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Exploring New Zealand children's internet access, skills and opportunities

Evidence from Ngā taiohi matihiko o Aotearoa – New Zealand Kids Online

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What is this about?

This research report presents findings from a study that explores New Zealand children's internet access, online skills, practices, and opportunities. This report is part of Netsafe's research project Ngā taiohi matihiko o Aotearoa - New Zealand Kids Online, and our first publication as a member of Global Kids Online.

In September 2018, Netsafe, with the support of UNICEF NZ, joined Global Kids Online[1], an international network of academics, social researchers, and experts dedicated to the study of children's rights, risks and opportunities in the digital age. Global Kids Online's purpose is to generate rigorous cross-national research-based evidence regarding the way children access and use the internet and to understand the risks and opportunities of their interaction with digital tools.

Netsafe, meanwhile, is New Zealand's Approved Agency under the Harmful Digital Communications Act 2015. It has a statutory role to assist people making complaints about digital communications they claim have harmed them in some way, and to provide advice on policies for online safety and conduct on the internet.

Summary of findings

- Most New Zealand children have frequent access to the internet, with 77% saying they can often or always go online.

- The most common places for children to access the internet are at home (96%) and at school (89%).

- Children use multiple, preferably portable, digital devices to go online. Overall the most commonly used devices are laptop or notebook computers (76%), and smartphones (72%).

- However, among older children (15-17 years) smartphones are the most frequently used device (93%).

- Most children said they are confident about their digital skills.

- However, younger children (9-11 years) are less so than other age groups, particularly in regard to managing privacy.

- Most children use the internet for entertainment, learning, and socialising, e.g. 90% watched video clips at least once a week.

- However, children are much less likely to go online for community engagement, civic participation and creative opportunities, e.g. 15% created and shared their own video or music.

- Social media is ubiquitous among children of all ages who use these tools primarily for socialising and entertainment. There are some gender differences regarding social interaction through social media.

[1] An initiative of UNICEF's Office of Research-Innocenti, London School of Economics and Political Science (LSE), and EU Kids Online.

As part of its role, Netsafe also generates research-based evidence about the online experiences of New Zealanders which includes children. Consequently, by participating in Global Kids Online, Netsafe benefits from a research methodology that has been used internationally to carry out reliable and standardised national research with children and their parents. Critically, this will enable research results for New Zealand to be compared with those in other countries, increasing the value of these findings to the country as a whole, and complementing the research work that Netsafe already does with organisations in Australia and the UK. For Netsafe, being part of Global Kids Online similarly reflects its efforts to help to maximise digital opportunities for New Zealand children while preventing the impact of potential online harm.

This is why, with the implementation of Ngā taiohi matihiko o Aotearoa - New Zealand Kids Online, Netsafe has embarked on a research project exploring the online experiences of children aged 9-17, and their parents' views on managing the challenges that their children experience online. The findings from this project will not only inform our own internal practices and service delivery but also will provide insights for government, academics, and other professionals with an interest in online safety issues.

We believe that generating insightful, reliable evidence about New Zealand children's online experiences is vital to develop adequate support that reflects children's experiences and needs. This, in turn, will help them to manage online risks and potential harm from behaviours such as cyberbullying, harassment, and other forms of abuse and intimidation.

What we know so far

While children's interaction with digital technologies is a matter of interest in New Zealand, evidence based on nationally representative data about how integrated these tools are in children's everyday life is still limited in the country[2]. The few available studies have centred on technology access and use but measures of aspects such as skills and opportunities have been left unexplored. Also, to date, available evidence has concentrated on the online experiences of teenagers (see Broadcasting Standards Authority & NZ On Air, 2015; Pacheco & Melhuish, 2018) leaving gaps in our knowledge about younger children's interaction with their online environment.

For example, a study conducted in 2014 by the Broadcasting Standards Authority and NZ On Air on children's media consumption found that the most common devices that 6-14 year-olds used to access the internet were a computer or laptop (79%), tablet (59%), and smartphone (39%) and that the adoption of these tools was influenced by factors such as region, ethnicity and socio-economic status (Broadcasting Standards Authority & NZ On Air, 2015).

Recent evidence from the CensusAtSchool NZ project suggests that mobile technology ownership increases with children's age. Specifically, the study found that a quarter of Year 4 (about 8 years-old) students have their own mobile phone and that the rate increases to 68% for Year 7 (about 11 years-old) children. Meanwhile, owning a mobile phone is ubiquitous among those students (98%) in their final year of high school[3].

Regarding online activities, the Broadcasting Standards Authority and NZ On Air's study found that two-thirds of the children accessed the internet each day and that their most common activities were playing online games (76%) and watching YouTube videos (75%). However, the study's focus on media consumption, including traditional media such

as TV and radio, provides restricted insights about children's interactions with the digital environment.

On the other hand, there is little evidence about the places where children access more often the internet. However, a recent study by 20/20 Trust (2017) with principals from 464 schools indicates that children are connecting online mainly at home.

Meanwhile, in 2017, a Netsafe study of teens aged 14-17 years old found that they primarily use the internet for entertainment (e.g. playing games or streaming videos), socialising, and learning activities related to school and other training (Pacheco & Melhuish, 2018). This nationally representative study also revealed New Zealand teens' active engagement with social media tools, with 4 in 10 teens reporting using five or more platforms, with YouTube, Facebook, Snapchat and Messenger being the most popular. Interestingly, the study not only found gender differences regarding teens' preferences for specific online platforms but also how boys and girls use digital devices and the activities they undertake online (Pacheco & Melhuish, 2018). Similarly, the study found that while overall teens regarded themselves as confident technology users, Māori and Asian teens were less confident about their digital competencies compared to other ethnic groups (Pacheco & Melhuish, 2018). Despite these valuable insights, the study did not investigate the online experiences of younger children (13 years old and under). This unexplored aspect of New Zealand children's online experiences is a critical line of inquiry for research, policy and service provision as children's use of the internet evolves over time, with younger kids increasingly accessing and using a range of devices and online tools (Garside, 2014; Livingstone, Davidson, & Bryce, 2017).

