Digital Capacities Index - Quantitative Findings

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## Digital Capacities Index - Quantitative Findings

The *Digital Capacities Index* is a pilot survey instrument developed by researchers at Western Sydney University and Google Australia. The survey was administered by [Pure Profile](https://www.pureprofile.com/us/) in Febuary 2016.

### Introduction

We included a total of 158 items measuring (a) frequency of various online behaviour, (b) levels of agreement with statements about digital capacities, (c) perceived importance of online activities and (d) ease of use of digital technologies.

We further distinguished questions into the following key thematic areas, or what we have termed, following James (2014), 'critical issues'. These issues are:

* **Competencies** (42 indicators).
* **Interests** (44 indicators).
* **Resilience** (24 indicators).
* **Social Connectedness** (48 indicators).

These four issues were distilled from a list of nine issues that also included *Engagement*, *Inclusion*, *Policy Environment*, *Infrastructure* and *Consequences*.

Against these four issues, we selected items and scales from existing sources in the literature where possible. In particular we drew from 'Kids Online' (Livingstone et al. 2010), Helsper's (2012) 'Corresponding fields model', a study by Humphry (2014) of mobile use among homeless populations, and indicators compiled by the [Young and Well CRC](http://www.youngandwellcrc.org.au/). Other indicators were developed by the *Digital Capacities Index* team.

A large number of candidate scales were distilled down to the current list after two day-long workshops, and testing of the survey.

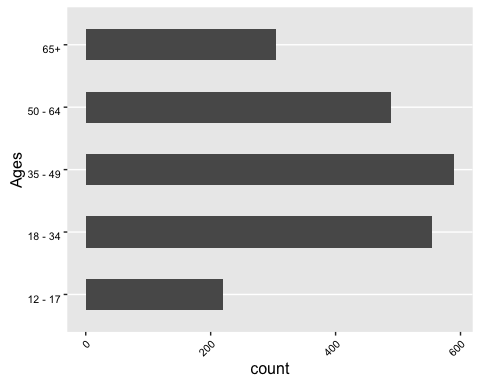
### Demographics

The survey included a total of 2,157 participants. We requested the survey provider provide a panel in terms of age groups, gender and geographic regions. As the panel provider recruited participants online, our pilot sample is expected to be skewed towards Australian citizens and families with comparatively high digital capacities. This caveat is signficant to the interpretation of our results below.

#### Age

Participant ages ranged from 12 to 91, with a median value of 42.

*Figure 1* provides more detailed age demographics:



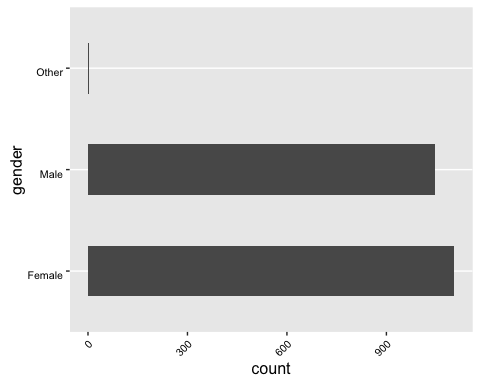
**Figure 1: Age Frequency**

These show participants' ages correspond approximately to Australia's adult demographic. 89.8% of participants were aged 35-54.

#### Gender

Participant gender is roughly evenly distributed. The survey included 1,105 (51%) women; 1,048 (49%) men; and 4 (0.19%) identifying as 'Other'.

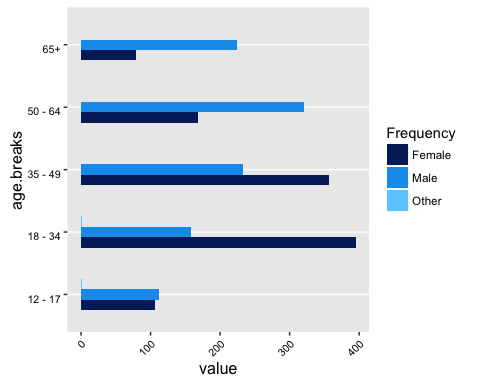
Gender demographics are distributed, as show in Figure 2:



