

Reading in a Digital Age

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## Disclaimer:

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# 1. Context

The research reported here set out to better understand New Zealanders' online reading behaviours. Unlike previous research, this report used a version of an 'experiential sampling' design, asking about what people were reading at various points across the day and week. This kind of approach is a more reliable guide to what people are doing than based simply on asking them to recall what they have done. As a result, this research likely presents a unique insight into our reading behaviour. This is important because we read in different ways - we can quickly scan material and we can immerse ourselves in longer texts. Both ways of reading are useful but there is a strong argument that many of the benefits of reading are closely linked to a deeper engagement that occurs with those longer texts (see Section 3: The need for this research).





# 2. Key messages

The key messages from the research are:

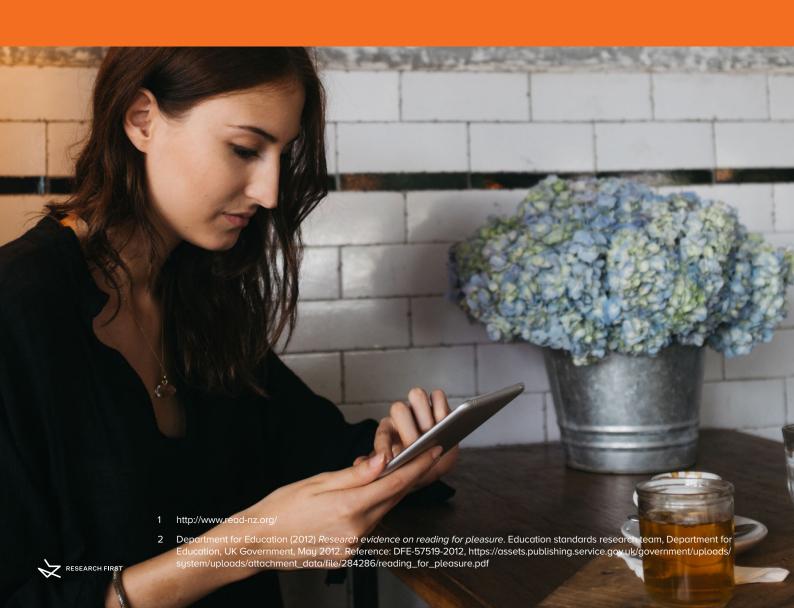
- The participants in this research report reading more online sources than print, regardless of the age or aender of the reader.
- However, while online reading is **displacing** traditional reading, it is not **replacing** it. Both formats continue to be read by the majority of readers every week.
- Indeed, the growth of online sources may be helping to grow reading. One in three participants in this research believe they are reading more now than ever before because of the availability of online content and the ease and enjoyment gained from switching between materials. Others also reported finding online reading pleasurable.
- High levels of reading behaviour are reported across a number of subgroups.
  - Females are generally more avid readers than males; reading enjoyment increases with age; people of Māori/Pasifika ethnicity find reading less enjoyable.
  - Digital content is read by New Zealanders of all ages, with blogs and e-magazines more likely to be read by those who are tertiary qualified.
  - Traditional reading material is also read by a range of New Zealanders, albeit generally lower for Asian New Zealanders.
- Yet it is likely that much of this 'reading' does not reach the level of engagement that has been shown to provide the benefits associated with reading longer form pieces (see Section 3: The need for this research).
- The participants in this research report being more engaged with longer form reading material whereas their interaction with online content is more likely to be brief, and involve switching between material.
- At the same time, the research suggests they are engaging with those longer form pieces less often: 44% of the readers in this research report finding it harder to read long and challenging content than they did in the past, more so for those aged 25-54 and tertiary qualified New Zealanders.
- They also report being able to concentrate less and being less likely to read longer online content. This is particularly so for females and those aged 25-34.





# 3. The need for this research

Read NZ Te Pou Muramura (formerly New Zealand Book Council) aims to grow a nation of readers. It wants more New Zealanders to read more. It wants to do this because New Zealand's literacy rates directly impact on its future prosperity and wellbeing. The research about the societal benefits of reading is clear — it increases empathy and social skills, and it improves health and wellbeing. It is a social skills and it improves health and wellbeing.



# 3. The need for this research

Research by the UK think-tank Demos has shown the profound impact reading can have on alleviating loneliness, mental health problems, dementia, and social immobility.<sup>3</sup> This led the Demos researchers to conclude

It's time we take reading seriously ... and recognise books for more than their educational value. We must start to see reading as a crucial tool for maintaining mental wellbeing and something worth investing in.<sup>4</sup>

To help Read NZ Te Pou Muramura grow a nation of readers, it is important to understand how New Zealanders are reading today. While there is some baseline data about how often New Zealanders read books, there is an incomplete understanding of how we read online. For instance, distinguishing between how much time is spent reading longer form pieces (such as blogs or online articles) and how much time is spent scrolling through social media posts or following hypertext links.

This research is important because so many of the benefits of reading follow from being fully engaged in the act of reading. It is possible that the increase in online reading is undermining that engagement in at least two ways. The first is that it simply **displaces** traditional reading, with no time left for reading longer form pieces due to the greater attraction of online content. The second, potentially more damaging, is that increased time online **undermines** the ability to read those longer form pieces.