What we did

This study is informed by the Global Kids Online methodology. We used its quantitative research tools[4] which include resources and guidance for conducting a modular survey that contains core, optional and adaptable questions. For this report, we describe children's answers to the Global Kids Online core questions regarding internet access (Module B), opportunities and practices (Module C), digital ecology (Module D), and skills (Module E) in the context of key demographics. While the core questions were kept stable for future comparability with studies carried out by other Global Kids Online member countries, the framework's flexibility allowed us to make minor changes to adapt questions to the New Zealand context (e.g. children's preferences for online platforms and apps). Then, these questions were cognitively tested with a small number of children and finally piloted before fieldwork started.

Fieldwork was carried out between 20 July and 30 September 2018 by Colmar Brunton's Social Research Agency. The study collected quantitative data from 2,061 New Zealand children aged 9-17 years old, using an online survey which took around 20 minutes.

The weighted sample is representative of the population of New Zealand children in terms of ethnicity, age, gender, and location with a maximum margin of error of +/- 2.2%[5]. In relation to the demographics of the sample, 51% of respondents were males and 49% females. In terms of age distribution, 9, 10, and 11-year-old participants represented 11%, 12% and 12% of the sample respectively. Children aged 12, 13 and 14 accounted for 10%, 13% and 8% of the sample. Finally, older teens, aged 15, 16 and 17 years, represented 9%, 12% and 11% of the total. In terms of ethnicity, the sample was distributed as follows: NZ European/Pākehā (73%), Māori (26%), Pacific (13%), Asian (15%), and "other ethnicity" (2%)[6].

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4 For further details about the quantitative tools see http://globalkidsonline.net/tools/survey/

5 +/-6.2% maximum error for each year of age, and +/-4.0% for each age group: 9-11, 12-14 and 15-17-year-olds.

6 Note that percentages in this report may not total exactly 100% due to rounding or because survey participants were allowed to choose multiple answers to some questions.

While this study has gathered valuable insights about the way New Zealand children interact with digital technologies, it is also important to acknowledge potential challenges and limitations. A common limitation of survey research is that it relies on self-reported data. Thus, there was a chance that children did not feel encouraged to provide accurate, honest answers and/or were not comfortable providing answers that presented themselves in an unfavourable manner. To manage this issue, we asked parents to allow their children to complete the survey alone. Due to the nature of the questions we also provided links to support services in case the children participating in the survey wished to seek advice or help.

What we found

This section presents the main findings of the study based on questions about children's internet access, digital ecology, digital skills, and opportunities and practice. Comparisons based on key demographics are presented, when relevant.

ACCESS

Most New Zealand children have regular access to the internet. The results show that nearly 8 in 10 children have access to the internet when they want or need to (either always or often) – see Figure 1. Specifically, about 44% of the
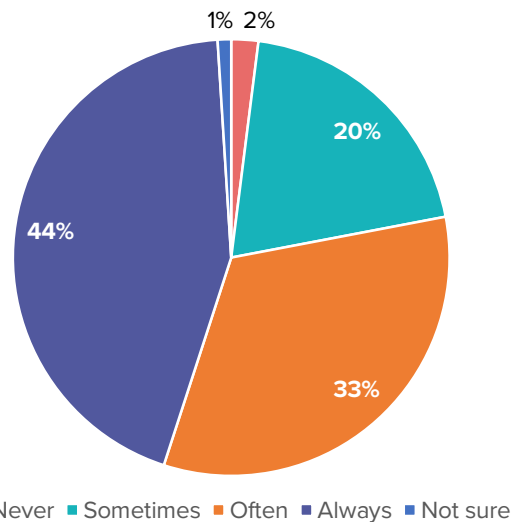

Figure 1. Children's self-reported internet access

Base: All children aged 9-17 (n=2,061)

children indicated that they "always" have access to the internet, while 33% said that this is "often" the case. For 20% of children, internet access only occurs "sometimes" and only 2% said they "never" have access to the online medium.

In terms of age, the findings show that the rate of internet access progressively increased with the age of the children from 9 to 17 years old. For example, 53% of 9-year-olds aged reported having access to the internet either always or often. In contrast, for older children, access was much more prevalent. For instance, 93% of 17-year-olds said they access the internet when they want or need to – see Figure 2. Note that
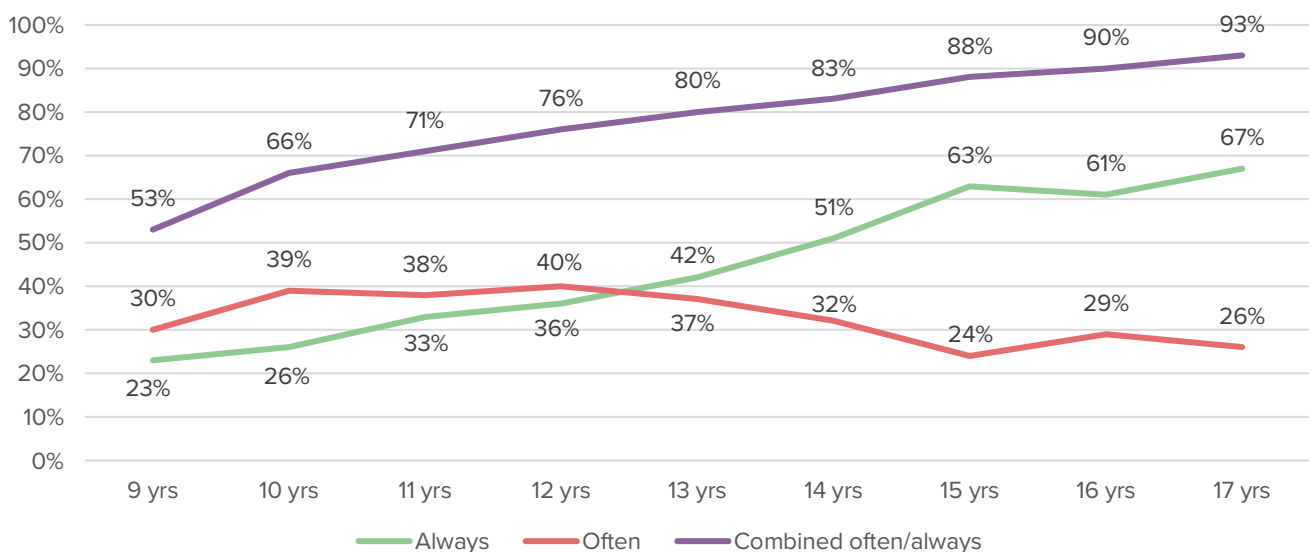

Figure 2. Children's self-reported internet access by age

Base: All children aged 9-17 (n=2,061)

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to facilitate graphical interpretation of findings Figure 2 does not include the responses "sometimes", "never", and "not sure".

