medium, low);
- Geographical location (London and Leeds).

Internet use was defined as follows:

High: using internet daily, and frequently for most/all of the following activities:

- Accessing information;
- Entering personal data onto a website;
- Communicating with other people, e.g. through social networking sites;
- Entertainment, e.g. watching You Tube, listening to the radio, reading blogs, etc;

- Transactions making payments via a website;
- User generated content, uploading pictures, films, etc.

Medium: using the internet on average once or twice a week, for at least 3 of the following activities:

- Accessing information;
- Entering personal data onto a website;
- Communicating with other people, e.g. through social networking sites;
- Entertainment, e.g. watching You Tube, listening to the radio, reading blogs, etc;
- Transactions making payments via a website.

Low: using the internet less than once a week, and mainly when prompted by others to do so (family, friend, retailer, government, etc).

The fieldwork was conducted between 25.03.09 and 09.04.09.

2. Diaries and follow-up interview

This element of the research involved 36 participants¹⁹ keeping an online diary for two weeks on the days they used the internet, keeping a record of the sites they visited in terms of:

- Feelings with regard to the veracity, trustworthiness, independence and balance of the content.
- Their sense of who was responsible for them feeling able to trust the site.

During the course of the diary fortnight, participants were asked to visit examples of specified categories of site they were not so familiar with. They were free to choose which sites to visit.

The diary was stimulus to raise self-awareness of existing behaviour and feelings which could then be discussed in a follow-up extended, face-to-face, interview in-home.

The sample structure is outlined below. Participants were recruited based on:

- Gender;
- Age;
- Socio-economic group (B, C1, C2, D, E);

¹⁹ Two participants dropped out of the study during the course of the fieldwork. The final sample comprised of 34 participants, and all findings reported are based on this sample.

- Life-stage;
- Working status;
- Frequency of using the internet;
- Geographical location (Manchester, Brighton, Birmingham, Glasgow, Edinburgh, Belfast, Cardiff).

Internet usage was defined in the same way as for the peer group discussions. See details above. All participants had the internet at home.

No.	Gender	AGE	Socio economic group	LIFE STAGE	INTERNET USE	LOCATION
1	M	13	В	SCHOOL YEAR 8	MED	Manchester
2	F	13	В	SCHOOL YEAR 8	HIGH	Glasgow
3	M	14	D	SCHOOL YEAR 9	HIGH	Brighton
4	F	15	D	SCHOOL YEAR 10	MED	Birmingham
5	M	15	C1	SCHOOL YEAR 11	LOW	Belfast
6	F	17	D	WORKING PART TIME / FURTHER	MED	Cardiff
7	М	17	C1	EDUCATION STUDENT	HIGH	M Keynes
8	F	19	C2	STUDENT / WORKING	LOW	Manchester
9	М	19	В	STUDENT	MED	Edinburgh
10	F	20	C1	STUDENT	MED	London
11	М	22	C1	SINGLE / WORKING	MED	Cardiff
12	М	29	C1	WORKING / NO KIDS	LOW	Manchester
13	F	23	C2	SINGLE / WORKING	MED	Belfast
14	F	31	D	NO KIDS / WORKING	LOW	Brighton
15	М	32	C1	SINGLE / WORKING	HIGH	Birmingham
16	F	40	В	YOUNG FAMILY / WORKING PAR TIME	HIGH	Cardiff
17	M	35	C1	YOUNG FAMILY / WORKING	MED	Glasgow
18	F	35	C2	YOUNG FAMILY/WORKING	HIGH	Belfast
19	М	31	D	WORKING/YOUNG FAMILY	LOW	Milton Keynes
20	М	34	C2	YOUNG FAMILY/NOT WORKING	MED	Leeds

21	М	48	В	TEEN FAMILY / WORKING	LOW	London
22	F	46	C1	TEEN FAMILY / WORKING	HIGH	Edinburgh
23	M	38	C2	TEEN FAMILY / WORKING	MED	Cardiff
24	F	48	D	TEEN FAMILY / WORKING	LOW	Belfast
25	M	43	C1	TEEN FAMILY	LOW	Birmingham
26	F	39	В	TEEN FAMILY/NOT WORKING	HIGH	Leeds
27	F	57	В	EMPTY NEST / NOT WORKING	HIGH	London
28	F	47	C1	NO KIDS / WORKING	LOW	Glasgow
29	M	50	C2	EMPTY NEST / WORKING	HIGH	Cardiff
30	M	57	D	EMPTY NEST/NOT WORKING	MED	Leeds
31	M	59	C1	EMPTY NEST / WORKING	HIGH	Belfast
32	F	62	В	RETIRED	LOW	M Keynes
33	F	67	C1	RETIRED	MED	Brighton
34	F	60	C2	RETIRED	LOW	Edinburgh
35	M	63	E	RETIRED	HIGH	Belfast
36	F	60	C2	SEMI RETIRED	MED	Cardiff

Fieldwork was conducted between 27.03.09 and 30.4.09.

