

NEW ZEALAND WORK RESEARCH INSTITUTE

THE WORLD INTERNET PROJECT NEW ZEALAND 2021



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DISCLAIMER

The views expressed are those of the authors and do not necessarily reflect the views of the organisations involved.

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1 Introduction

The ubiquity and extended use of the internet exert an increasing influence on our social, political and economic lives. Globally, an estimated 66% of the world population were internet users, as of March 2021 (Internet World Stats, 2021). The World Internet Project (WIP) investigates the evolution of this technology, focusing on areas such as: use of the internet, online privacy and security issues and concerns, the internet's influence on political power, freedom of speech over the internet and social interactions. In this iteration of survey in New Zealand (WIP-NZ 2021), we also investigate the impact of the NZ March-April 2020 COVID-19 lockdown on internet use.

1.1 The World Internet Project

WIP was launched in 2000 by the Center for the Digital Future, at the University of Southern California, Annenberg School for Communication and Journalism. Currently, WIP is an international collaboration, with surveys conducted by partners across 38 countries.

The survey is based around a set of common questions, agreed to by all partners and updated regularly. The purpose of these common questions is to provide context and comparability between participating countries. While these questions are common to surveys conducted by all partners, each partner has the opportunity to ask additional questions relevant to their national context.

The common questions for the WIP-NZ 2021 survey cover the following aspects:

- Personal details such as: employment/student status, gender, age, marital status, income.
- Whether the person is an internet user¹, and for how long.
- For those who do not use the internet, why they do not.
- How the internet affects political involvement, civic engagement and the perceived power of individuals.
- Reliability of information on the internet.
- Online privacy issues, concerns and consequences of security breaches.
- Frequency of internet use for a range of tasks.
- Freedom of speech over the internet.
- The impact of social media.
- The threats of automation on employment.

¹ WIP classifies anyone who has used the internet in the past three months as a 'user'.

1.2 The World Internet Project in New Zealand

This is the seventh iteration of WIP to run in NZ since 2007. In recent years, WIP-NZ has built upon the common questions, adding further detail to various areas such as disability, access and support. In this version of the survey, we also investigate the impact of COVID-19 and the March-April 2020 national lockdown on these use patterns. This work summarises key statistics from the data and is not primarily focused on how multiple indicators are linked; further work is needed to investigate the possible connections across various factors.

This report focuses on the findings in this latest iteration of the survey and does not link back to compare to past trends. Given the number of iterations conducted in New Zealand, we plan to produce a separate brief (forthcoming) on trends over time.

1.3 Summary of key findings

1.3.1 User vs non-user divide

- There are clear differences in user status across household income categories. The lowest household income group of under \$30,000 is made up of 13% non-users; this number falls dramatically as household income rises to between 0-1% for income categories above \$50,000.
- There does not appear to be an urban/rural connectivity divide. 6% of those in urban areas are non-users, whereas the comparable number for rural individuals is 5%. These ratios however do not speak to internet quality or reliability.
- The breakdown of users and non-users is very similar across ethnic groups.
- Age is clearly related to non-user status. The proportion of non-users in each age category from 16-24 through to 55-64 ranged between 2% and 5%; whereas non-users comprised 16% of those aged over 65. Almost two thirds of this age group indicated the reason was that the internet had no purpose.
- 35% of users mainly connected to the internet using their home connection. The most common type of home connection was Fibre/Broadband (69%).
- Between 53% and 63% of users indicated that they didn't intend to change how much they use the internet for communication, information, entertainment, transactions, and learning.

1.3.2 Impacts of COVID-19

- 17% of users received some form of internet support during the March-April 2020 lockdown. The majority of this support (54%) came from family members and/or friends.
- 25% of those who received support had household income of \$100,001 or more per year. The second largest household income group that received support (21%) were those at the other end of the income spectrum below \$30,000.
- Between one third (32%) and a half (54%) of respondents used the internet more during the lockdown than after for communication, information, entertainment and transactions. Interestingly, the comparable figure for learning purposes was only 26%. Results point to much of the increase in internet activity during lockdown being temporary in nature.

• As a direct result of the COVID-19 lockdown, almost one in five users (19%) made or received a voice or video call over the internet for the first time; and 17% of users used the internet to look for news for the first time.

1.3.3 Internet experiences and attitudes

- 40% of users reported being contacted by someone online asking for bank or personal details. While most users who had their privacy violated online reported that it was not really a problem, or minor in nature (65%).
- Although 54% believe that there is no privacy online, almost 70% of users take some steps to protect their privacy on the internet.
- Despite 61% of respondents either somewhat or strongly agreeing that they feel comfortable speaking their mind about politics, only 33% agreed that it was safe to do so online.
- The majority of respondents (64%) agreed that people like them can better understand politics by using the internet, while only 12% disagreed.
- Almost 60% of respondents stated that social media companies like Facebook, Twitter and TikTok ought to be more strongly regulated than they are now. This is consistent with the 30% of respondents who believe that these companies have made the world a worse place.
- Of disabled respondents, just 8% indicated that their use or experience on the internet could be enhanced with additional help or equipment, while 22% did not know. This result signals that individuals may not be aware of what help or assistance may exist. Approximately a half (49%) of the disabled respondents indicated that using the internet has improved their quality of life and or social interactions, with a further 23% saying that the internet had no/a neutral impact.

