About this document

This document provides an in-depth study of the findings from the Digital Day 2014 children’s consumer research. It focusses on the data from the children’s quantitative 3-day diary study, and includes some comparisons to the adults’ study.

Key findings from the main adults’ study were published in August as part of our Communications Market Report 2014. This report, focussing on children, will be the first of a series of more in-depth reports looking at particular groups within the data sets collected in the main study.

The Communications Act 2003 placed a responsibility on Ofcom to promote, and to carry out research in, media literacy. This report on children’s digital day contributes to Ofcom’s work in this area. The study was also undertaken to support Ofcom’s regulatory goal to research markets constantly and to remain at the forefront of technological understanding.
1.1 Digital Day 2014

1.1.1 Introduction

People have more flexibility and choice than ever before when it comes to what, how and when they access media content and use communications services. This is a result of expansion in the range of devices, services and media content now available, and the speed of their adoption.

While Ofcom makes use of a wide range of industry research that allows us to understand how people consume broadcast media and how they use websites, there is little current insight into how people use media and communications services and devices together, and how these form a central part of a consumer's day.

Therefore, in Q1 2014, Ofcom conducted an in-depth study on UK adults’ and children’s total media and communications activities to provide an overview of the role of media and communications in people’s lives. The research provides a snapshot of people’s media and communications behaviour over a seven-day period, exploring when and how people use services and devices throughout the day, covering both in- and out-of-home use.

1.1.2 Methodology for the Children’s study

Digital Day Children’s study – who took part

A nationally representative sample of 1,644 UK adults aged 16+ participated in the main Digital Day study in March-April 2014, completing seven-day media diaries. However, alongside the adults study, a children’s sample of 186 primary school aged children (aged 6-11) and 173 secondary aged school children (aged 11-15) also took part, completing a three-day media diary including two week days and one weekend day. The dataset analysed in this report focuses on these participants.

The survey recorded when participants undertook any of the media and communications activities listed in Figure 1.1 and what device they were using, including any concurrent use, over three days. Figure 1.1 also defines the aggregate media categories used throughout the report. In addition to the main activity types (e.g. watching, listening, communicating), these have been divided into grouped activities (e.g. ‘watching’ activities comprise TV or films on a TV set, TV or films on another device and other video including short clips). Participants recorded all their media behaviour in a paper diary, and these data were captured on a daily basis online or by telephone.

This study complements other Ofcom research into Children’s use of media and communications services and devices. In particular, Ofcom has an ongoing study into children’s media literacy, with annual reports published on the website here: http://stakeholders.ofcom.org.uk/market-data-research/media-literacy-pubs/

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1 For further detail on the methodology, questionnaires and findings from the full quantitative adults study, please refer to the Technical Appendix and the Overview of findings, published in the Communications Market Report 2014.
**Media consumption activities**