**Figure 2: Gender Frequency**

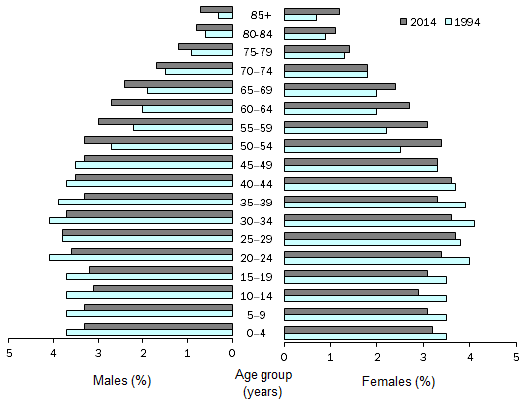
#### Combined Age and Gender

Combined age and gender demographics are distributed as per \*Figure 3:



**Figure 3: Age & Gender Frequency**

These figures approximate to Australia's adult age distribution, as reported by the ABS in 2014 in **Figure 4** below, though with a considerably higher skew towards younger women and older men.

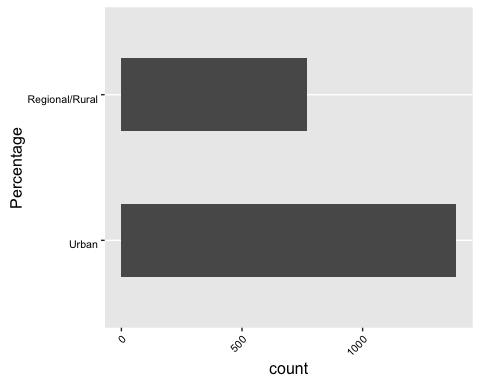


**Figure 4: Australia's Age & Gender Frequency (ABS 2014)**

#### State and Location

Survey distribution by state broadly follows Australia's demographic distribution.

The split of participants between urban and regional/rural is as follows:



The percentage of reported urban residents here is 64.3 - considerably less than [World Bank figures of 89%](http://data.worldbank.org/indicator/SP.URB.TOTL.IN.ZS).

## Results by Critical Issue - Aggregated

### Competencies

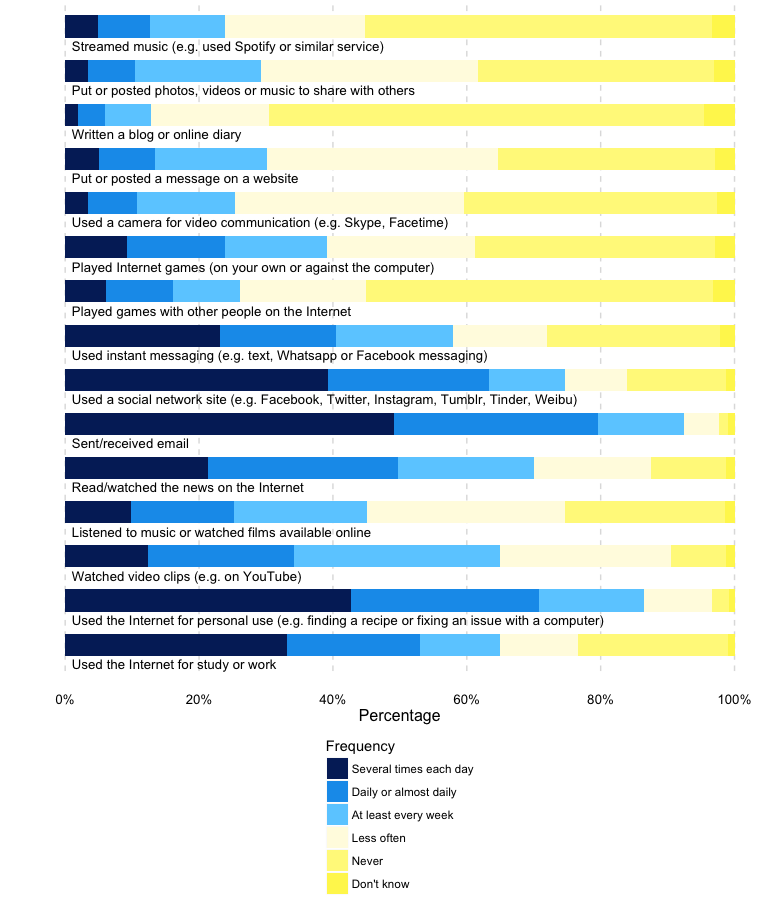
Our survey asked participants to respond to two questions about competencies:

* Frequency of online activity
* Perceived ease of conducting online activity

#### Frequency of online activity

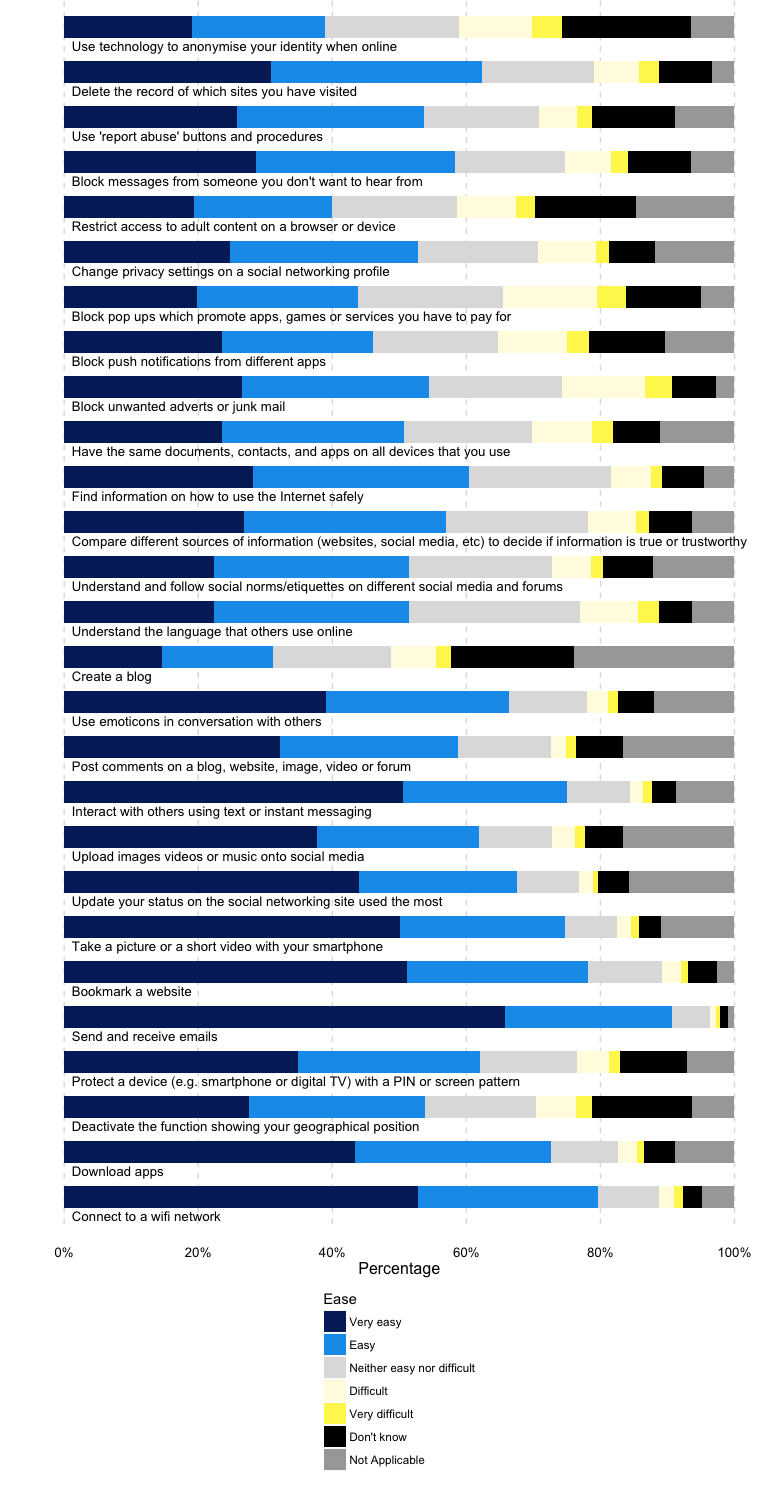
*Frequency of online activity* measures frequency of 15 different activities, ranging from highly common activities such as sending email through to less common activities (in 2016), such as writing blogs.

The graph below shows the relative frequencies of each activity. Using the Internet generally (for work, study, and for personal use), sending email and social networking are the most common activities. Streaming music, playing games with others, sharing media and writing blogs or diaries are comparatively uncommon activities.