2 WIP-NZ 2021

2.1 Sampling methodology

The WIP-NZ 2021 was conducted as a two-stage survey facilitated by Qualtrics.² The data collection process started in July of 2020 and finished in May of 2021. The first stage's sole objective was to screen for the percentage of New Zealanders using and not using the internet. This stage was conducted entirely through Computer Assisted Telephone Interviews (CATI), with respondents selected through Random Digit Dialling (RDD) split across landlines and mobile throughout the country.³ If the respondent was over the age of 16, they were then asked whether they were an internet user, or had been in the last three months, while also capturing a small selection of demographic details (age, gender and region).

The rationale behind determining the non-user rate in stage one lies with the use of CATI versus online surveys. The use of online surveys to determine the non-user rate introduces significant sample selection bias, as non-users are unlikely to have access to the survey. On the other hand, the costs associated with using CATI to conduct the full range of questions across the desired number of respondents of WIP-NZ 2021 makes this method prohibitively expensive.

The focus on a single variable in stage one (i.e., internet use) means that an appropriate level of statistical confidence can be achieved with a smaller sample size. The first stage of WIP-NZ 2021 was solely to determine the rate of non-users. This figure was then used to determine the number of CATI interviews to be targeted at non-users in stage two.⁴ These non-user responses were entered directly into the online portal by interviewers. Users were asked to complete the survey via the same online portal as used by interviewers. Conditional routing was built into the survey portal ensuring that each type of respondent was asked the appropriate questions.

Previous studies indicate that landline connectivity has been declining, with this rate falling from 91.6% in 2006 to 85.5% in 2013, and 65% in 2015, with connectivity concentrated on older age groups (Smith, 2015). Heavier sampling of mobile users was used to offset this age bias to some degree. However, low response rates from mobile calls limited the extent to which we could survey mobile phone users. The final split of mobile to landline is approximately 40% and 60%, respectively.

For the stage two survey, users were drawn from a range of online panel database providers contacted through Qualtrics as well as random digit dialled CATI respondents. This stage was targeted at specific quotas of ethnicity, age and region (with priority in that order) based on New Zealand Census (2018) data to ensure that the stage two sample was nationally representative. The quotas are listed in Table 1. Non-users were random digit dialled CATI respondents; a portion of these respondents also took part in stage one survey.

² Qualtrics is an American experience management company who specialise in survey software.

³ The final split between successful landline and mobile CATIs is as close as possible to 50/50.

⁴ Some non-users contacted during stage 1 subsequently answered the full stage 2 survey, administered via CATI.

There were some challenges to fulfilling the ethnicity quota for the Pacific community, since their participation was relatively low. In order to increase the number of Pacific respondents, we engaged key leaders from government, business and the community to share the survey and encourage greater Pacific engagement. This approach resulted in a substantial increase in the response rate from Pacific participants. In future iterations of the survey, we plan to build this engagement with key leaders into the plan earlier in the process.

Variable	Quota	Actual
Ethnicity		
European	62.3%	62.2%
Māori	14.7%	15.8%
Pacific Peoples	7.2%	6.6%
Asian	13.4%	12.3%
Middle Eastern/Latin American/African	1.3%	1.6%
Other Ethnicity	1.1%	1.6%
		n=2,063
Age		
16-24	17.4%	15.3%
25-34	15.2%	15.5%
35-44	17.0%	18.0%
45-54	17.8%	17.9%
55-64	14.6%	14.3%
65+	18.0%	18.9%
		n=2,064
Region		
Northland	4%	4%
Auckland	33%	30%
Waikato/ Bay of Plenty	17%	15%
Gisborne/ Hawke's Bay	5%	5%
Taranaki/Manawatū-Whanganui	7%	7%
Wellington	11%	12%
Top of South/West Coast	4%	6%
Canterbury	13%	13%
Otago/ Southland	7%	8%
		n=2 051

Table 1. Demographic variables, target quotas and actual sample

Notes: The different sample sizes for each variable are explained by the 'don't know / prefer not to answer' responses.

3 Internet connectivity, access and use

3.1 Non-users

3.1.1 Non-users

Our sample is made up of 94% users and 6% non-users as determined by stage one of the project. The non-user sample equates to 118 individuals. We define non-users as individuals which fall into one of the following categories:

- Never used the internet (n=100)
- Previously used the internet but not in the last 3 months (n=18)

Non-users make up between 2% and 16% of each age group and increase dramatically in the over 65 age group as illustrated in Figure 1.5



Figure 1. Percent of users and non-users by age

Notes: N= 2,063

We defined ethnicity by asking respondents to select the ethnicity they most associated with, as well as all ethnicities they considered relevant to them. Where respondents did not choose a prioritised ethnicity but did indicate some ethnicity preferences, a prioritised ethnicity was assigned to them according to StatsNZ level 1 prioritised ethnicities. Figure 2 shows that the breakdown of users vs non-users is very similar across ethnic groups. It is worth noting that 62.5% of users identified as European.

⁵ The majority of non-users (53%) were 65 and above. The next largest age groups were those between 55 and 64 years old and those between 25 and 34, at 14% and 12% of non-users, respectively.