<table>
<thead>
<tr>
<th>Activity types</th>
<th>Grouped activities</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Watching</td>
<td>TV or films on a TV set</td>
<td>Live TV, Recorded TV, On-demand / catch-up TV or films (free), Downloaded or streamed TV or films (paid-for), TV or films on DVD, Blu-ray, VHS video</td>
</tr>
<tr>
<td></td>
<td>TV or films on another device</td>
<td>Live TV, Recorded TV, On-demand / catch-up TV or films (free), Downloaded or streamed TV or films (paid-for), TV or films on DVD, Blu-ray, VHS video</td>
</tr>
<tr>
<td></td>
<td>Other video (short clips)</td>
<td>Short online video clips</td>
</tr>
<tr>
<td>Listening</td>
<td>Radio on radio set</td>
<td>Radio (at the time of broadcast), On-demand/'Listen again' radio programmes or podcasts</td>
</tr>
<tr>
<td></td>
<td>Radio on another device</td>
<td>Radio (at the time of broadcast), On-demand/'Listen again' radio programmes or podcasts</td>
</tr>
<tr>
<td></td>
<td>Other audio</td>
<td>Personal digital music or audio collection, Streamed online music, Personal music collection on CD, Vinyl record or cassette tapes, Music videos (background listening)</td>
</tr>
<tr>
<td>Communicating</td>
<td>Voice communications</td>
<td>By phone call, By video calls</td>
</tr>
<tr>
<td></td>
<td>Text communications</td>
<td>Through a Social Networking site (excluding checking updates), Instant Messaging, email (reading or writing), Text message, Photo or video messages (viewing or sending) or Snapchat</td>
</tr>
<tr>
<td>Playing</td>
<td>Games</td>
<td>Games (on an electronic device)</td>
</tr>
<tr>
<td>Read/ browsed/ used</td>
<td>Print media</td>
<td>A newspaper/article (printed or online/digital including apps), A magazine/article (printed or online/digital including apps), A book (printed or eBook)</td>
</tr>
<tr>
<td></td>
<td>Other Internet media</td>
<td>A newspaper/article (printed or online/digital including apps), A magazine/article (printed or online/digital including apps), Other online news (not through an newspaper site), Sports news updates (not through a newspaper site), Online shopping or ticketing site/app, Other websites or apps - including online banking, checking updates on social networks (e.g. Facebook, Twitter) etc.</td>
</tr>
<tr>
<td></td>
<td>Other non-internet media</td>
<td>A book (printed or eBook), Other activities such as creating office documents/spreadsheets, creating or editing videos/music/audio etc. or other apps or software/programs</td>
</tr>
</tbody>
</table>

**Terminology**

The analysis examines a range of media behaviours. The terminology is defined below.

**Media consumption**

This refers not only to viewing and listening, but to all text and voice communications, and the consumption of print media.

**Weekly reach**

The proportion of participants who took part in a particular activity, or used a particular device, at any point across the week e.g. 90% of children aged 6-11 watched live TV across the week. Although children were asked to complete a diary for 3 days, all 7 days of the week contained enough sample of children to allow the calculation for average weekly reach – including all 7 days – to be applied to children.

**Volume**

Average minutes of an activities or use of a device per day

**Simultaneous media consumption**

Undertaking more than one media activity at the same time e.g. texting while watching TV

**Solus media consumption**

Media consumed while doing no other media activity
Key points for children

• **11-15s squeeze nine and a half hours’ worth of media and communications activity into just over seven hours each day.** 11-15 year olds are more likely to do more than one activity at the same time, as they squeeze 9 hours 33 minutes of media activity each day into 7 hours 3 minutes. 6-11 year olds spend less time on media and communications each day, and undertake less multi-tasking, compressing 5 hours 36 minutes of media activity each day into 5 hours 6 minutes.

• **11-15s spend almost an hour a day communicating via social networking sites.** This age group spend a significantly greater amount of time on communication activities than 6-11s, accounting for 2 hours 26 mins per day. Of this, almost an hour per day (52 mins) is taken up by communicating on social networking sites, while 38 mins per day on average is spent communicating via text message.

• **11-15s favour communicating through messaging and social networking sites, over phone calls and emailing.** The way children engage with communication activities is markedly different to adults, with phone calls and emails being much less popular among children aged 6-15. Over half of time spent on communication activities among children is taken up by text messages, instant messages and photo messages (54% of communication time for 6-11s and 56% for children aged 11-15), compared to 28% of communication time attributed to messaging among adults.

• **Media time is dominated by TV for 6-11s.** Among this age group, television viewed on a TV set dominates the media day, and accounts for over 50% of time spent consuming media between 7am and 9am. In comparison, for children aged 11-15 this activity takes up a much lower proportion of overall media consumption time while the use of text communications, such as instant messaging and texting, features prominently throughout the day.

• **A fifth of time 11-15s spend on ‘watching’ activities is attributed to short online video content.** Considering all of the time spent on ‘watching’ activities across a week among 11-15 year olds, just over half (52%) is to live television, compared to 69% for all adults. However, this age group spends a significantly greater proportion of its viewing time watching short online video clips compared to adults (19% vs. 2%).

• **Twenty per cent of children’s media and comms time is spent playing games.** Overall, three quarters (75%) of children aged 6-15 reported playing games on an electronic device (including games consoles and tablets) during the week. These gaming activities took up a fifth of children’s total time spent on media and communications – well above the 5% of media time taken up by this among adults.

