Digital Capacities Index - Quantitative Findings

Liam Magee, Delphine Bellarose, Anjali Sharma

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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 in Febuary 2016.

Introduction

We included a total of 133 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** (23 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. 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

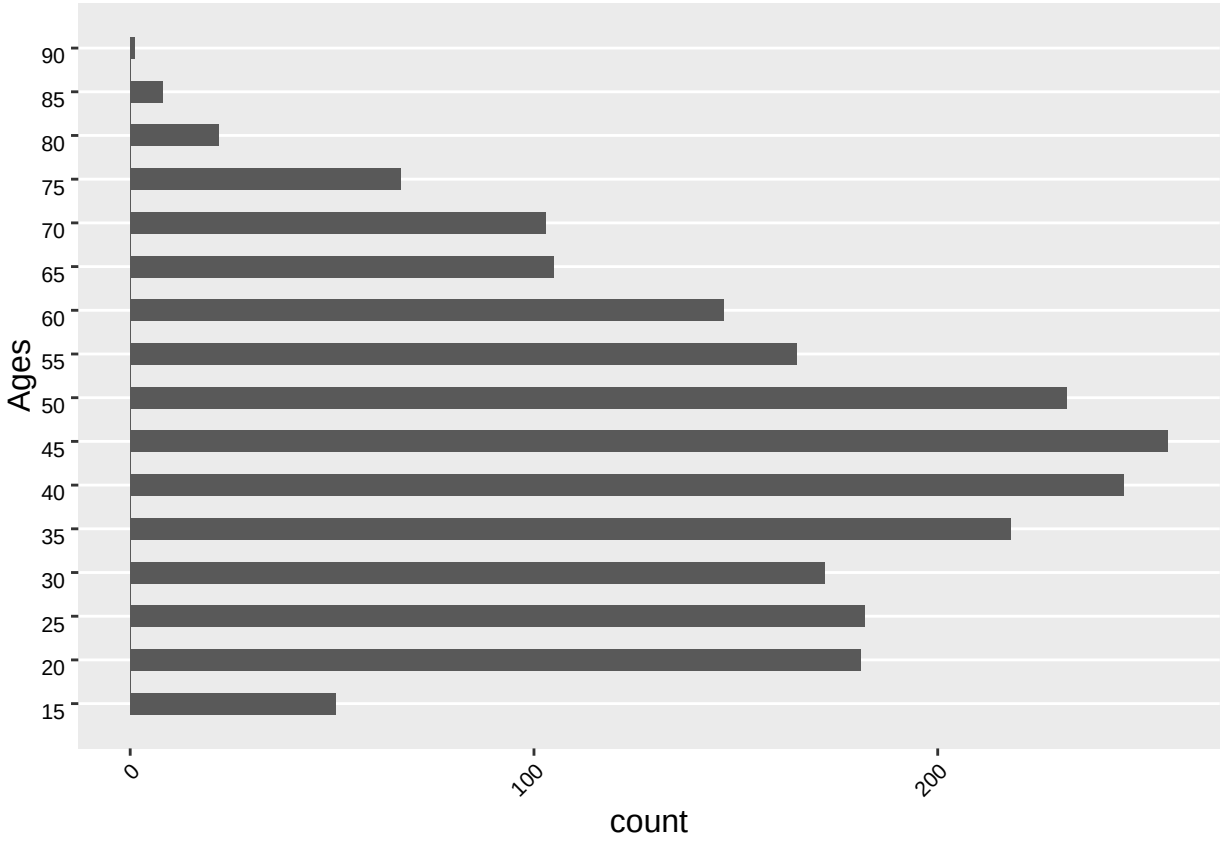
The survey included a total of 2,157 participants. We requested the survey provider provide a panel in terms of age groups, gender and geographic regions. As the panel provider recruited participants online, our pilot sample is expected to be skewed towards Australian citizens and families with comparatively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

[Need something on family composition]

Age

Participant ages ranged from 18 to 91, with a median value of 45.

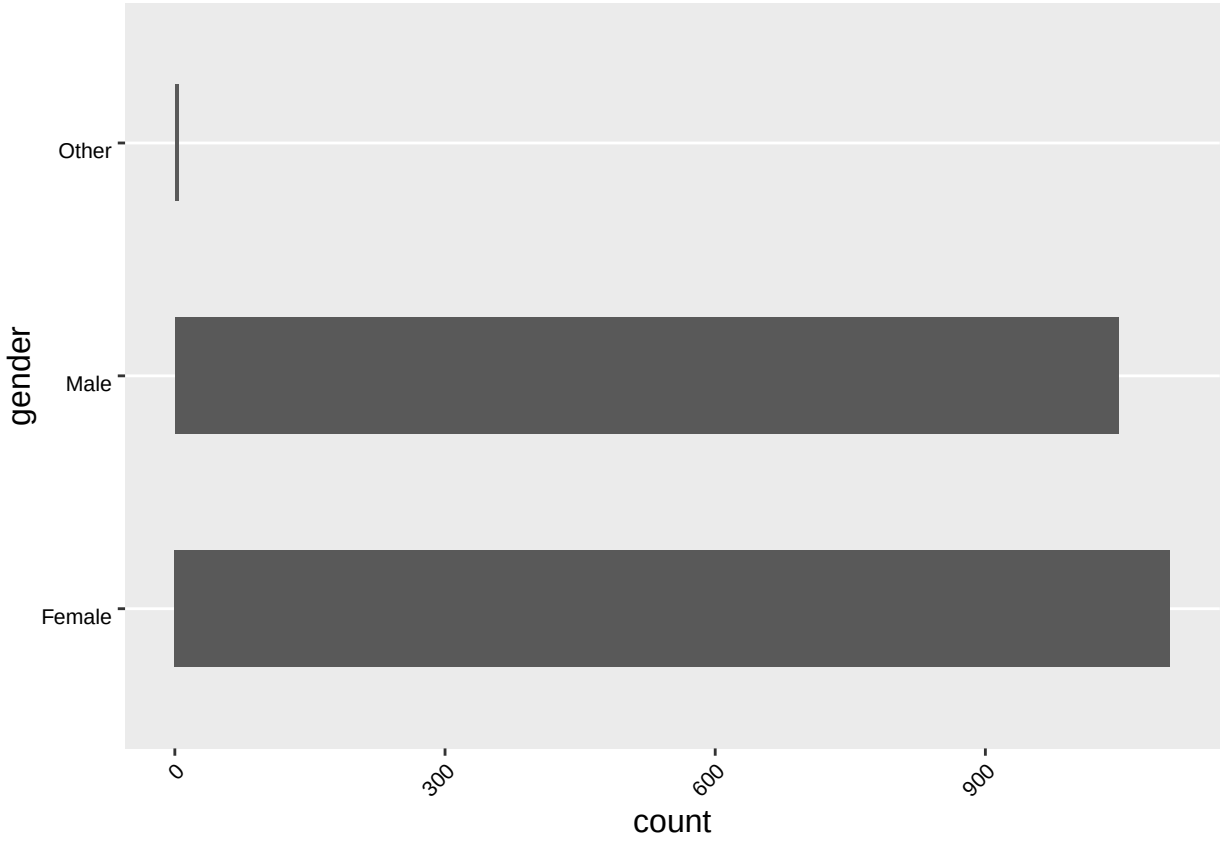
Graph 1 provides more detailed age demographics:



Gender

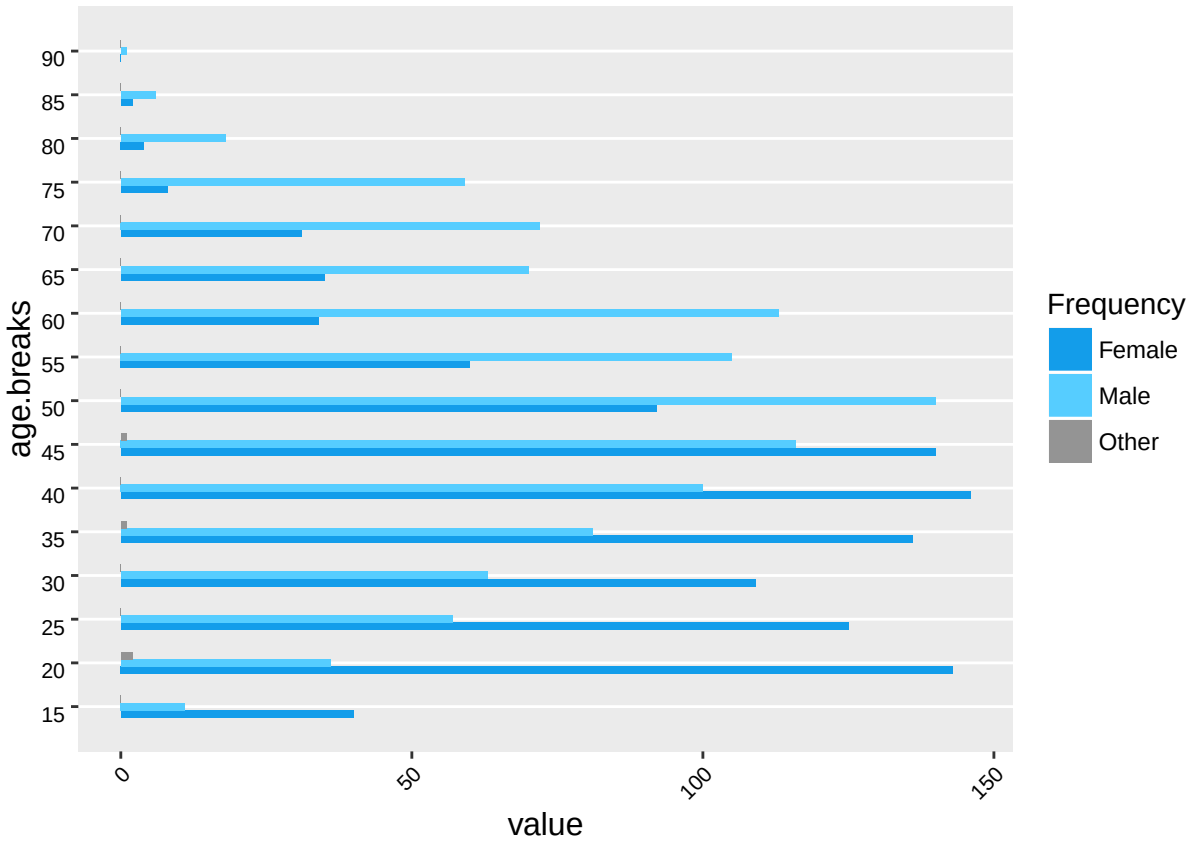
Participant gender is roughly evenly distributed. The survey included 1,105 (51%) women; 1,048 (49%) men; and 4 (0.19%) identifying as 'Other'.