Figure 2. Percent of users and non-users by ethnicity

Notes: MELAA = Middle Eastern/Latin American/African. The 'Preferred not to answer' and 'Not applicable' categories were omitted (non-user n=5, user n=3). n= 2,063.

As figure 3 shows, there are clear differences in user status across household income categories. The lowest household income group of under \$30,000 has 13% of this group as non-users; and this number falls dramatically as household income rises, with between 0 -1% for any of the income categories above \$50,000. It is also notable that a quarter of non-users fell into the 'don't know' category for their household income, with an additional 11% preferring not to answer this income question.





Notes: Categories 'Don't know' (non-user n=13, user n=101) and 'Prefer not to answer' (non-user n=29, user n=174) were omitted. n= 2,063.

Figure 4 illustrates the percent of users and non-users living in rural vs urban areas. There is little difference by this form of regional split, 6% of those in urban areas are non-users, whereas the comparable number for rural individuals is 5%.



Figure 4. Percent of users and non-users by rural vs urban areas

Notes: Rural n= 153, urban n= 1,808.

3.1.2 Reasons for non-use

The most reported reason for not using the internet was that it had no purpose, meaning that a large proportion of non-users did not feel like the internet could be useful to them. As illustrated in figure 5, the second most common reason was age, followed by not enough knowledge of the internet and disability or illness. While not shown in figure 5, almost two thirds (64%) of those that indicated no purpose in using the internet were aged over 65.





Notes: A total of 163 reasons were given by 94 respondents, as this question allowed up to 6 reasons per respondent. Other reasons given for not using the internet were: no time, not safe and other.

As shown in figure 6, just over a third of the non-users (36%) out of 118 respondents, indicated that nothing would help them become internet users. This response is consistent with the reasons given for non-use in figure 5, as many respondents (22%) stated 'no purpose' as the reason they didn't use the internet.



Figure 6. Help needed to become an internet user

Notes: The 'Don't know' and 'Prefer not to answer' categories were omitted and made up 2% and 1% of non-users respectively.

3.2 Connection & internet use

Individuals who identified as internet users were asked about their connectivity and device usage, as we report next.

3.2.1 Frequency and connection

Table 2 shows how long users have been using the internet for. Over half (56%) of internet users report having used the internet for 15 years or more. Only a small proportion of the respondents have used the internet for less than 4 years (8%) or more than 30 years (5%).

Table 2. Time using the internet	
Time	% of users
Less than a year	3%
1 – 4 years	5%
5 – 9 years	13%
10 – 14 years	21%
15 – 19 years	17%
20 – 24 years	26%
25 – 29 years	8%
30+ years	5%
	n= 1,907

Most users connected to the internet using their home connection (35%) or data from a mobile phone service provider (29%). The most common type of internet connection users had in their homes was ultra-fast broadband/fibre, as illustrated in Figure 7.



Figure 7. Type of internet connection at home

Notes: The 'Prefer not to answer' (n=1) and 'None' (n=2) categories were omitted, and both made up 0% of users. n= 1,826.

3.2.2 Device and frequency

The survey asked individuals how often they used a computer (desktop or laptop), phone, or tablet/e-reader to connect to the internet. Table 3 summarises the results.

Device	Never	Less than monthly	Monthly	Weekly	Daily	Several times a day
Computer (deskton /lanton)	5%	4%	2%	9%	24%	56%
Phone	5%	2%	1%	3%	21%	67%
Tablet/e-reader	41%	10%	4%	12%	15%	15%

Table 3. Frequency of internet use by device type

Notes: The 'Don't know' and 'Prefer not to answer' categories were omitted and made up between 1% and 3% of responses. Percentages sum horizontally. For each device type n= 1,964.

Figure 8 illustrates that most users who connected using multiple devices used both a phone and a computer (desktop or laptop). It is interesting to note that 29% of respondents connected through all three device types at least once a day.

Figure 8. Use of multiple devices at least once a day



4 Usage patterns and activities

The survey next investigates usage patterns and activities based on five themes: communication, information, entertainment, transactions, and learning. These themes are comprised of several specific activities. We ask users how frequently they performed each of these activities, as well as whether they would like to do less/more or the same in the future.

4.1 General use

Only a small proportion (17%) of users reported that they did not need any help in order to do more online activities in general. For the rest, as Table 4 illustrates, there is a wide spread of help users reported would increase their use of the internet. Two popular answers were 'cheaper cost associated with internet use' and 'better security and ways of protecting my identity'.

Table 4. Help needed to do more online activities

Type of help	% of respondents
Nothing	17%
Cheaper cost associated with internet use	13%
Better security and ways of protecting my identity	13%
More time	11%
Training/getting support	11%
Understanding more about the benefits	10%
Better/more reliable connection available	9%
Better hardware or software	9%
Better access to computers or devices through community facilities	6%
	n=3,971

Notes: The 'Other' category was omitted and made up 1% of responses. Respondents could select all items that applied to them, a maximum of nine per respondent.

Figure 9 summarises respondents' intentions to learn new digital skills. Just over a quarter of users (27%) indicated that they wished to learn how to use new digital tools more.

Figure 9. Intention to learn how to use new digital tools

I would like to learn how to use new digital tools such as saving information to the cloud...



