



Connected Devices and Children's Media Consumption: A Case Study

ACB, Children's Media Conference July 5th- 6th



The 1-3-9 Media Lab:

- Video ethnography
- Multiple device capture



The Sample:

- Toddlers
- Young Children
- Older Children
- YoungTeens

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Introduction

ACB is an industry-neutral research agency that studies how people use technology in their own homes, recognised by the Economist as providing reliable predictions in terms of technology adoption. We provide research for a consortium of organisations including the BBC, Sky, Samsung, Ofcom, Microsoft and ITV. As part of the latest phase of a longitudinal project known as the 1-3-9 Media Lab, ACB introduced a variety of connected TVs and mobile devices to a broad sample of families, including eleven children. As a piece of true ethnographic research, this is actually a very large sample; senior anthropologist at Microsoft, Ann Kirah, would consider using three or four individuals to be totally adequate for the deep insights we study. Our insights are based on actual behaviour, how people act in their home environment, without interference. We get to see the whole household dynamic, the environment behind the decisions and the relationships between viewers. Focus groups and surveys, wider quantitative data from claimed insights, can be used for a generalised approach to understanding viewing behaviour, but these do not necessarily give the full picture. This is especially relevant for children. The result here is a very simple but effective way of explaining the behaviour of the child, and the dynamics around it, when exposed to TV content on all screens.

This is behaviour ahead of the curve, looking at how new technology might change viewing behaviour, but as it gives a full picture we can also explore patterns in

embedded behaviour. We have found that embedded behaviour remains the majority use – most behaviour is embedded, so when looking at changes it is important to keep the rest in mind.

From the households in this study, the child viewers (those below the age of 15) could be categorised into four separate groups: the toddlers; the young children; the older children; and the young teens. Whilst they naturally have their own idiosyncratic behaviours, these children roughly fit into set patterns of behaviour depending on their ages. This presentation will profile each of these groups in turn, to show how increasingly connected technology through blu-ray players and Smart TVs and connected devices such as mobiles and tablets impacts not only what they watch, but how and where they choose to watch it.

All participants in this study are referred to by pseudonyms to protect confidentiality.

- New technology allows parents to become more engaged and involved with the the toddler's viewing
- Parents can explore more, but most often stick to familiar and trusted content



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Toddlers

There were two toddlers present in this phase of ACB's study, Chloe Gardner (2) and Rachel Foster (2). Both were only children of the Gardner and Foster households. Barely able to walk and talk, the behaviour of these toddlers is more a reflection of their parents' attitudes and habits than their own. These toddlers do not have access to the remote, and cannot browse the TV for shows to watch, so their viewing is dictated for them.

Chloe (2) watches episodes of Peppa Pig or Raa Raa the Noisy Lion back-to-back, taken from a large collection on the PVR. This especially suits her parents, as they are reluctant to expose Chloe (2) to adverts, and use the PVR to avoid them. Francis (47), Chloe's father, claims that without the option to limit adverts and the content surrounding programmes, he would not allow her watch any channel other than Cbeebies. For Rachel (2), viewing is a little more relaxed, but when she is given a slot for TV viewing she will also be given a standard set of programmes – most often, this means leaving Cbeebies running. In addition, Rachel (2) is frequently exposed to her mother's daytime viewing, such as This Morning, and other magazine shows often including adult content regarding news and celebrities.

The Gardners and Fosters have quite different approaches to their toddlers' viewing, both in terms of what they allow them to watch and how they watch with them. The

Gardners are compensating for a lack of time to spend with Chloe (2), using the TV for a means to spend quality time with her, and the tablets allow them to do this more, as they can simultaneously attend to work matters. The Gardners becoming quite involved with Chloe's (2) viewing. They talk with her about the show, and mother Verity (37) has purchased items relating to Raa Raa the Noisy Lion from her iPad whilst watching with Chloe (2). For the Gardners, content that is appropriate for Chloe (2) is paramount when they view together, and they will watch only what is suitable for her with her, so without the opportunity to perform tasks on another device at the same time, these parents would likely have less time with their child.