Gender demographics are distributed as per *Graph 2*:

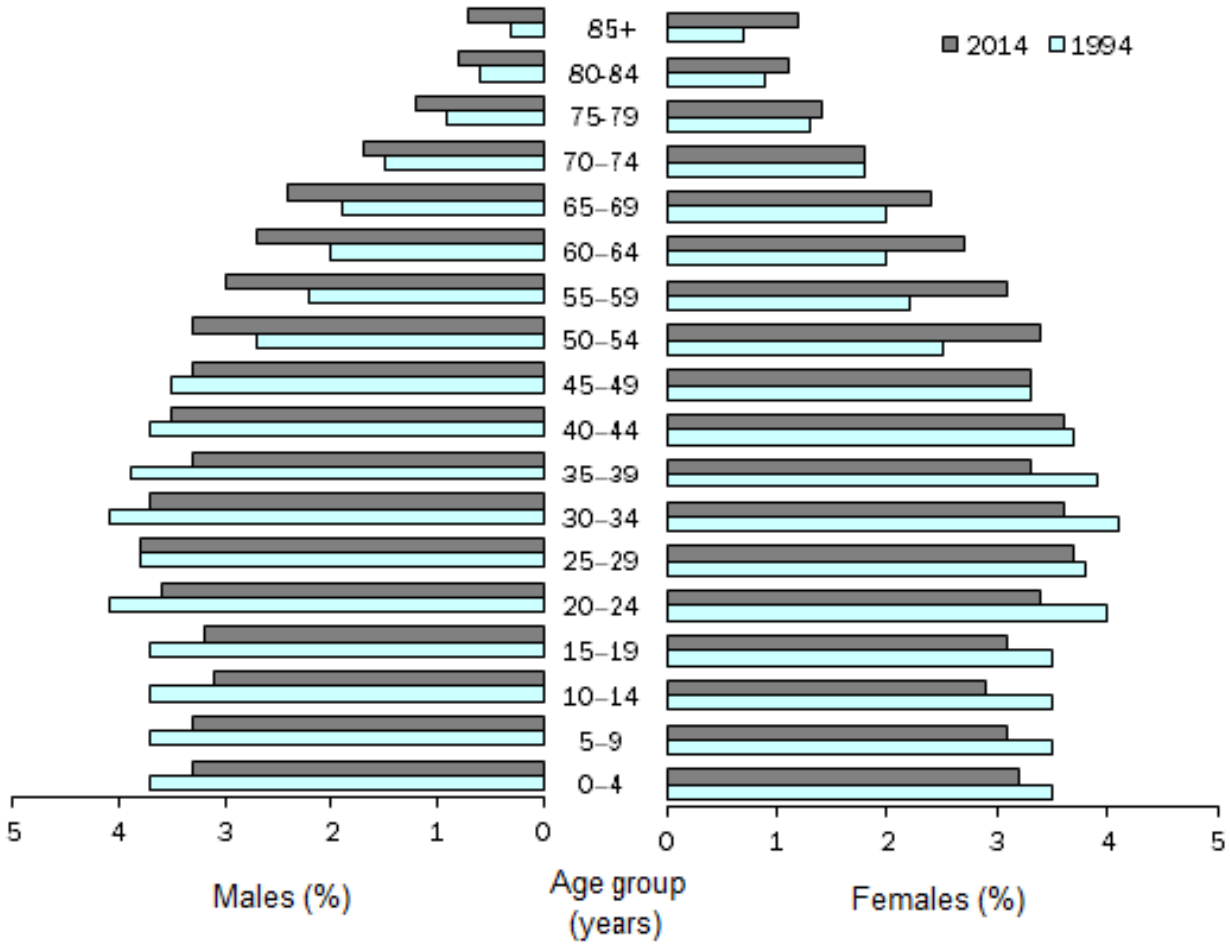


Combined Age and Gender

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

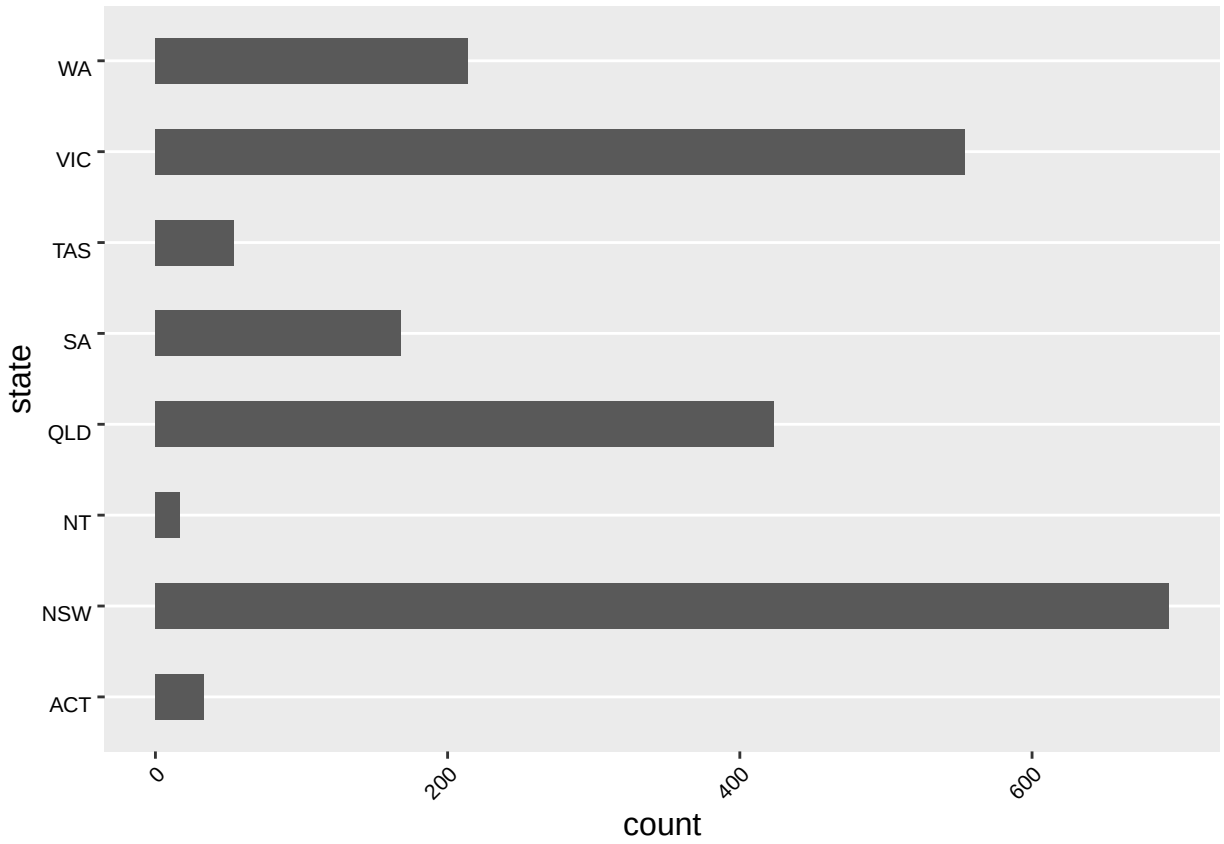


These figures approximate to Australia's adult age distribution, as reported by the ABS in 2014 in *Graph 4* below, though with a considerably higher skew towards younger women and older men.