#### Perceived ease of conducting online activity

[Introductory Text]

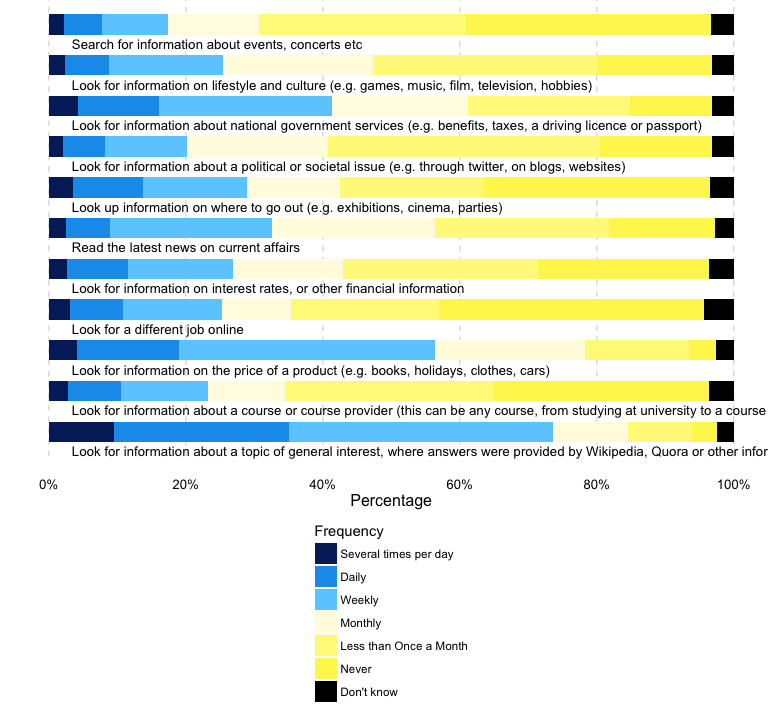


### Interests

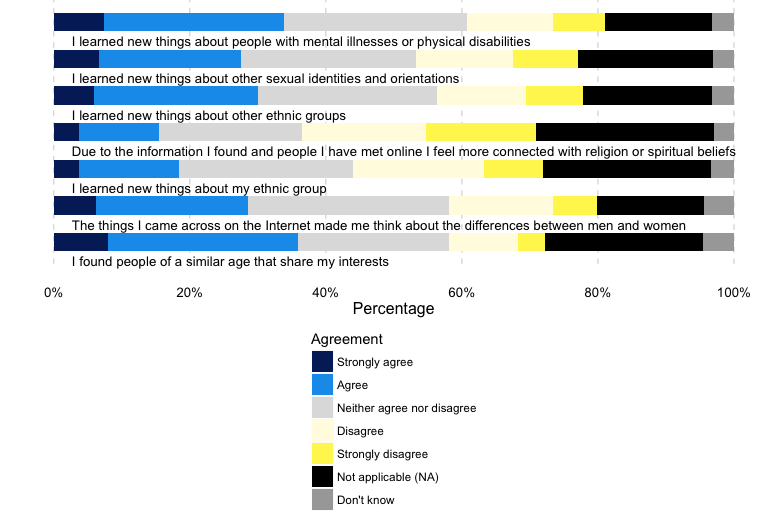
[Overview of Critical Issue]

#### General Interests

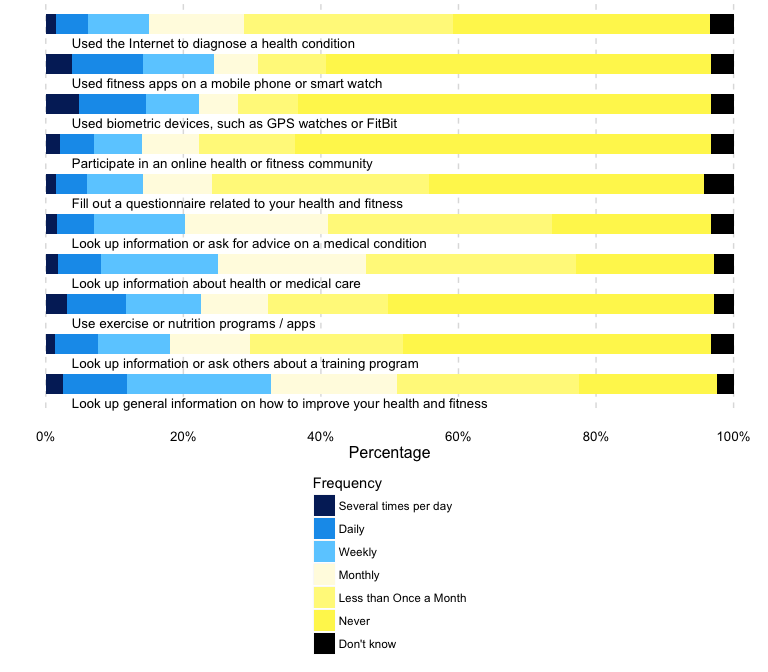
[Introductory Text]