• **Six in ten children aged 6-11 use a tablet each week.** Among 6-15 year olds tablets and smartphones are more popular than desktop/laptops. Tablets are the most used device among 6-11s after TV sets; sixty per cent of children in this age group claim to use tablets each week compared to 38% of all adults. For 11-15s, smartphones are the most used device each week (67%) after TV sets.

• **11-15s display a much more varied use of devices throughout the day.** While for both children’s age groups the TV set is the most used media or communications device on weekday and weekend evenings, for 11-15s other devices see much more consistent use throughout the day. In particular, children in this age group display much greater use of smartphones throughout the day, and games consoles particularly in the evening period.
1.1.3 Media and communications activities across the day

11-15 year olds engage in nine and a half hours' worth of media and communications activity in just over seven hours each day.

Figure 1.2 compares solus and simultaneous media and communications use across the different age groups (from both the adults and children's diaries). When looking at the children's age groups, children aged 11-15, are more likely to do more than one activity at the same time, as they squeeze 9 hours 33 minutes of media activity each day into 7 hours 3 minutes. Children aged 6-11 spend less time on media and communications each day, and undertake less media multi-tasking, compressing 5 hours 36 minutes of media activity each day into 5 hours 6 minutes. Children overall have lower levels of media consumption than adults, due to time at school, and more time sleeping.

Figure 1.2 Average time spent using media and communications per day, by age group

![Average time spent using media and communications per day, by age group](image)

Source: Digital Day 7-day diary for adults/ 3-day diary for children
Base: All activity records for adults aged 16+ (108782), 6-11 (2972), 11-15 (3843) 16-24 (6910), 25-34 (16035), 35-44 (25304), 45-54 (26662), 55-64 (19918), 65+ (13953)

11-15s spend almost an hour a day communicating on social networking sites

Figure 1.3 shows how the total time spent on media and communications activities is made up of the overall activity types. Just over half of the 5 hours 36 minutes 6-11 year olds engage in these types of activity each day involves watching audio-visual content. For this age group, the next most popular activity by time spent is playing games on an electronic device, accounting for just over an hour per day (68 mins) – more than double the time for adults. However, only 6% of their media time is spent on communication activities (such as text messaging, emailing or phone calls), amounting to 20 minutes per child per day. This is likely due to the much lower reach of communications devices such as smartphones among this age group, and the lower level of social networking activity.

Among children aged 11-15, ‘watching’ activities take up a similar amount of time as they do for 6-11s (177 minutes per day), but account for a smaller proportion of total media time (31%). Compared to 6-11s, they spend a significantly greater amount of time on communication activities (and the same amount of time as adults), accounting for 2 hours 26 mins per day. Of this, almost an hour per day (52 mins) is taken up by communicating on
social networking sites, while 38 mins per day on average is spent communicating via text message.

As with 6-11 year olds, approximately a fifth of media time is taken up playing games on an electronic device, while 13% of time spent on media and communications each day was taken up by ‘reading/ browsing/ using’ activities (such as reading books, newspapers, checking updates on social networks or browsing the internet). This was closely followed by listening activities (such as listening to the radio or personal music collections), which accounted for 12% of media time for 11-15s.

Figure 1.3 Average daily total media and communications time spent (mins), including simultaneous activity

<table>
<thead>
<tr>
<th>Activity</th>
<th>Proportion of total media and comms time</th>
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<tbody>
<tr>
<td></td>
<td>Adults 16+</td>
</tr>
<tr>
<td>Watching</td>
<td></td>
</tr>
<tr>
<td>Communicating</td>
<td></td>
</tr>
<tr>
<td>Reading/browsing/using</td>
<td></td>
</tr>
<tr>
<td>Listening</td>
<td></td>
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<tr>
<td>Playing</td>
<td></td>
</tr>
</tbody>
</table>

Source: Digital Day 7-day diary for adults/ 3-day diary for children
Base: All activity records for adults aged 16+ (108782), 6-11 (2972), 11-15 (3843)
Note: For this analysis the calculations are made by generating mean times spent by all adults for each of the individual activities (including zeros). These mean times are then summed together to create total media and communications time, and time per activity type (hence includes simultaneous activities).