Notes: 'Less' includes 'A little less' and 'A lot less'; 'More' includes 'A little more' and 'A lot more'. 'Don't know' and 'Prefer not to answer' responses are omitted, they make up 9% and 2% of the sample, respectively. n=1,964.

4.2 Communication

We next show, in Table 5, how often respondents engaged in the listed communication activities at the time of the survey. Over 40% of respondents used email and message/chat services several times a day, making these two the most common communication activities reported by internet users.

Communication activity	Never	Less than monthly	Monthly	Weekly	Daily	Several times a day
Send/receive e-	1%	2%	4%	12%	31%	49%
mails	(15)	(39)	(/1)	(243)	(610)	(957)
Send direct messages/chat	5% (102)	4% (88)	3% (59)	12% (236)	29% (574)	44% (872)
Make or receive	13%	14%	11%	28%	20%	12%
voice or video calls over the internet	(260)	(268)	(216)	(543)	(391)	(244)
Post your own	19%	23%	16%	23%	10%	6%
content	(372)	(454)	(323)	(446)	(204)	(123)
Re-post/share links or content created	17% (338)	21% (417)	14% (271)	22% (423)	14% (284)	9% (178)

Table 5 Communication activities (n = 1.964)

Notes: The 'Don't know' and 'Prefer not to answer' categories were omitted and made up between 1% and 3% of responses. Percentages sum horizontally. Sample sizes in brackets.

In terms of whether respondents want to change their communication frequency, as illustrated by figure 10, most respondents (56%) reported that they wanted to use the internet for communication 'about the same' as they already did. A small proportion (9%) wanted to reduce their use while 27% wished to use it more.

Figure 10. Intention to change internet use for communication purposes

I would like to communicate, create and share content online...



Notes: 'Less' includes 'A little less' and 'A lot less'; 'More' includes 'A little more' and 'A lot more'. 'Don't know' and 'Prefer not to answer' responses are omitted, they make up 6% and 1% of the sample, respectively. n=1,964.

4.3 Information

With the exception of 'look for news' and 'look for other information', most respondents reported doing information-seeking activities online 'less than monthly' or 'never', as highlighted in Table 6. Perhaps not surprising due to COVID-19, a large proportion of respondents, 34%, indicated that they look for travel information less than monthly.

Information activity	Never	Less than monthly	Monthly	Weekly	Daily	Several times a day
Look for news	4%	6%	5%	17%	37%	29%
	(84)	(109)	(92)	(330)	(735)	(574)
Look for travel information	16%	34%	20%	16%	8%	4%
	(313)	(661)	(383)	(323)	(152)	(82)
Look for jobs, work	28%	25%	11%	15%	11%	7%
	(558)	(487)	(215)	(288)	(219)	(130)
Look for health	9%	28%	21%	23%	11%	4%
information	(177)	(551)	(422)	(455)	(214)	(80)
Interact/access central government services	13% (259)	37% (719)	23% (460)	14% (282)	6% (109)	4% (73)
Interact/access local	24%	40%	17%	9%	4%	3%
government services	(464)	(781)	(326)	(178)	(82)	(50)
Look for other	2%	7%	8%	21%	32%	26%
information	(47)	(138)	(164)	(414)	(623)	(513)

Table 6. Information activities (n = 1,964)

Notes: The 'Don't know' and 'Prefer not to answer' categories were omitted and made up between 2% and 4% of responses. Percentages sum horizontally. Sample sizes in brackets.

Figure 11 shows that the majority of respondents (86%) would like to use the internet for information purposes at least the same amount as currently, if not more frequently.

Figure 11. Intention to change internet use for information purposes

I would like to source information such as news, travel, government services, jobs, health...



Notes: 'Less' includes 'A little less' and 'A lot less'; 'More' includes 'A little more' and 'A lot more'. 'Don't know' and 'Prefer not to answer' responses are omitted, they make up 5% and 1% of the sample, respectively. n=1,964.

4.4 Entertainment

As shown in Table 7, most respondents played games online (46%), downloaded or listened to music (42%), and downloaded or watched videos (46%) at least daily. For the remaining activities, most respondents indicated that they 'never' engaged in them online.

Table 7. Entertainment activities (n = 1,964)						
Entertainment activity	Never	Less than monthly	Monthly	Weekly	Daily	Several times a day
Play games online	25% (484)	10% (197)	6% (113)	12% (244)	26% (505)	20% (394)
Download/listen to	15%	13%	10%	19%	25%	17%
music	(287)	(262)	(195)	(378)	(490)	(327)
Download/watch	12%	11%	8%	22%	27%	19%
videos	(234)	(215)	(165)	(425)	(523)	(372)
Look at religious/	56%	17%	8%	10%	8%	1%
spiritual content	(1,099)	(228)	(151)	(197)	(155)	(70)
Take part in	67%	9%	6%	9%	4%	3%
religious/spiritual	(1,307)	(178)	(126)	(173)	(70)	(55)
Take part in online	61%	12%	7%	9%	6%	2%
exercise classes	(1,197)	(229)	(137)	(186)	(114)	(40)
Attend music	82%	5%	4%	3%	2%	2%
rehearsals	(1,607)	(95)	(69)	(65)	(42)	(34)
Bet, gamble, or	63%	11%	7%	11%	3%	2%
enter sweepstakes	(1,244)	(211)	(131)	(211)	(66)	(44)
Look at sites with	60%	12%	7%	10%	4%	2%
sexual content	(1,183)	(236)	(138)	(191)	(82)	(37)
Use online dating	80%	6%	3%	3%	3%	2%
sites	(1,572)	(111)	(64)	(65)	(57)	(32)

Notes: The 'Don't know' and 'Prefer not to answer' categories were omitted and made up between 1% and 5% of responses. Percentages sum horizontally. Sample sizes in brackets.

