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# New Zealand Financial Capability Focus on those with disabilities or long-term health conditions



**TE ARA  
AHUNGA ORA**  
Retirement Commission

# Introduction

In February and March 2021, Te Ara Ahunga Ora Retirement Commission conducted a nationwide survey exploring financial wellbeing, with the aim of contributing to the National Strategy for Financial Capability. The National Strategy provides a framework for collaboration, communication and knowledge sharing across the financial capability community. The community includes government, industry, iwi and non-profit organisations, working towards helping people gain the skills they need to be able to achieve their goals and, ultimately, retire with confidence.

The New Zealand Financial Capability Survey main report was released in July 2021 and can be found [here](#). The survey involved 3027 adult New Zealanders and measured a range of financial capabilities and outcomes using the financial wellbeing model designed by Prof. Elaine Kempson (2018). The framework for the model is derived from interviews and focus groups in several countries and contains 21 components of financial capability which are each scored on a scale of 0 to 100.<sup>1</sup>

The content of each survey component and how it affects financial outcomes is listed below (Table 1).

**Table 1**

**Financial wellbeing component structure**

Financial behaviours	Financial knowledge and experience	Psychological factors	Financial wellbeing (outcome)
Keeping track of money	Knowledge of money management	Long-term thinking	Overall financial wellbeing
Planned use of income	Experience of money management	Impulsivity control	Meeting commitments
Spending restraint	Knowledge of how to compare financial products	Lack of concern about social status	Financially comfortable
Active saving	Financial inclusion	Self-control	Resilience for the future
Not borrowing for day-to-day expenses	Understanding of risk	Financial confidence	Preparedness for retirement
Restrained use of consumer credit		Financial locus of control	
Informed financial decision-making		Action orientation	
Informed product choice		Attitudes to saving, spending and borrowing	

Terms in italics such as *meeting commitments* or *informed products choice* refer to financial wellbeing outcomes or financial capabilities in the model. Please refer to the main report for information on what they mean and how they are calculated.

The current report examines the financial wellbeing of people with a disability or long-term health condition. It is one in a series of papers produced using the larger dataset. Other reports in the series look at financial wellbeing of: [women](#); [Māori](#); [Pacific People](#); and people who currently don't contribute to [KiwiSaver](#).

<sup>1</sup> Each of the components is measured using a set of questions. The technical report accompanying this report explains the methodology of constructing the scores [here](#)

# Executive summary and implications

- Participants with disabilities and/or long-term health conditions (D/LTHC) have lower participation rates in the workforce, lower incomes, and lower homeownership rates than those without a D/LTHC.
- Financial wellbeing scores are significantly lower for participants with D/LTHCs, even when other demographic variables such as age, income, or ethnicity are controlled for.
- Compared to those without D/LTHCs, participants with D/LTHCs rate themselves as spenders rather than savers, are more inclined to use credit cards, and borrow for day-day expenses more frequently.
- Participants with D/LTHCs are more likely to keep a close eye on their finances, while those who have a high personal income rate themselves as more knowledgeable in understanding how to compare financial products (particularly insurance) compared to high income earners without disabilities.
- Participants with D/LTHCs indicate lower financial confidence in managing money day-day or planning their financial future than those without.
- Financial inclusion and participation in KiwiSaver are lower for those with D/LTHCs.
- Participants with D/LTHCs score lower on long-term thinking and (for men) higher on impulsivity, while perceptions of control over their financial situation are lower.
- Māori are over-represented as having a D/LTHC within each age group, while Pacific People become over-represented from 55-64.

Overall, the results indicate that people with disabilities and/or long-term health conditions:

- have lower participation in the workforce and consequently have fewer opportunities to build wealth and accumulate significant assets;
- have to spend more than they earn, and as a result;
- may be assessed by some financial service providers as a greater credit risk, and thus need to rely on alternative and potentially more expensive sources of credit;
- keep a close eye on their finances and can have better knowledge of comparing financial products (particularly insurance), and yet;
- have lower perceptions of financial self-efficacy.

Combined, these results show comparatively lower financial wellbeing for people with D/LTHCs than those without such conditions. Māori are more likely to experience D/LTHCs within any age group compared to other ethnicities, and as such are more likely to experience poor financial wellbeing outcomes.