The Fosters household are more relaxed with Rachel (2)'s content. Mother Julia (34) has more time at home, and lets Rachel (2) watch daytime TV whilst she attends to household tasks. Rachel (2) is thus exposed to more varied content than Chloe (2), and Julia (34) frequently makes comments to her about what is on, as though discussing gossip with a friend. Meanwhile, the proliferation of choices on the new TV, a Samsung D8000, allow Julia (34) to find content specific to Rachel (2) that they can both enjoy. Julia (34), familiar with VoD options such as Blinkbox, Lovefilm, YouTube and Sky Player, settles for Mary Poppins (from Sky Player), a nostalgic choice. The Fosters often view compromised content such as this, to share hours of viewing time with Rachel (2).

The toddlers also enjoyed peripheral impact from the new technology. Skype on the TV, a device that proved very popular in this phase, made a big impact for Chloe (2) as she could talk with Grandma on the TV, in her usual activity space. Verity (37) explained that Chloe has come to associate the TV with talking to Grandma, making it more personal and engaging for her. Similarly, in the Foster household the use of media-sharing apps was popular, and they like to share photos of Rachel (2) with each other and guests, which again draws Rachel (2) into the experience as she sees people she loves on the TV screen.

What is important to take away from this is that the IETVs, tablets and mobiles and the options that they offer are creating a more engaging and positive experience for both the parents and their toddlers. However, despite this increased engagement and viewing time, exploration with new technology such as VoD services or using the PVR will most often lead to familiar and trusted, or nostalgic content, which is something the industry must learn from. The parents recognise the increased opportunities of flexibility and autonomy, though, so the future of TV should provide a more productive and personal experience to share with their children.

- Explore new technology socially
- Privately, restrict themselves to favourite shows and methods
- Very little simultaneous use
- Ultimately use depends on the influence of older users



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The Younger Children

Jumping from the toddlers to the younger children, starting at age 7, the viewer becomes more independent and their personal tastes become more important. At this age, the children are comfortable controlling the TV and know what they want to watch. They have Sony 3DTVs and Panasonic blu-ray players, with internet access that can provide options such as YouTube and music video browsing.

Thanks to their dad's explorative influence, Mel (7) was impressed by clips of Cheryl Cole from Muzu, Angus was engaged by fantasy gaming clips chosen for him on YouTube via the blu-ray player, and Layla (9) and Tabby (9) spent an afternoon browsing video streaming services from the Sony connected TV such as Ustream. All these younger children were encouraged to use the Kinect by parents. They can use these options themselves, and can clearly see the benefits they offer, but when in control of the TV their primary use of the new technology is not to explore, but to find the most effective way of watching their known favourite shows (often previously viewed). Whilst this is good news for some content providers, it represents a marketing challenge for the new technology providers.

When given free reign of the TV, Mel (7) never fails to find an episode of Spongebob Squarepants to watch. She uses live TV channels, browsing through the EPG knowing exactly which channels will give the best results. Angus (9) settles for a select few

children's channels for browsing, but otherwise gravitates towards a wealth of Match of the Day episodes or Horrible Histories he has stored on the PVR. Layla (9), meanwhile, is very adept with the VoD options available to her, and can always find favoured shows like Tracy Beaker and Dani's House through BBC iPlayer.

Though these children use different platforms to get there, their pattern of viewing is very similar. They find a show they are already familiar with and stick to it. They are invariably not explorative (when on their own), and do not necessarily need other devices to enhance their experience.

They almost never use a second device in front of the TV, too absorbed by the content – when they are driven to distraction, it is by physical games such as jumping on sofas and playing with toys. Though the younger children often used the laptop for basic games or browsing for birthday presents, this was done as an activity in itself, away from the TV. These children have no interest in long-range communication yet (such as social networking or email, both on the TV or in general), and do not attempt to extend the living room experience. Similarly, the young children are satisfied to view content on the TV, rather than look to other devices for content. When an older cousin tried to show Mel (9) clips of children's shows on the tablet, Mel (9) was quickly distracted from the device, not associating it with viewing. It is important to keep in mind that whilst these children are engaged in the TV without distractions, their appetite for convergence is actually very low; the TV is their main focal point, and with options such as VoD and Kinect it makes television engaging enough to minimise the need for a second screen. They are unlikely to follow things up on the internet, or be easily moved to another device, so regular marketing methods will remain most effective for them.