3. Eye-tracking sample

Forty participants took part in this part of the research. The sample consisted of participants aged 18 to 70 years old, representing a range of life-stages, socio-economic groups and with internet usage ranging from light to heavy.

No	Life stage	Age	Gender	Socio- economic		Internet: Light/Moder	Marital Status Single (S)
				Group		ate/Heavy	Married (M)
1	College	18 – 24	M	В	College	M	S
2	College	18 – 24	F	C1	Higher	Н	S
3	College	18 – 24	F	C2	Education	Н	S
	_						
4	No kids	18 – 40	M	В		M	S
5	No kids	18 – 40	F	C1C2	Not studying.	L	S
6	No kids	18 – 40	M	D	Mix living alone,	М	S
7	No kids	18 – 40	F	В	friends or	L	M
8	No kids	18 – 40	M	В	couple	Н	S
9	No kids	18 – 40	M	C1C2		Н	M
10	Young	25 – 40	F	D		L	S
	lly						

11	Young family	25 – 40	F	В		Н	M
12	Young ly	25 – 40	М	C1C2	Eldest at primary school.	М	M
13	Young ly	25 – 40	F	C1C2		М	M
14	Young family	25 – 40	F	D		L	М
15	Young	25 – 40	М	В		М	S/M
16	Young family	25 – 40	F	C1		Н	S/M
17	Young	25 – 40	М	C2		Н	S/M
18	Young family	25 – 40	М	В		М	S/M
19	Older /No kids	35 – 55	F	В	Live alone	L	S
20	Older/ No kids	35 – 55	М	C1C2	Live alone or with partner	Н	М
21	Older /No kids	35 – 55	F	В	·	Н	М
22	Teenage family	35 – 55	F	C1C2		L	S
23	Teenage family	35 – 55	М	D	Eldest child at secondary	М	М
24	Teenage family	35 – 55	F	D	school.	L	М
25	Teenage family	35 – 55	М	C1C2		М	M
26	Teenage family	35 – 55	F	D		L	M
27	Teenage family	35 – 55	M	В		Н	M
28	Empty nest	40 – 60	M	C1C2	Children have	M	S/M
29	Empty nest	40 – 60	F	C2	left home.	Н	S/M
30	Empty nest	40 – 60	M	В	1	M	S/M
31	Empty nest	40 – 60	F	C1C2	1	L	S/M
32	Empty nest	40 – 60	M	D	Children have	M	S/M
33	Empty nest	40 – 60	F	В	left home, or	L	S/M
34	Empty nest	40 – 60	M	C1C2	never had children	H	S/M
35	Retired	60 – 70	F	C1C2	Mix of	L	S/M
36	Retired	60 – 70	F	В	couples/single	Н	S/M
37	Retired	60 – 70	М	C1C2	1 .	М	S/M
38	Retired	60 – 70	F	D	1	L	S/M
39	Retired	60 – 70	M	В	1	H	S/M
40	Retired	60 – 70	M	C1C2	1	M	S/M
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The research took place in Croydon and Brighton on 28th and 29th April 2009.

Annex 2: Discussion guides/interview materials

1. Peer group discussion

Prior to attending the group, participants were asked to note some good and bad sites on the internet (in their own terms).

Welcome - 5mins

- Explaining the reason for the research: our interest is in how people come to decide they feel good about the websites they are choosing to 'adopt' or not. (Explaining that will explain who commissioned the research a little later).
- Allow for any spontaneous group response
 - o Clarify as required

Section 1-25 mins

- Personal introductions that draw on their examples of good, bad and ugly sites to elicit personal narratives about ending up happy with their choice.
 - Build collective descriptors of what feelings they associate with this process for different types of site.
 - Allow for own types/definitions to emerge
 - o Prompt as appropriate for 6 areas of interest
 - Accessing information
 - Entering personal data onto a website
 - Communicating
 - Entertainment
 - Transactional making payments via a website
 - User generated content
- A bank of tactile material for different textures (e.g. silk, wool, wire wool, plastic, marble etc) to use as a way of expressing their feelings.
- Support above discussion on own sites, if required, with bank of stimulus images (agreed with Ofcom) that reference the different kinds of activities the Internet can be used for
- Throughout above discussion we are interested in spontaneous reference to the concepts
 of truthful, trustworthy, balanced and independence as well as the idea of any kind of
 regulation. We will not be forcing these concepts on them.