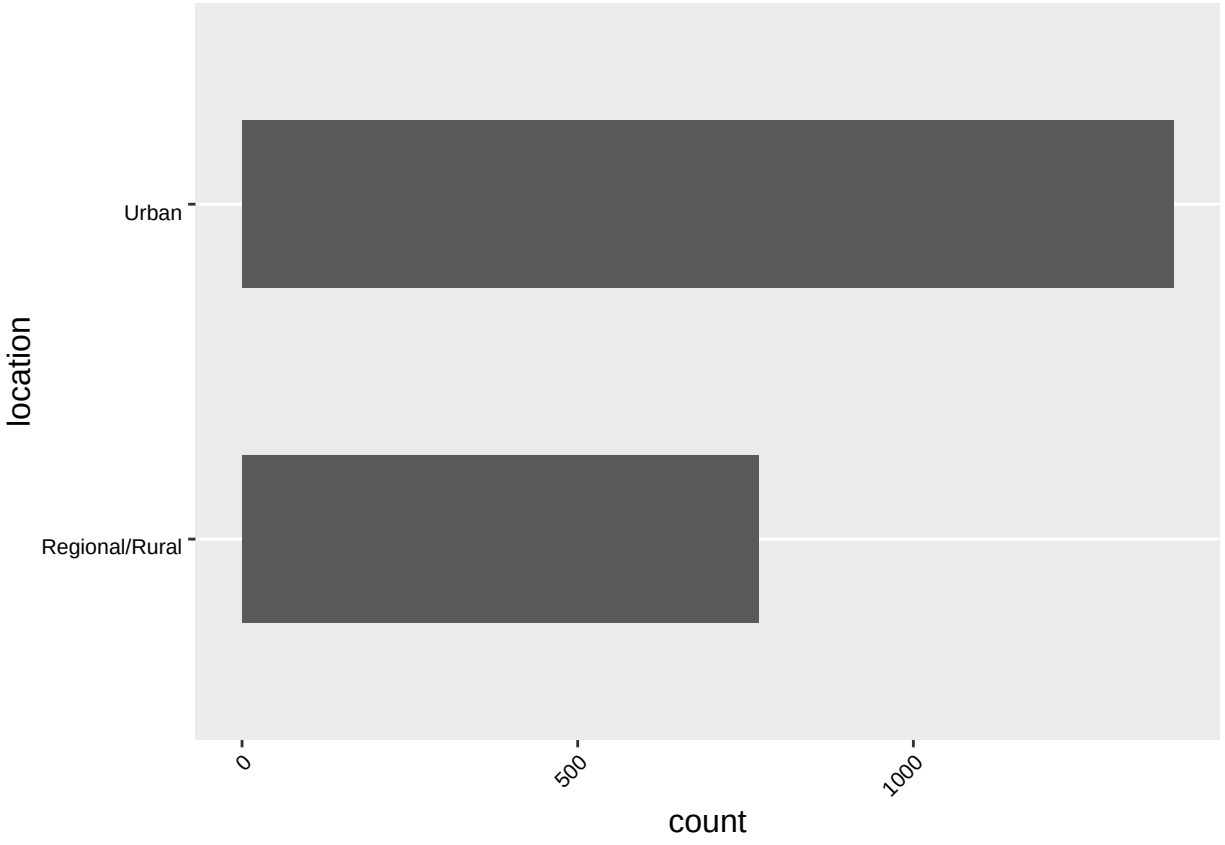


State and Location

Participants are distributed by state as follows:



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



Results by Critical Issue

Competencies

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

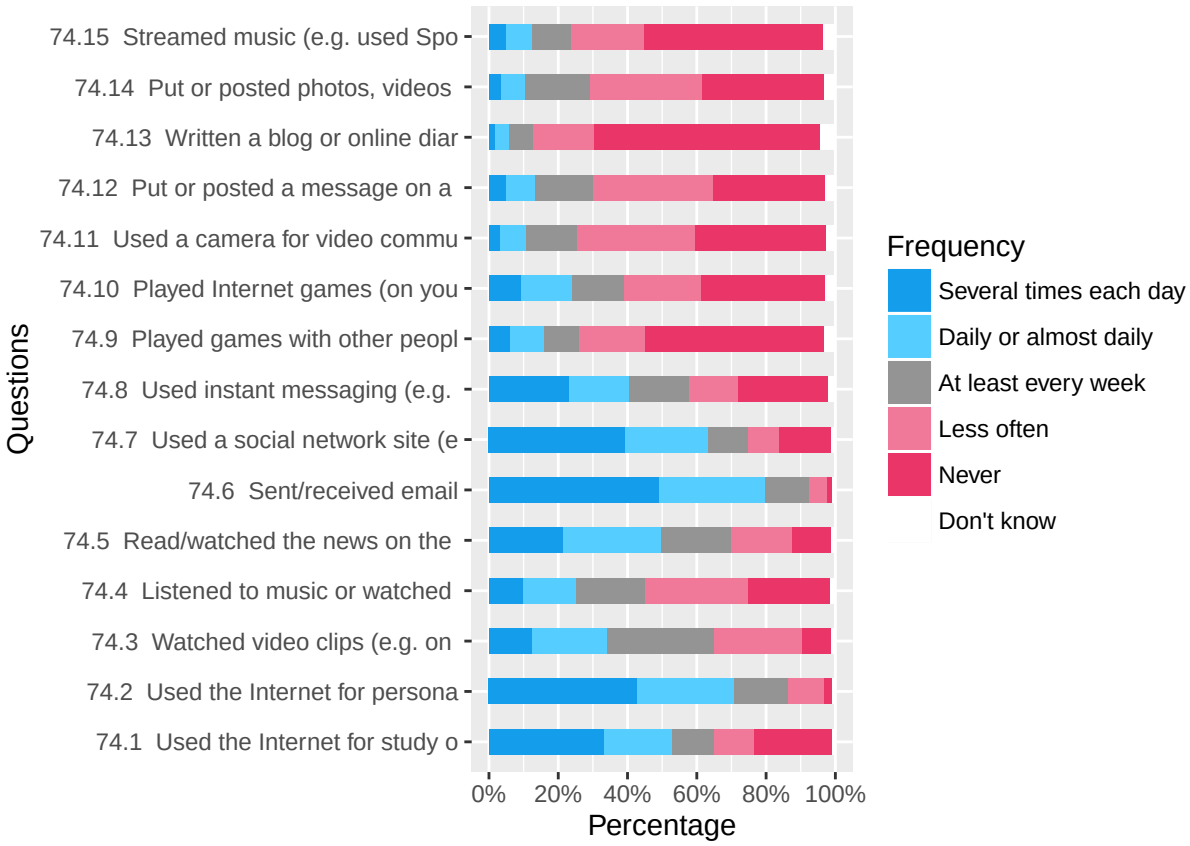
- Frequency of online activity
- Perceived ease of conducting online activity

Frequency of online activity

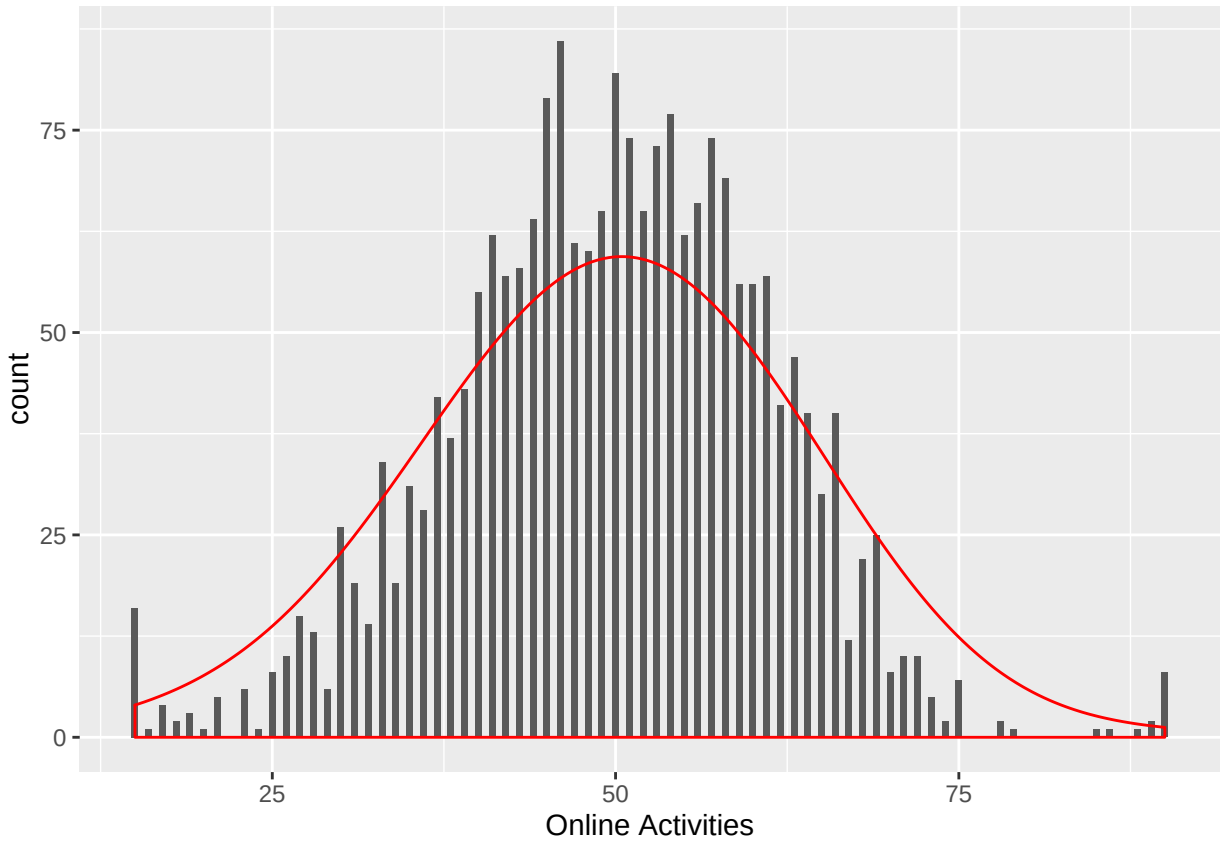
Frequency of online activity measures frequency of 15 different activities, ranging from highly common activities such as sending email through to less common activities (in 2016), such as writing blogs.