An additional look at the data shows some interesting results regarding ethnicity. For instance, the rate of frequent internet access was higher among children who identified as Asian (83%) compared to other ethnic groups such as NZ European/Pākehā and Māori children, 77% and 78%, respectively. The rate for Pacific children who said they often/always access the internet was 71%.

In terms of gender, both boys (77%) and girls (78%) reported similar rates of internet access.

The survey also asked children about the places they most often use the internet. As shown in Table 1, most New Zealand children connect online at home and at school at least weekly. Specifically, it was more common for children to use the internet at home (96%) and then at school or college (89%). Less frequent was being online when they were "somewhere else by myself" (50%), in the "home of friends or relatives" (50%), "on my way somewhere" (37%), and "in a public place" (33%).

Table 1. Children's most common places of internet use at least weekly

Most common places of internet use	%
At home	96%
At school	89%
When I am somewhere by myself	50%
Home of friends or relatives	50%
When I am on my way somewhere	37%
In a public place	33%

Base: All children aged 9-17 (n=2,061)

There was no statistical difference between boys' and girls' internet use at home, (97% and 96% respectively). A similar pattern was found among children who identified themselves as NZ European/Pākehā (96%), Māori (96%) and Pacific (94%). Going online at home was slightly higher among Asian children (98%).

Further, in the context of age groups, our data show that access from home at least once a

week was also common for all three age groups (9-11, 12-14, and 15-17-year-olds) with over 90% primarily connecting online at home – see Figure 3 for details. In this respect, 98% of children aged between 15 and 17 years old reported using the internet at home, while for those aged 12-14 the proportion was 97%. For younger children (9-11 years old) internet access at home was slightly lower (94%) but still significant compared with the other age groups.
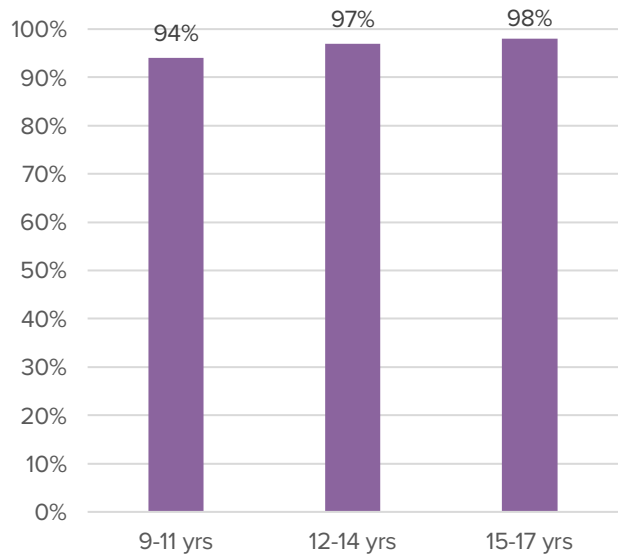

Figure 3. Children's internet use at home at least weekly by age group

Base: All children aged 9-17 (n=2,061)

Differences in internet access at school between each age group were not particularly large – see details in Figure 4. Specifically, 87% of 9-11-year-olds accessed the internet from school compared to 91% of those aged 12-14 and 89% of older children (15-17 years old).

When looking at the pattern regarding internet access at school by gender, the difference was not significant between boys (89%) and girls (88%).
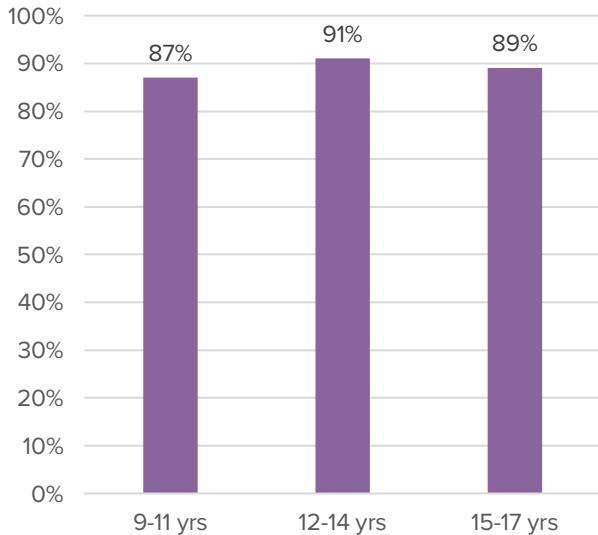
Figure 4. Children's internet use at school/college at least weekly by age group

Base: All children aged 9-17 (n=2,061)

We also asked children about the type of devices they use to go online at least once a week. To collect this data, they were presented with a list of devices, such as smartphone, to select from. To facilitate understanding of the question, especially among younger children, the list included examples of popular brands representing each type of device. In addition, the list included graphics depicting the devices on the list.

As Table 2 shows, most New Zealand children reported using portable or mobile technologies to go online at least once a week. In more detail, 76% of children said they use a laptop or notebook to navigate the internet. A smartphone (72%) was the second most frequently used device. It was less common to go online using a tablet (48%), desktop computer (46%), games console (38%) or a smart TV (37%).

Table 2. Children's overall use of devices to access the internet at least weekly

Type of device	%
Laptop or notebook computer	**76%**
Smartphone	**72%**
Tablet	48%
Desktop computer	46%
Smart TV	38%
Games console	37%

Base: All children aged 9-17 (n=2,061)

Our data also shows some interesting differences in the devices boys and girls used to go online. The use of smartphones was higher among girls (76%) compared to boys (70%). However, boys' use of a games console (55%) was significantly higher than girls (21%). There was also a 10% difference in boys' use of a desktop computer (50%) compared to girls' (40%). For further details about the use of other types of device see Table 3.

