



# Culture, Communication and Change:

**Summary of an investigation of  
the use and impact of modern media  
and technology in our lives**

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Cover design and layout by:

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Staffordshire  
ST4 7AY  
Email: [info@kenthouse.com](mailto:info@kenthouse.com)  
Web: <http://www.kenthouse.com/>

Printed and bound by:

The Printing House Ltd  
Marshfield Bank  
Crewe  
Cheshire  
CW2 8UY  
Email: [enquiries@theprintinghouseltd.co.uk](mailto:enquiries@theprintinghouseltd.co.uk)  
Web: <http://www.theprintinghouseltd.co.uk/>

First published in 2011 by:

Engineering Design Centre  
University of Cambridge  
Trumpington Street  
Cambridge  
CB2 1PZ  
UK  
Email: [edc-enquiries@eng.cam.ac.uk](mailto:edc-enquiries@eng.cam.ac.uk)  
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ISBN 978-0-9545243-6-4

# Abstract

**As communications technology develops, the ways in which humans interact with and react to technology and one another change as well.**

This project investigates both the positive and negative impacts of use of Information and Communication Technology (ICT) in the populations of four countries: the UK, the US, Australia, and China. After a review of the existing research in this area, families in each country filled out diaries detailing their use of communications technology for one week and were subsequently interviewed about their use of and feelings towards ICT. A survey was also conducted with a larger number of participants in each country. Patterns of use and effects of ICT were fairly similar in the UK, US, and Australia, but were very different from patterns in China. ICT use ultimately can both help and hinder individuals and families, although it depends how the technology is used and not just how much technology is used. The negative effects could largely be mitigated by centralising the location of technology, creating rules and awareness, educating all family members about responsible technology use, and finding a good point of balance.

# Project Documentation

**There are three main documents that comprise the output of this research.** The first (“Summary”) is a short report that summarises the main research results and conclusions. The second (“Report”) is the full research report that includes a literature review, description of methods, and both qualitative and quantitative data analysis. The third (“Reflections”) is a supplementary book of thought pieces based on interviews with twelve experts in fields relating to the research.

# Acknowledgements

**This research would not have been possible without the help, support, and guidance of a number of people.** We would first and foremost like to thank our collaborators in BT Retail – CEO Gavin Patterson, John Petter and Jasmine Holland – for sponsoring this project and providing active help throughout the research and generation of this report. Next, we would like to thank Xunhua Guo, Qiang Wei, Ye Liu, Ya Wang and Hao Wang from Tsinghua University, as well as Quan Li and Jie Zhang from BT China for their dedication to the work that allowed us to add the Chinese perspective to this research. We further thank Natasha Dwyer from Victoria University in Australia and her colleagues Emma Koster, Cameron Laird, Ella Hewitt, Fehim Klebic and Argirios Mavroudis, for their hard work in contributing the Australian perspective. We are also grateful to Kaz Karwowski from the Massachusetts Institute of Technology and his students, Juan Diaz and Ingrid Chaires from the Gordon-MIT Engineering Leadership Program, for contributing the American perspective. Further thanks go to Kent House Consulting Ltd., JRQ Research and MyOpinions for their assistance with recruitment of participants for our studies. Kent House Consulting Ltd. also deserves rich thanks for help with designing the cover and inner pages of this short report, as well as the long report and the book of twelve thought pieces. Numerous thanks also go to Fishburn Hedges for their support during the different stages of this research. We thank all the participants of our studies for their insights and much appreciated time and effort. An additional thank you to Ana Medeiros and Kai Ruggeri from the Engineering Design Centre for their help with data analysis. Finally, we would like to thank Jeff Patmore, Mary Lumkin, and Sue Hessey from BT Research and Technology, whose tireless and persistent efforts and contributions made this report possible.

# Glossary of Terms

ICT	Information and Communication Technology
CMC	Computer Mediated Communication
IM	Instant Messaging
SNS	Social Networking Site (e.g. Facebook, Linked-in)
CS	Content Sharing (e.g. blogging sites, YouTube, forums)
FtF	Face-to-Face

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CHAPTER 1

## Introduction

The world is changing, some say faster than ever, some say irreversibly, and all argue about whether the change is for the better or for the worse. What is driving this change is the immersion of our society into a new way of communicating. Where we once had to wait days, weeks, or months to talk to distant friends and family, we now view a delay of a few seconds as an inconvenience. We can take our letter-writing devices, phones, photos, and music, among other things, with us wherever we go, and our modern lives revolve around this ability.

There is no doubt that this ubiquity of Information and Communication Technology (ICT) has changed the ways individuals, groups, and societies think, feel, behave, and interact, but the extent and value of the change is largely unknown. As one of the major international ICT providers, BT strives to understand this change in order to be able to improve the lives of customers. More importantly, BT seeks to look at change objectively. A great deal of baseless fear and outrageous optimism permeates opinions about technological change, but only by looking at real data and sound research can the short and long-term effects of modern ICT be understood and, if necessary, moderated in a positive way.

### 1.1 Well-being and ICT

Even across many schools of thought, there is agreement that there is a clear change in society as the result of ICT. New skills have been created and old skills have become almost obsolete. Ways of communication with others have changed. Accessibility to knowledge has increased, but inundation with too much information has potentially threatened the ability to process that information and acquire new knowledge. There are clear positive and negative





consequences to the pervasiveness of modern ICT, but with so much extreme fear and optimism surrounding the changes being experienced in the modern world, how is it possible to know which changes are ultimately good?

This is where the concept of well-being is critical. Well-being is essentially defined as a state of positive functioning. It is more than just personal happiness, also taking into account such factors as sense of purpose and direction [1]. As put by Huppert, well-being is “the combination of feeling good and functioning effectively” [2]. While societal changes as a result of ICT will always be evaluated by older generations by comparisons to the societal norms with which they grew up, the only truly objective and useful way of evaluating ICT-induced change is by evaluating positive or negative changes in the well-being of individuals, families, and communities [3].

## 1.2 Project Overview

This research investigated both how modern ICT is affecting individuals and families and how all people can form a more ideal relationship with communications technology in the face of rapid change. In order to achieve this, the research took place in two parts. First, a Family Study, conducted with between seven and twenty-six families in the UK, US, Australia, and China, had each family member fill out their ICT use in a diary for a week, and then the family was interviewed about their attitudes towards and use of communications technology. Second, a survey was distributed to over 1000 participants in each country, based on questions from the Family Study interviews, in order to get an overall view of the population of those countries. The results and conclusions are presented in the following sections.