The context of the current report in terms of financial wellbeing of those with disabilities and/or long-term health conditions is extremely broad. While experiences of poorer financial outcomes are associated with D/LTHC even when factors such as age, income and ethnicity are accounted for, the finding needs to be interpreted with caution. Additionally, the questions and methodology mean we are unlikely to have captured the insights of those who might needed greater accommodation or assistance to complete the survey (e.g. those with learning or intellectual disabilities, low/no vision).

The current survey did not explore other measures or aspects that may be important in the context of D/LTHC. Future research should explore the following in the context of financial wellbeing:

- Disability-specific expenses: Expenses such as mobility aids, wheelchairs, hearing aids as well as less obvious expenses such as only being able to use certain kinds of newer, more advanced or more reliable technology used as assistive technology (e.g., iPhones with particular accessibility features, computers that must have very high specs for voice recognition software).

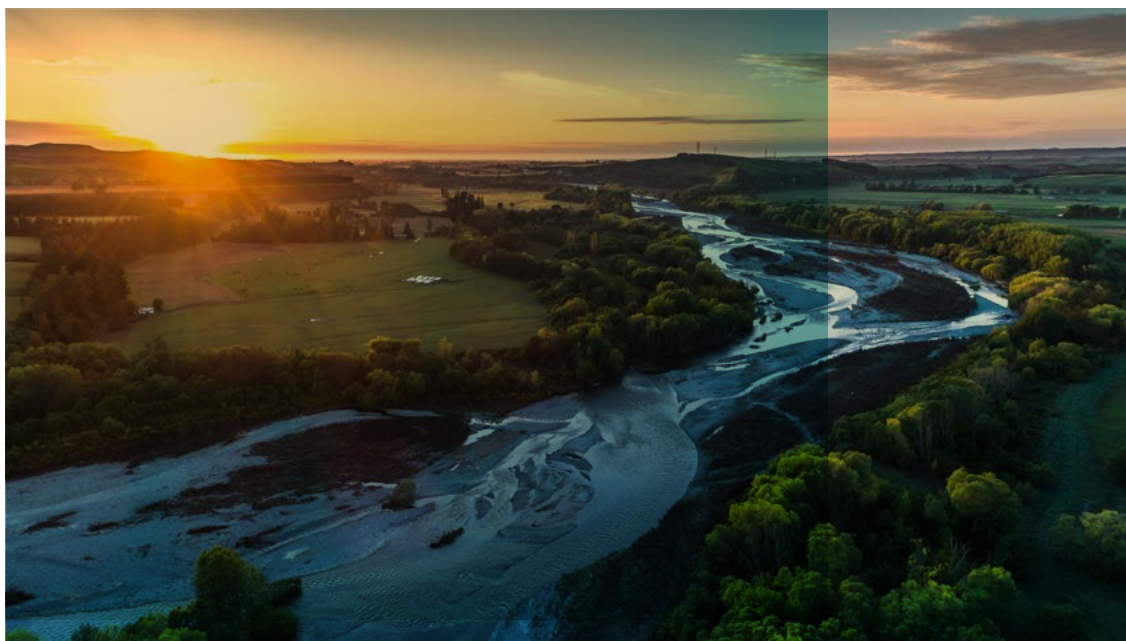




- Disability-relevant expenses: Some expenditure, common to those with and without a D/LTHC, might generally be considered luxury items but may be more appropriately reclassified as standard for those with D/LTHC (e.g., takeaway or pre-prepared meals). This should be considered when undertaking any research on expenditure by those with D/LTHC. Similarly, long-term thinking and impulsivity differences should be examined more closely in the context of D/LTHCs.
- Disability-specific financial literacy: what specific knowledge do people with D/LTHC need? (e.g. understanding what support a person is eligible for, knowing who to go to for help, knowledge of how to obtain grants for home renovation / accommodation, the risks associated with credit cards or unsecured loans, or the benefits associated with insurance).
- Consideration of disability-specific financial agency of an individual: For example, what support does a person need to make financial decisions independently? Is there autonomy/agency over their own finances or are they held in trust? Do they have their own bank card, know their credit card number, and can they make online purchases when desired?
- Accessibility of financial services: what is the customer experience of someone who has a D/LTHC? How well does technology support those with a D/LTHC (e.g. voice-enabled EFTPOS machines and ATMs for blind and low-vision people). What are their experiences with the financial system as a whole?
- Barriers to accessing traditional or cheaper financial products (e.g. insurance, mortgages), and ability to pay off debt.