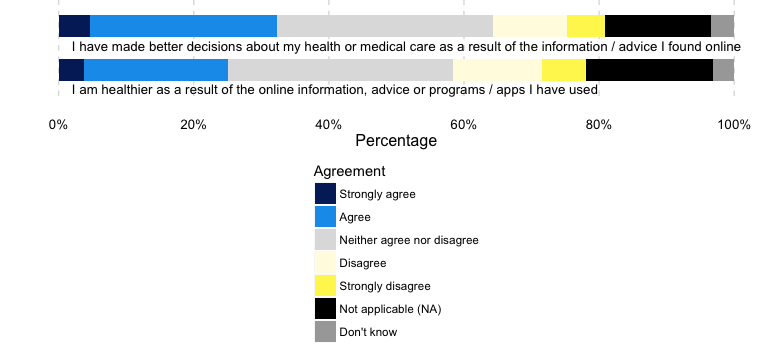


#### Interest in seeking difference

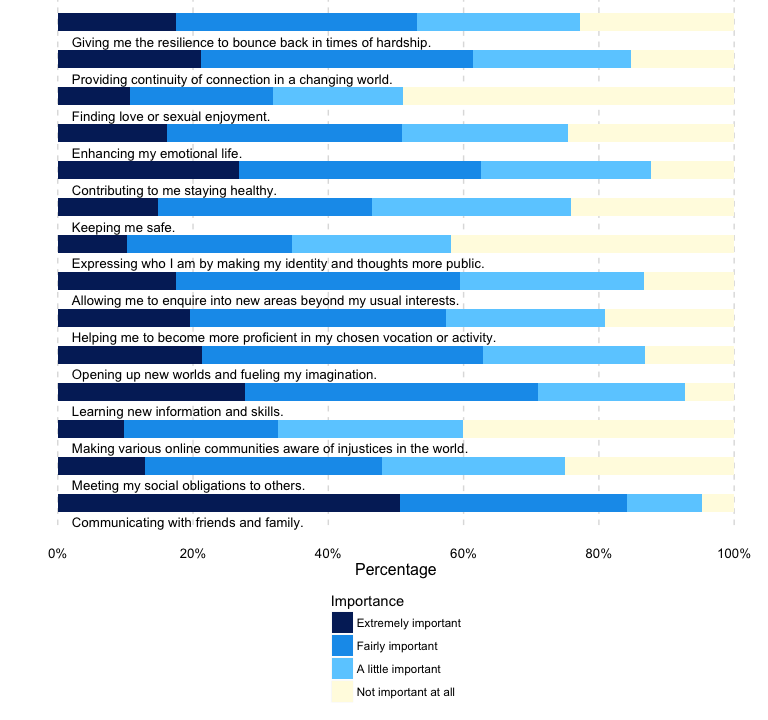


#### Interest in fitness and health improvement