This group is also seldom in control of the TV, so their concentrated style of viewing is restricted to certain times of day; usually first thing in the morning or immediately after school, when no one else is around. Otherwise they are at the whim of older siblings and adults.

What is important to note about this group is that they explore the new technology socially, but in private they binge on the favourite shows they know. They have the most potential to use PVRs and VoD options, but their use will depend on the influence of older users. They do not feel the need to use second screens or many of the new TV functions on their own, but can be driven to by older siblings or their fathers.

- Browsing habits become more varied, content more mature
- More susceptible to VoD and mobile device viewing options
- Starting to use devices for communication



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The Older Children

A few years older than the young children, the children from 11 up are a lot more flexible with their viewing choices and device use. As elder siblings, they have more control over the TV. Their viewing habits are more sophisticated, with more time-shifting behaviour, consumption of more adult content and access to VoD away from the TV. They do not stick to one show, one platform and one device like the younger children.

Amy (11) particularly stands out as an advancing child viewer, who is comfortable viewing VoD content away from the TV. She uses the tablet for bingeing 4oD and BBC iPlayer in her bedroom. Though Amy (11) is very fond of the option to view content in such a way, it does mean she is exposed to more adult themes in the programmes she is drawn to, including Made In Essex and Hollyoaks. The flexibility of the tablet allowed her to use it frequently, including early in the morning, and with the mobile she was able to mimic her tablet behaviour on the move, with the exception of longer VoD viewing.

With her increasing mobile content viewing and regular social-networking it is also worthy noting that she is vulnerable, and during our capture period was sent pornographic messages by a stranger on Twitter.

Like the younger children, Dylan (11) has set channels for browsing, but his habits are more flexible; Dylan (11) has multiple platforms to pick shows from, and will just as often choose favourite shows like Greatest Tank Battles from the PVR as choose something live. Ruby (11) also shows evidence of browsing further afield than her younger sisters. She browses from a mixture of live viewing and VoD options, and will dictate viewing of shows such as Merlin for everyone to watch. As we saw in earlier phases, she also tries to watch content that's personally immersive, such as Doctor Who, without sharing with her sisters.

The maturing viewing of these older children represents a bridge between the bingeing of young viewers and a gradual move away from viewing that occurs during adolescence. Amy (11) in particular can be seen as a viewer who is becoming more interested in convergent devices than the TV itself, and in time is likely to shift further away from the TV to meet her social needs. All these older children show evidence of seeking private viewing time, starting to shift away from the family to view content that they love.

Part of this shift of viewing means the older children start to seek their content in different locations. When Amy (11) browses for clips on the tablet, she goes to YouTube rather than the applicable TV VoD options that should offer the same children's shows. She is becoming detached from the TV channels, more in tune with the brands of the internet. This is not always the norm, however, as Ruby (11) and the Andrews household remain very loyal to the BBC brand, and very frequently go the iPlayer as a point of reference. As she becomes more converged, however, this loyalty may fade.

To be noted here is that the older children are starting to use second screens routinely, for communication and VoD, and are increasingly explorative in terms of both platforms and content. They are beginning to seek private viewing time, and as a result are accessible on more platforms than other children. This makes them a potential market for apps, shifting away from the TV, and their movement into social media is the key driver here (though always note, they still need protection).

- Gaming and socialising on the internet is a priority over TV content
- “Without Xbox there would be nothing to do.” M14
- Content viewed primarily VoD, often shared on the internet – short and long form
- Main TV viewed socially with family members



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Young Teens

Jack (13) and Lloyd (14) Knight, the eldest children in the study, represent a different demographic entirely, absorbed by gaming and internet use. Their time spent viewing TV content is minimal, but is increasingly supplemented by VoD options on their mobile and gaming devices. Indeed, Jack (13) was seen viewing Frozen Planet from the BBC iPlayer on his phone, late at night in his bedroom – without this option he would not have been watching TV at such a time, and is unlikely to have been exposed to the content on another occasion.