Media time is dominated by TV 6-11s, while text communications have a more prominent role among 11-15s

Figure 1.4 shows the proportion of media activities participated in across the day among children aged 6-11. Television viewed on a TV set dominates their media day, and accounts for over 50% of media consumption activities between 7am and 9am. Playing games on an electronic device (such as a games console, a phone or tablet) is the second most popular activity among 6-11s in terms of proportion of media time, taking up between 15% and 30% of media activities during the daytime period from 7.15am to 8pm. Reach of this activity peaks at 10.45-10.59am when it accounts for a 31% share of media and communications time, potentially corresponding with school break times.
Figure 1.4  Proportion of media and communications activities across the day – Children aged 6-11

In comparison, Figure 1.5 shows the proportion of media and communications activities across the day for children aged 11-15. Watching TV or films on a TV set takes up a much lower proportion of overall media consumption time for this age group – although 11-15s consume more media overall. However, the use of text communications, such as instant messaging and texting, features prominently throughout the day, taking approximately a 30% share of media and communications activity between 6am-6pm.

‘Other audio’ activities which includes any listening activities except for listening to the radio e.g. listening to a personal digital music collection or using music streaming sites, are also more popular among this age group compared to 6-11 year olds. From 6.30am to 8.59am and again from 12 noon to 4.14pm this activity takes up between 10% and 20% of all media consumption time.

Similar to 6-11s, children aged 11-15 spent a significant proportion of their media time playing games on an electronic device, with this activity accounting for a quarter (24%) of all media consumption between 5.30-5.59pm.
1.1.4 Watching activities

Almost half of 11-15 year olds watch online video clips during the week

Figure 1.6 shows the weekly reach of the different ‘watching’ activities, and shows some significant differences between the two children’s age groups. While nine in ten 6-11 year olds reported watching live TV during the week, this fell to 78% of those aged 11-15. In comparison, a significantly greater proportion of 11-15s (45% compared to 23% of 6-11s) reported watching online video clips through sites such as YouTube during the week, with this being the second most popular watching activity. Both children’s age groups reported higher weekly reach for this activity than adults (20%). 11-15 year old children were also more likely to watch recorded TV (35%) or on-demand TV (26%) than children aged 6-11. Conversely four in ten children aged 6-11 watched TV or films in a physical format i.e. on DVD, Blu-Ray or VHS, compared to a quarter (27%) of those aged 11-15.
Almost a fifth of time 11-15 year olds spend on watching activities is attributed to short online video content

Considering all of the time spent on watching activities across a week among 11-15 year olds, just over half (52%) is to live television, compared to 69% for all adults. However, this age group spends a significantly greater proportion of its viewing time than all adults (19% vs. 2%) watching short online video clips.

Although children aged 6-11 spend half the proportion of weekly viewing time on recorded TV compared to all adults (8% vs. 16%), they spend a significantly larger proportion of time watching DVDs or Blu-ray (12% vs. 5%).
Figure 1.7  Proportion of watching activities, all adults vs. children

Source: Digital Day 7-day diary for adults/ 3-day diary for children
Base: All watching activity records for adults 16+ (25272), primary school-aged 6-11 (1249), secondary school-aged 11-15 (1094)

Ofcom’s Children’s Media Use and Attitudes report 2014 provides further analysis on children’s preferences for watching television vs. YouTube channels. In line with the findings shown above, this study revealed a fifth (19%) of 12-15 year olds who watch TV preferred watching YouTube channels over TV channels2.

1.1.5 Listening activities

Fewer than half of children claimed to listen to live radio on a weekly basis

When considering all listening activities, among adult participants, listening to live radio is by far the most popular, with three quarters of respondents recording this activity during the week. However, reach falls to less than half – 42% - of children aged 6-15.