Additional avenues for future research into the impacts of disability on financial wellbeing include:

- Type of disability or long-term health condition (e.g. neurodiversity, learning disabilities, mental health, physical impairment, as well as severity) and how they impact on financial wellbeing
- Sources of income (e.g. ACC, supported living, earnings) and how they impact on financial behaviour and wellbeing
- Timing of disability or health condition onset (e.g. at birth, adolescence or later in life) and how that impacts on life trajectories financially
- Financial impact on families who live with someone that has a D/LTHC
- A comparison of financial literacy and financial resources in families with a disabled child vs a disabled adult
- Role of ethnicity and gender in attenuating or exacerbating financial wellbeing of those with a D/LTHC, or who care for someone with D/LTHCs.



# Findings in Detail

The current report uses the full sample of 3027 participants in analysis, which includes all people aged 18 years of age or older. Participants were asked to indicate if they had *'any long-term health condition, impairment or disability that restricts you in your everyday activities and has lasted or is likely to last for 6 months or longer'*. Incidence of self-reported disability or long-term health condition (D/LTHC) is 33% in the sample, or n=990 participants aged 18+.

The figure is significantly higher than that reported in the 2013 New Zealand Disability Survey<sup>2</sup> at 24%. However, the two surveys are not directly comparable, given differences in wording and the inclusion of all people (rather than 18+ in our survey). In particular, the Disability Survey frames 'health condition' in the context of causing difficulty / stopping activity *despite device use* (e.g. glasses, a hearing aid), while the current survey simply asks the participant if they have a disability or long-term health condition.

## Finding 1

### Participants with disabilities and/or long-term health conditions are more likely to have restricted financial resources compared to those without such conditions.

In terms of financial situation for those with vs without a D/LTHC:

- The proportion of D/LTHC participants who are employed (aged under 65) is 59%, far lower than for non-D/LTHC participants at 79%<sup>3</sup> (StatsNZ report 43% of disabled people aged 15-64 were employed compared to 79% of non-disabled people in the same age group). Differences between our survey and StatsNZ results are again likely to relate to survey wording.
- A third (35%) of D/LTHC participants aged under 65 indicated their main source of income was a government benefit or allowance (compared to 11% of non-D/LTHC participants), peaking in the 55-64 age group at 50%.
- 53% of those with D/LTHC earn under \$30,000 per annum (excluding 'don't know/decline to answer') compared to 32% of those without.
- Within each age category, those with a D/LTHC are comparatively more prevalent in the 'under \$30k personal income' bracket than those without. By 55-64 those with a D/LTHC are twice as prevalent in the lowest income bracket category (table 2).
- Renting is far more common for 35-64-year-old participants with a D/LTHC than those without, while those aged 55+ with a D/LTHC are nearly half as likely to be in a freehold owned home (see figure 1).

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<sup>2</sup> [Disability survey: 2013 | Stats NZ](#)

<sup>3</sup> [Household Labour Force Survey 2021](#)