The displacement argument is easy to see. The earliest recorded use of the internet in New Zealand occurred in 1985, and the first local website was created in 1992. By 1996, only one in five New Zealanders had heard of the internet.<sup>5</sup> And yet by 2018 New Zealand had become one of 'the most internet-addicted nations in the world',<sup>6</sup> with one study suggesting Kiwis spend 56 hours (or 47 per cent of their average waking hours in a week) on a digital device.<sup>7</sup> Another study shows that in 2018 New Zealanders owned an average of 6.5 digital devices, with 67 per cent of them being connected to the internet.<sup>8</sup>

As internet pioneer Steve Crocker noted, "there has not been, in the entire history of mankind, anything that has changed so dramatically as computer communications".9

Given the rapid growth in time spent online or with a digital device, it is perhaps no surprise that the time available for reading longer form pieces has declined. Read NZ Te Pou Muramura's own research shows that 400,000 New Zealanders did not pick up a book in 2017<sup>10</sup>; and in 2018 New Zealand came 30<sup>th</sup> out of 50 OECD countries in a study of childhood reading comprehension, a list that New Zealand topped in the 1970s.<sup>11</sup>

- 3 Demos (2018) A Society of Readers, London. https://demosuk.wpengine.com/wp-content/uploads/2018/12/A-Society-of-Readers-Formatted.pdf
- 4 Demos (2018) Want to tackle loneliness? Invest in a society of readers, https://demos.co.uk/blog/want-to-tackle-loneliness-invest-in-a-society-of-readers/
- 5 Russell Brown, 'Digital media and the internet', Te Ara the Encyclopedia of New Zealand, http://www.TeAra.govt.nz/en/digital-media-and-the-internet (accessed 16 July 2019)
- Internet World Stats: Internet World Usage > Links > New Zealand. https://www.internetworldstats.com/usage/use016.htm
- 7 ConsumerScape research cited in 'Proof that Kiwis love their devices'. https://www.stuff.co.nz/technology/digital-living/96220747/proof-that-kiwis-love-their-devices
- 8 IDC research quoted in 'Proof that Kiwis love their devices'. https://www.stuff.co.nz/technology/digital-living/96220747/proof-that-kiwis-love-their-devices
- 9 In Burkeman, O. (2009) "Forty Years of the Internet: How the World Changed For Ever"/The Guardian/October 23rd 2009.
- 10 New Zealand Book Council (2017) Book Reading in New Zealand, July 2017, Wellington.
- OECD (2000) Literacy in the Information Age: Final Report of the International Adult Literacy Survey, OECD Publications, Paris.



The argument that time spent online or with digital devices potentially undermines (rather than simply displaces) longer form reading is based on what all the time online does to our brains. In particular, the move to engaging with material through 'continuous partial attention'<sup>12</sup> means an increase in 'cognitive impatience'<sup>13</sup>. This leads to the loss of what Professor Maryanne Wolf has called 'deep reading' – the kind of reading that requires the reader's complete attention to understand the thoughts on the page. This lack of engagement means opportunities to develop the brain circuitry needed for deep reading are absent, which may also affect the ability to engage in deep reflection and original thought. Or, as Professor Maryanne Wolf and Mirit Barzilla put it, this change in reading behaviour might:

7

Short-circuit the development of slower, more cognitively demanding comprehensive processes that go into the formation of deep reading and deep thinking. If such truncated development occurs, we may be spawning a culture so inured to sound bites and thought bits that it fosters neither critical analysis nor contemplative processes in its members<sup>14</sup>.

What is not in doubt is that when people read materials on a screen, they read in very different ways from the traditional printed page. In particular, skimming is much more common. Research shows that when engaging with online content, readers tend to read in a F pattern scanning for key words. Also, readers need to make a decision about which hyperlinks to follow rather than directing their full attention to the text. It's for these reasons that Sam Anderson has noted when we read online, we hardly read at all. Or, as Dana Gioia, the Chair of the National Endowment for the Arts in the USA, put it;

Whatever the benefits of newer electronic media, they provide no measurable substitute for the intellectual and personal development initiated and sustained by frequent reading. $^{7}$ 

- 12 Rose, E (2010) "Continuous Partial Attention: Reconsidering the Role of Online Learning in the Age of Interruption", *Educational Technology /* Vol. 50, No. 4 (July-August 2010), pp. 41-46
- 13 Wolf, M. (2018) "Skim reading is the new normal. The effect on society is profound", The Guardian, August 25th 2018
- 14 Wolf, M. and Barzillao, M. (2009) "The Importance of Deep Reading", Education Leadership March 2009 | Volume 66 | Number 6 Pages 32-37
- 15 Wolf, M. (2018) "Skim reading is the new normal. The effect on society is profound", The Guardian / August 25th 2018
- 16 Anderson, S. (2009) "In Defense of Distraction", New York Magazine, May 17th 2009.
- 7 Rich, M. (2018) "Literacy Debate: Online, R U Really Reading?", New York Times, July 27th 2018, https://www.nytimes.com/2008/07/27/books/27reading.html



The increase in cognitive impatience and lack of engagement with online materials is perhaps best illustrated with the creation of the label TL;DR ('too long; didn't read'). It's not entirely clear where and when TL;DR first began but the first Urban Dictionary entry was submitted on January 15th, 2003. The Google Insights graph for the term indicates a noticeable spike in search interest circa 2006.

This idea has been expanded by the Scottish cartoonish Tom Gauld who, with his "Useful abbreviations for the time-pressed online reader" suggested the addition of useful abbreviations suggested additions as referenced in Figure 3.1 below.

Figure 3.1: Useful abbreviations for the online reader

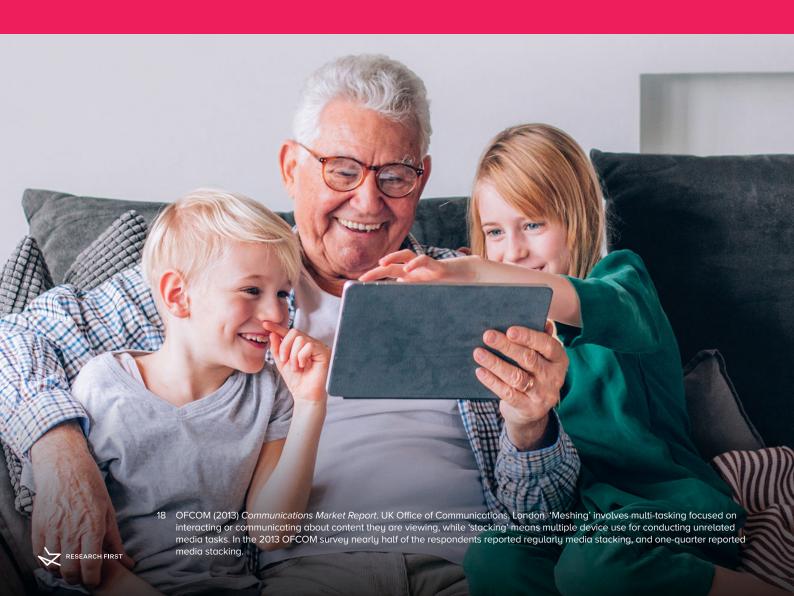
# USEFUL ABBREVIATIONS FOR THE TIME-PRESSED ONLINE READER TOO LONG; READ A BIT;



Given this context, it is clear why Read NZ Te Pou Muramura was so interested in better understanding how New Zealanders are reading in 2019, with a special emphasis on exploring how engaged they are with the things they are reading.