The majority of respondents (81%) also wished to use the internet for entertainment either the same or more in the future.

Figure 12. Intention to change internet use for entertainment purposes

I would like to use the internet for personal entertainment such as music, movies, gambling...



Notes: 'Less' includes 'A little less' and 'A lot less'; 'More' includes 'A little more' and 'A lot more'. 'Don't know' and 'Prefer not to answer' responses are omitted, they make up 5% and 2% of the sample, respectively. n=1,964.

4.5 Transactions

Table 8 shows that the use of the internet for transaction purposes varies greatly depending on the specific activity. For example, 46% of respondents 'Pay bills/do e-banking' weekly, but only 8% 'Invest in stocks/funds/bonds'.

Table 8	. Transaction	activities	(n =	1,964)
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Information activity	Never	Less than monthly	Monthly	Weekly	Daily	Several times a day
Get information	4%	11%	13%	36%	22%	12%
about a product	(76)	(214)	(254)	(710)	(430)	(228)
Buy things	7%	22%	32%	28%	5%	3%
	(143)	(432)	(632)	(545)	(99)	(63)
Make travel reservations/ bookings	27% (522)	46% (912)	13% (252)	6% (118)	2% (49)	2% (39)
Pay bills/do e-	7%	6%	23%	46%	12%	4%
banking	(130)	(116)	(461)	(900)	(234)	(83)
Invest in	62%	11%	10%	8%	4%	2%
stocks/funds/bonds	(1,226)	(218)	(189)	(150)	(72)	(40)
Compare prices of products/services	11%	18%	23%	29%	11%	5%
	(210)	(355)	(459)	(564)	(221)	(98)
Sell things	34%	33%	14%	10%	3%	2%
	(658)	(656)	(280)	(194)	(66)	(41)

Notes: The 'Don't know' and 'Prefer not to answer' categories were omitted and made up between 2% and 6% of responses. Percentages sum horizontally. Sample sizes in brackets. For each communication activity n=1,964.

Figure 13. Intention to change internet use for transaction purposes

I would like to complete transactions such as banking, buying, selling and/or comparing products...



Notes: 'Less' includes 'A little less' and 'A lot less'; 'More' includes 'A little more' and 'A lot more'. 'Don't know' and 'Prefer not to answer' responses are omitted, they make up 4% and 1% of the sample, respectively. n=1,964.

4.6 Learning

A large proportion of respondents indicated that they never used the internet to participate in formal learning for a qualification/job training, or to get information for schoolwork or study-related work. Table 9 shows the online learning activities respondents engaged in and the frequency of these activities.

Table 9. Learning activities (n = 1, 964)

Learning activity	Never	Less than monthly	Monthly	Weekly	Daily	Several times a day
Look up a definition of a	10%	18%	17%	29%	15%	8%
word	(190)	(350)	(343)	(564)	(301)	(160)
Find/check a fact	6%	14%	15%	32%	22%	9%
	(124)	(268)	(286)	(629)	(423)	(177)
	. ,	. ,	. ,	. ,	. ,	
Get information for	44%	13%	8%	14%	11%	7%
schoolwork or study-	(859)	(247)	(161)	(273)	(223)	(138)
related work						
Participate in formal	56%	14%	7%	8%	7%	4%
learning for an academic	(1,107)	(271)	(141)	(155)	(144)	(80)
degree/iob training		- *		. ,	. ,	

Notes: The 'Don't know' and 'Prefer not to answer' categories were omitted and made up 3% of responses. Percentages sum horizontally. Sample sizes in brackets.

Figure 14. Intention to change internet use for learning purposes

I would like to use the internet for learning such as definitions, work training, school/study...



Notes: 'Less' includes 'A little less' and 'A lot less'; 'More' includes 'A little more' and 'A lot more'. 'Don't know' and 'Prefer not to answer' responses are omitted, they make up 9% and 2% of the sample, respectively. n=1,964.

5 COVID-19 impacts

As an extension to the WIP common questions, we also asked respondents how the COVID-19 lockdown of March-April 2020 affected their use of the internet. In addition to asking about support during the COVID-19 lockdown, we also asked respondents to compare their internet use during and before the lockdown to their current use (at the time of the survey - i.e. six months or more after the lockdown) of the internet. This question was asked for each of the five themes (communication, information, entertainment, transactions, and learning) covered in Section 4. This part of the survey therefore captures both immediate effect the lockdown had on their use and the changes in internet use after the lockdown.

5.1 Support during COVID-19 lockdown

We asked users if they received any internet-related support during the lockdown. A small proportion, 17%, indicated that they received some form of support (examples detailed below), and 77% did not. It is important to note, however, that this does not indicate how many users would have liked or needed support during the lockdown. Amongst those that received support, the most frequent form was devices (24%) followed by software/apps to help them work from home (20%). Figure 15 illustrates the other forms of support users reported.