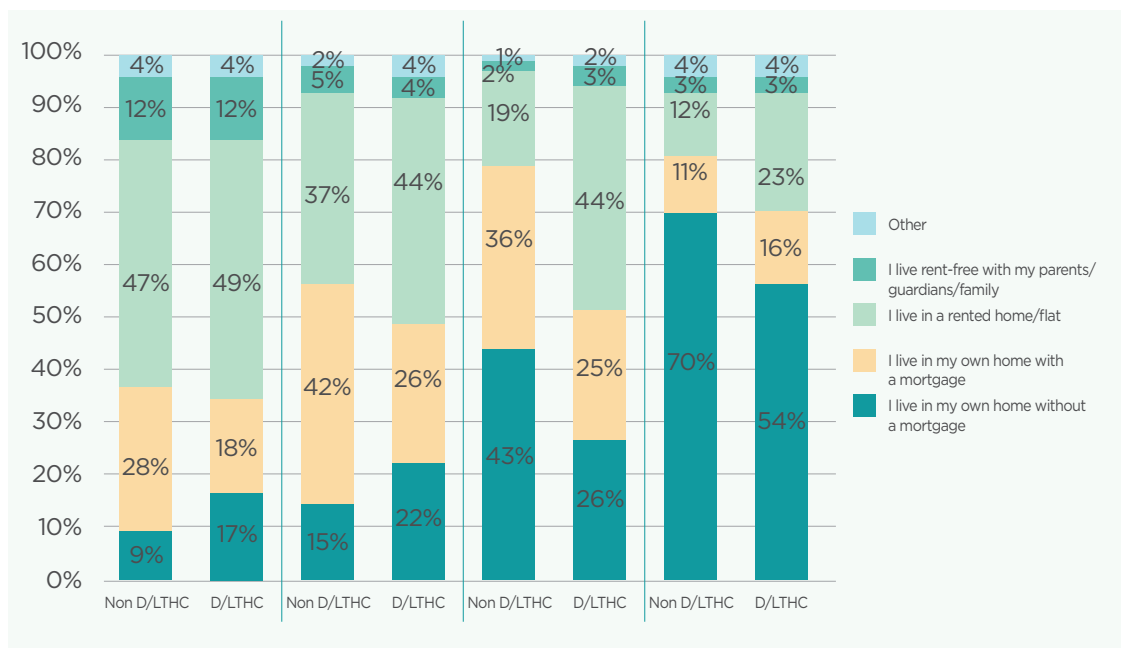
**Table 2**

Incidence of disability / long-term health condition by age and income

		D/LTHC	non-D/LTHC
18-34	Under \$30,000	<b>38%</b>	29%
	\$30000-49999	16%	21%
	\$50000-69000	16%	22%
	\$70000-99999	16%	18%
	\$100000-119999	6%	4%
	\$120000+	7%	5%
35-54	Under \$30,000	<b>43%</b>	25%
	\$30000-49999	11%	14%
	\$50000-69000	15%	23%
	\$70000-99999	12%	24%
	\$100000-119999	4%	8%
	\$120000+	14%	7%
55-64	Under \$30,000	<b>63%</b>	31%
	\$30000-49999	17%	19%
	\$50000-69000	8%	16%
	\$70000-99999	7%	20%
	\$100000-119999	2%	4%
	\$120000+	3%	9%
65+	Under \$30,000	<b>67%</b>	53%
	\$30000-49999	20%	29%
	\$50000-69000	7%	8%
	\$70000-99999	4%	7%
	\$100000-119999	1%	1%
	\$120000+	2%	2%

**Figure 1**

Housing tenure by age and D/LTHC status



## Finding 2

### Financial wellbeing scores are significantly lower for participants with D/LTHCs, even when other demographic variables such as age, income or ethnicity are controlled for.

Those who experience D/LTHCs have significantly lower financial wellbeing scores for components seen in table 3 and is particularly the case for *'meeting commitments'*.

**Table 3**

Mean financial capability and wellbeing scores by those with D/LTHC vs those without

	D/LTHC	No D/LTHC	D/LTHC – no D/LTHC difference	Is the difference statistically significant (p<0.05)?
Overall wellbeing	55	64	-9	Yes
Meeting commitments	63	77	-13	Yes
Financially comfortable	54	62	-7	Yes
Resilience for the future	50	58	-8	Yes
Preparedness for retirement	38	45	-7	Yes



The financial situation of those with D/LTHC is likely to be worse at least to some extent than for non-D/LTHC participants but the relationship is not straight forward. To account for these complexities, ordered logit regression was conducted on each financial wellbeing outcome and component using a range of demographic variables.

The association of D/LTHC with lower financial wellbeing remains for *'meeting commitments'*, *'financial comfort'* and *'preparedness of the retirement'* even when other potentially influential variables (such as income, age or ethnicity<sup>4</sup>) are controlled for (table 4<sup>5</sup>). However, there may well be other measures that are important in the context of D/LTHC that are not captured in the current survey, meaning caution should be used when assuming D/LTHC in itself is associated with lower financial wellbeing outcomes. For instance, those with D/LTHC may face higher medical or living costs than others. Additionally, those who are receiving ACC compensation may have a different financial support system compared to those who aren't. Future research should ensure these factors are included.