# 4. Research design

Providing an accurate picture of online reading behaviour is an interesting challenge. We know from international research that media multitasking is common, with users either 'stacking' or 'meshing' the use of devices.<sup>18</sup> What is less clear is the impact this has on the level of engagement readers have with the various sources. As a result, Read NZ Te Pou Muramura recognised the need for an intellectually sophisticated and methodologically robust research response.



# 4. Research design

This research needed to be nationally representative to enable Read NZ Te Pou Muramura to look at reading behaviour by a series of stakeholder groups. Given this need to measure behaviour, the research needed a method that sampled behaviour in real time.<sup>19</sup>

This meant that the Experiential Sampling Method was the obvious solution for Read NZ Te Pou Muramura's needs. This approach (also known as 'ecological momentary assessment') involves asking participants about their behaviour on multiple occasions over time. By asking about behaviour in the moment it occurs, the method overcomes the biases associated with recall. For instance recall can be distorted by 'social desirability bias' (where respondents provide answers they believe are socially desirable rather than an accurate reflection of their actual behaviour) and 'recency bias' (where their answers are based on their most recent behaviour rather than on typical behaviour patterns). Memory is often distorted by phenomena like the Von Restorff Effect (where an item that sticks out is more likely to be remembered than other items), and the Zeigarnik Effect (where uncompleted or interrupted tasks are remembered better than completed ones). The Experiential Sampling Method was designed to overcome the inherent fallibility of recall and it is a method that is common in psychological research, <sup>20</sup> where its validity for studies such as this has been repeatedly confirmed. <sup>21</sup>

In practice, using this method meant empanelling a randomly-selected sample of New Zealanders and sending them a short SMS survey every day across a seven day period (at various times of day). As well as tracking reading behaviour, this research was interested in hearing from readers about how they think their reading has changed over time, and this was done via an online survey after the SMS data collection was complete. Given New Zealand's high internet penetration rate (86% of the population in 2012<sup>22</sup>), the panel was recruited online. This approach does mean that those without access to the internet were unable to participate in the research, and suggests the results should skew towards those who are digitally connected.

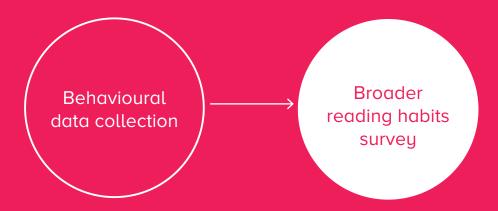
- 21 Csikszentmihalyi, M. (July 2014). Validity and Reliability of the Experience-Sampling Method. New York: Springer.
- 22 Internet World Stats, June 2012 https://www.internetworldstats.com/sp/nz.htm



<sup>19</sup> Because recall of behaviour is unreliable and subject to a series of cognitive biases. Given how often participants in the research may be 'reading' online, it makes little sense to ask them to recall those instances over a protracted period.

<sup>20</sup> Larson, R.; Csikszentmihalyi, M. (1983). "The experience sampling method". New Directions for Methodology of Social and Behavioral Science; and 15: 41–56 and Hektner, J.M., Schmidt, J.A., Csikszentmihalyi, M. (Eds.). (2006). Experience Sampling Method: Measuring the Quality of Everyday Life", Sage Publications, Inc

# A two-stage research process



- Experiential sampling.
- · SMS surveys over 2 week period.
- 19th June 2nd July 2019.
- 216 New Zealanders.

- Supplementary survey to understand online reading habits in general.
- Nationally representative sample of 515 New Zealanders.
- July 2019.

## Stage One: Behavioural data collection:

- 500 New Zealanders were invited to participate in the SMS survey. Data was collected across seven days, with a series of text messages sent to participants in the morning, afternoon and evening across different days.
- As to be expected with this method, partial responses were achieved at different points of the SMS survey period (due to not everyone responding to every SMS). Overall 216 people responded to any of the text messages, providing behavioural data across multiple days of the survey period. This number of responses provided over 1000 points of behavioural data from which to garner a picture of what typical reading behaviours look like in New Zealand.

## Stage Two: Broader reading habits survey:

- At the completion of the behavioural survey, all participants were invited to complete the broader reading habits survey. 135 respondents followed through to submit their answers to this survey.
- An online panel was used to supplement this data, with N=515 additional responses collected to be representative of age, gender and region across New Zealand.



#### Some caveats and limitations

The research results presented here are based on over 1000 daily SMS behavioural surveys and two perception surveys that have a combined sample of 647 responses. This is clearly a significant dataset and perhaps even a unique one. The validity of the results is underpinned by an analytical technique known as 'triangulation', which is the use of multiple perspectives to create a coherent picture of the topic being studied. By constructing such a picture from multiple standpoints and approaches, Read NZ Te Pou Muramura can be confident that it presents a robust and valid view. It is the presence of this 'triangulation' in the dataset that gives Research First confidence that the themes uncovered in this research can be generalised to a broader audience.

But this is not to say that the research results presented here are without limitations, or should be accepted uncritically. The limitation of the online selection method has been noted above, and this skew towards digitally connected readers is likely compounded by the selection bias that occurs as people opt-in to the SMS behavioural survey sample. Similarly, while the overall sample is large, the results for any sub-groups in the sample will be less useful than for the sample as a whole. Where these groups are particularly small, the results for those groups need to be read with some caution.

Finally, there are places in this report where the data from the behavioural survey and the data from the attitudinal survey seem to point in different directions. This is most likely due to the difference in methods and samples used for the two surveys. For all the reasons noted in Section 4, the SMS survey will present a more accurate picture of reading *behaviour* while the supplementary survey, because its sample is larger, likely presents a more reliable picture of reading *attitudes*.