Table 3. Children's use of devices to access the internet at least weekly by gender

Type of device	Boys	Girls
Laptop or notebook computer	75%	78%
Smartphone	70%	**76%**
Tablet	47%	49%
Desktop computer	**50%**	40%
Smart TV	37%	37%
Games console	**55%**	21%

Base: All children aged 9-17 (n=2,061)

Next, Figure 5 depicts results about the main devices used by children to access the internet based on age group.
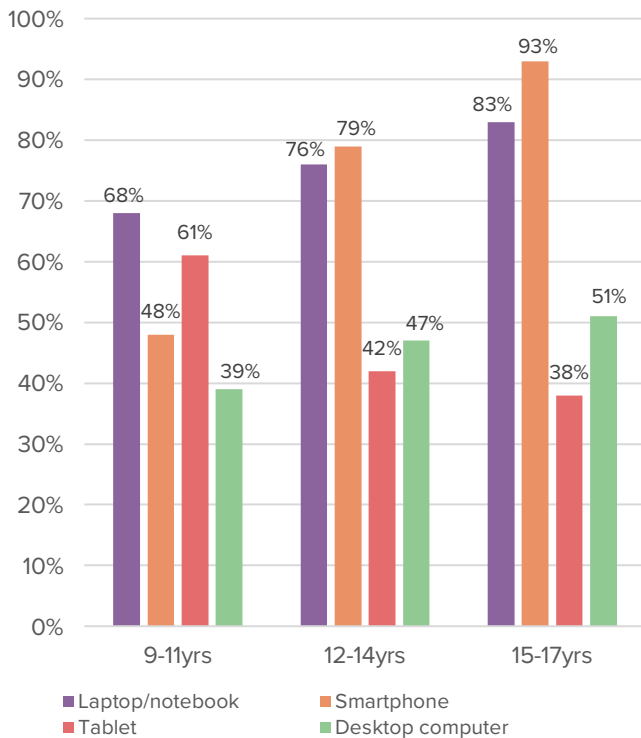
Figure 5. Children's use of devices to access the internet at least weekly by age group

Base: All children aged 9-17 (n=2,061)

Overall the figure shows that children's use of portable devices (except for tablets) increases according to their age. For example, 68% children aged 9-11 years old and 76% of children between 12 and 14 used a laptop or notebook computer to go online at least weekly compared to 83% of their older peers (those aged 15-17). On the other hand, the use of a smartphone was more common among older children with 93% of 15-17-year-olds using this type of device to navigate the internet, followed by those aged 12-14 years old (79%). In contrast, nearly 5 in 10 of children aged between 9 and 11 years old used a smartphone at least once a week to go online. Interestingly, it was more common for younger children to use a tablet to access the internet. For example, 61% of children aged between 9 and 11 years old used a tablet for this purpose at least once a week. This result contrasted significantly with those from children aged 12-14 (42%) and older children aged 15-17 years old (38%) – see Figure 5 for details.

DIGITAL ECOLOGY

In addition to the use of devices and the places of frequent internet use, the survey also asked New Zealand children about their interaction with online platforms and services. Specifically, we asked children about their use of a range of websites and apps. We provided them with a list of options, following the Global Kids Online framework. These included a search engine (e.g. Google), social networking site (e.g. Facebook), instant messaging apps (e.g. Snapchat), video-hosting website (e.g. YouTube), photo and video-sharing apps (e.g. Instagram), online encyclopaedia (e.g. Wikipedia) and gaming sites (e.g. Minecraft). The results are presented in Table 4.

Table 4. Children's preferred websites and apps

Use of websites and apps	%
YouTube	81%
Google	64%
Instagram	41%
Messenger	37%
Facebook	36%
Snapchat	36%
Minecraft	26%
Wikipedia	18%
Other	9%
Discord	7%
None of these	1%

Base: All children aged 9-17 (n=2,061)

When looking at children's interaction with these websites and apps, YouTube was reported as the most popular online platform with 8 in 10 children using the video sharing website regularly. The Google search engine was the second most popular tool among children (64%) followed by the photo sharing app Instagram (41%). Other social networking sites and apps were also experiencing significant use among participants: Messenger (37%), Facebook (36%), and Snapchat (36%). About 9% of children said they use other tools not listed in the options such as Roblox,

Fortnite, Netflix, Spotify, and Musical.ly – see Table 4 for details.

Our data also shows boys' and girls' preferences for these websites and apps - see Table 5 for details. For example, instant messaging apps were more popular among girls compared to boys. In this respect, girls' use of Snapchat (44%) and Messenger (41%) was higher than boys', 28% and 34%, respectively.

Table 5. Children's preferred websites and apps by gender

Use of websites and apps	Boys	Girls
YouTube	83%	79%
Google	65%	63%
Facebook	35%	38%
Messenger	34%	**41%**
Instagram	34%	**49%**
Minecraft	**32%**	19%
Snapchat	28%	**44%**
Wikipedia	19%	16%
Discord	11%	3%
Other	8%	11%
None of these	1%	1%

Base: All children aged 9-17 (n=2,061)

A similar trend was found in relation to the use of photo sharing app Instagram. About 49% of girls were users of the app compared to 34% of boys. In contrast, the use of online gaming site Minecraft was more popular among boys (32%) than girls (19%). Discord, another gaming-related app, was also more popular among boys (11%) than among girls, only 3%.

On the other hand, while YouTube was consistently popular across all age groups, children's preferences for other websites and apps differed. For example, the use of Facebook was higher in older children, especially those aged 16 and 17 years old (75% for both ages). Regarding instant messaging applications, children's use of Snapchat and Messenger steadily increased among those aged 14 and over. In this respect, while nearly half of 14-year-old children used both apps, three quarters of those aged 17 years old

indicated their preferences for these digital tools. Regarding Instagram, 2 in 3 children aged between 14 and 17 years old said they use the photo and video-sharing app.