By activity

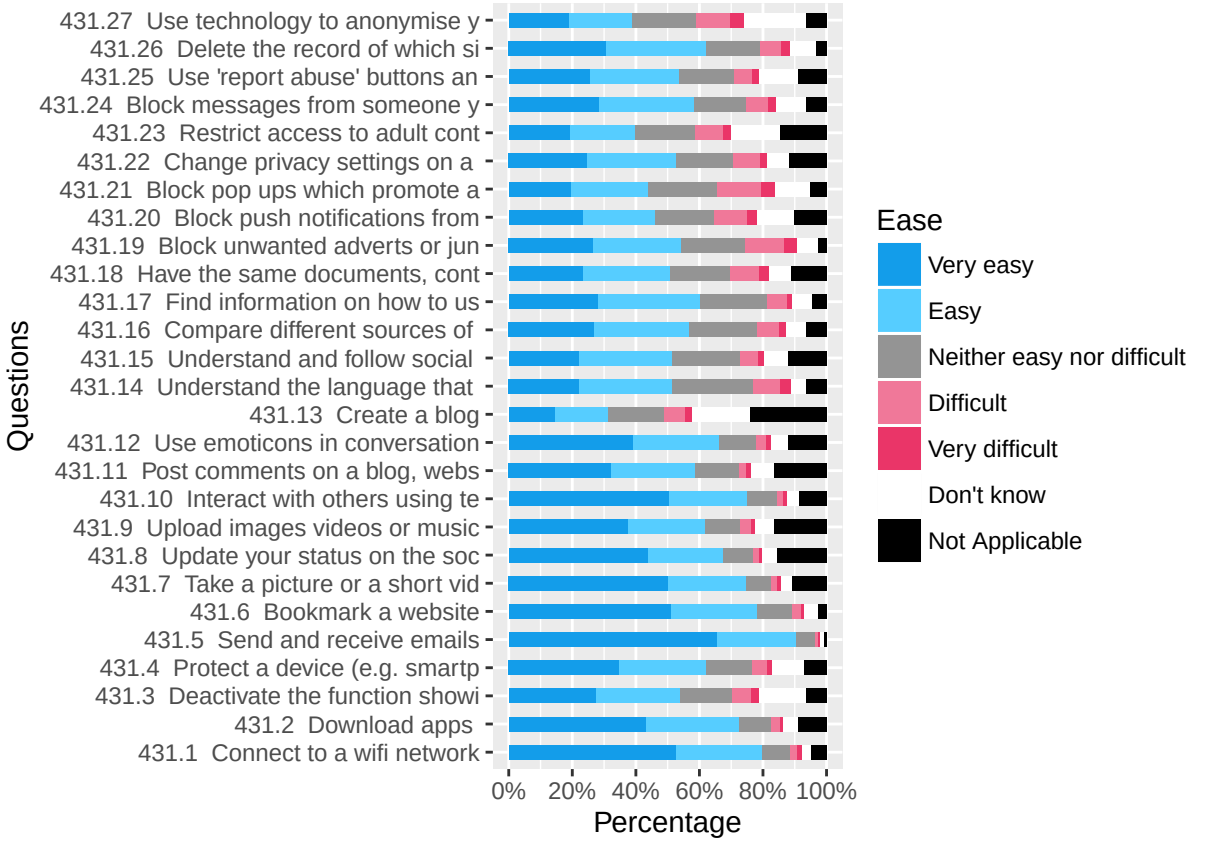
The graph below shows the relative frequencies of each activity. Using the Internet generally (for work, study, and for personal use), sending email and social networking are the most common activities. Streaming music, playing games with others, sharing media and writing blogs or diaries are comparatively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



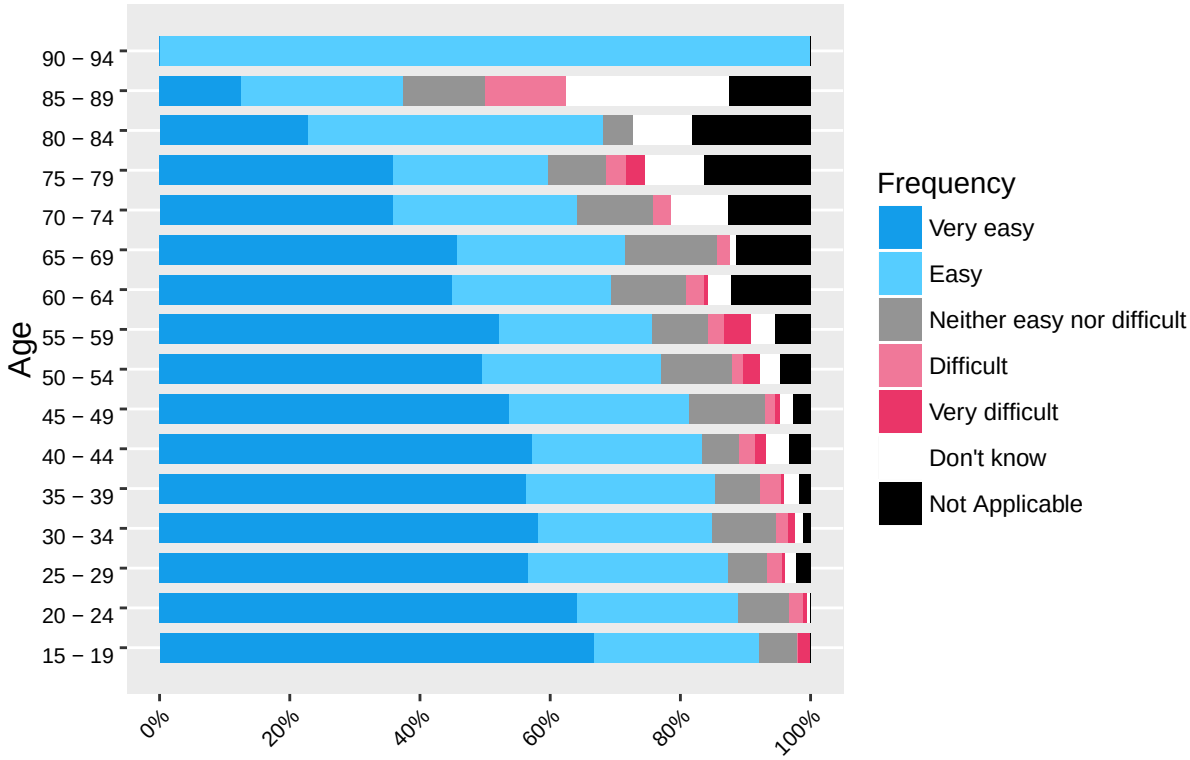
Aggregated online activity



Perceived ease of conducting online activity



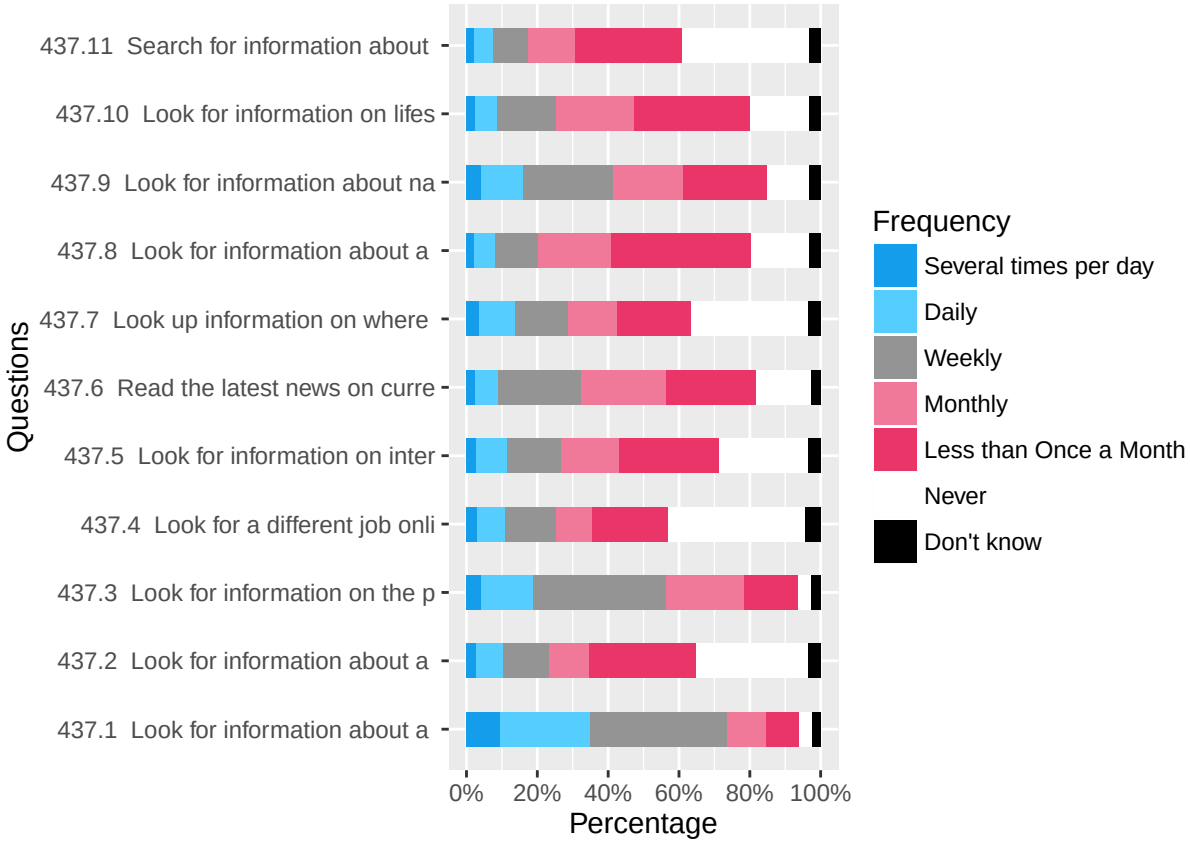
.1 − Competencies with digital life − Connect to a wifi network by Age