Figure 15. Internet-related support received during the lockdown

Notes: 'Don't know' and 'Prefer not to answer' responses are omitted, each make up 2% of the sample. n= 537.

The top three sources of help were:

- Family members and/or friends (54%)
- Work/place of employment (21%)
- Government ministry/organisation (17%)

Other sources of help were charity/non-government organisations (3%) and other (5%).

As shown in figure 16, a quarter of those who received support had household income of \$100,001 or more per year. The second largest household income group were those at the other end of the income spectrum – below \$30,000.



Figure 16. Support received by household income

Note: n=334

5.2 Communication

We asked users about their use of the internet for communication purposes both before and during the lockdown, relative to now (at the time of the survey). Illustrated in figure 17, a balance was struck between those who were using the internet, at the time of the survey, for communication less than they did before the lockdown (25%), and those who were using it more (24%). Interestingly 50% of respondents were using the internet for communication the same as prior to the lockdown. This question captures the medium-to-long-term change in internet use, beyond any temporary shifts that occurred during the lockdown period.

Unsurprisingly, compared to their use at the time of the survey, the majority of users (54%) indicated that they used the internet for communication more during the lockdown.

Figure 17. Changes in internet use for COMMUNICATION due to lockdown

My use BEFORE lockdown compared to my use now...



Notes: 'Less' includes 'A little less' and 'A lot less'; 'More' includes 'A little more' and 'A lot more'. 'Don't know' and 'Prefer not to answer' responses are omitted, they make up 1% and 0% of the sample, respectively. n=1,964.

An additional impact of the lockdown period includes the uptake of new internet activities for communication. As shown in Table 10, the majority of respondents (62%) used the internet for communication purposes in a new way. The most common communication purpose used for the first time was making and receiving voice and video calls (19%).

Types of communication	% of respondents
None	38%
Make/receive voice or video calls over the internet	19%
Send direct messages/chat	15%
Send/receive emails	14%
Post your own content	9%
Re-post/share links or content	5%
	n= 2,957

Table 10. New COMMUNICATION uses as a result of the COVID-19 lockdown

5.3 Information

As shown in figure 18, 22% of users were using the internet, at the time of the survey, for information less than they did before the lockdown and 21% were using it more. Just over 50% of respondents were using the internet for information the same as prior to the lockdown.

Compared to their use at the time of the survey, an almost equal proportion of users indicated that they either used the internet for information more or the same during the lockdown.

Figure 18. Changes on internet use for INFORMATION due to lockdown

My use BEFORE lockdown compared to my use now...



Notes: 'Less' includes 'A little less' and 'A lot less'; 'More' includes 'A little more' and 'A lot more'. 'Don't know' and 'Prefer not to answer' responses are omitted, they make up 2% and 1% of the sample, respectively. n=1,964.

Over three-quarters (76%) of respondents used the internet for new information-seeking purposes as a result of the lockdown. The most common new information-seeking activity was looking for news online (17%), followed closely by looking for health information (16%).

Types of information	% of respondents
None	24%
Look for news	17%
Look for health information	16%
Look for other information	11%
Look for jobs/work	9%
Interact with/access central government services	9%
Look for travel information	6%
Interact with/access local government services	6%
	n=3.608

Table 11. New INFORMATION uses as a result of the COVID-19 lockdown

5.4 Entertainment

We asked respondents about their use of the internet for entertainment both before and during the lockdown relative to the time of the survey. Almost 60% of respondents were using the internet for entertainment about the same before lockdown as they did at the time of the survey.

However, an almost equal proportion of users indicated that they either used the internet for entertainment more or the same during the lockdown compared to their use now.

Figure 19. Changes on internet use for ENTERTAINMENT due to lockdown

My use BEFORE lockdown compared to my use now...





Notes: 'Less' includes 'A little less' and 'A lot less'; 'More' includes 'A little more' and 'A lot more'. 'Don't know' and 'Prefer not to answer' responses are omitted, they make up 3% and 1% of the sample, respectively. n=1,953.

As Table 12 shows, between 12% and 13% of respondents started using the internet for online gaming and downloading music or videos for the first time because of the lockdown. Only 2% of respondents tried online dating for the first time, and 34% didn't try any new types of online entertainment.

Types of information	% of respondents
None	34%
Play games online	13%
Download/listen to music	12%
Download/watch videos	12%
Take part in religious/spiritual services	6%
Take part in online exercise classes	6%
Look at religious/spiritual content	5%
Bet, gamble, or enter sweepstakes	5%
Look at sites with sexual content	3%
Attend music rehearsals	2%
Use online dating sites	2%
	n=3,248

Table 12. New ENTERTAINMENT uses as a result of the COVID-19 lockdown

5.5 Transactions

Most respondents (62%) use the internet for transactions about the same now as they did before the lockdown. As figure 20 shows, the remaining respondents are split evenly between using it more (18%), and less (17%).⁶ Only 9% of users used the internet for transactions less during the lockdown than their use at the time of the survey.

Figure 20. Changes on internet use for TRANSACTIONS due to lockdown

My use BEFORE lockdown compared to my use now...



Notes: 'Less' includes 'A little less' and 'A lot less'; 'More' includes 'A little more' and 'A lot more'. 'Don't know' and 'Prefer not to answer' responses are omitted, they make up 3% and 1% of the sample, respectively. n=1,964.