DIGITAL SKILLS

We also asked children about their skills, competencies and literacies regarding their internet use. This section of the survey covers these aspects by exploring children's operational skills, informational/browsing skills, social skills, creative skills and skills related to using mobile devices. To do so, we provided them with a list of ten statements about what they can do and how they do it online and asked them how true these statements were. Our measure included the following agreement scale: "not true for me", "a bit true for me", "fairly true for me", and "very true for me". Overall findings about New Zealand children's digital skills are presented in Table 6.

Regarding operational skills, 3 in 4 children (75%) reported they knew how to save a photo they found online while just over 6 in 10 children (62%) reported knowing how to change privacy settings in platforms and devices. When asked about their information/browsing skills, children also reported a significant level of confidence. For example, 57% indicated that it was easy for them to check if the information they found online is true. Perceptions were even higher when children reported that they found it easy to choose the best keywords for online searches (67%). Our findings also suggest that children were more confident in terms of their social skills when using the internet. In this sense, about 8 in 10 of them (82%) said they knew which information they should and shouldn't share online. Similarly, 7 in 10 children (71%) indicated how to remove people from their contact lists. On the other hand, while still significant, the level of confidence of New Zealand children about their creative skills was lower compared to other competencies. For instance, 57% said they knew how to post online videos or music that they have created themselves. However, 40% reported to know how to edit or make basic changes to online content that others have created. Finally, when

asked about their mobile skills, over 8 in 10 children (84%) felt confident about how to install apps on a mobile device (for example, phone or tablet). However, they were not as confident about how to keep track of the costs of mobile app use with nearly half of them knowing how to do this (47%).

Table 6. Children's perceived digital skills

Children's perceived digital skills	Fairly true/very true
Operational skills	
I know how to save a photo that I find online	75%
I know how to change my privacy settings (e.g., on a social networking site)	62%
Information/browsing skills	
I find it easy to check if the information I find online is true	57%
I find it easy to choose the best keywords for online searches	67%
Social skills	
I know which information I should and shouldn't share online	82%
I know how to remove people from my contact lists	71%
Creative skills	
I know how to post online videos or music that I have created myself	57%
I know how to edit or make basic changes to online content that others have created	40%
Mobile skills	
I know how to install apps on a mobile device (e.g., phone or tablet)	84%
I know how to keep track of the costs of mobile app use	47%

Base: All children aged 9-17 (n=2,061)

Our data also show some differences when looking at the demographics. For example, in terms of children's gender, girls (65%) reported a slightly higher rate of knowledge about changing privacy settings on devices compared to boys (61%). In contrast, when asked about knowing how to edit or make basic changes to online content created by others, 42% of boys

answered that this was fairly true or very true for them compared to 39% of girls.

In terms of ethnicity, a look at children's knowledge about managing privacy settings shows that Māori (66%), Asian (64%), and NZ European/Pākehā (63%) were more confident about this specific skill, while Pacific children (59%) were less confident. When asked whether they find it easy to check if the information they find online is true, Asian (60%) and NZ European/Pākehā (58%) children indicated that this was fairly or very true followed by Māori (56%) and Pacific children (52%).

We were also interested in age differences regarding the skills of children to manage privacy-related issues. Figure 6 shows that 9-11-year-olds were significantly less confident about knowing how to change their privacy settings in platforms (29%) and how to remove people from their contact list (41%) compared with their peers aged 12-14 and 15-17. Although 71% of children said they know what information they should or should not share online, the rate was lower than in older children.
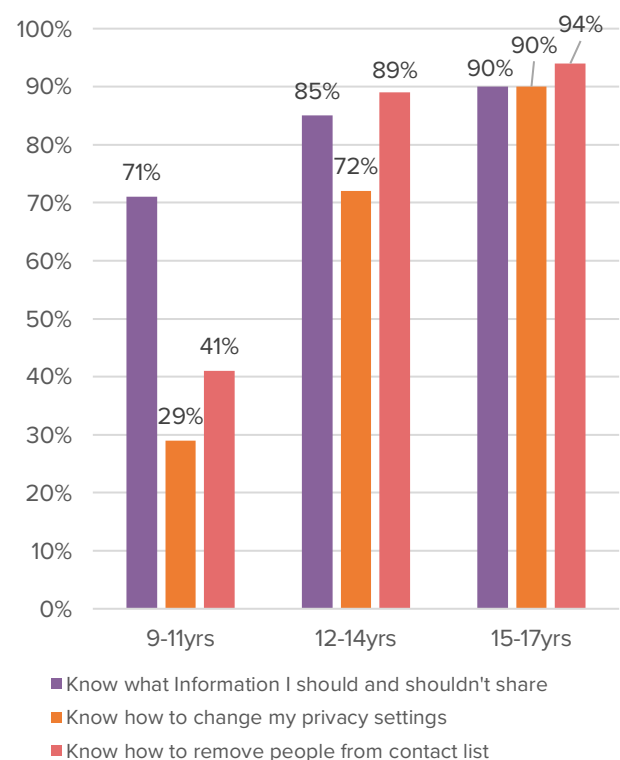

■ Know what Information I should and shouldn't share
■ Know how to change my privacy settings
■ Know how to remove people from contact list

Figure 6. Children's perceived digital skills by age group - privacy

Base: All children aged 9-17 (n=2,061)

OPPORTUNITIES AND PRACTICE

This part of the report describes children's responses regarding online opportunities and practices. Its purpose is to explore the extent to which children experience the internet as a positive environment, and the diverse online practices they undertake in relation to learning, community and civic participation, creativity, social practices, entertainment, and personal activities.

As Table 7 shows, online activities related to entertainment were significantly popular among children. In this respect, a large majority of children, 9 in 10, reported they use the internet to watch videos at least every week. Also significant among children was playing online games (67%). Similarly, learning something new by searching online was also high among children (74%). On the other hand, the use of the internet for social practices was significant but less popular than entertainment activities. For example, 52% of children said they visited a social networking site such as Facebook at least once a week. The use of instant messaging apps such as WhatsApp, Snapchat or Viber for social relationship purposes was also common among children (53%), followed by the use of photo and video sharing apps such as Instagram or Musical.ly (46%), while 41% said they use online tools (e.g. Skype) to talk to friends or family who live further away.