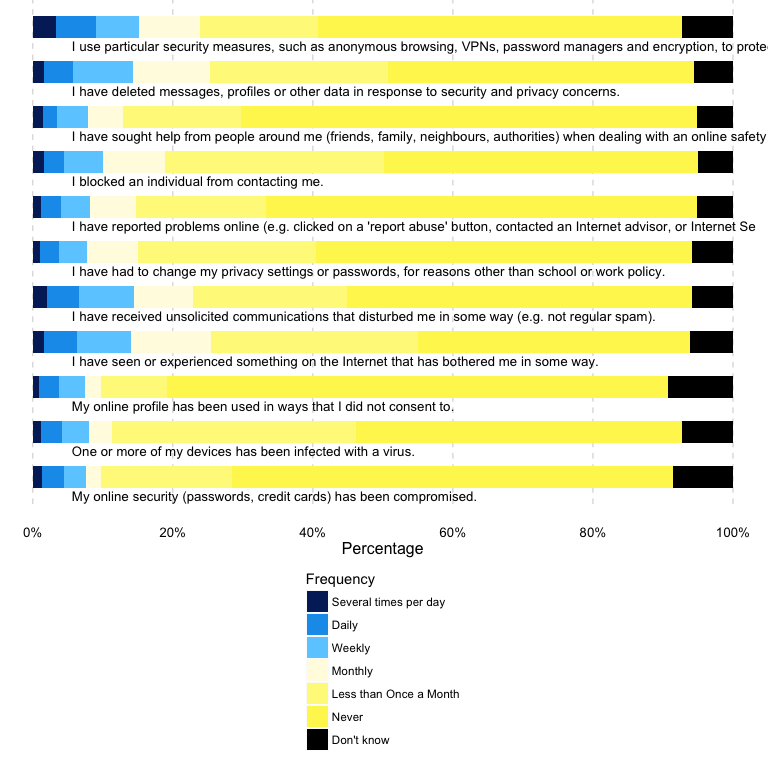
#### Interest in keeping in touch



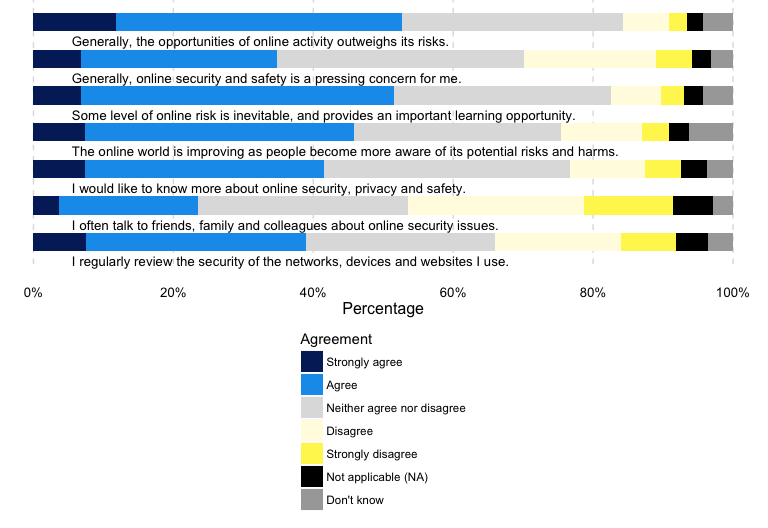
### Resilience

[Overview of Critical Issue]