*'Resilience for the future'* is less impacted by the existence of D/LTHC and remains a non-significant factor even with the removal of income (typically the variable with the highest association with resilience for the future) or main source of income. Components that relate to this outcome include *'If, tomorrow, you had to meet an unexpected expense that is equivalent to a month's income for your household, how much of it would you be able to cover from money you have readily available either in cash or in an account?'*, or *'Would you need to borrow, overdraw your account or use a credit card to meet an unexpected expense equivalent to a month's income?'* However, when age is removed as a factor instead of income, the existence of D/LTHC becomes significant. While there are significant differences in resilience scores for those with and without D/LTHC within each age band, the biggest difference is seen in the 55-64 age group, shrinking considerably in the 65+ age group (figure 2).

Access to NZ Superannuation may play a role here by providing a stable, basic income for everyone aged 65 or over. For those on very low incomes (e.g. if relying on a benefit/allowance) prior to reaching 65, turning 65 may represent an improvement in financial situation since they may receive both a disability allowance and NZ Superannuation.

**Table 4**  
**Contribution to financial wellbeing outcomes for those with D/LTHC**

	<b>B Co-efficient<sup>6</sup></b>	<b>Significant after controlling for socio-economic /fin cap factors?</b>
Overall wellbeing	-2.159	Yes
Meeting commitments	-3.471	Yes
Financially comfortable	-2.097	Yes
Resilience for the future	-1.289	No
Preparedness for retirement	-2.612	Yes

4 Variables included a range of socio-economic factors (e.g., age, gender, ethnicity, education, household income, employment status, source of income, relationship status, home-ownership status, children under 18 and access to informal financial support) and the financial wellbeing components.

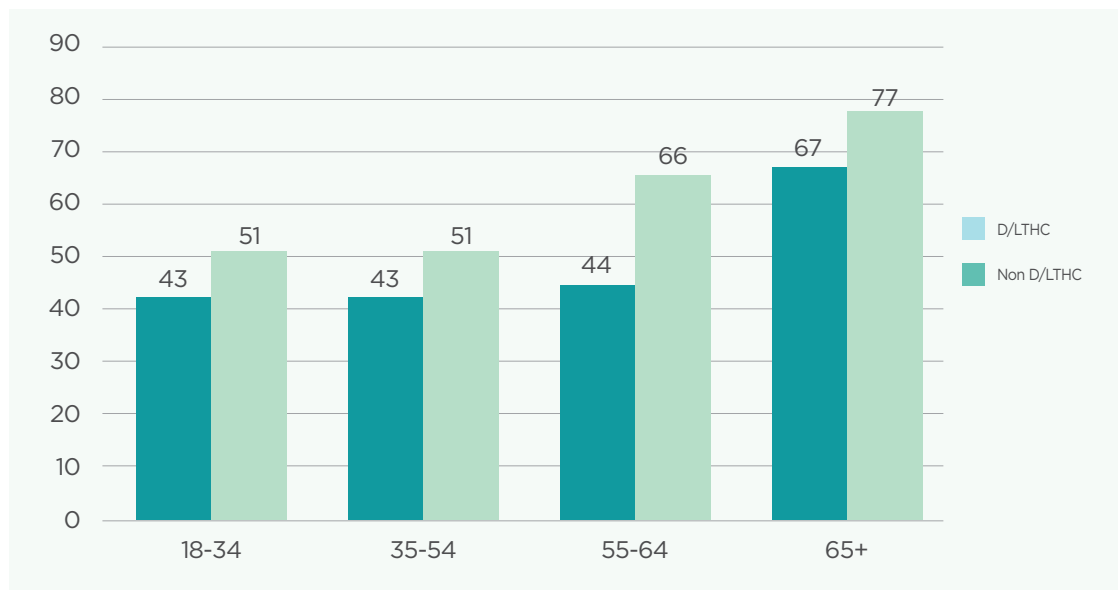
5 The technical report is available on request.

6 The beta coefficient is the degree of change in the outcome variable for every 1-unit of change in the predictor variable. If the beta coefficient is positive, it means that for every 1-unit increase in the predictor variable, the outcome variable will increase by the beta coefficient value. If the beta coefficient is negative, it means that for every 1-unit increase in the predictor variable, the outcome variable will decrease by the beta coefficient value.



**Figure 2**

Resilience for the future score (out of 100) by D/LTHC status and age



Looking at the financial wellbeing components that feed into the wellbeing outcomes (Table 5), D/LTHC is negatively associated with borrowing-oriented components (particularly *'restrained consumer credit card use'*, and *'attitudes to saving, spending and borrowing'*) suggesting a greater need to borrow. Conversely D/LTHC is positively associated with product-related components (e.g. *'informed product choice'*, *'knowledge of how to compare financial products'*), and with *'planning income use'* and *'keeping track of money'*.