## CHAPTER 2

# The Research

The analysis of the data generated from both the Family Study and the Survey was focused around a set of questions that this project aimed to answer. The overarching question being asked was:

***What are both the positive and negative effects of using communications technology, and what causes these effects?***

The relevant sub-questions investigated include:

- ***What kinds of ICT are people using and for what purposes?***
- ***How does the amount of ICT used affect overall well-being, relationships, and productivity?***
- ***How is ICT affecting families?***
- ***Do people consciously focus on or moderate their use of ICT?***
- ***What are people and families who are happy with the role that ICT plays in their life doing differently from those who are not?***

## 2.1 Use Patterns

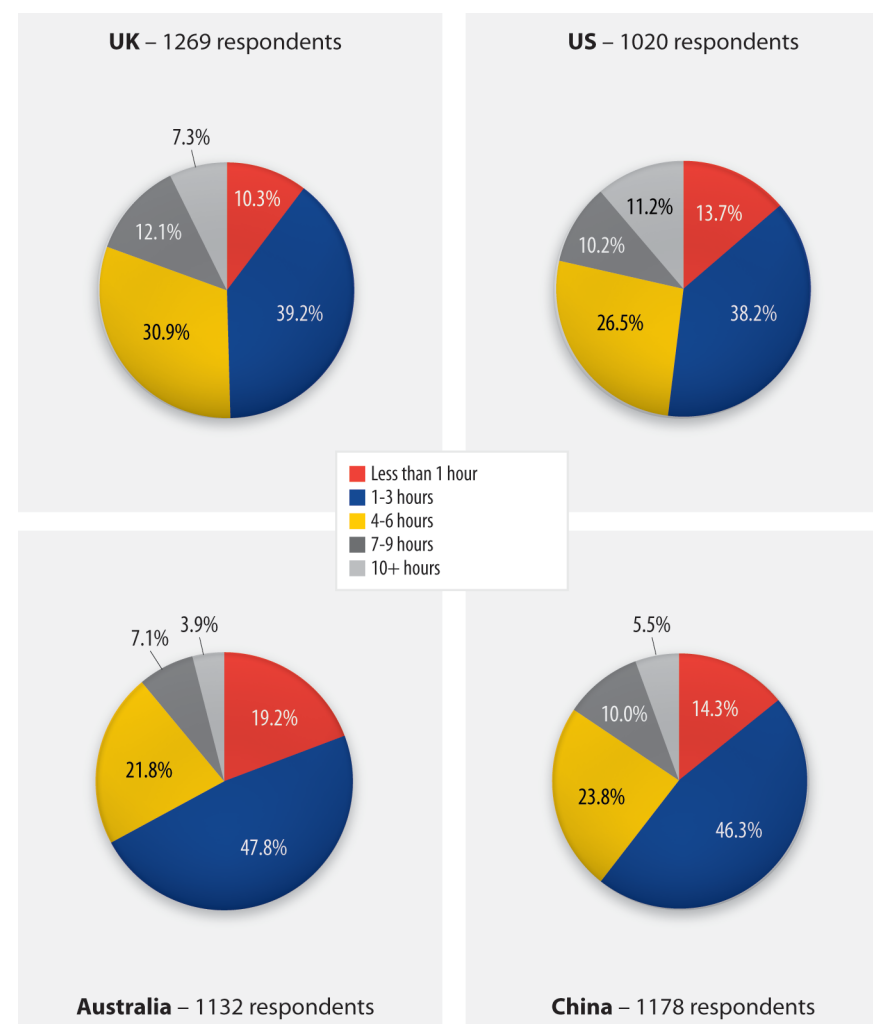
In order to understand how technology is affecting individuals and families, it is first necessary to understand how it is actually being used. It is common to hear fears surrounding the decline of face-to-face communication or the prevalence of texting, but progress can only be made when the true distribution of communication media is understood. This section looks at how and how much people are communicating, whether it be in-person or via technology.

### 2.1.1 How much communications technology are people using?

Figure 1 shows the survey results from the four countries to the question: *Taking into account all the different ways you use communications technologies, please estimate how many hours a day you use some form of communications technology.*

Figure 1:

Breakdown of hours spent using some method of communication in UK, US, Australia and China.



Almost **1 in 5** people in the UK use communications technology for more than **7 hours** each day, and **1 in 13** use it for more than **10 hours**.

The use patterns among the four countries are very similar, with most respondents using communications technology for 1-3 hours each day. However, almost one in five people in the UK use communications technology for more than seven hours each day, and one in thirteen use it for more than ten hours.

### 2.1.2 How are people using communications technology?

The following graphs show the relative use of communications in the Family Study by children (Figure 2) and parents (Figure 3) across the four countries of the study (UK, US, Australia and China).

Use of communications – Comparison of **Children** from UK, US, Australia and China

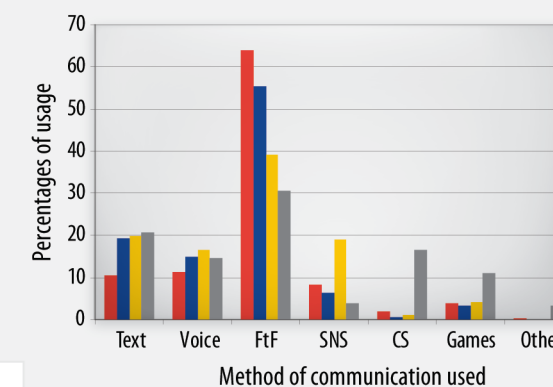
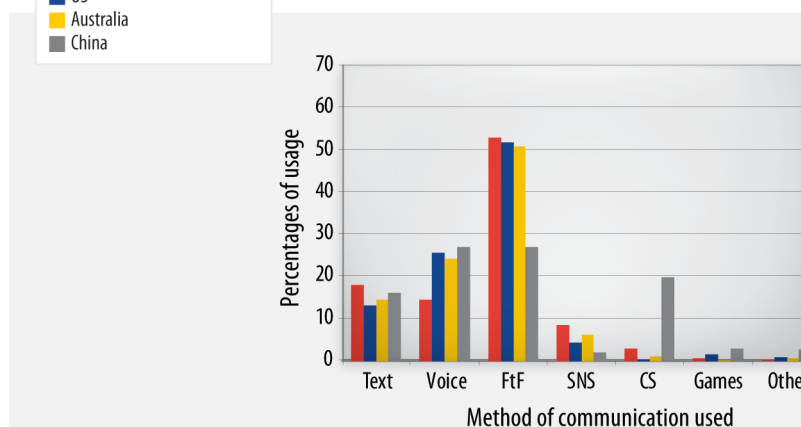


Figure 2:

Use of different communications – diary data of children from 16 UK families, 7 US families, 14 Australian families and 26 Chinese families.



Use of communications – Comparison of **Parents** from UK, US, Australia and China

Figure 3:

Use of different communications – diary data of parents from 16 UK families, 7 US families, 14 Australian families and 26 Chinese families.

## 2.2 Preferences

While it is informative to look at overall levels of use across the population, it is also very important to understand individual preferences. How an individual feels about their technology use will likely be related to how well that use matches their preferred levels of use and media of choice.