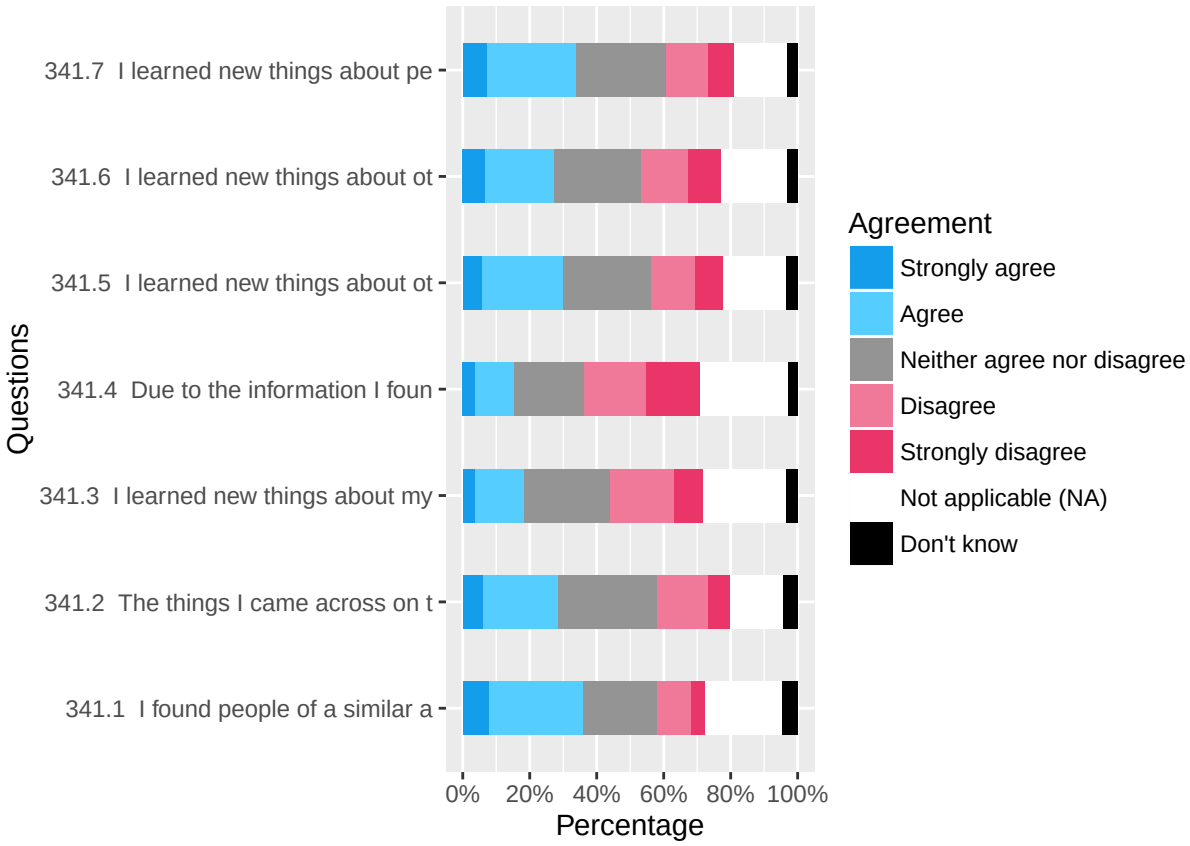
431.1 − Competencies with digital life − Connect to a wifi network