⁶ Of note is that over this period NZ banks announced the end of transactions through physical cheques, potentially influencing some individuals to use the internet for transactions more than before irrespective of the lockdown.

Almost 40% of respondents did not start using the internet for any new transaction activities. The most common new activity, as shown in Table 13, was buying things online, with 14% of respondents indicating they did this for the first time as a result of the lockdown.

Types of information	% of respondents
None	39%
Buy things online	14%
Get information about product online	12%
Pay bills online/do e-banking	12%
Compare prices of products/services online	8%
Make travel reservations/bookings online	5%
Invest in stocks/funds/bonds online	5%
Sell things online	4%
	n=3,029

Table 13. New uses for TRANSACTION purposes as a result of the COVID-19 lockdown Types of information % of responde

5.6 Learning

Continuing the theme from the previous sections, figure 21 shows that most respondents (64%) have continued using the internet for learning about the same as they did before lockdown. Again, the proportion who were using it more and those using it less before is very similar to those who were using it more. Almost 60% of respondents did not change their use for learning during the lockdown.

Figure 21. Changes on internet use for LEARNING due to lockdown

My use BEFORE lockdown compared to my use now...



Notes: 'Less' includes 'A little less' and 'A lot less'; 'More' includes 'A little more' and 'A lot more'. 'Don't know' and 'Prefer not to answer' responses are omitted, they make up 5% and 1% of the sample, respectively. n=1,964.

Almost half of respondents did not do any new online activities related to learning as a result of the lockdown. Table 14 illustrates that the most common new activity was looking up facts at 16%, with looking up the definition of a word a close second at 15%.

Types of information	% of respondents	
None	49%	
Find or check a fact	16%	
Look up a definition of a word	15%	
Get info for schoolwork or study-related work	11%	
Participate in formal online learning for an academic	10%	
degree/job training		
	n=2,560	

Table 14. New uses for LEARNING purposes as a result of the COVID-19 lockdown

6 Internet privacy, reliability and skills

6.1 Privacy and security

Most users experienced different forms of cyber-attacks (e.g. fraud attempts, online bullying, unsolicited content, etc.) in the last 12 months. Figure 22 shows a breakdown of the most common negative experiences on the internet.

Figure 22. Negative experiences on the internet



Note: Don't know' and 'Prefer not to answer' responses are omitted, they make up between 0% and 11% of each item. For each item n= 1,964.

Not shown in figure 22, a third of those who had been bullied online were between 16 and 24 years old, while over 55 to 64-year-olds were the least likely to report having received a virus on their computer (11%).

Almost 25% of respondents reported that they believed that their privacy had been violated online in the past year. However, Table 16 indicates that for more than half of those who had their privacy violated online it was not really a problem, or minor in nature. It appears to have resulted in serious problems for the respondent and/or others for 15% who had their privacy violated.

Table 15.	Reactions t	to online	privacy	violations
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Types of information	% of respondents
Don't know	2%
Prefer not to answer	1%
It was not really a problem	13%
It was only a minor problem	52%
It caused considerable problems	17%
It caused serious problems but only for myself	8%
It caused serious problems and impacted on others too	7%
	n=2,560

The top six consequences of privacy violations are illustrated in Figure 23. The most reported consequence was that respondents changed their internet behaviour and security settings (23%).



Figure 23. Consequences of privacy violations

Notes: Don't know' (2%) and 'Prefer not to answer' (1%), among other responses with small percentages are omitted. Respondents could select all items that applied to them, a maximum of eight per respondent. n= 766.

More respondents were concerned about corporations violating their privacy online than any other entity. As Figure 24 illustrates, the second-most concerning entity were other individuals, followed by other governments and the NZ government which was least concerning.



Figure 24. Concerns about who is violating privacy online

Notes: 'Don't know' and 'Prefer not to answer' responses are omitted, they make up between 0% and 7% of each question. n=1,964

Figure 25 reports respondents' opinions about privacy online. A total of 69% of respondents reported that they at least somewhat agree that they actively protect their privacy online, however 54% also at least somewhat agree that there is no privacy online. When it came to the statement "I have nothing to hide", just over half (52%) of respondents at least somewhat agreed.



Figure 25. Opinions about privacy online

Notes: 'Don't know' and 'Prefer not to answer' responses are omitted, they make up between 1% and 4% of each question. n=1,964

6.2 Online information reliability and digital literacy

41% of individuals reported that they believed that about half of the information online was reliable. As figure 26 shows, 22% were less optimistic, stating that only a small portion was reliable, while 26% went the other way, believing that most information on the internet is generally reliable.





Notes: 'Don't know' and 'Prefer not to answer' responses are omitted, they make up 8% and 0% of the sample, respectively. n=2,064.

The survey then asked respondents to rate their confidence in assessing the reliability of information online. As shown in figure 27, 5% of respondents reported that they do not even attempt to discern the reliability of information online, while 7% reported that they were extremely confident. The majority of respondents indicated that they were either confident about half of the time (30%) or most of the time (37%).



Figure 27. Perceptions about one's ability to assess online information reliability

When asked about their online and digital skills, the majority of respondents indicated that they knew how to download apps to a mobile device (62%) and how to open and download files (60%).