There is also evidence of more general attitudinal differences between those with and without D/LTHC.

The differences will be examined more closely in the next sections.



**Table 5****Association of D/LTHC to financial wellbeing components**

	B Co-efficient	Significant after controlling for socio-economic /fin cap factors?
Spending restraint	-0.763	No
Active saving	0.978	No
Not borrowing for daily expenses	-1.966	Yes
Restrained consumer credit use	-6.181	Yes
Informed financial decision making	-1.289	No
Informed product choice	5.062	Yes
Planning income use	3.88	Yes
Keeping track of money	1.678	Yes
Knowledge of money management	-1.853	Yes
Knowledge how to compare financial products (rev)	2.189	Yes
Experience of money management	-2.41	Yes
Financial inclusion	-0.721	No
Understanding of risk	1.503	Yes
Attitudes to saving, spending and borrowing	-5.723	Yes
Financial confidence	-3.279	Yes
Long-term thinking	-4.719	Yes
Impulsivity control	-4.376	Yes
Lack of concern about social status	-0.498	No
Self control	-2.398	Yes
Locus of control	-3.389	Yes
Action orientation	-1.838	Yes



### Finding 3

**Compared to those without D/LTHCs, participants with D/LTHCs tend towards being a ‘spender’ rather than a ‘saver’, are more inclined to use credit cards, and borrow for day-day expenses more frequently.**

Individual statements that feed into each of the financial wellbeing components in table 5 were examined to identify specific attitudes or behaviour differences.

In terms of ‘attitudes to saving, spending and borrowing’, participants in this study with D/LTHCs are more inclined to say they are spenders rather than savers. For instance, just over a third (36%) say the statement “I find it more satisfying to spend money than to save it” fits very or fairly well (compared to 29% of those without a D/LTHC). Other spending sentiments show a similar pattern (see figure 3).

**Figure 3**

**Spending sentiment by D/LTHC status and age**



*Restrained use of consumer credit* measures how much unsecured debt people have (such as credit cards, overdrafts, personal loans). Participants with D/LTHC score lower on this measure. Specifically, those with D/LTHC are more likely to access credit cards and unsecured loans:

- 40% have at least one credit card that is not paid off in full compared to 26% of those without a D/LTHC
- 12% have more than four credit cards not paid off, compared to only 2% of those without D/LTHC.
- Age plays a role, where 24% of those aged under 55 with D/LTHCs have at least four credit cards, compared to 2% of those without D/LTHC in the same age category. The differences disappear for those aged 55+.
- Ethnicity also plays a role, in that 21% of Māori with D/LTHCs have four or more cards not paid off, compared to 8% of European/others with a D/LTHC.

- Median amount owed on a credit card is \$4,987, compared to \$2,100 for those without a D/LTHC.
- 46% have at least one unsecured loan, compared to 36% of those without a D/LTHC (22% have at least three, compared to only 9% of those without a D/LTHC)
- Median amount owed on unsecured loans is the same for both groups

Regarding the component '*not borrowing for day-to-day expenses*':

- 23% of those with D/LTHC say they use a credit card, overdraft or borrow money to buy food/pay expenses because they have run short of money at least 'often' or more frequently (compared to 14% of non-D/LTHC participants). At 32%, Māori participants with D/LTHCs are most likely to do this at least 'often'.
- 28% say they/their household borrows money to pay off debts at least 'sometimes' (compared to 18%). Māori and Pacific participants with D/LTHCs are most likely to do this (43% and 44% respectively).
- 24% of those with D/LTHCs are overdrawn on their current account most or every month (compared to 12% of non-D/LTHC participants) with Māori and Pacific participants particularly likely to say this (38% and 37% respectively).

Future research needs to explore the tendency towards spending rather than saving. For instance, while phrasing of the '*attitudes to saving, spending and borrowing*' questions infer a preference for spending, it may have been interpreted by participants as a need to spend on expenses that may not at first glance be considered disability-related (e.g. relating to ease/ manageability, urgency or accessibility / acceptability).