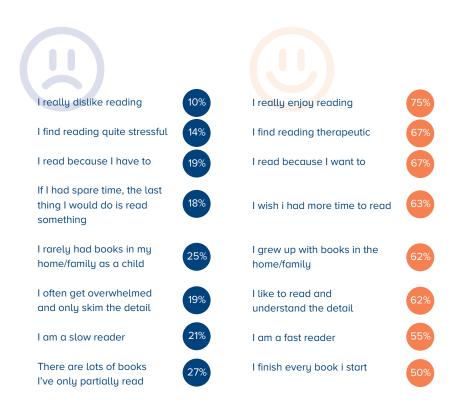
# 5. Detailed findings

#### **General reading attitudes**

Read NZ Te Pou Muramura wants to grow a nation of readers. This research shows that we are already a nation that enjoys reading and that many wish they had more time to be able to read. In this research:

- Females are more avid readers than males, but certainly wish they could have more time to read.
- · Enjoyment of reading increases with age:
  - The youngest generation (18 to 24 year olds) are less positive. Nearly 1 in 4 say they dislike reading, find it stressful, are less likely to finish every book they start, and feel like they have to read rather than choose to read.
- Those whose highest qualification is school level are significantly less likely to want more time to read (albeit the proportion is still high at 54%).
- There are some indicative variations by ethnicity. These are outlined on pages 16 and 24.

Figure 5.1: General reading attitudes



Source: Research First, July 2019, survey 515





The attitudinal survey does suggest some interesting differences by ethnicity. For instance, Maori and Pasifika respondents:

- Were more likely to associate negative emotions (bored, stressed, etc.) with reading than Pakeha respondents (21% vs 10%).
- Were more likely to say they disliked reading (21% vs 9%).

But Maori and Pasifika in this research were also just as likely to say they grew up with books in their homes as Pakeha (70% vs 67%).

There were greater differences in the survey between those who identified as Pakeha and as Asian New Zealanders. For instance:

- Asian New Zealanders were less likely than Pakeha or Maori and Pasifika to say they grew up with books in their homes (41% vs 67% for Pakeha and 70% for Maori and Pasifika).
- Asian New Zealanders were much less likely to say they read because they 'want to' (37% compared with 74% of Pakeha and 60% of Maori and Pasifika).

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## A snapshot of reading in 2019

The behavioural data show that at any point in the day (between 7am and 10pm), 2 in 3 New Zealanders are reading something. Of those surveyed, 17% report reading digital and printed material simultaneously.

Figure 5.2: Reading behaviour

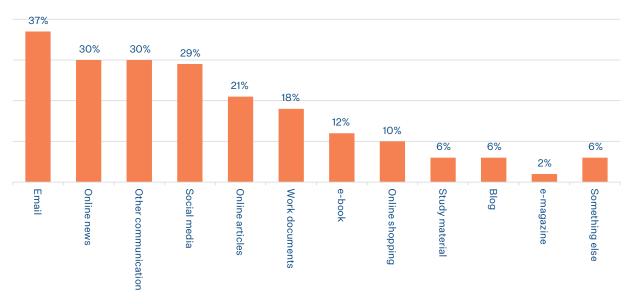


Source: Research First behavioural data, July 2019, N=1048

## Online reading behaviour

As noted in Section 3, the growth and diffusion of online content in New Zealand has been remarkable (with other research showing that by 2018 New Zealand had become one of 'the most internet addicted nations in the world'<sup>23</sup>). That high level of engagement with the internet is seen in this research, where e-mails, online news, other digital communication channels and social media are all consumed regularly.

Figure 5.3: Any digital content being read 2019



Source: Research First behavioural data, July 2019, N=266



The supplementary survey also shows that digital communications are not just channels for younger New Zealanders:

- Digital communication tools (Messenger, WhatsApp etc) have high use right across the age spectrum.
- Social media scrolling has high use across 18-54s and first starts to drop off for 55+, but is still used by the majority of people (76% of 55-64s and 64% of 65+).

Figure 5	.4: Digital content ever read	
	Most common online content 96% email 89% websites	Email and websites are read less often by Asian New Zealanders
	85% online articles 85% online news sites	News sites and articles are more likely to be read by those who are university qualified
	81% other communication 79% social media scrolling	<ul> <li>Both statistically higher among females than males</li> <li>Social media sees less use by those who are retired</li> </ul>
	Work and education focus 71% work documents 61% study material	<ul> <li>Work documents naturally higher among working age 25-54s</li> <li>Study material among 18-24s</li> </ul>
	Other online 57% blogs 44% e-magazines	<ul> <li>Females more likely to read blogs than males</li> <li>Both forms get statistically higher use among those who are university qualified</li> </ul>

Source: Research First survey, July 2019, total sample 515



# Reasons for reading online

Most online reading is done for pleasure. However, much is also done for 'no real reason'.

- 1 in 10 18-24 year olds claim to 'never' read online content for pleasure.
- 63% of females are more likely to read online content daily for 'no real reason'.
- Similarly, those with university level qualifications are more likely to read regularly for no real reason.

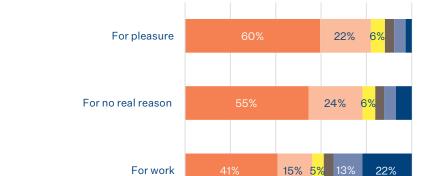


Figure 5.5: Frequency of reading digital/online content



Source: Research First survey, July 2019, total sample 515

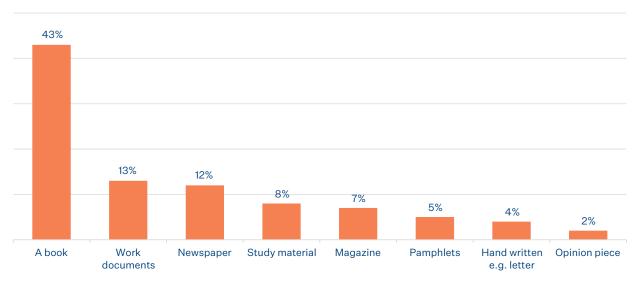


## Non-online reading behaviour

The research suggests these high levels of digital engagement have not replaced traditional forms of reading but have displaced some of it and found new ways to sit alongside it.