Instead among those aged 11-15, listening to online or digital ‘pull’ content was popular. Listening to a personal digital music collection e.g. via an MP3 player or smartphone was the most popular listening activity, undertaken by 44% on a weekly basis. This activity had significantly higher reach among this age group compared to both 6-11s (15% reach) and adults (33%). Listening to streamed online music and listening to music videos (as background) were also more popular among this age group than among 6-11s or adults, with approximately one in five children aged 11-15 undertaking these activities.

Reach was lower for most of the listening activities among children aged 6-11, with the exception of listening to music in physical format (e.g. CDs), and listening to live radio, with these activities having broadly similar reach among 11-15s.

As with 16-24s, live radio accounts for a fifth of all listening time for 11-15 year olds

Compared to all adults, a significantly smaller proportion of children’s listening time is attributed to live radio, particularly for those aged 11-15 (21% vs. 71% for all adults). Instead, digital music (streamed or stored on a device) takes over half (54%) of the ‘share of ear’ among this age group. In addition, children in both age groups spend more than 10% of their total listening time playing music videos on television, or online, as background listening.

As with watching activities, playing of physical media e.g. CDs takes up a significantly higher proportion of listening time among 6-11s (18%), compared to 11-15s (8% of listening time) or adults (7%).
1.1.6 Communicating activities

11-15s favour communicating through messaging and social networking sites, over more traditional forms of communication such as phone calls and emailing

The way children engage with communication activities is markedly different to adults (Figure 1.10). Phone calls are much less popular, being conducted by 14% of 6-11s and a quarter of 11-15s, compared to 83% of adults. Even the older forms of electronic communication, such as emails and text messages, have significantly lower reach among children aged 6-15.

While for those aged 6-11 this may in a large part be explained by lower take-up of mobile phones - Figure 1.15 shows 27% of this age group used a smartphone during the week – weekly reach of smartphones for 11-15s is on a par with adults (67% and 65% respectively). However, 11-15 year olds are communicating more than adults through newer forms of communication such as via social networking sites (47%), instant messaging (40%) and a fifth reported sending photo or video messages.
Children’s communication time is dominated by messaging

Over half of time spent on communication activities among children is taken up by text messages, instant messages and photo messages (54% of communication time for 6-11s and 56% for children aged 11-15). This compares to just over a quarter of time spent on communications (28%) attributed to messaging for adults.

Furthermore, compared to adults, children aged 11-15 spend double the proportion of their communication time on social networks (36% vs. 18%). Figure 1.11 shows that children spend a very low proportion (6% or less) of communication time on either phone calls or emails.
For children, voice or video calls account for a small minority of time spent on smartphones

Figure 1.12 below shows how time is spent on a smartphone, among those who used this device. Children aged 6-11 have a distinct pattern of usage, with a fifth of their time on this device being spent playing games, and a further 16% of time spent viewing short online video clips.

Children aged 11-15 have a usage pattern more similar to that of adults, with around a quarter of time on a smartphone spent on text messaging, and just under a fifth of time spent on social networking sites. However, they spend a significantly greater proportion of time on this device instant messaging (16%) and listening to a digital music collection (12%) compared to adults. Notably, just 4% of time spent on a smartphone among this age group is taken up by voice or video calls.
20 per cent of children’s media and communications time is spent playing games

Overall, 76% of children aged 6-11 and 74% of children aged 11-15 reported playing games on an electronic device (including games consoles, mobile phones and tablets) during their diary week, significantly higher than the 42% reach among adult participants. These gaming activities took up a fifth of children’s total time spent on media and communications (20% of media time for 6-11s and 19% for 11-15%) – well above the 5% of media time taken up by this activity among adults.

Figure 1.13 shows the weekly reach of playing games across the day. For the 6-11 age group, there are two clear peaks of activity in the morning and late afternoon, post-school. Reach was highest between 4.45-4.59pm when a third of children aged 6-11 played games at this time during the week.

In comparison, for the 11-15 age group, gaming activity rises steadily throughout the day, peaking later on at 8-8.14pm when 37% engaged in this activity. The higher reach of games playing throughout the day among 11-15s is likely due to their greater use of portable devices, particularly smartphones (see Figure 1.15).
For 6-11s, a quarter of all time spent playing games is on a tablet

Figure 1.14 shows how time spent gaming is split by device. Games consoles are the most popular way to play games among both age groups, although this device accounts for a much greater proportion of gaming time among 11-15s (67%) than 6-11s (41%). However, among the 6-11s a quarter of time spent gaming is on a tablet, in line with the high reach of this device among this age group shown in Figure 1.15. Among 11-15s, only 7% of gaming time is spent on this device.