Interests

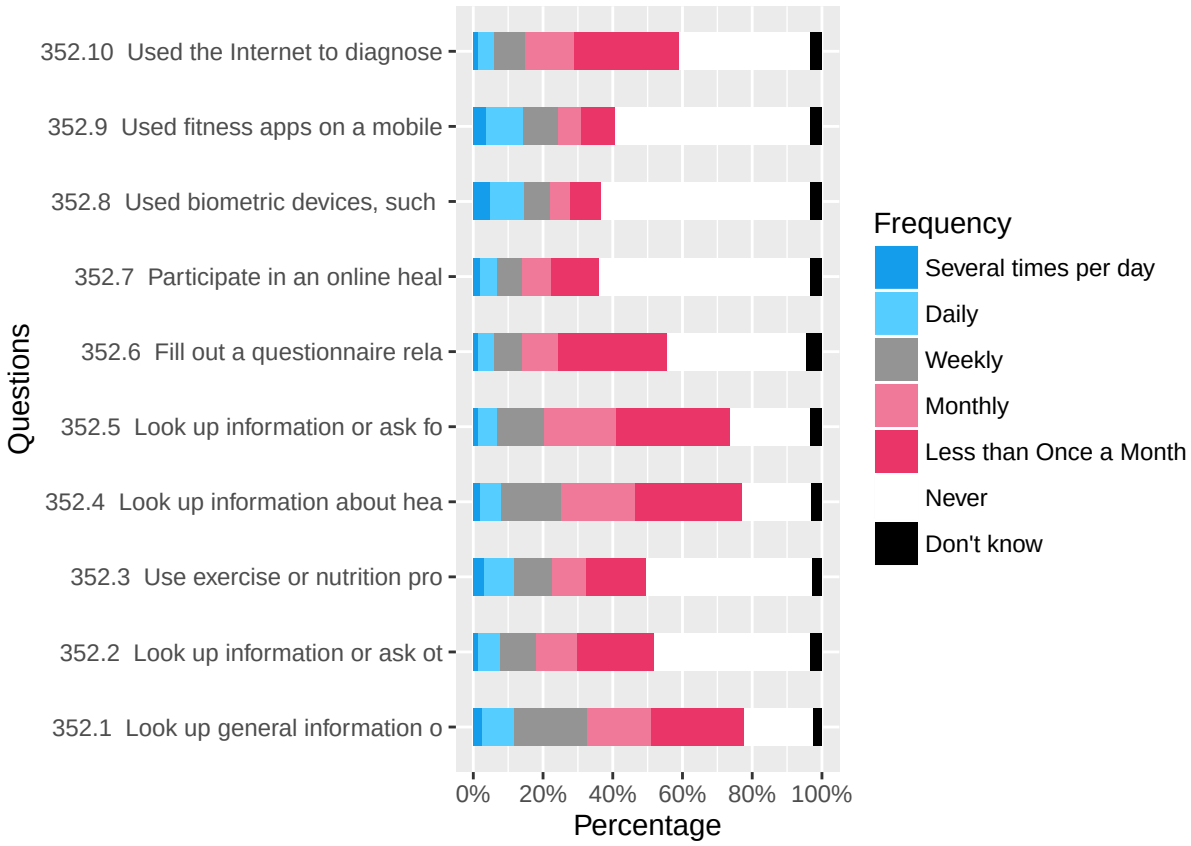
General Interests

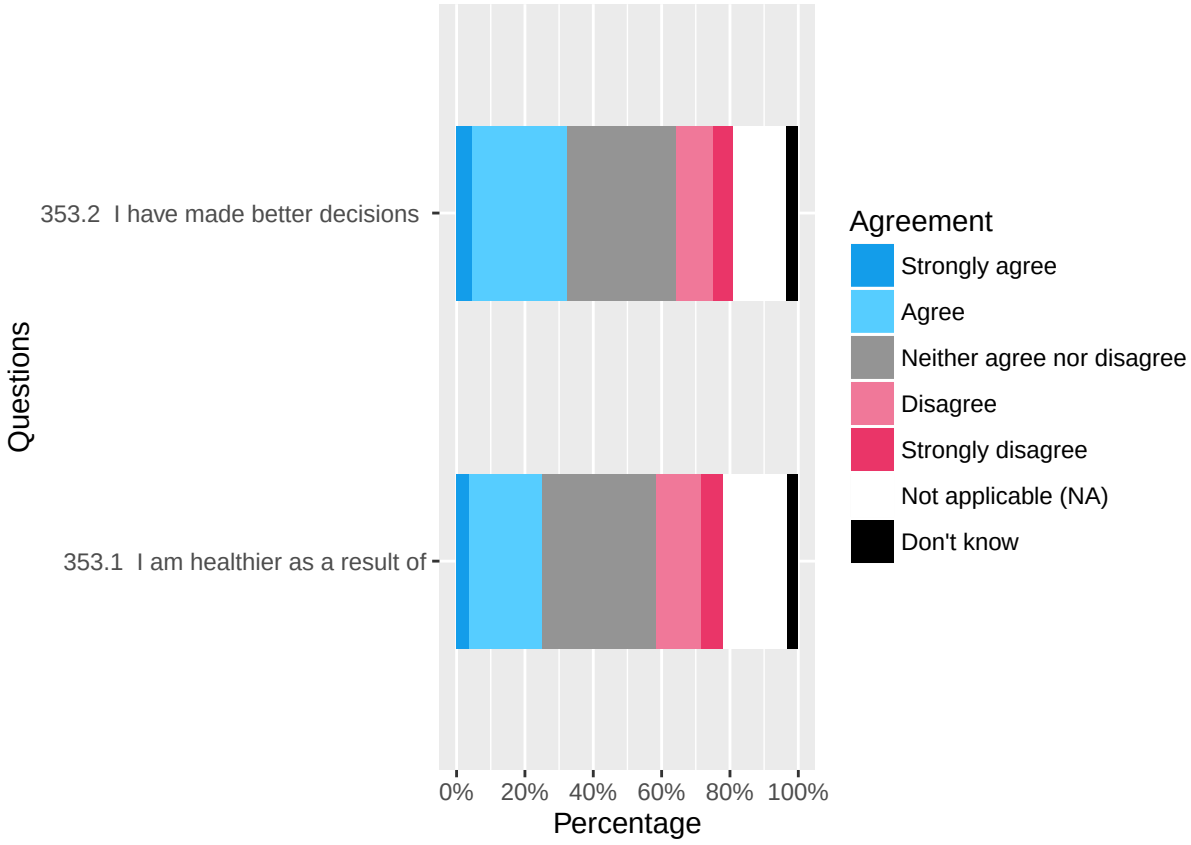


Interest in seeking difference

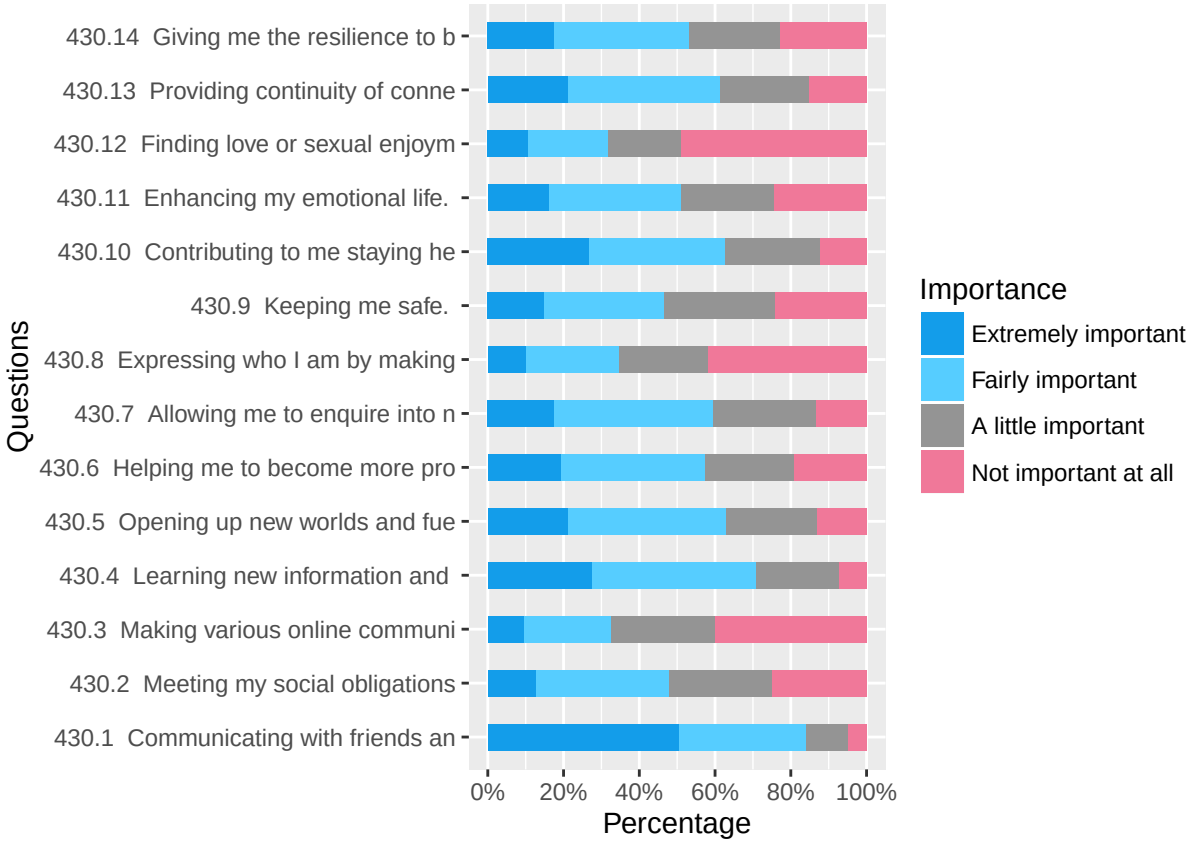


Interest in fitness and health improvement


352.10 Used the Internet to diagnose
352.9 Used fitness apps on a mobile
352.8 Used biometric devices, such
352.7 Participate in an online heal
352.6 Fill out a questionnaire rela
352.5 Look up information or ask fo
352.4 Look up information about hea
352.3 Use exercise or nutrition pro
352.2 Look up information or ask ot
352.1 Look up general information o
Questions
0%
20%
40%
60%
80%
100%
Percentage
Frequency
Several times per day
Daily
Weekly
Monthly
Less than Once a Month
Never
Don't know

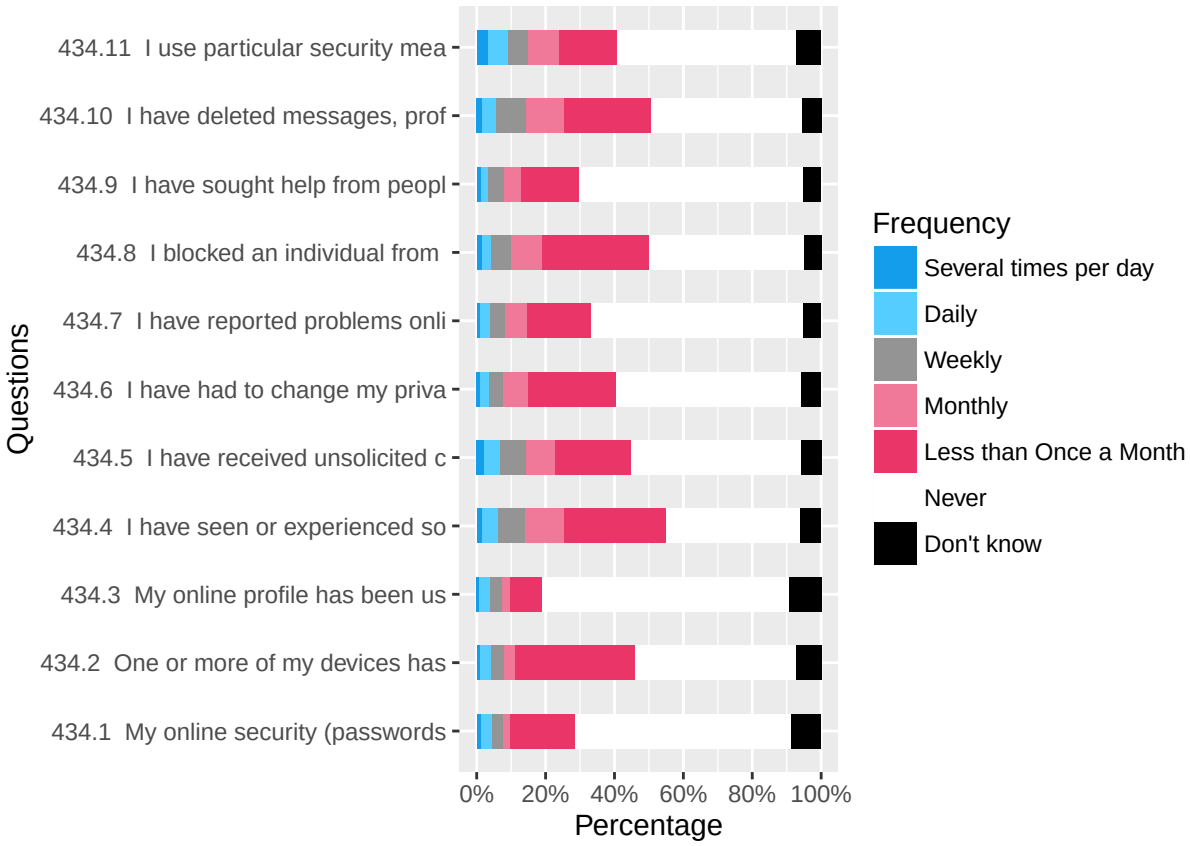

353.2 I have made better decisions
353.1 I am healthier as a result of
Questions
0%
20%
40%
60%
80%
100%
Percentage
Agreement
Strongly agree
Agree
Neither agree nor disagree
Disagree
Strongly disagree
Not applicable (NA)
Don't know