The printed non-online content most commonly read was a book, but work documents and newspapers were also common.

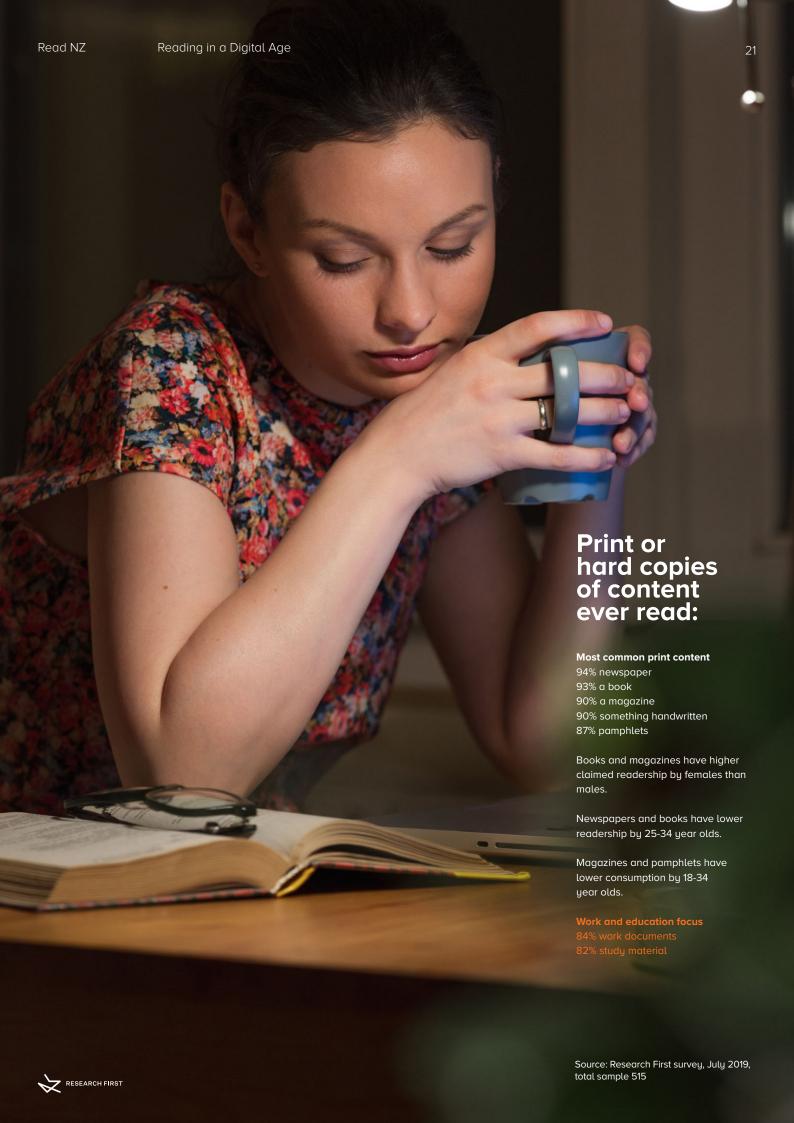
Figure 5.6: Non-online/printed content being read 2019



Source: Research First behavioural data, July 2019, N=266

In fact, the supplementary survey reports high levels of engagement across many traditional reading materials (except for Asian New Zealanders who have lower levels of reported reading of all of these materials).





#### Non-online behaviour

As with online reading, most offline reading is also done for pleasure:

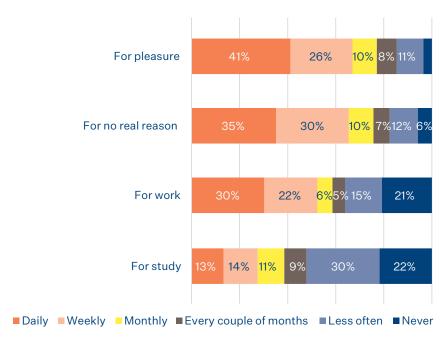
- 18-34s are much less likely to read hard copy content for pleasure.
- Those aged 55+, or with university qualifications, are more likely to read for pleasure.

And just like with online materials, many people report reading printed materials for 'no real reason'. In particular:

• 74% of females are more likely to read non-online content daily for 'no real reason'.

However, while 74% of the research participants said they read online materials 'for no real reason' every day or every week, the percentage doing the same with printed materials was 65%.

Figure 5.7: Frequency of reading non-online content



Source: Research First survey, July 2019, total sample 515



## Online is displacing rather than replacing traditional reading forms

The previous sections show that both online and non-online reading sources are readily consumed by New Zealanders – the online formats are not necessarily being used as substitutes for traditional formats, rather both continue to be read.

However, the behavioural data shows that New Zealanders are reading more sources of digital content at any point in the day (between 7am and 10pm). On average, the number of items being read are:

Figure 5.8 General reading attitudes average number of reading sources



Source: Research First, July 2019, QA1, behavioural data 680

The behavioural data shows that people read more online; however, the supplementary survey shows that more New Zealanders *believe* they still read more in hard copy than online. However, they all agree that they read more in detail when engaging with non-online content.

Figure 5.9: General reading attitudes

I read more things online than in hard copy

I read more things in hard copy than online

I read more things in detail online than in hard copy

I read more things in detail in hard copy than online

47%

Source: Research First, July 2019, behavioural data 135, supplementary survey 515



## Differences in behaviour by ethnicity

As noted on page 16, Māori and Pasifika respondents:

- Were less likely to read things in hard copy than online (28% for Māori and Pasifika vs 44% for Pākehā).
- Were more likely to read online materials in depth than other readers (40% for Māori and Pasifika vs 19% for Pākehā).

Similarly, Asian New Zealanders were much more likely to read for work/study purposes. For instance 75% of the Asian New Zealanders in the survey said they read hard copy for work vs 56% for Pākehā, and 46% for Māori and Pasifika, with a similar distribution for online work reading.