However, far fewer children used the internet for other online activities such as community, civic engagement, and creative practices. As Table 7 depicts, fewer children went online to search for information about what was happening in their neighbourhood (27%) or talk to people from places or backgrounds different from theirs (27%). A similar pattern was found when children were asked whether they use the internet to discuss political or social problems with other people online (13%). What's more, overall our data show that for children the internet was much less popular for creative activities. In this respect, only 1 in 10 children indicated having created their own blog, story or website online, while creating their own video, uploading and sharing it was a practice

Table 7. Children's online activities at least weekly

Online activities	At least weekly
Learning	
I learned something new by searching online	**74%**
I looked for information about work or study opportunities	40%
Community	
I searched for information about what was happening in my local neighbourhood	20%
I used the internet to talk to people from places or backgrounds different from mine	27%
Civic	
I looked at news online	37%
I discussed political or social problems with other people online	13%
Creative	
I created my own video or music and uploaded it to share	15%
I created my own blog or story or website online	11%
Social	
I visited a social networking site (e.g., Facebook, Google+)	52%
I talked to friends or family who live further away (e.g., Skype)	41%
I used instant messaging (IM) (e.g., Viber, WhatsApp, Snapchat)	53%
I used a photo and video sharing tool / app (e.g., Instagram, Musical.ly)	46%
I used an anonymous messaging service for personal feedback (e.g., Sarahah)	10%
Entertainment	
I watched video clips (e.g., on YouTube)	**90%**
I played online games	67%
Personal	
I looked for health information for myself or someone I know	17%
I participated in a site where people share my interests or hobbies	30%

Base: All children aged 9-17 (n=2,061)

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undertaken by 15% of children.

Interestingly, our data show some gender differences regarding the way boys and girls interact with the internet for social and entertainment activities (see Figure 7). For example, the use of photo and/or video sharing apps (e.g. Instagram, Musical.ly) was significantly more popular among girls (54%) compared to boys (37%). A similar pattern was found regarding engagement with instant messaging apps (e.g. Viber, WhatsApp, Snapchat). About 60% of girls reported using these tools compared to 48% of boys. Gender differences were also found in relation to the use of video calling tools and social networking sites for socialising activities, but they were less marked. For example, more girls (43%) reported talking to friends or family who live further away via tools such as Skype compared to boys (37%). Similarly, socialising through social networking sites (e.g. Facebook) was slightly higher in girls (54%) than boys (50%). Regarding entertainment activities, both boys and girls equally enjoy watching videos online, with 9 in 10 in each group engaging in this activity. In contrast, for boys (79%), it was far more popular to play online games than for girls (54%) – see details in Figure 7.
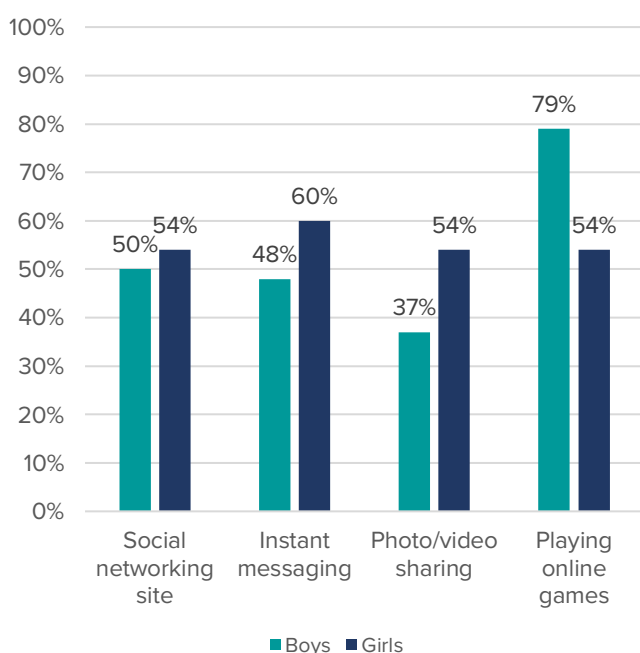
On the other hand, when children were asked whether they looked for health information for their personal use or someone they know, 21% of girls indicated they do so at least once a week compared to 16% of boys. Our data show no significant differences regarding the use of the internet for learning, community participation, civic engagement and creative activities in terms of children's gender.

As shown in Figure 8, when disaggregated by age, a closer look at the data shows that far fewer younger children (9-11-year-olds) used social networking sites, instant messaging apps and photo/video sharing tools compared with older children. Our results show that, overall, the biggest jump in the use of the internet for social activities occurred among children aged 12 and 14 years old and that the upward trend
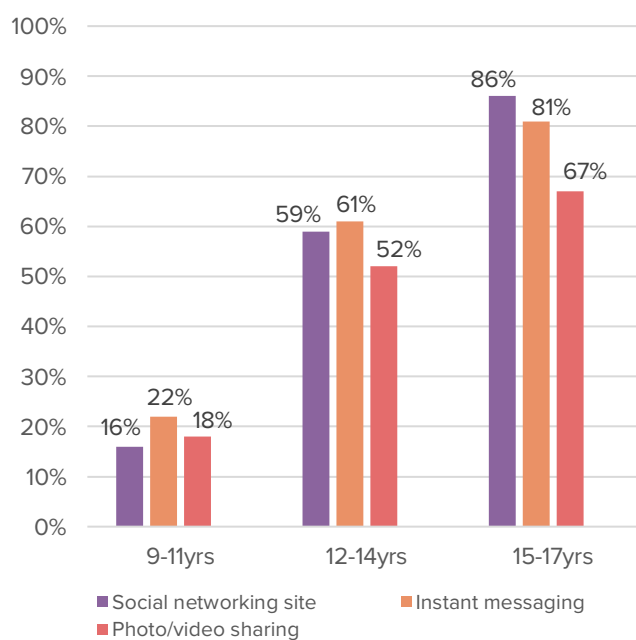
Figure 8. Children's online activities at least weekly by age – socialising