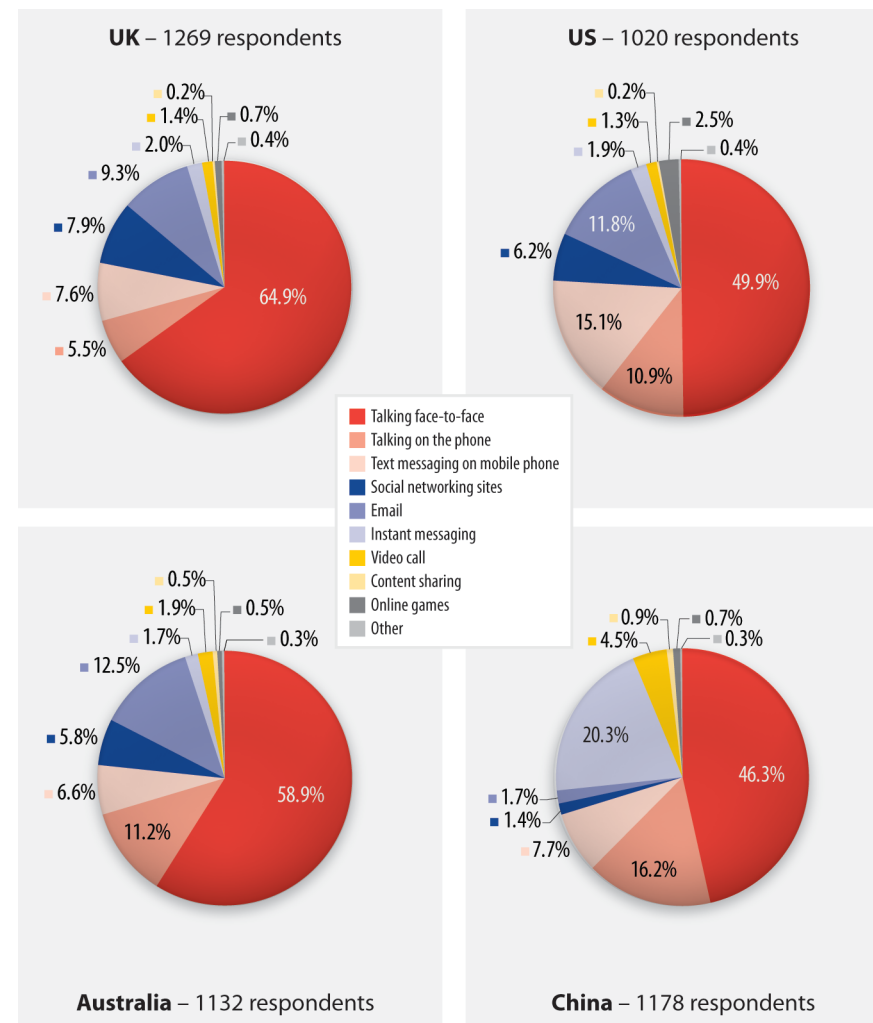
Figure 4:

Preferred methods of communicating with others for UK, US, Australian and Chinese respondents.



People in the UK liked to communicate face-to-face more than any other country, with almost **65%** of respondents preferring face-to-face over other methods with email a distant second at **9.3%** preference.

Figure 4 shows the survey results from the four countries to the question: *Of those methods of communication that you have experienced, which do you like using the most?*



Overall, a majority of people still prefer communicating face-to-face over communicating using some sort of technology. In the UK, US, and Australia, the distribution of preferences was similar, with talking on the phone, text messaging, social networking sites, and email being preferred over other methods. People in the UK liked to communicate face-to-face more than any other country, with almost 65% of respondents preferring face-to-face over other methods with email a distant second at 9.3% preference.

However, in China the distribution was significantly different. Less than 50% of the population preferred face-to-face communication, and instant messenger was a clear second choice, with talking on the phone being the third most common preference. The different preferences in China are likely to affect the ways in which families, friends, and co-workers communicate, and possibly also the way that Chinese people feel about these interactions.

## 2.2.1 What type of communication is used most during the day?

Figure 5 shows the survey results from the four countries to the question: *Indicate how much time you spend using each method of communication during your waking hours on an average weekday.* The percent of people who use each method of communication for more than one hour each day (based on survey response breakdown) is indicated for each country.

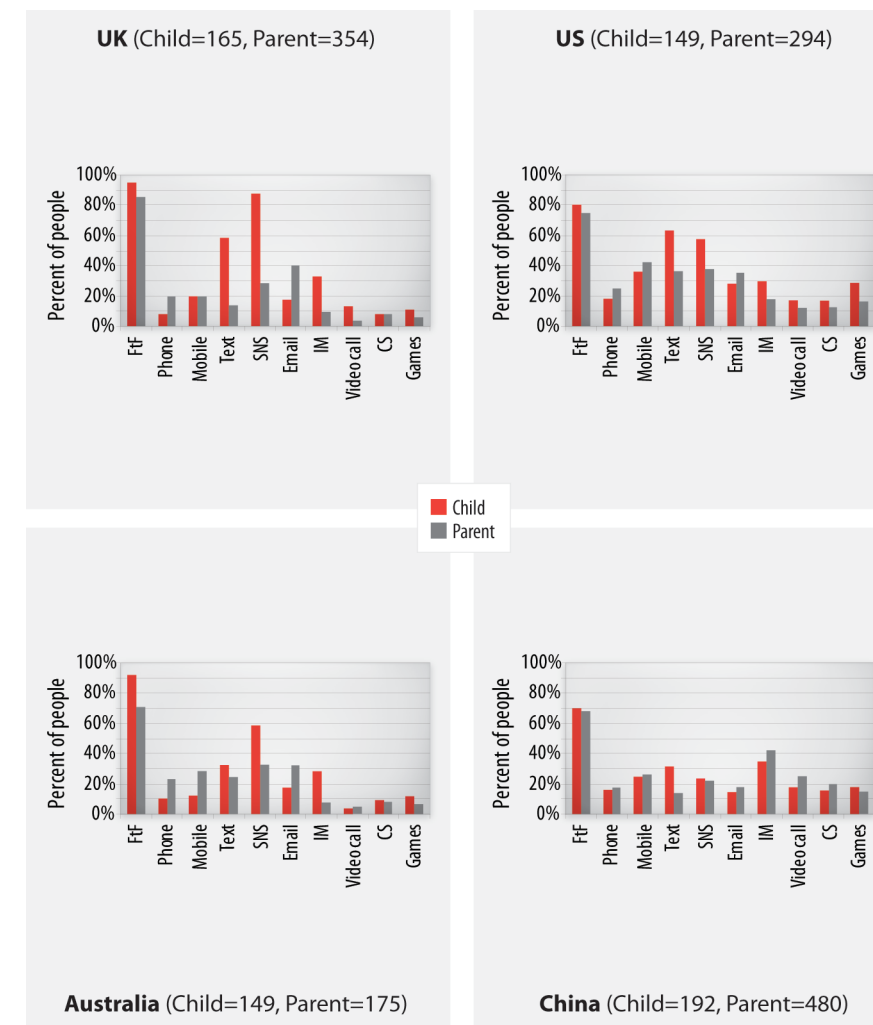


Figure 5:

Comparison of amount of usage of different methods of communication for over one hour each day for children and parents from UK, US, Australia and China.