# Online versus non-online reading behaviour

## Who is reading what?

Looking at regular (at least weekly) readers of online or non-online content, the majority of New Zealanders claim to be reading both formats. Only 10% of respondents said they read exclusively online materials.

10%
regularly read online content weekly, and not hard copy/printed content weekly, and non-online content weekly regularly read non-online content weekly and not digital content

4%
don't read either

Figure 5.10: Online and other reading overlap

Source: Research First supplementary survey, July 2019, QB4a/b, N=515  $\,$ 

The profile of the 10% who are 'regular online and not hard-copy/print readers' is small and therefore indicative only, but points to:

- A younger demographic (40% are aged 18-34).
- Slightly more males than females.
- School educated (no tertiary or vocational qualifications).
- · Those who are not currently working.
- People who are less likely to want to read in their spare time.
- · Those who are less likely to enjoy reading, and more likely to find it stressful.



# Weekday versus weekend behaviour

New Zealanders are reading less over the weekend, whether online or non-online formats:

- Within this, we naturally see levels of work and study reading decline on the weekend.
- Meanwhile reading of other communications and e-books increases at weekends.
- Reading of books, newspapers and handwritten content is broadly stable throughout all days of the week.

Figure 5.11: Reading behaviour by time of day

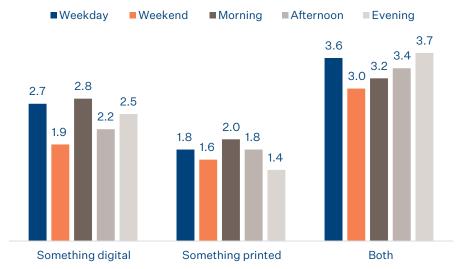


Source: Research First behavioural data, July 2019, N=266



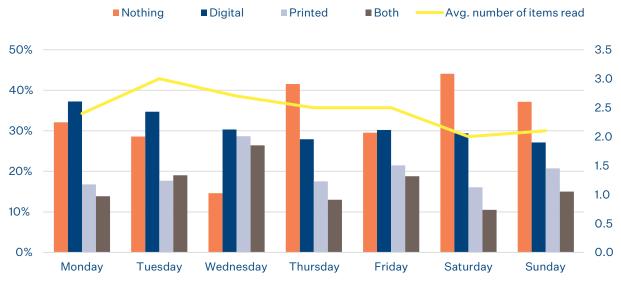
We also see a decline in the number of items read, especially digitally, at the weekend. Those reading digital content tend to read more sources throughout the day, whereas those that read non-online content certainly read less of it in the evenings.

Figure 5.12: Average number of items read



Source: Research First, July 2019, behavioural data 680

Figure 5.13: Reading format over a week



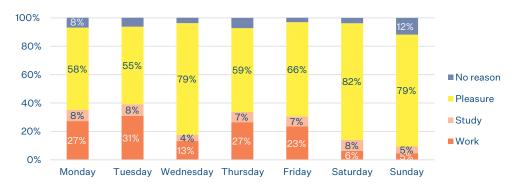
Source: Research First behavioural data, July 2019,





While fewer people read on weekends, those that do tend to do so for pleasure

Figure 5.14: Purpose of reading over a week



Source: Research First behavioural data, July 2019,

Correspondingly, the reading of hard copy books is high throughout the week, but peaking on Wednesdays:

- Emails and online articles also peak on a Wednesday and again on Friday.
- Online news and social media fluctuating less over the week.
- Digital work documents reach lows on the weekend as other forms of digital communication see a slightly greater uptake on the weekend instead.

Figure 5.15: Formats read over a week

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Hard copy book	29%	41%	<b>53</b> %	33%	43%	39%	46%
Other digital comms	22%	38%	28%	27%	31%	36%	39%
Digital work documents	10%	<b>27</b> %	20%	25%	18%	16%	10%
Email	36%	33%	49%	22%	38%	36%	22%
Social media	29%	23%	29%	20%	31%	26%	27%
Online news site	22%	26%	37%	29%	<b>27</b> %	24%	32%
Online article	19%	<b>16</b> %	30%	17%	23%	24%	14%

Source: Research First behavioural data, July 2019, N=259 (49-97 per category)

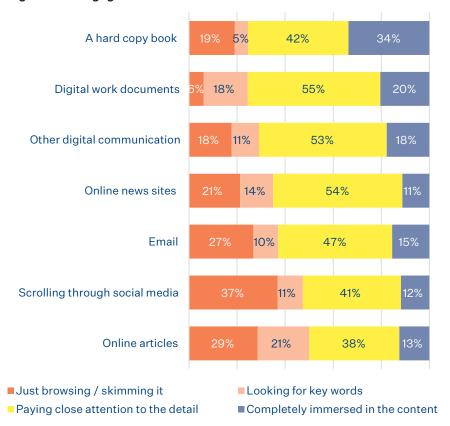


# **Engagement**

This research is clear that New Zealanders believe they engage less deeply with online content than traditional reading material. In particular:

- A printed book gets the most immersion by the reader.
- Other digital categories get close attention to the detail but lack complete immersion, while more skimming behaviour is evident when reading online articles or social media.

Figure 5.16: Engagement



Source: Research First behavioural data, July 2019, N=259



We can combine the data in the behavioural survey to create a direct comparison between those reading a hard copy book and those reading online articles. The time and nature of the reading session is different along with the level of engagement.