These boys’ TV habits are very different to the other children, as they use their devices for almost exclusively social or gaming purposes. They use the TV to play Xbox and their phones to browse Facebook. There is some room for content viewing on the internet, as they share short-form video, but this is usually limited to entertainment media: they watch clips relating to films, their computer games or music videos, and express no interest in pursuing other genres. Lloyd (14) went so far as to tell us that without his Xbox he would have nothing to do, as there is nothing he wants to watch on TV, pinpointing the news in particular as pointless.

As members of the household, this viewing behaviour appears antisocial to the outsider, as they game alone or quietly watch whatever another family member has chosen to put on the TV (usually only early in the morning, when they are preparing

to begin their day). They will not influence viewing choices in the house. Their most social interaction with the TV comes in special occasions when their dad insists on everyone watching a film together, late in the evening. However, they use social networks and Xbox Live to make their regular viewing experience much more social than it appears, and whilst their viewing does not seem to affect the household they may well be affecting viewers in other locations.

Indeed, they follow the trend started in the older children that convergent devices are taking over from the TV. In each age group, as the viewers get older, there is more simultaneous device use than the last, and the VoD use for the young teens was similarly very high. Though the majority of their time is spent gaming, when Jack (13) and Lloyd (14) do chose to watch something, they most often go through VoD options to choose exactly what they need, and are likely to share it via the internet, for example posting clips on Facebook. The opportunity to reach these children is narrower than with the older children, but when they do find something they like, which is easily shared, they are in a position to spread it exponentially. For example, Jack (13) was seen viewing a Rizzle Kicks video on YouTube on multiple occasions, which he always accessed through Facebook and tried to share with friends. In contrast, when he tried to find a clip from the film Gladiator to share with a friend via his mobile phone, he had a lot of difficulty finding it and ultimately failed to share it. The content that these young-teens consume must be easily accessibly through different formats to the younger children, if it is to spread.

The young teens have made a break from the heavy viewing children with set content routines, towards the teenagers who view a lot less, taking time out to game, use the internet or stay away from the TV. Jack (13) and Lloyd (14) represent the jumping point, where viewing is no longer a priority for children, and the social uses of the internet and gaming become the greatest element they are exposed to. They are still consuming content, but their criteria for doing so, and influencing others, has dramatically changed.

- As children grow older, they become more explorative, both for viewing and devices
- The TV and mobile devices are used socially by all, but the older children use it for more long-distance communication, and become increasingly more likely to share outside the home
- Younger viewers are exposed to most uninterrupted content, but older viewers are exposed to a variety of platforms and content



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Conclusion

The four groups we have identified follow a trend of becoming more convergent as they grow older, increasing their viewing options and device use. This is due to both a greater degree of exploration for more mature content, and increasing technical prowess. As the children get older, however, this ability to explore and use other devices leads them away from basic TV viewing, even with access to connected TVs. For some, it can increase viewing options through access to internet apps such as BBC iPlayer, 4oD and Twitter in otherwise inconvenient locations, thanks to mobile devices like the tablet. For others, however, it can lead to a more restricted exposure to regular TV, as their entertainment needs start to become met by the internet, on mobile and gaming devices – restricting use to Xbox and mobile phones.

The TV remains a sociable device for all, but in what way will vary depending on age. For the very youngest viewer, the TV provides an opportunity for parents and children to bond, and increasingly to share family experiences such as photos and Skype which give a strong driver to social TV viewing. For the older children, it is an opportunity to bond with friends by sharing favourite content, socialising through gaming on the internet, and rare family viewing events.

As the gamers' needs shift towards more communicative entertainment, they are exposed to far less actual TV content. It is only the young children, who will pick the

shows they like and stick to them with little jumping around, who are likely to consume all that is put before them.

Not all the new technology was successful, however; Youtube on the TV was unpopular with some parents and younger users. The TV lean-back format meant that recommendations could automatically come up when YouTube is loaded, which could expose children to inappropriate content. In addition, the TV format was more difficult to navigate than on other devices. The result is that YouTube was unpopular for younger children, as parents did not trust it, and unpopular for older children as they had easier ways to reach the technology. I will finish by showing you a clip demonstrating some of these concerns.

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