No matter the preference, most people still communicate face-to-face more than through any other method, and face-to-face communication makes up the majority of social interaction. Perhaps unsurprisingly, children are more likely to supplement their face-to-face interactions with social networking sites and text messaging, whereas adults spend more time talking on the phone and emailing. The preference for Instant Messaging (IM) expressed in China is clearly reflected in Figure 5, with China being the only country where adults IM more than children. Social networking and text messaging are also much more popular among children in the UK and US compared to Australia and China, with the gaps between child and parent technology usage being the most drastic in the UK.



### 2.2.2 Preferences: Children

Despite the fear that children and adolescents are turning more to technology for communication, most people of all ages still prefer face-to-face communication for important messages, turning to use services such as email or texting more for information exchange. Even heavier users of ICT found that face-to-face was better, particularly for certain kinds of communication. In fact, the vast majority of children preferred to use different pieces of technology for different kinds of communication, and preferences differed greatly by child and by family. The appeal of communications technology was also highly variable. For some, the convenience and immediacy of communication was a huge draw, but surprisingly many children expressed ambivalence about using technology heavily to communicate, sometimes finding it draining, annoying, or simply not as meaningful as in-person conversation.

### 2.2.3 Preferences: Adult

Adults overwhelmingly preferred face-to-face communication, particularly to deliver important or emotionally sensitive messages. For communication with friends, technologies like texting were often seen as useful purely for logistics or information exchange, not for conveying more important content. However, for work purposes, technologies such as email were seen as hugely useful but also sometimes aggravating or overwhelming. Surprisingly, many adults also found social networking sites such as Facebook to be useful. Adults generally seemed very aware of the complications posed by certain communications and that some communication methods were better suited for some types of conversations.

## 2.3 Effects

This section describes the different effects that technology has on family life and individual well-being.

**36.4%** from a sample of **354 parents** in the UK found technology at least sometimes disrupted family life, with **10.5%** finding that disruption regular.

### 2.3.1 Impact on Family Life

It is hard to generalise the impact that communications technology has on family life. However, any negative impacts seemed generally to occur within the immediate family. ICT was almost universally seen as a positive force for maintaining relationships with geographically distant family members, but many families found that ICT did disrupt home life in at least some ways.

Family members almost uniformly said that they used more communications technology over time and that it was becoming a much more integral part of life. Many expressed frustration with the ubiquity and frequency of use, sometimes lamenting the perceived loss of time with family or uninterrupted interactions and activities. In fact, 36.4% from a sample of 354 parents in the UK found technology at least sometimes disrupted family life, with 10.5% finding that disruption regular. For adults, the main problem with communications technology at home was the interference with work/life balance. Work communication was often found to disrupt family time. For parents' relationships with children, the common problem that was reiterated multiple times was the perception that children would rather engage with their devices than with their families, especially while at home. However, families that introduced rules and boundaries surrounding communications technology found that they could control their interactions much better and ultimately did not feel the same sorts of negative impacts.

While some families have rules for specific times like mealtimes, others have found that they need to create rules as circumstances change to preserve family time. Overall, 58.8% of people in the UK said they felt that their family would benefit from having technology-free time where all communications are switched off. Although rules surrounding technology use were generally perceived positively by parents, some felt they did not go far enough to protect family interaction. Other families, however, found that frequent use of technology at home made technology-free time more special.

Some families went farther than mealtime technology bans to preserve time spent interacting as a family. Sometimes this involved all using a piece of technology, such as a video game, together, and technology was found to have a positive impact on family life particularly in instances when it was something that family members could all use at the same time. Many families also found that technology enabled them to keep in touch with family members that they might not be able to see often.



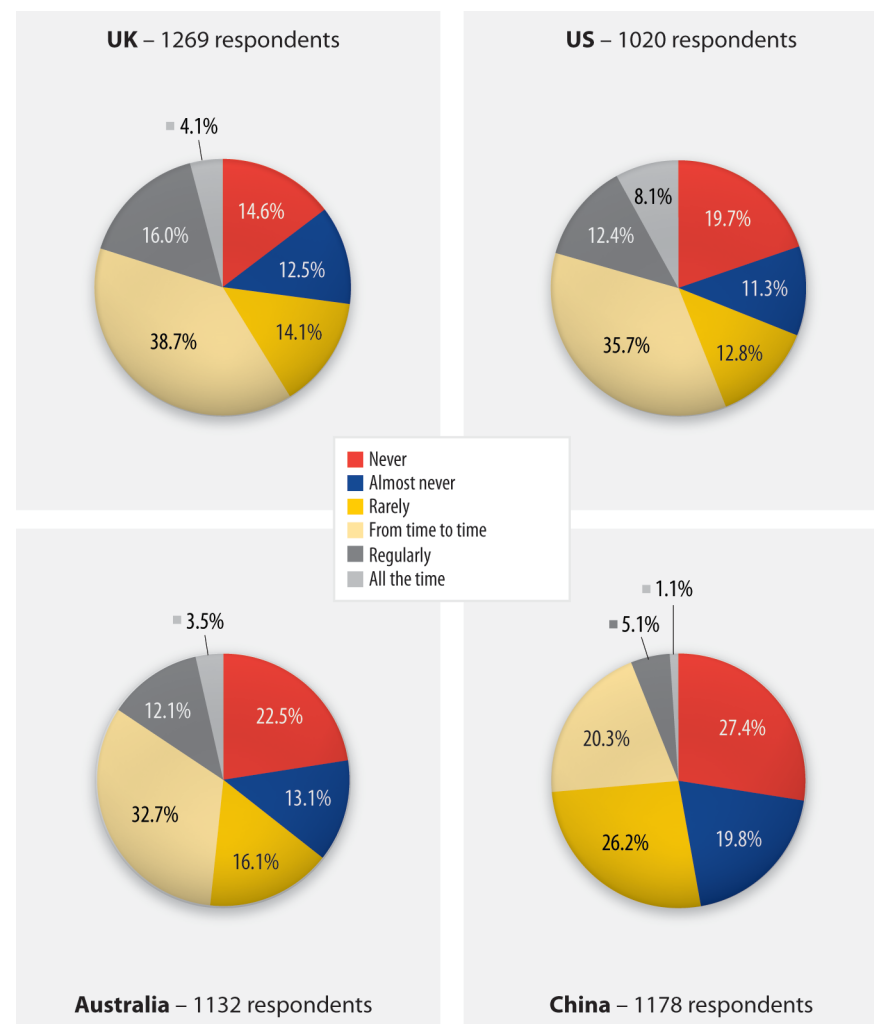
**58.8%** of people in the UK said they felt that their family would benefit from having technology-free time where all communications are switched off.



Figure 6 shows the survey results from the four countries to the question: *Do you ever feel that you or your family would benefit from having 'technology-free time' where all communications devices are switched off?*

Figure 6:

Feelings that family would benefit from having 'technology-free time' where all communications devices are switched off.



**1 in 5** people in the UK admitted that they did not always feel in control of their use of communications technologies.