Base: All children aged 9-17 (n=2,061)

On the other hand, Figure 9 shows some interesting results regarding children going online for entertainment purposes. For instance, watching online videos was a popular activity across all ages with 86% of 9-11-year-olds doing it, while 12-14 and 15-17-year-olds reported a slightly higher rate, both 91%.
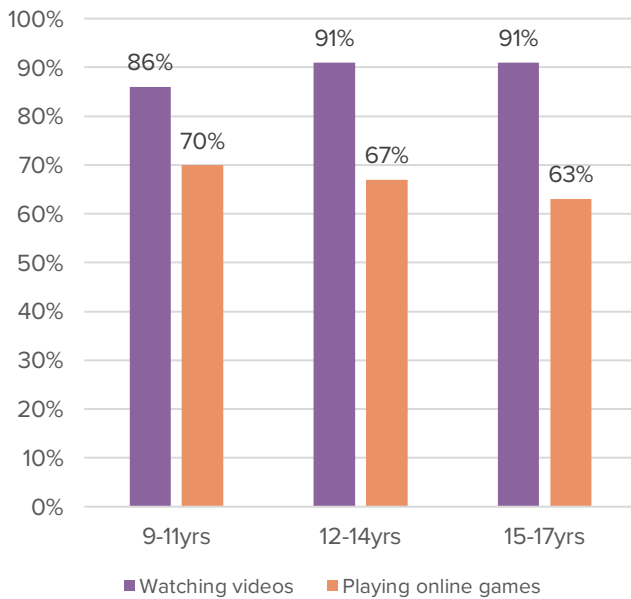
Figure 7. Children's online activities at least weekly by gender – socialising and entertainment

Base: All children aged 9-17 (n=2,061)

Figure 9. Children's online activities at least weekly by age – entertainment

Base: All children aged 9-17 (n=2,061)

Regarding playing an online game, 70% of younger kids (9-11) reported engaging in this activity at least weekly. Older children tended to play online games slightly less: 67% for those aged 12-14 and 63% for 15-17 years old.

Concluding remarks

This report has presented findings from a quantitative study that explored New Zealand children's access, use, skills and opportunities in the context of digital technologies. The findings complement and echo the results from a previous Netsafe study with older New Zealand children (aged 14-17)[7]. Furthermore, these findings expand current understanding on the topic as it includes results from younger children (9-13-year-olds). In a time when more children are using and interacting through digital technologies, there is a need for robust research-based evidence about the risks and opportunities of the internet in order to promote and ensure children's safety, wellbeing and rights in the digital age. This report, the first Netsafe publication as a member of Global Kids Online, addresses the evidence gap and provides policy makers, service providers, educators and parents with useful statistical

insights that reflect the New Zealand context on the basis of nationally representative data.

CHILDREN'S INTERNET ACCESS

To start with, the study provides insights about how often New Zealand children (aged 9-17) access the internet, the places they most commonly connect online, and the digital devices they use to connect. The data show that most children, nearly 8 in 10, report frequent access (always or often) to the online medium. While this rate is high, the fact that some children are still unable to go online frequently might have implications for their online inclusion and participation in activities such as education and learning. The results also show that a large majority go online mainly at home (96%) and then school (89%). Regarding children accessing the internet mainly from home, this finding reflects a similar trend reported by other Global Kids Online participating countries[8].

DIGITAL DEVICES USED TO GO ONLINE

With respect to the use of digital devices, New Zealand children access the internet through a range of tools. Furthermore, their preference for portable devices, such as laptops, tablets and smartphones, is evident in our study. This finding is not a surprise and confirms an international trend (see Anderson & Jiang, 2018; Byrne, Kardefelt-Winther, Livingstone, & Stoilova, 2016). However, while portable devices can make the internet accessible from anywhere and its use more personalised, it may also challenge the effort of parents to guide and support their children in navigating the online environment (Byrne et al., 2016).

It is interesting to find that, in general, New Zealand children access the internet more frequently via a laptop or notebook computer than with a smartphone. This finding contrasts with results from other Global Kids Online participating countries who report higher internet access through smartphones (see

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[7] The study is entitled *New Zealand teens' digital profile: A factsheet*. See https://www.netsafe.org.nz/youth-factsheet-2018/

[8] In most participating countries over 90% of children use the internet from home at least weekly, excepting Ghana and the Philippines. For research results from each participating country visit http://globalkidsonline.net/results/

Byrne et al., 2016). Considering that the second most common place for New Zealand children to access the internet is school, an explanation for this finding might be the long-standing policy to promote digital learning in the school setting.

Further, the types of device children use to access the internet differs depending on their age and gender. For example, the use of smartphones was most prevalent among 15-17-year-olds, while tablets were used more often by younger children (9-11). In terms of gender, it was more common for boys to use a games console and/or a desktop computer, while girls' use of smartphones was higher. In this sense, the findings suggest that guidance and support provided to children by parents, schools, and other support organisations could be tailored considering children's age and gender. In doing so, it will not only reflect children's preferences for specific digital devices (as is discussed below for online activities) but also could facilitate the effective delivery of, and access to, support.

DIGITAL SKILL LEVELS VARY WITH AGE

There is another important conclusion related to New Zealand children's online skills. While they largely regard themselves as confident internet users, perceived digital skill varies with age. In particular, there is a gap in confidence between the youngest age group (9-11 years) compared to those aged 12 and older. For example, the results show that 9-11-year-olds are significantly less confident about knowing how to change their privacy settings and how to remove people from their contact list. They also show that, while comparatively higher, these younger children still have less knowledge of what kind of information should and shouldn't be shared online than that of older children.

Younger kids' lack of confidence in skills to manage their privacy online has implications for their online safety. As research shows, while young skilled internet users might be more exposed to risks, those with limited digital competencies are more likely to experience harm due to those risks (Sonck & de Haan, 2013).