As shown in figure 28, respondents were least confident about changing who they shared content with online, with only 36% somewhat agreeing that they could, and 34% strongly agreeing.

Notes: 'Don't know' and 'Prefer not to answer' responses are omitted, they make up 5% and 1% of the sample, respectively. n=2,064.



Notes: 'Don't know' and 'Prefer not to answer' responses are omitted, they make up between 0% and 2% of each question. n=1,964

7 Civic engagement and the internet

Questions in this section include whether using the internet improves political understanding and participation, the reliability of information, and freedom of speech. A new area of interest included in this iteration is respondents' attitudes toward social media companies.

Both users and non-users answered all of the questions that follow.

7.1 Politics and freedom of speech

Figure 28 illustrates respondents' opinions on five aspects of political engagement online. As shown below, although 61% of respondents either somewhat or strongly agreed that they feel comfortable speaking their mind about politics, only 33% agreed that it was safe to do so online.

The majority of respondents either somewhat or strongly agreed that individuals should be free to criticise the government online, however, respondents were split on whether people should be free to express extreme ideas on the internet. This indicates that although most respondents are comfortable with political dissent online, there is less consensus on dissent that deviates too far from the norm. That being said, about a third of respondents were unsure or neutral about whether the level of online regulation ought to change.

Figure 29. Perceptions about freedom of speech online



Notes: 'Don't know' and 'Prefer not to answer' responses are omitted, they make up between 1% and 4% of each question. n=2,064.

We also asked respondents if they thought that people like them could have more political impact by using the internet. Just under a third of respondents were undecided or neutral when asked if, by using the internet, they could have more political power, while a similar proportion (one third) indicated that they would have more to say about what government does.

As Figure 29 shows, the majority of respondents indicated that they either somewhat or strongly agreed that people like them can better understand politics by using the internet, while only 12% somewhat or strongly disagreed.

When it came to public officials, more respondents (37%) thought that officials would care more about their opinions through the use of the internet than those who somewhat or strongly disagreed (27%).



Figure 30. Perceptions about internet-enabled empowerment

Notes: 'Don't know' and 'Prefer not to answer' responses are omitted, they make up between 0% and 5% of each question. n=2,064.

7.2 Social media

When asked about social media companies like Facebook, Twitter and TikTok, almost 60% of respondents stated that they ought to be more strongly regulated than they are now. This finding is consistent with the 30% of respondents who believe that these companies have made the world a worse place (Figure 32).





Notes: 'Don't know' and 'Prefer not to answer' responses are omitted, they make up between 0% and 5% of each question. n=2,064.



Figure 32. Perceptions about social media influence

Notes: n=2,064.

8 Using the internet with disabilities

A final area of consideration for the WIP-NZ 2021 is the experience of the internet for those living with disabilities. We initially used the Washington Consensus questions to determine if users experienced difficulty with vision, hearing, memory or concentration, movement, and communication in their customary language. If respondents answered yes, we then asked if these difficulties limit their access to the internet; whether they have access to assistance; and whether their use of the internet has changed their quality of life and/or social interaction.

8.1 Barriers

We used the Washington Group short set of questions to identify respondents living with disability, the following number of respondents identified as having 'a lot of difficulty' or were fully impaired (e.g. blind or deaf). Table 16 breaks down the frequency of each impairment, with a total of 339 instances of a severe disability from a total of 232 impaired respondents.

Table 16. Respondents living with disabilities

Type of impairment	# of respondents
Difficulty seeing, even if wearing glasses	46 (2%)
Difficulty hearing, even if using a hearing aid	31 (2%)
Difficulty walking or climbing steps	101 (5%)
Difficulty remembering or concentrating	85 (4%)
Difficulty with self-care such as washing all over or dressing	42 (2%)
Difficulty communicating, understanding or being understood	34 (2%)

Notes: Percentages in brackets indicate the proportion of impaired respondents for each question. Included are respondents who indicated they had either 'A lot of difficulty' or were fully impaired. For each question, n = 2,064.

Of the individuals identified as having a disability, a quarter indicated that their difficulty limited their use or access of the internet either sometimes, often or always. However, as figure 31 illustrates, just under half (47%) of respondents indicated that their difficulty never limited their internet use, with a further 25% saying it limited their use only rarely.



Figure 31. How often a disability limited internet access/use

Notes: 'Don't know' and 'Prefer not to answer' responses are omitted, they make up 2% and 1% of responses respectively. n = 232.

Of the disabled respondents identified above, just 8% indicated that their use or experience of the internet could be enhanced with additional help or equipment, while 22% did not know. This result may signal instances where individuals are not aware of what help or assistance may exist and thus are unsure if there is anything that would improve their ability to access and use the internet. Discouragingly, of the 232 respondents living with severe impairments, only 3% have access to any internet help or equipment.

8.2 Consequences of internet use on quality of life and social interaction

Of the disabled respondents identified in the previous section, 49% indicated that using the internet has improved their quality of life and or social interactions, with a further 23% saying that the internet had no/a neutral impact. These responses are illustrated by figure 32.



Figure 32. Consequences of internet use on quality of life and/or social interaction

Notes: 'N/A', 'Don't know' and 'Prefer not to answer' responses are omitted, they make up between 2% and 9% of responses respectively. n= 123.

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