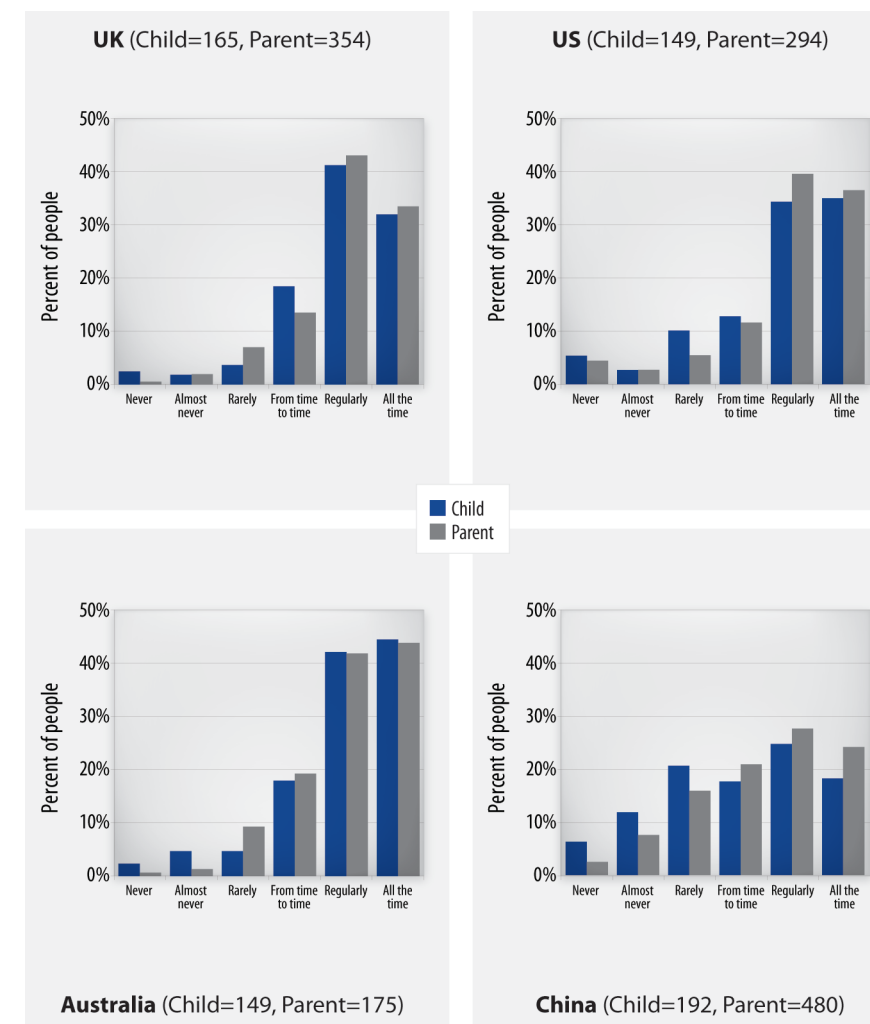
### 2.3.2 Self-Control, Feelings of Control, and Feeling Overwhelmed

In interviews with families, it was often noted that some families tended to feel fairly in control of their use of technology, while others felt overwhelmed or even enslaved. In response to the larger survey, one in five people in the UK admitted that they did not always feel in control of their use of communications technologies.

Figure 7 shows the survey results for children and parents from all four countries to the question: *Do you feel in control of your use of communications technologies?*

Figure 7:

Comparison of children and parents' feelings of control when using communications technology for UK, US, Australia and China.

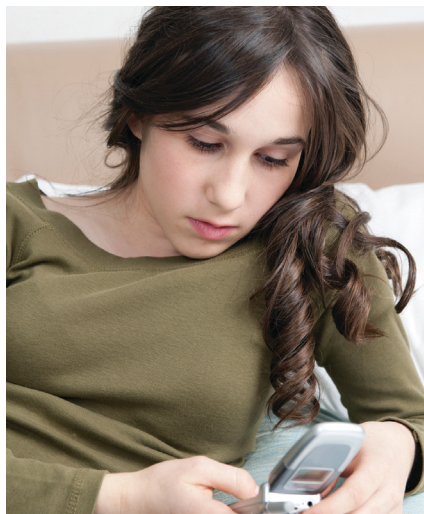


The source of lack of control in families varied for different family members. Some children felt that they could no longer isolate themselves socially, even if they wanted to. Parents, on the other hand, often felt that out-of-hours work communication interfered with family life. In fact, aside from feeling that they could not control their children's technology use, this was their main source of frustration and lack of control. Moreover, some people felt out of control to the point of being overwhelmed. In the broader UK population surveyed, one in three people has felt overwhelmed to the point of needing to escape from communications technologies.

**1 in 3** people has felt overwhelmed to the point of needing to escape from communications technologies.

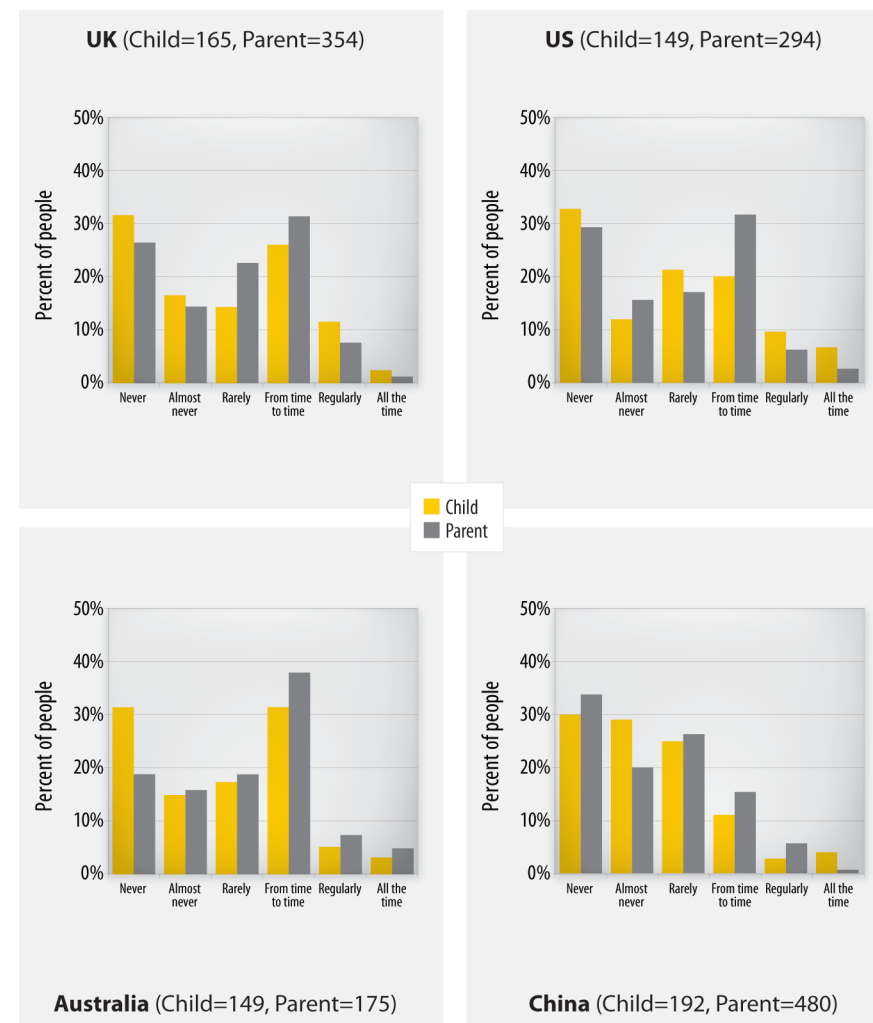
**Figure 8:**

Comparison of children and parents' feelings of being overwhelmed by communications technology for UK, US, Australia and China.