Section 2 – The idea of regulation and comparisons between TV and Internet – 20mins

- Prompt on the idea of regulation? Initial reactions
- How do they define it
- Note: we will ensure different types of regulation are covered in the discussion: Personal responsibility, Self-regulation, Co-regulation and Statutory Regulation. We want to see what emerges naturally, but will prompt to ensure these different concepts are covered.
 - o In relation to other media vs. Internet
 - Prompt for TV, how does watching a TV programme feel compared to being on the Internet
 - o Probe on how people feel watching TV versus being online
- Get a gauge on awareness of specific things online that form part of regulation, spontaneous then prompted with e.g.:
 - AV content provider tools (e.g. guidance labels) to assist users in making choices about whether or not content is suitable for them/children in their care to watch. (self-regulation)
 - 'padlock symbol' to help safeguard financial transactions/provision of personal data. (self regulation)
 - Advertisements, e.g. pop ups can be handled by Advertising Standards (example of co-regulation)
 - There is no statutory regulation online except for illegal content is banned
- What's the group's 'common sense' position on regulation online, i.e. what just feels right for the group
 - Do flash points emerge, i.e. do significant heartfelt differences of opinion that matter to people emerge in the discussion
 - As required draw on site stimulus of various site types for different online events to explore what regulation means to them in online context

Section 3 – 25mins: Personal strategies reviewed

- Revisit their earlier narratives/feelings in light of the fact that the Internet is unregulated
- Allow time for reflection
- What do you use to build trust/evaluate content?
 - As required, stimulate discussion with examples of web pages drawn from own examples /agreed bank
 - o Discuss role of:
 - friends, family
 - professionals, e.g. IT managers

- well known brands
- look and feel of a site
- recommendations on tv or print media for websites
- checking out what other people online say about the site, customer history or rating etc
- padlock symbol for personal details
- user rating
- o Explore if there is variation in the above signals used by type of site using

Section 4: Ofcom's role online (15 mins)

- Note: this closing part of the discussion is concerned with media literacy, not statutory regulation
- What advice would you give to people about looking after yourself when you are online?
 - o Imagine you are talking to a friend or neighbour who has not been on the Internet before, what do they need to look out for?
 - How would you describe the Internet world to them (safe, dangerous, be cautious, experiment)
- Advise, if not already covered, that the research was for Ofcom allow for spontaneous comment
- State that Ofcom is not able to regulate the Internet in same way as it does television or radio. But it has been asked to consider how it can help people to use the Internet with confidence and effectively.
- Based on this explore perceptions of what Ofcom can do to help people to evaluate and assess the veracity, trustworthiness/independence and balance of content.
 - o i.e. without statutory regulation

2. Extended interactions with diary participants: semi-structured interviews

- The interviews are undertaken in home. The diary work is instrumental in shaping the session. We deliberately avoid imposing our agenda on the discussion as this would encourage more formal responses.
- We aim to capture the kind of frank talk that reveals so much about a person's implicit
 associations that are held in the subconscious, as well as reveal their level of media
 literacy.
- We ask participants to be allowed to frame their own opinions with their own social and cultural codes, be able to make spontaneous judgements and associations, explain in their own terms how they believe they decide if a site is trustworthy, balanced,

- independent, truthful etc. Also, we explore how their understanding of regulation in terms of Personal responsibility vs Self-regulation vs Co-regulation vs Statutory Regulation is influencing them.
- We review the entries they've made for individual sites, which covertly ensures we cover
 everything we need to address to understand personal strategies and what are the
 influences across the principal uses of the web, as outlined below:
 - Accessing information
 - Entering personal data onto a website
 - Communicating
 - Entertainment
 - Transactional making payments via a website
 - User generated content
- The session takes place by their computer so that they can use sites to make their point. This is also an opportunity for the interviewer to rate their computer skills.
- The diary provides us with the opportunity to prompt participants with how they
 emotionally reacted to different sites and their sense of responsibility. We can then listen
 for spontaneous reasons for feeling the way they did, and probe on any specifics of
 familiarity, cultural, peer group, aesthetic and online semiotics/coding.
- The concluding part of this session is an opportunity for the interviewer to review their comments and focus on comparing the contributor's personal strategies for TV/Radio versus the internet.

3. Eye-tracking session guide

Part 1: 10 mins - Eye Tracking

- Participants are presented with 38 sites in seven segments.
- Prior to each segment the respondent is advised of the category type, e.g. Travel related sites, and asked to consider what trust would mean to them in this context.
- They then view the sites, each for 10 secs only, and rate each for trust on a scale of 1 to 10. Participants are allowed to respond with a trust judgement before the 10 second presentation is completed. Both the trust score and the response time to the nearest second is recorded. Before each segment, the interviewer checks that they have comprehended the question about trust, as stated below.
 - o e-commerce how much would you trust this site to do a financial interaction?
 - o Finance how much would you trust this site to do a financial interaction?
 - o Travel/Holidays how much would you trust this site to do a financial interaction?
 - Opinion how much do you trust the information on this site is accurate?
 - o Health how much do you trust the information on this site is accurate?
 - News how much do you trust the information on this site is accurate?

Entertainment - how much do you trust this site is safe for your computer?

Part 2: 20 mins one-to-one interview

- Profile respondent in terms of:
 - o Home life, work life, internet usage (type of uses, frequency of use).
- Establishing their general outlook on the trustworthiness of the internet.
- Define what trust means for them for each of the seven categories.
- For each category re-present the selection of sites used (as print-outs) and identify what visual cues exist to substantiate trust.
- Discuss comparison within categories as to why participants state they trusted some sites and not others.