Interest in keeping in touch

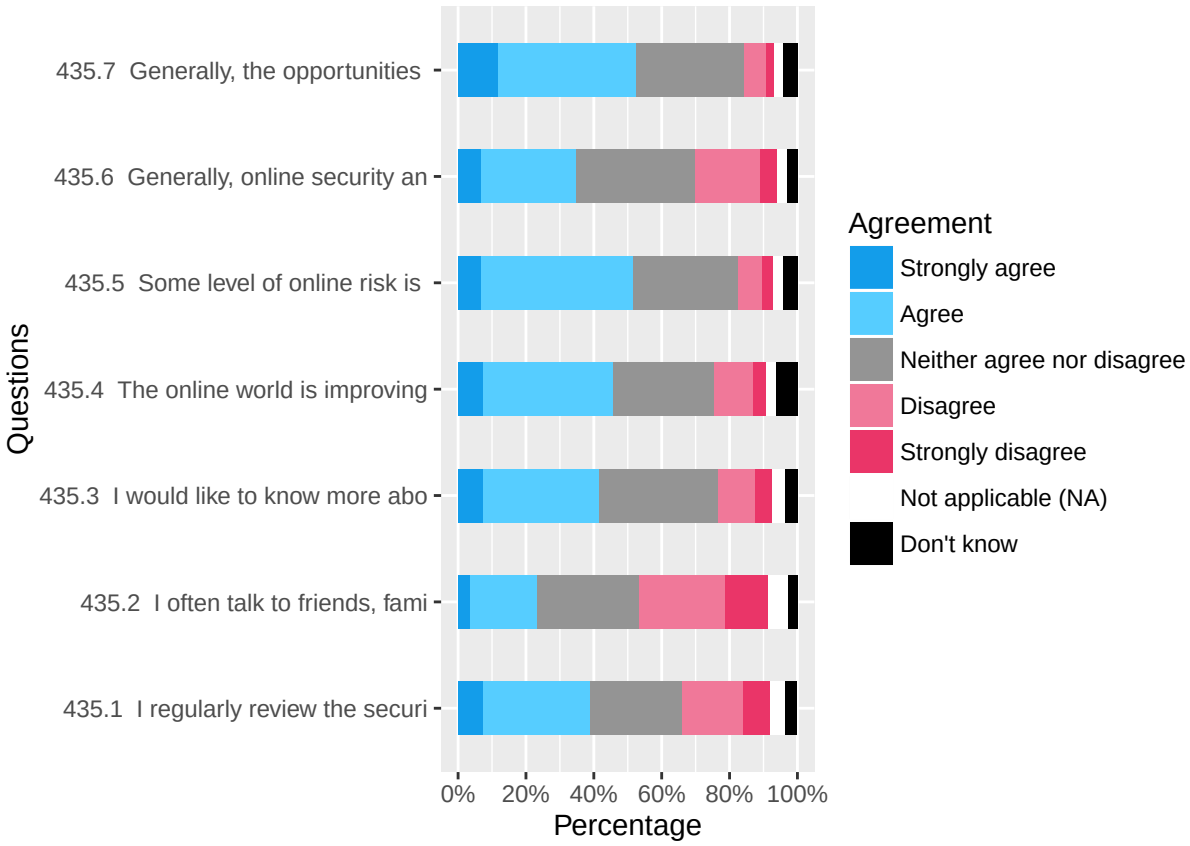


Resilience

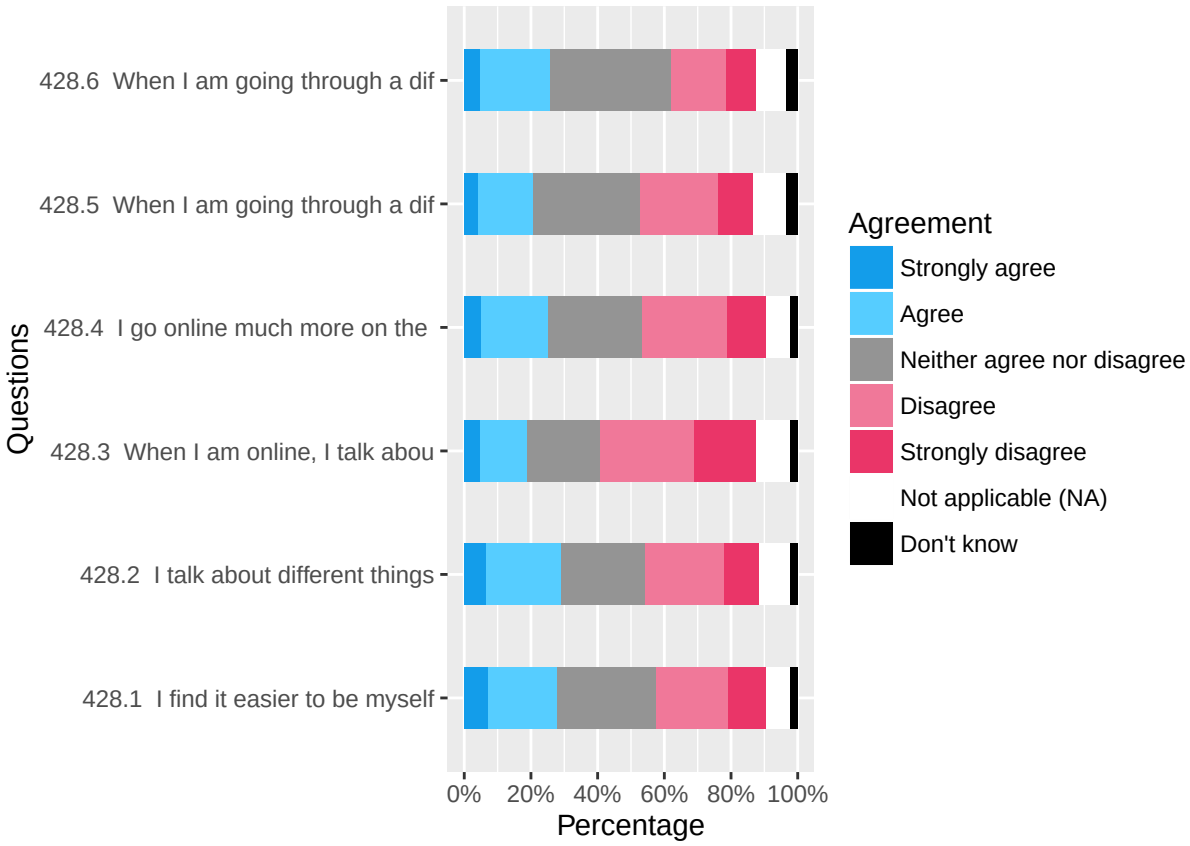
Frequency of harmful events



Responses to statements about online harms

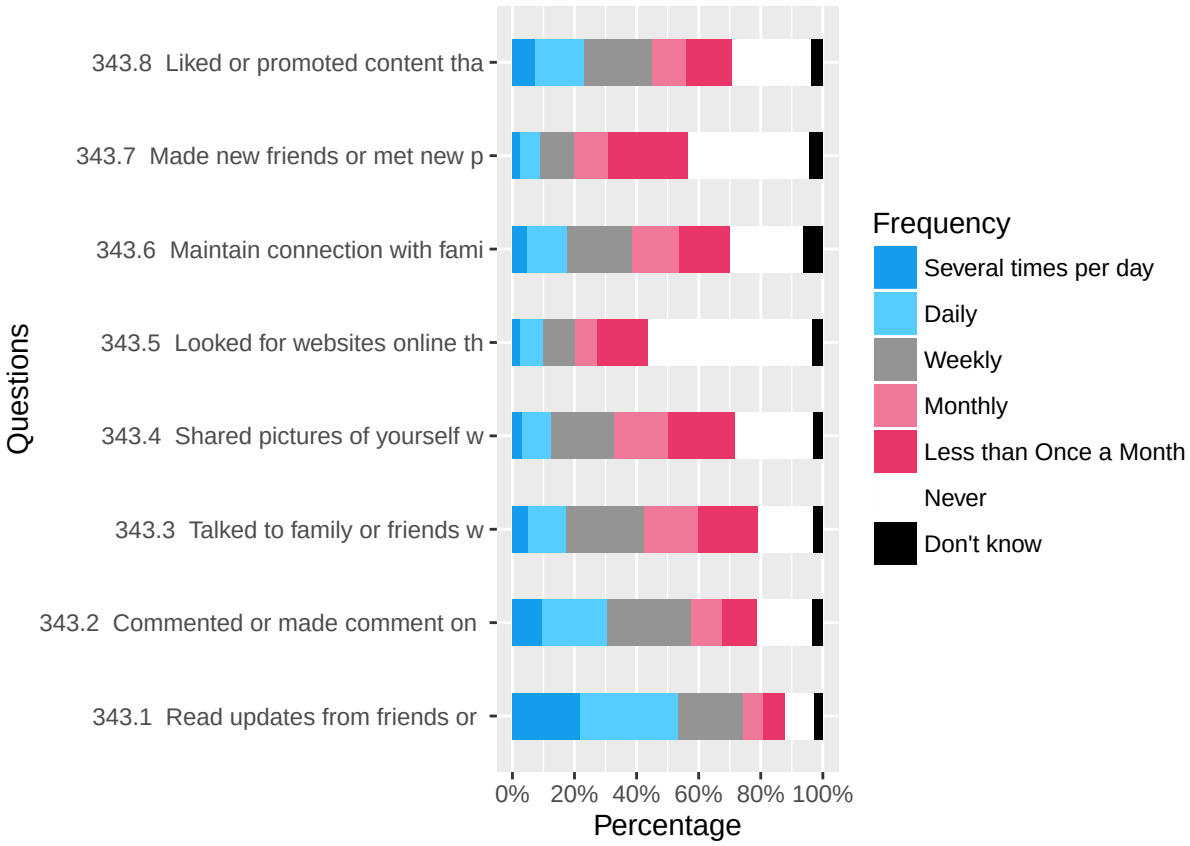


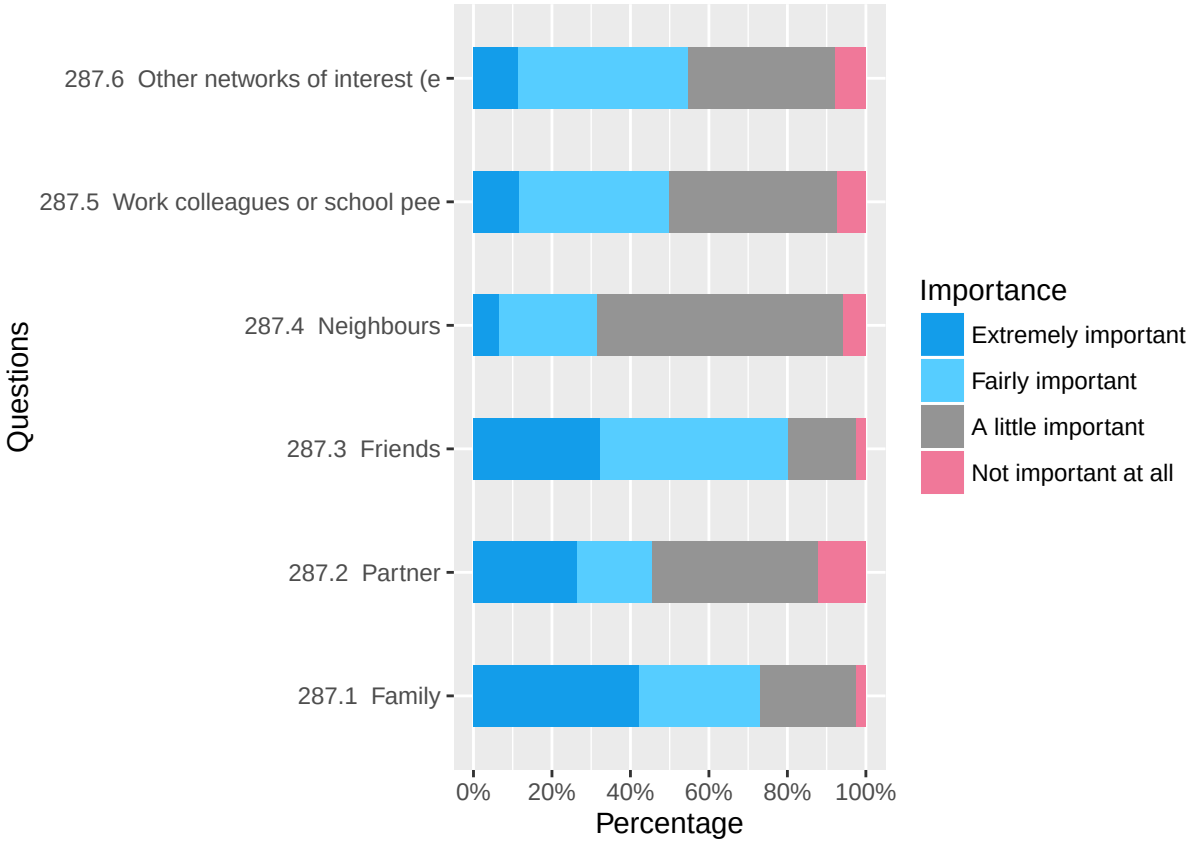
Willingness to engage with others



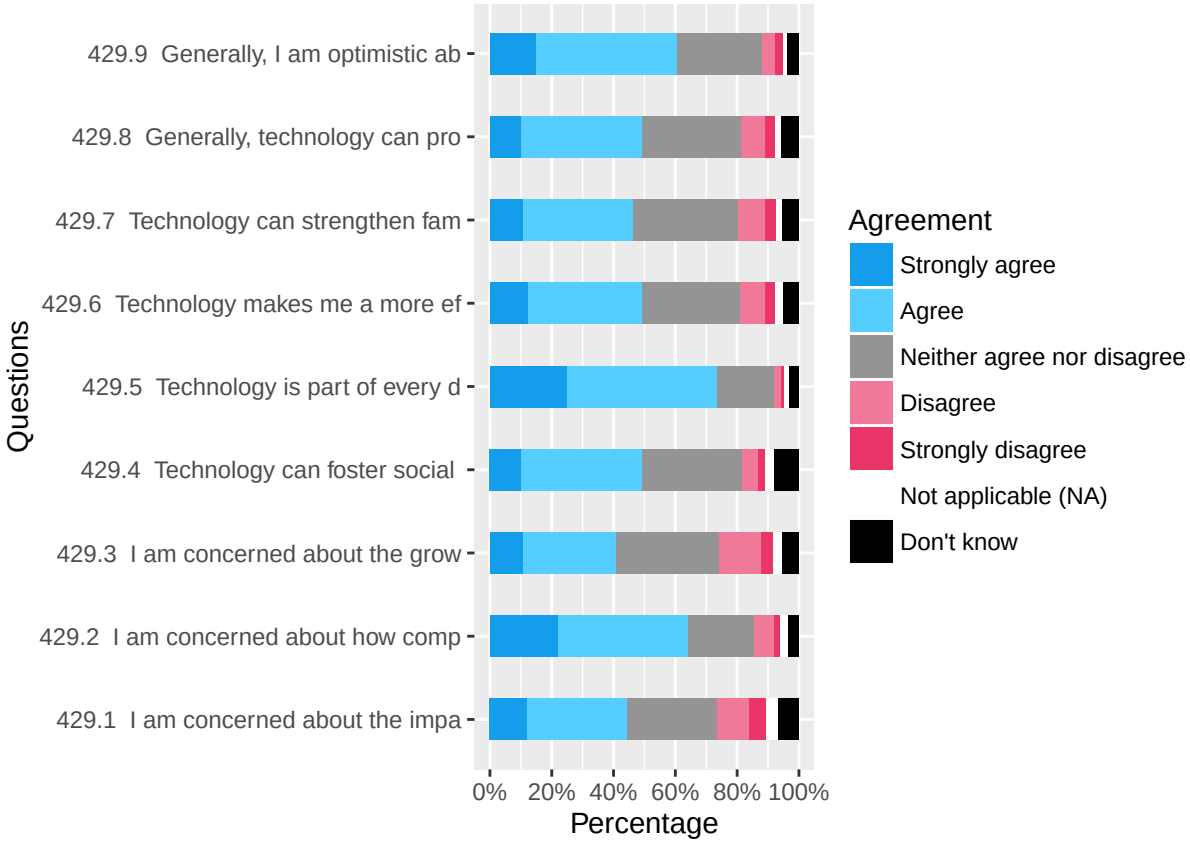
Social Connectedness

Maintaining connections


343.8 Liked or promoted content tha
343.7 Made new friends or met new p
343.6 Maintain connection with fami
343.5 Looked for websites online th
343.4 Shared pictures of yourself w
343.3 Talked to family or friends w
343.2 Commented or made comment on
343.1 Read updates from friends or
Questions