Feelings of control towards technology use appeared to positively affect well-being.

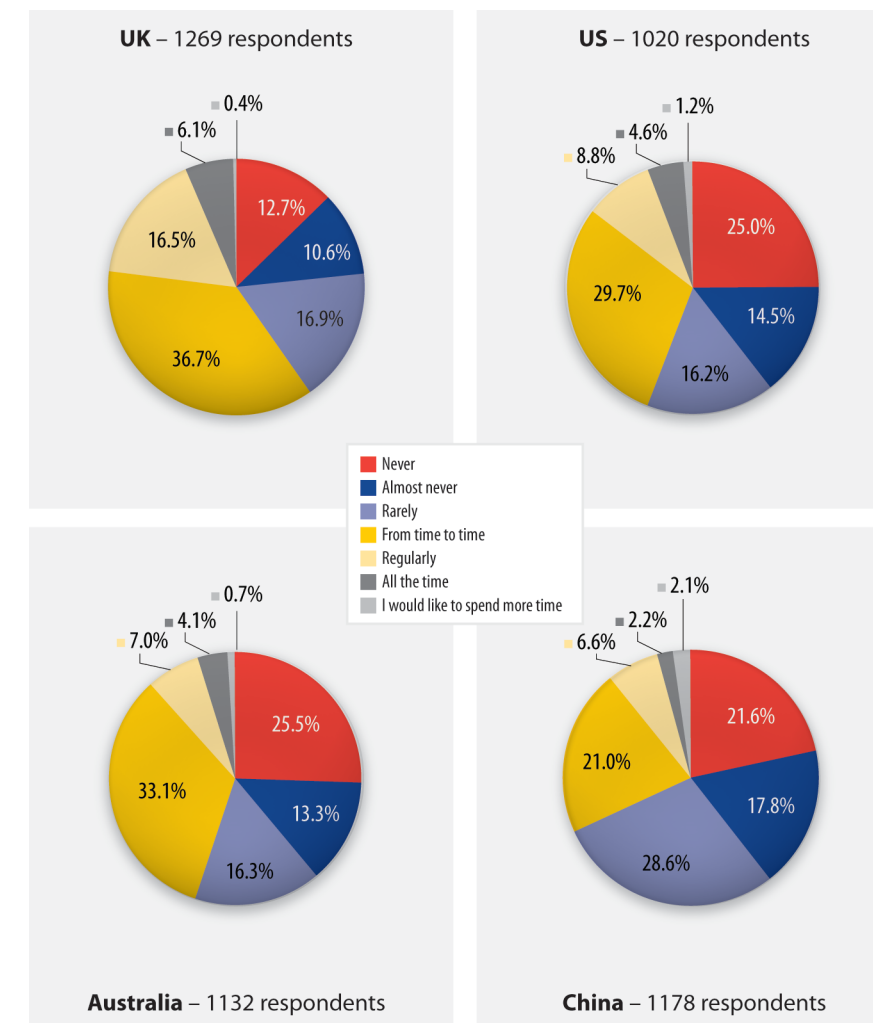
**Figure 8** shows the survey results for children and parents from all four countries to the question: *Do you ever feel overwhelmed by communications technologies to the point that you feel the need to escape them?*



However, not everyone feels overwhelmed. Families that did express feelings of control also tended to feel more positively towards their interactions with technology. It was therefore hypothesised that feelings of control towards technology would contribute to overall well-being, whereas feeling overwhelmed would lead to decreased well-being. In fact, survey results showed that frequently feeling overwhelmed did correlate negatively with well-being in all four countries. In other words, those who frequently felt overwhelmed by communications technology were more likely to have reduced well-being. In addition, feelings of control towards technology use appeared to positively affect well-being. This indicates that feeling in control of technology use could improve well-being, which is supported by previous research on well-being, and further research should be carried out with US participants to understand the nature in that country of both feeling overwhelmed and feelings of control.

### 2.3.3 Awareness and Moderation

**Figure 9** shows the survey results from all four countries to the question: *Do you ever feel that you spend too much time using communications technologies?*



There is a great deal of similarity among the UK, US, and Australia in feelings that too much time is spent using communications technology, with just under 60% of people in the UK feeling that they spend too much time using communications technology. For some, this may be the beginning of feeling overwhelmed. However, very few Chinese respondents felt that they spend too much time using communications technology.

**Figure 9:**

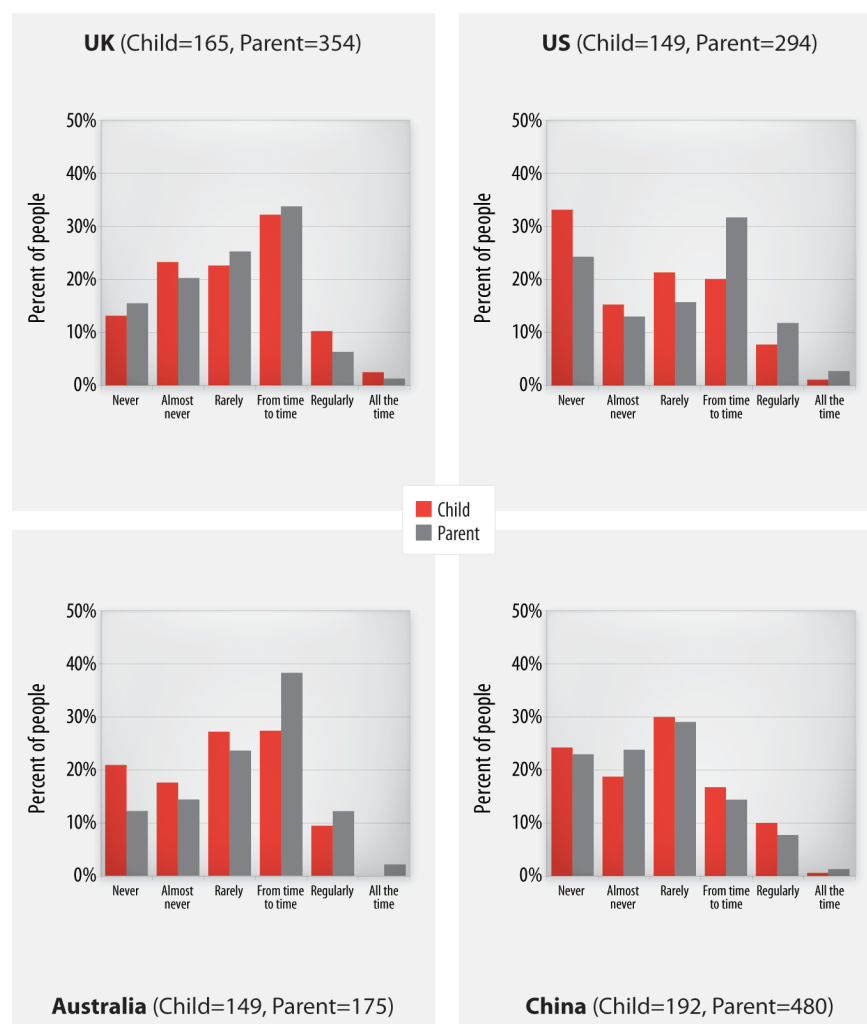
Feelings that too much time is spent using communications technologies for UK, US, Australian and Chinese respondents.