#### Frequency of harmful events



#### Responses to statements about online harms



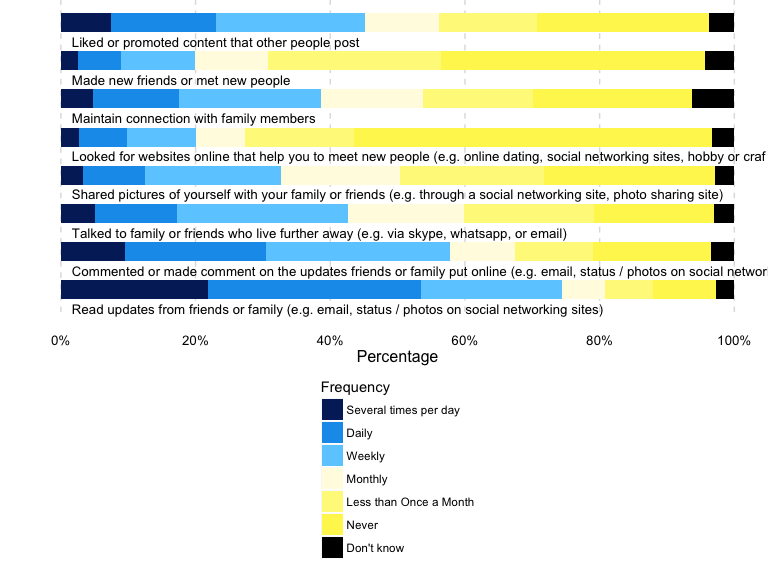
#### Willingness to engage with others

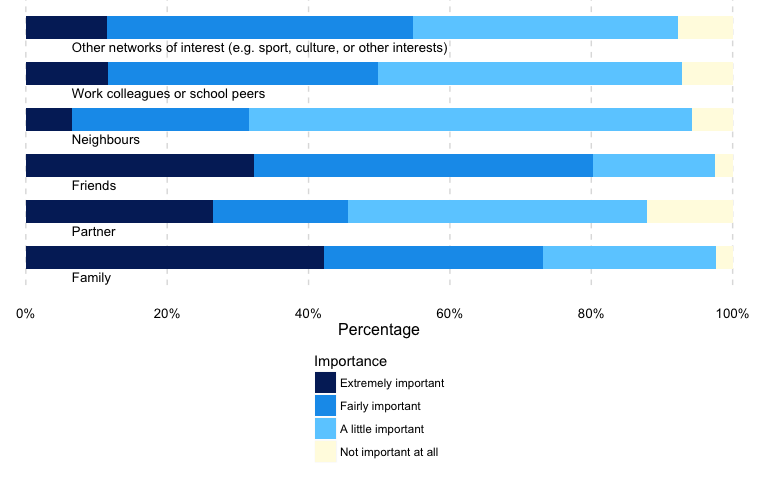


### Social Connectedness

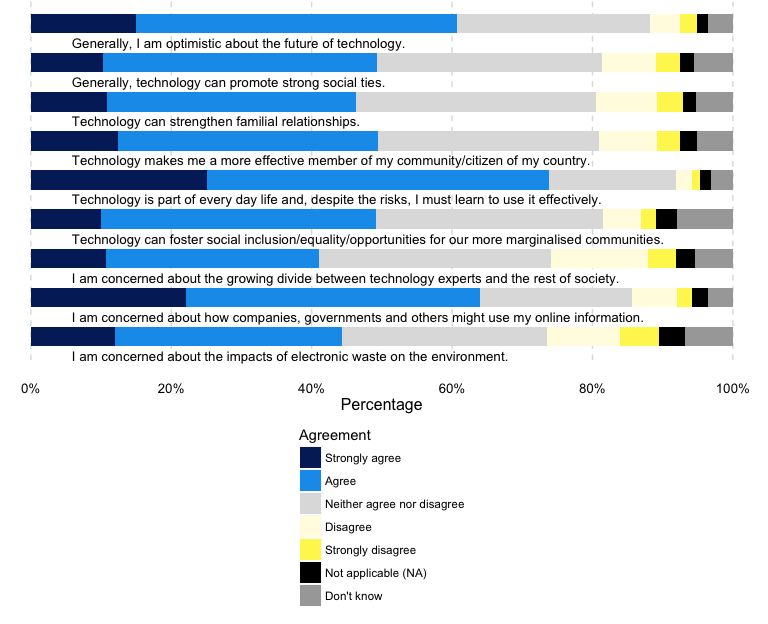
[Overview of Critical Issue]

#### Maintaining connections



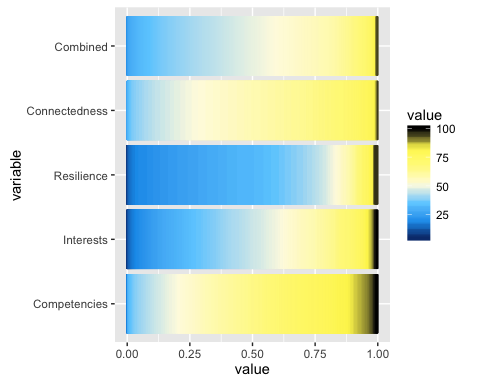


#### Attitudes towards Technology



## Overall results

### Aggregates by Critical Issue



## Appendices

## References

Helsper, Ellen. 2012. “A Corresponding Fields Model for the Links Between Social and Digital Exclusion.” *Communication Theory* 22 (4). Wiley Online Library: 403–26.

Humphry, Justine. 2014. “The Importance of Circumstance: Digital Access and Affordability for People Experiencing Homelessness.” *Australian Journal of Telecommunications and the Digital Economy* 2 (3). Telecommunications Association: 55.

James, Paul. 2014. *Urban Sustainability in Theory and Practice: Circles of Sustainability*. Routledge.

Livingstone, Sonia, Leslie Haddon, Anke Görzig, and Kjartan Ólafsson. 2010. “Risks and Safety on the Internet: The Perspective of European Children: Key Findings from the EU Kids Online Survey of 9-16 Year Olds and Their Parents in 25 Countries.” EU Kids Online.