Compared to adults, both children’s age groups show a much smaller proportion of time spent playing games on desktop PCs (10% and 12% of gaming time among 6-11s and 11-15s respectively, compared to over a third of gaming time among adults spent on this device).
1.1.8 Reach of media and communications devices

Tablets are the most-used device among 6-11 year olds, after TV sets

Sixty per cent of children aged 6-11 years claim to use tablets each week, compared to 38% of all adults. This means that in terms of weekly reach of devices, tablets are ranked second among this age group, but eighth for all adults.

Children aged 11-15 are half as likely as all adults (30% vs. 60%) to use print media each week (physical books, newspapers or magazines). In addition, they are significantly less likely to use either analogue radio (20% vs. 54%) or DAB radio (19% vs. 34%).

When considering mobile phone use, a small minority of children used a standard (non-smart) mobile phone during the week (4% of 6-11s and 15% of 11-15 year olds), compared to nearly seven in ten (67%) 11-15s using smartphones during the week, and a quarter of 6-11s (27%).
The TV set dominates in the morning and evening periods for 6-11s

Figure 1.16 and Figure 1.17 below show the weekly reach of media and communications devices by children aged 6-11, split by weekdays and weekend days. Both charts show the TV set dominating with this being the most used device; on weekdays there are two clearly defined peaks at breakfast (36% of children used this device between 7.45-7.59am on a weekday), and again in the evening, when 44% used the TV between 7-7.14pm.

Reach for other devices among this age group were much lower; tablet use peaked on weekday evenings between 7-7.14pm, when a fifth of children aged 6-11 used this device. On weekends use of tablets was more evenly spread, but with the device being most popular in the morning (8am-11am) and late afternoon/ early evening period (4.30-7.59pm) with approximately 10% reach at these times.

Games consoles were also popular, with around 10-20% of 6-11s using one during the week in the after school period between 4pm-8.29pm, with usage spread more evenly throughout the day on weekends.
**Figure 1.16 Reach of devices across the day – Children aged 6-11 (weekdays)**

Source: Digital Day 3-day diary
Base: All children 6-11 in Primary school who completed on any weekday (Monday to Friday) (186) - data aggregated to 15 min slots. Data shown for 6am-midnight

**Figure 1.17 Reach of devices across the day – Children aged 6-11 (weekend)**

Source: Digital Day 3-day diary
Base: All children 6-11 in Primary school who completed on any weekend day (Saturday to Sunday) (184) - data aggregated to 15 min slots. Data shown for 6am-midnight
11-15 year olds display a much more varied use of devices throughout the day

The weekly reach charts for children aged 11-15 are markedly different to those of 6-11 year olds, showing a much more varied use of devices throughout the day. While the TV set still has the highest reach on weekday and weekend evenings, other devices see much more consistent use throughout the day. The most notable example is smartphone use, with reach fluctuating between 10% and 30% from 7am-10.30pm on weekdays, with slightly lower reach (between 10% and 17%) throughout the day on weekends.

Games consoles also have a higher reach among this age group, with use on weekdays rising sharply in the after-school period, with almost a quarter of children using this device between 4-5.59pm on a weekday. On both weekdays and weekends, tablets have higher reach than laptop/ desktop computers throughout the day.

Figure 1.18 Reach of devices across the day – Children aged 11-15 (weekdays)

Source: Digital Day 3-day diary
Base: All children 11-15 in Secondary school who completed on any weekday (Monday to Friday) (172) - data aggregated to 15 min slots. Data shown for 6am-midnight
Figure 1.19 Reach of devices across the day – Children aged 11-15 (weekend)

Source: Digital Day 3-day diary
Base: All children 11-15 in Secondary school who completed on any weekend day (Saturday to Sunday) (172) - data aggregated to 15 min slots