Just under **60%** of people in the UK felt that they spend too much time using communications technology.

**Figure 10:**

Comparison of children and parents' conscious moderation of communications technology for UK, US, Australia and China respondents.

**Figure 10** shows the survey results from all four countries to the question: *How often do you consciously try to reduce your use of communications technologies?* In the UK, one in three people reported consciously trying to reduce their use of communications technology. Of these, most are trying to reduce use of social networking sites, text messaging and email.



In the UK, **1 in 3** people reported consciously trying to reduce their use of communications technology. Of these, most are trying to reduce use of social networking sites, text messaging and email.

## 2.4 Key Questions Answered

This study aimed to answer the question: *What are both the positive and negative effects of using communications technology, and what causes these effects?* In both the qualitative and quantitative parts of the study, individuals and families have been both helped and hindered to varying extents from using communications technology, and the patterns of and causes for this were explored.

### 2.4.1 What kinds of ICT are people using and for what purposes?

Despite fears that Computer Mediated Communication (CMC) will replace face-to-face interaction, the overwhelming majority of people in all four countries still communicate face-to-face more frequently than using any

other type of communication. Moreover, most people prefer face-to-face communication over other methods, particularly for conveying important messages or having “proper conversations”. Face-to-face interaction was also most commonly cited as the most trusted form of communication. Critically, this preference was shared by children and adults.

Preferences for technology mediated communication, whether by phone, text, Social Networking Sites (SNS), or one of the myriad of other options, varied widely among individuals, families, and ages. As expected, children were generally more comfortable with the idea of communicating via technology, viewing it as natural, although most children expressed that they still liked seeing their friends in-person when possible. In addition, most adults also used communications technology as part of their daily communications, although sometimes more frequently for work purposes than for social or family purposes.

Text-based communications emerged as a favourite for pure information exchange, with many people citing the ease with which information could be distributed to large numbers of people with minimal effort. However, the challenge of conveying any sort of emotional content via text was frequently brought up as an issue. Many people preferred to call or speak in-person for any potentially sensitive matter. Adults also raised the problem of information overload, expressing frustration with the sheer volume of communication they had to deal with on a daily basis, primarily from work, and expressed that this not only hampered their productivity but also could interfere with family life.

### 2.4.2 How does the amount of ICT used affect overall well-being, relationships, and productivity?

No relationship emerged between the amount of ICT used and overall well-being. However, the manner of ICT use did seem to affect well-being<sup>1</sup>, particularly where people felt overwhelmed or perpetually distracted. To improve well-being, it is more important to look at how technology is being used and whether or not the user feels in control of that use.

### 2.4.3 How is ICT affecting families?

In terms of keeping in touch with distant family members, families felt almost uniformly positive about ICT. Whether by using video calls, social networking, or email, families felt that ICT allowed them to keep in touch with family members who might be living farther away.

Families had mixed reaction to how ICT affected home life, however. While not every family felt negative effects, many did have at least a few problems. For adults, the main problem mentioned was that ICT allowed work to disrupt their home life. Smartphones and laptops made it possible to follow things at work at any time of the day as well as enabling co-workers to contact them

Despite fears that CMC will replace face-to-face interaction, the overwhelming majority of people in all 4 countries still communicate face-to-face more frequently than using any other type of communication.

Most people prefer face-to-face communication over other methods.

<sup>1</sup>The exception was China, where there appeared to be a slight negative effect on well-being.





Once individuals and families know how much communications technology they are using, they can try to aim for a more ideal level, whatever they define that level to be.

more frequently. Moreover, it made it harder to resist the urge to check in on something quickly, which often turned into several hours of use.

Parents also frequently complained that ICT use by children was isolating and interfered with family interaction. The most common complaint was that family members would prefer to be interacting with or through their devices than with other family members. This often happened when children had devices in their own room or while mobile devices were used frequently at home. Centralising device location (e.g. having one main computer in the family room instead of each child having his or her own computer) and making rules around when technology could be used (e.g. no technology at dinner) did much to alleviate these problems.

Some families also found ways to have ICT bring them together. For example, many families used systems like Wii gaming as family activities. Others might video chat with distant family members together. Even having a centrally located TV was seen positively by some.

While ICT can have negative impacts on families, moderated use tends to mitigate these effects. The nature of the effects varied widely based on where technology was located, when it was used, what it was used for and how frequently, and if there were any rules governing use.

#### 2.4.4 Do people consciously focus on or moderate their use of ICT?

Although many people seemed unaware of just how much ICT they were using, those that felt the most overwhelmed did try to moderate their use at least to some extent. Parents were likely to moderate their own use when they felt that their work interfered with their family life, although some families reported further moderating use after completing the diary study. In general, children did not feel much of a need to moderate their use of ICT, although they were often forced to via parental rules, which were received with various degrees of positivity. Some children would moderate their use in extreme circumstances, such as when they were revising for exams or when they felt that they had used a particular piece of technology for too long. In general, mobile devices proved the hardest to moderate, with people often reporting that they felt the most dependence on those devices.

#### 2.4.5 What are people and families who are happy with the role that ICT plays in their life doing differently from those who are not?

While some families felt strongly that technology had negatively affected family relationships and closeness, other families had a healthy relationship with technology and found few if any negative impacts. Importantly, the latter set of families had taken some conscious steps to control how they interacted with the technologies in the household, and five key factors, described next,

seemed to be responsible for much of the positive relationship that these families formed with communications technology. These five factors were: Location, Rules, Awareness, Education, and Balance.

##### 2.4.5.1 Location

Many parents felt that communications technology lured children away from family interactions. Similarly, some children commented that work took parents away from family time. Some families successfully solved this problem by having a central location for most technology. For example, several families had their computers, video games, and televisions in the family room so that they could both monitor use and keep their children from disappearing into their own rooms when they wanted to use technology. This gave parents a sense of control over how their children were using technology, and this reduced anxiety both increased their positive feelings towards technology and reduced feelings that technology was disrupting family life.