With regard to older children, this study also contributes to the understanding of New Zealand teens and privacy in the digital environment. As reported, a large majority of older children said they are confident about how to change their privacy settings online, remove people from contact list, and know what kind of information should and shouldn't be shared online. These findings suggest that teens are aware of privacy risks online. Since the inception of social media platforms there has been some discussion around the *privacy paradox*, in which teens say they care about their privacy but still openly share their personal information online (Hargittai & Marwick, 2016). Evidence from previous Netsafe research with teens aged 14-17 supports our interpretation of findings about young people's privacy awareness. These studies show that teens are largely not involved in risky behaviours such as sharing nudes of themselves online (Pacheco & Melhuish, 2017) or use strategies such as creating multiple profiles in platforms to deal with spam while keeping privacy settings up to date (Ministry for Women, 2017). Teens seem to care about and act on their online privacy in their own terms (boyd, 2014; Webster, 2016), but future research needs to explore how effective these actions are in relation to dealing with risks and managing potential harm.

To sum up, these findings add to the growing research evidence challenging assumptions in policy and practice that there is a new generation of young people who have been immersed in digital technologies from an early age and, as a result, have developed a set of skills and acquired specific behaviours that older generations lack. Some people use terms such as *digital natives* (Prensky, 2001) or the *Net Generation* (Tapscott, 2009) to refer to this generation of young people. Rather, these competencies are, as some argue, developed over time through children's online experiences and interaction with digital tools (see Helsper & Eynon, 2010; Kirschner & De Bruyckere, 2017).

CHILDREN AND SOCIAL MEDIA

Our findings also provide a 'big picture' view of the ubiquity and use of social media[9] among New Zealand children. Social media is argued to present opportunities for children with regard to entertainment, the presentation of the self, study and learning, the construction and maintenance of new and existing social connections, access to peer support, and the management of privacy and intimacy (Lenhart, Smith, Anderson, Duggan, & Perrin, 2015; Livingstone & Brake, 2010; Pacheco & Melhuish, 2018). In our results, social media, particularly social networking sites, instant messaging apps and photo sharing tools, plays a significant socialising role for children, especially among those aged 12 and older. What is more, the use of social media for entertainment purposes is even more prevalent across all age groups. In this respect, a large majority of children not only use social media platforms to watch videos but most of them also enjoy playing online games. Social media use also differs with the gender of the children. For example, for girls it was more common to use instant messaging and photo sharing apps for socialising and connecting with peers and friends. In contrast, boys reported a higher use of social media tools for entertainment purposes, in particular for playing online games. These findings mirror prior New Zealand-based research on patterns of online activity with regard to teens' age and gender (Ministry for Women, 2017; Pacheco & Melhuish, 2018).

However, it is also important to note that there is not a "bright line" between socialising and entertainment activities. This is, to a large extent, because *media convergence* (see Meikle & Young, 2011) enables different uses of media content and technologies but also practices. For example, while instant messaging might primarily meet children's needs for social connectedness, it can also be a vehicle for entertainment. Similarly, both online gaming and watching videos can involve social interaction as social media that focuses on entertaining

also allows socialising through synchronous communication features.

Similarly, the opportunities brought by social media potentially open the doors, on the other hand, to online safety risks and challenges for children. For example, our findings show that teens are not the only ones embracing social media for entertainment purposes, with a large majority of younger children also engaged with these tools. As a large number of younger children watch online videos or play online games, there is a chance they are exposed to explicit violent and sexual content online. Likewise, as teenage girls, for example, are more likely to enjoy instant messaging and photo sharing tools, there are risks of being the subject of cyberbullying, online grooming, any form of image-based sexual abuse and/or digital self-harm (Pacheco & Melhuish, 2017; Pacheco, Melhuish, & Fiske, 2019). These and other risks pose valid concerns for parents as well as challenges for policy makers, researchers, educators, and support service providers. As Livingstone and Brake (Livingstone & Brake, 2010) suggest, addressing these challenges will require, among others, a balanced reflection and link between the opportunities and risks of social media, an understanding of children's literacy demands in response to the changing development of technology, and the responsibility of other key players, not only parents and children themselves, in helping to prevent and manage online risks.

A LADDER OF ONLINE PARTICIPATION

While New Zealand children are embracing the capabilities of digital technologies for entertainment, learning, and socialising, there are still some online opportunities not being fully realised. Specifically, our study shows much lower use of the internet for community engagement, civic participation and creative activities by children. This finding reflects those from a recent Global Kids Online study about children's online participation in Bulgaria, Chile, and South Africa (Livingstone et al., 2019). The mentioned study found a *ladder* of online

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[9] For a definition of social media see https://en.wikipedia.org/wiki/Social_media

participation in which children report undertaking certain activities online more frequently compared to others. In other words, it seems that due to lack of motivation, skills or support to engage in digital activities, some children do not climb the ladder to benefit from opportunities such as community and civic engagement (Livingstone et al., 2019).

The idea of the ladder of online participation also raises questions for policy and research. For instance:-

- Why aren't New Zealand children engaging in community, civic participation and creative activities?
- What online activities do we expect children to be engaged in?
- What are the outcomes we desire to see from children's online activities?
- To what extent do their current digital experiences prepare children to climb the ladder of online participation?
- What additional guidance and support might children need to help them climb the ladder?

While answering these questions will require further policy discussion and the adoption of inter- and multidisciplinary research approaches, it should be noted that Global Kids Online acknowledges that the list of online activities could expand and change over time depending on children's needs and the support and role adopted by adults in mediating children's interaction with digital technologies (Livingstone et al., 2019).

Further, this study's results highlight a dilemma familiar to parents, teachers and others working to support children's safe access to digital opportunities: How do we simultaneously maximise children's online opportunities and safety while minimising online risks?

What's next?

In the coming months Netsafe will be publishing more findings from Ngā taiohi matihiko o Aotearoa - New Zealand Kids Online. Our forthcoming releases will address topics such as children's experiences of online risk, and parent's mediation and efforts to support their child to navigate the online environment.

Netsafe provides a collection of online safety resources. They are free and available to all New Zealanders. These resources can be found at: https://www.netsafe.org.nz/the-kit/resource-centre/

Netsafe also provides resources specifically developed for educators at: https://www.netsafe.org.nz/the-kit/

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