Figure 5.17: Reading behaviours for hard copy book versus online articles

	Reading a <b>hard copy book</b>	Reading online articles			
Who?	Aged 65+ 1 in 3	Aged 18-34 over 1 in 3			
When?	Mixture of afternoon and evening reading Higher readership on a Wednesday, but also more likely to be read on weekends	Nearly half are reading in the afternoon More weekday reading (especially Wednesday)			
How?	34% 42% Completely Paying close attention	38% 29% Paying close Browsing/ attention skimming it			
Session?	Greater chance of being read on its own without multitasking, with many reading for half an hour or longer	More likely read while multi tasking with other content. Reading session of 10-30 mins for 1 in 3, or longer than 30 minutes			

Source: Research First behavioural data, July 2019, N=259  $\,$ 

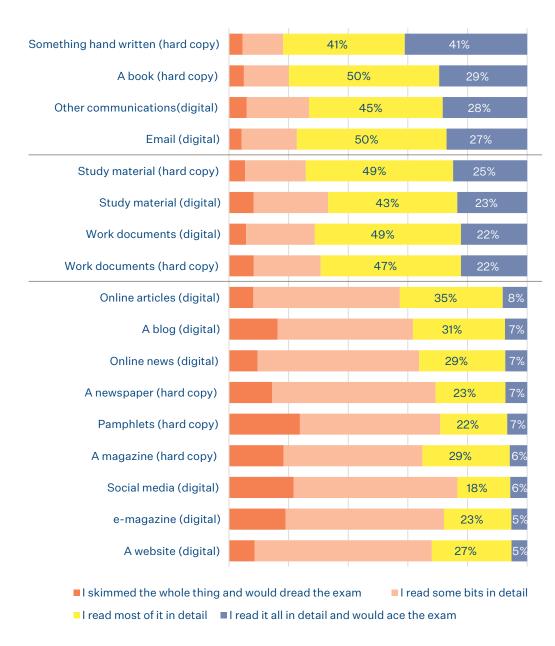


This research also shows that New Zealanders are most likely to read more intensely or deeply with content that is handwritten, (e.g. a letter or a postcard) followed by a traditional book, and then with email. Study and work documents also get a high amount of engagement.

Outside of emails, it is noteworthy how frequently readers skim online content, magazines and newspapers. And beyond this, several online content categories get only partial attention, reinforcing that content on a screen is often consumed in a different way. However, many digital sources are read in a similar vein to a hard copy newspaper, pamphlet or magazine whereby it's read in 'bits' rather than in full.

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Figure 5.18: Level of perceived engagement with reading material



Source: Research First survey, July 2019, total sample 515, those that have ever read each category (226-496)



## The impact of digital behaviour on reading habits

As noted above, international research shows that media multi-tasking is common, with users either 'stacking' or 'meshing' the use of devices<sup>24</sup>. This pattern is repeated in this research and is common whilst watching TV but also while reading hard copy materials.

•	Figure 5.19: Meshing behaviour  Multi-tasking focused on interacting or communicating about content they are viewing				
		61%	of New Zealanders 'mesh' while watching TV		
		44%	'mesh' while reading printed material		
		40%	read about something and comment or share it online		
•	Figure 5.20: Stacking behaviour:  Multiple device use for conducting unrelated media tasks				
		74%	of New Zealanders 'stack' while watching TV		
丹		33%	'stack' while reading printed material		
		24%	read about something online while commenting or sharing something else online		

Interestingly, females are significantly more likely to exhibit each of these behaviours, while those aged 65+ are less likely to do these, especially stacking.

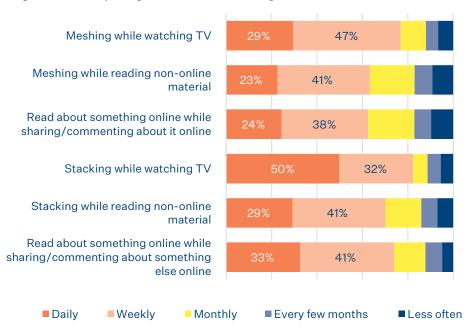
The fact that 'stacking' while watching TV is more common is interesting and can be interpreted in three ways:

- The first is that this rapid switching between content and tasks might reflect a newfound flexibility and fluidity in how readers process information, developed in response to how they are now immersed in dialtal worlds.
- The second, more pessimistic interpretation, is that this popularity of stacking shows the growth of a 'cognitive impatience', and a lower tolerance of cognitively challenging material, resulting in a desire to click through to something novel and more stimulating.
- Thirdly, it could be that 'stackers' are aware that some content requires more attention than others, so as well as becoming adept at rapid switching between materials, they are consciously choosing to function this way too.

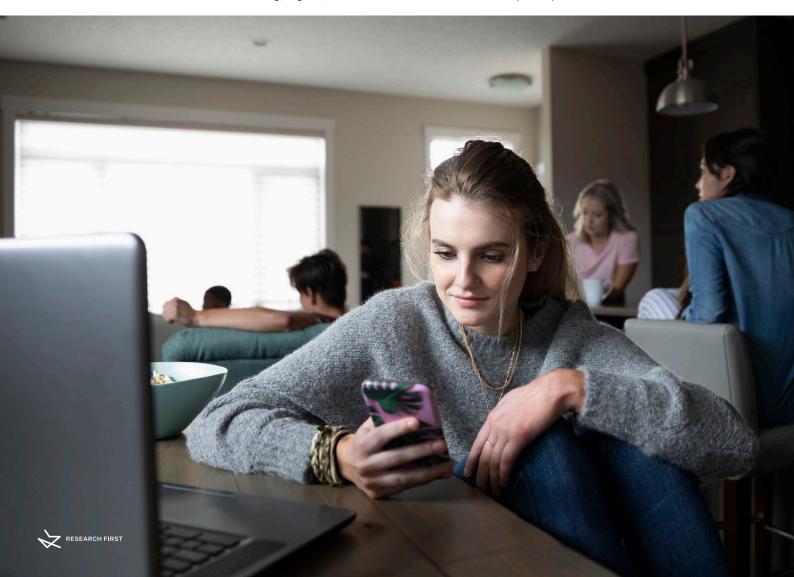
<sup>24</sup> OFCOM (2013) Communications Market Report. UK Office of Communications, London. 'Meshing' involves multi-tasking focused on interacting or communicating about content they are viewing, while 'stacking' means multiple device use for conducting unrelated media tasks. In the 2013 OFCOM survey nearly half of the respondents reported regularly media stacking, and one-quarter reported media stacking.