##### 2.4.5.2 Rules

Some families had a variety of rules in place to govern technology usage, and these families almost universally felt positively about the effects the rules had on their family life. Often rules were based around specific times. Many families banned technology at the dinner table. Others banned use during homework time. In addition, some people, but mainly adults, set rules for themselves to help control their own use.

No matter the form or whether the rules were set by parents or children, having them in place had a profoundly positive effect on individuals and families alike. Although the rules differed in nature and severity, they reduced some of the anxiety, concern, and feelings of helplessness that often surround the pervasiveness of modern communications technology.

##### 2.4.5.3 Awareness

During the interviews for the Family Study, several families thanked the research teams for allowing them to participate. Their reason was that the diary study had helped them increase their awareness of their use of technology, and for some, this led them to be able to moderate their use much better.

Awareness of use is the key to achieving balance and well-being when using communications technology, largely because most people appear to be unaware just how pervasive and habitual their use is. Talking as a family, or even going as far as to record personal levels of use for a few days, can be informative in raising awareness. Once individuals and families know how much communications technology they are using, they can try to aim for a more ideal level, whatever they define that level to be.



As technology continues to change, it is critical that children be educated about safe and responsible technology use.

Because children will likely be using different technologies over time, it is important that a good basis for determining sensible behaviour towards technology be instilled at a young age.



The goal of this project was not to prescribe a set of actions for everyone, but rather to understand the steps that individuals and families take to bring themselves to a point of balance with the hope that those who feel out of balance can make useful changes.

Besides central location and rules, the biggest thing that seemed to help families was some degree of technology-free time.

#### 2.4.5.4 Education

As technology continues to change, it is critical that children be educated about safe and responsible technology use. Because children will likely be using different technologies over time, it is important that a good basis for determining sensible behaviour towards technology be instilled at a young age.

Many schools now have IT education programmes that focus on teaching not just technological skills but also safe and mindful use. Some parents also talked about ways that they either moderated use or educated their children to encourage responsible future use. Other families used things like centralised location, filters blocking certain kinds of content, and explicit rules to govern how their children used technology. Most believed that these actions benefited both their children and their family life. Many also felt that there were certain ages at which certain kinds of technology were appropriate, although these ages differed by family.

#### 2.4.5.5 Balance

Moderation of communications technology, whether by location, rules, or something else, is ultimately in service of balance. Many concerns about the influence of communications technology refer to the extent to which it takes us away from “traditional” forms of communication, interaction, and behaviour. The concept of balance refers to using technology in such a way that it preserves the benefits of things like face-to-face interaction without preventing individuals and families from enjoying the positives of using technology.

Some families in the study recognised the need for a balanced and rational approach to technology use. Of course, the point of balance is unique to each individual. Some people feel lost without their mobiles while others relish time on planes when they cannot use it. Some children feel that Facebook is helpful for collaboration while doing homework while others find it a distraction. The goal of this project was not to prescribe a set of actions for everyone, but rather to understand the steps that individuals and families take to bring themselves to a point of balance with the hope that those who feel out of balance can make useful changes.

Besides central location and rules, the biggest thing that seemed to help families was some degree of technology-free time. Whether this happened every night at mealtimes or only on long, secluded holidays, all families who consciously took time to be away from communications technology found it to be a beneficial experience. Sometimes, turning off technology can also reduce feelings of dependence.



### CHAPTER 3

## Conclusions

This project was designed to provide a picture of how modern communications technology is being used by individuals and families and the subsequent effects. Furthermore, the factors that help some individuals and families form a healthier relationship with technology were identified.

The actual level of use of technology varies greatly across the population, but only a minority of people are heavy users, with the majority of people using communications technology for less than six hours a day on average. The preferences of the population were also highly variable, but face-to-face contact was still the strongest communications preference in all four countries studied. In addition, most people were aware that different kinds of ICT were best for different purposes and tried to modify their communications use accordingly.

The impacts of communications technology on individuals and families were both positive and negative in nature. While the raw amount of use did not appear to affect well-being in most cases, families did report that work communications sometimes interfered with family time and that children sometimes appeared to want to engage with technology more than with the family. Some people also reported feeling overwhelmed or out of control, which did appear to detract from overall well-being, even when those individuals tried to moderate their use. Furthermore, the frequent technology-related distractions often mentioned by families also appeared to influence well-being in some circumstances.

Conversely, feeling in control was associated with increased well-being. Steps taken by families towards feeling in control often involved increasing awareness of use and consciously moderating activity. This allowed families to reap some of the benefits of using technology, for example by talking to

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It is important to keep in mind that technological change is inevitable, so finding an optimal relationship and use pattern is a continual process.

distant family members or using gaming interfaces together. Many individuals also expressed that communications technology gave them an increased feeling of connectedness with friends and relatives, particularly those living farther away. Ultimately, finding an ideal location for technology, formulating rules, creating awareness, educating both parents and children about responsible use, and finding balance are key components in being able to harness the positives of technology while avoiding many of the negatives.

It is important to keep in mind that technological change is inevitable, so finding an optimal relationship and use pattern is a continual process. Societal advancement depends on technology, but that technology can also have unanticipated side-effects that must be mitigated. Having an understanding of what a satisfying relationship with ICT looks and feels like is helpful guidance for future changes. Ultimately, with the correct balance, the use of communications technology will enable individuals and families to achieve things never dreamt of in the past while maintaining a sense of humanity and well-being.

## Culture, Communication and Change:

**Summary of an investigation of the use and impact of modern media and technology in our lives**

Anna Mieczakowski, Tanya Goldhaber and John Clarkson

## Resources

1. Ryff, C. D. (1989) "Happiness Is Everything, or Is It - Explorations on the Meaning of Psychological Well-Being". *Journal of Personality and Social Psychology*, 57(6), p. 1069-1081.
2. Huppert, F. A. (2009) "Psychological Well-being: Evidence Regarding its Causes and Consequences". *Applied Psychology*, 1(2), p. 137-164.
3. Huppert, F. A. (2009) "A New Approach to Reducing Disorder and Improving Well-Being". *Perspectives on Psychological Science*, 4(1), p. 108-111.

Modern communication technology makes it possible to stay connected anywhere, all the time, and the flow of information is nearly limitless. With all the benefits afforded by this newfound capability, however, come potential consequences. Following the ever increasing flow of information through our computers, televisions, and phones has been a stream of concerns about the change in how we, as humans, communicate. Will the new ways in which we acquire, process, and relate information in turn change us as individuals, families, and societies?

The University of Cambridge, in partnership with BT, ran an international research project investigating these questions. Importantly, this work was aimed at stimulating a debate based on real research and not on speculation or fear. This book is part of the output of the project: a summary of the background and major results and conclusions of the research. A more detailed literature review, description of methods and data analysis, and in-depth conclusions are available in the full report; this document gives a shorter overview of the project as a whole.

More information about this research project can be found at: <http://www-edc.eng.cam.ac.uk/comms>

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ISBN 978-0-9545243-6-4