0% 20% 40% 60% 80% 100%
Percentage
Frequency
Several times per day
Daily
Weekly
Monthly
Less than Once a Month
Never
Don't know

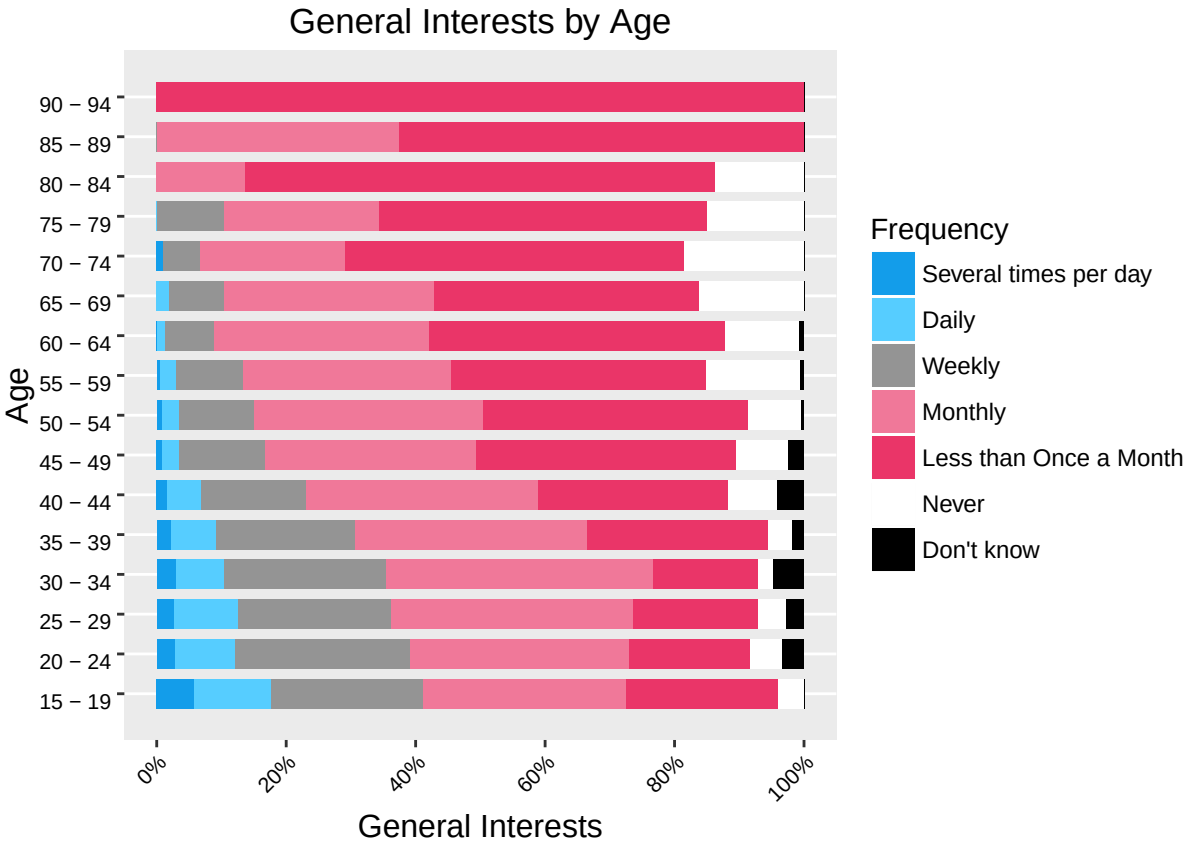

287.6 Other networks of interest (e
287.5 Work colleagues or school pee
287.4 Neighbours
287.3 Friends
287.2 Partner
287.1 Family
Questions
0% 20% 40% 60% 80% 100%
Percentage
Importance
Extremely important
Fairly important
A little important
Not important at all

Attitudes towards Technology



Overall results

Aggregated by age



Appendex 1 - Digital Capacities Index Survey

[Include Full Survey Here]

References

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

Humphry, Justine, and others. 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.