Figure 5.21: Frequency of media multi tasking



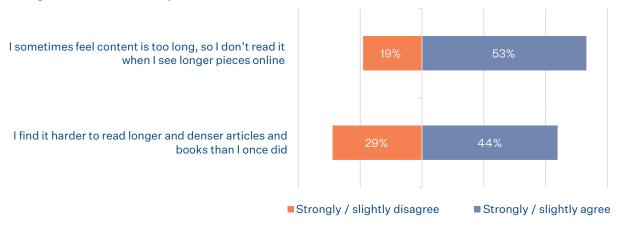
Source: Research First survey, July 2019, those that have ever done each behaviour (123-379)



## How is reading changing?

The participants in this survey are clear they are, on balance, less likely to read longer pieces of content online, and that they are finding it harder to read longer content than in the past. Interestingly, university educated New Zealanders are more likely to say they find it harder to read longer content.

Figure 5.22: Personal impact of screens

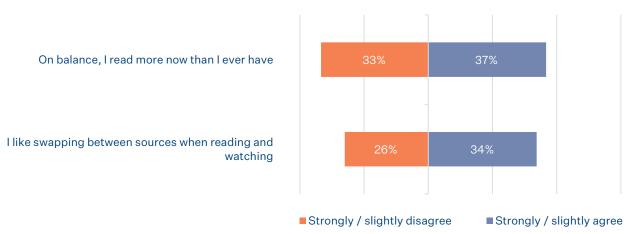


Source: Research First survey, July 2019, Total sample (515), those saying 'neither' not shown

And yet, for some, this means reading more now than ever before, with added enjoyment from switching between tasks and sources:

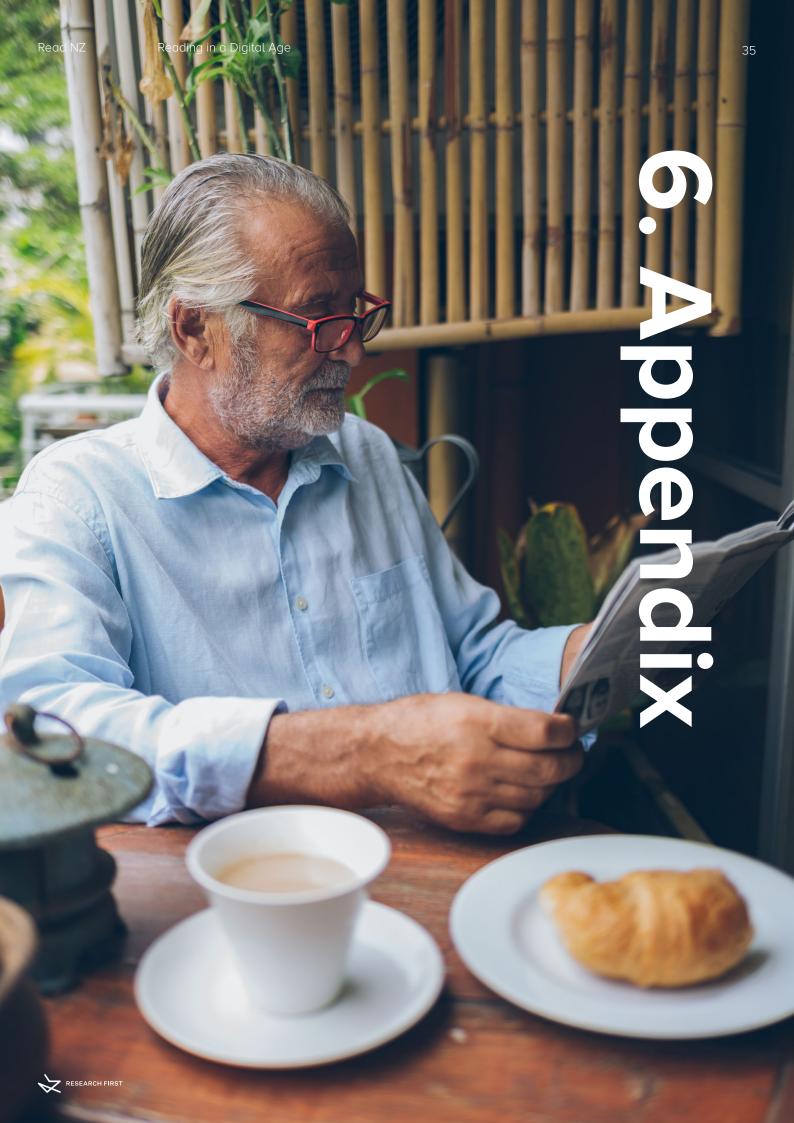
- Females and those who are studying are more likely to enjoy switching between sources.
- Those aged 65+ that are more likely to say they read more now than ever before, are also less likely to switch between sources.

Figure 5.23: Personal impact of screens



Source: Research First survey, July 2019, Total sample (515), those saying 'neither' not shown





# 6 Appendix

# Sample profile

	Behavioural data collection N=216	Broader reading habits survey N=515
Gender		
Male	35%	46%
Female	64%	53%
Gender diverse	1%	0%
Age		
18-24	10%	9%
25-34	19%	18%
35-44	22%	18%
45-54	19%	19%
55-64	16%	17%
65+	11%	18%
Region		
Auckland		32%
Wellington		11%
Other North Island		32%
Canterbury		13%
Other South Island		12%
Ethnicity		
NZ European		76%
Māori		6%
Pacific peoples		3%
Asian		14%
Middle Eastern/Latin American/African		3%
Other		5%



# Behavioural data profile

	Behavioural data collection N=1048
Time of survey completion	
Morning	28%
Afternoon	38%
Evening	33%
Day of week	
Monday	13%
Tuesday	14%
Wednesday	17%
Thursday	15%
Friday	14%
Saturday	14%
Sunday	13%

# Reading and device profile

	Behavioural data collection Those who completed final survey N=135	Broader reading habits survey N=515
Average number of books in the house	287	245
Average number of internet enabled devices in the house	5.8	5.3
When last purchased a book		
In the last month	39%	29%
Between 2-3 months ago	23%	21%
Between 3-6 months ago	10%	11%
Between 6-12 months ago	8%	10%
More than a year ago	8%	16%
I can't remember	13%	4%





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