#### Finding 4

### Financial inclusion and participation in KiwiSaver is lower among those with D/LTHCs

On average, those with D/LTHCs have 3.1 financial products (regardless of personal income), compared to 3.8 for those without D/LTHCs (those with high incomes have more financial products, 4.4). Participants with D/LTHCs are less likely to have insurances, investments, or savings accounts (table 6). Regression on number of products shows that presence of D/LTHC is significantly associated with fewer products, independent any of the other demographic variables (e.g. gender, ethnicity, income etc).

**Table 6**

**Do you have any of the following products in your own name (or jointly with someone else) by Disability/Long-term health condition status.**

	D/LTHC	non-D/LTHC
Pension fund (including a KiwiSaver fund you selected yourself)	31%	40%
Other pension	10%	7%
Investments	23%	33%
Health insurance	19%	29%
Life insurance or an income protection policy that pays out if you cannot work due to illness	20%	29%
Mortgage(s)	16%	27%
Other credit (loans from bank, credit unions, moneylenders, hire purchase, credit cards, overdraft)	26%	25%
General insurance (car insurance, home insurance including contents, contents only insurance, travel insurance)	47%	52%
Savings account	57%	70%
Current account	59%	65%
None of the above	5%	4%
Don't know	2%	2%

Focusing specifically on KiwiSaver, those with D/LTHC are:

- More likely to say they have bought their first home using KiwiSaver (29% compared to only 16% of KiwiSaver members without a D/LTHC).
- More likely to either be a non-contributing member (23% compared to 17% of those without D/LTHC) or a non-member 38% (compared to 24% for non-D/LTHC).
- Much less likely to be contributing members (36%) compared to those without D/LTHC (57%), consistent with lower participation rates in the workforce.
- More likely to have balances under \$10000 (42% compared to 29% of those without a D/LTHC).

## Finding 5

### Participants with D/LTHCs are more likely to keep a close eye on their finances but indicate lower financial confidence in managing money day-day or planning their financial future.

A mixed bag is apparent in terms of management of money. For instance, 37% know exactly how much money they spent personally in the last week, compared to 27% of non-D/LTHC - an aspect of the *'keeping track of money'* component.

Similarly, in terms of the *'planned income use'* component:

- There is a slight difference in how often a D/LTHC participant plans use of regular income (43% always or very often, compared to 37% non-D/LTHC). Women with a D/LTHC are particularly likely to plan always or very often (52%).
- There is also a larger difference in those who plan exactly (45% of D/LTHC vs 33% non-D/LTHC)
- Those with D/LTHCs are more likely to always or very often keep to their plan (32% of D/LTHC vs 24%). Women with a D/LTHC are the most likely to do so (35%).

In terms of *'informed product choice'*, those with D/LTHC are comparatively more likely to check the detailed terms and conditions of the selected financial product bought in the last 3 years (43% vs 36% of non-D/LTHC participants).

The component *'knowledge of how to compare financial products'* is positively associated with D/LTHC, but responses to the individual questions that make up component show a tendency for participants with D/LTHCs to rate themselves poorer than non-disabled participants. However, there appears to be an interaction between personal income and health status, whereby those who have a D/LTHC with a relatively high income rate themselves as significantly more knowledgeable than high income earners without a D/LTHC. There are no differences in perceived knowledge when looking at low-income for D/LTHC and non-D/LTHC participants:

- 81% of high-income earners (\$100,000+) with a D/LTHC rate their knowledge of how to use a price comparison website as very good compared to 76% of those without.
- 84% of the same group rate their knowledge of how to compare terms of conditions of insurance as quite or very good compared to 68% of high-income earners without a D/LTHC

Statements related to the component *'Knowledge of money management'* show little difference between those with and without D/LTHC. The one exception is that 36% say the statement *'I do not know enough about the available saving products to choose the right one for me'* fits fairly or very well, compared to 23% of non-D/LTHC participants. Given the greater reliance on borrowing and the lower likelihood of having savings-oriented products, it is not surprising that familiarity with savings products is comparatively lower.

Participants with D/LTHC also score lower on the *financial confidence* component. For instance, 26% rate themselves as very or quite unconfident about managing money day-day (compared to 21% of those without a D/LTHC), and 32% are very or quite unconfident about planning their financial future (compare to 26% of those without a D/LTHC).

Combined, the results suggest that despite less financial confidence, those who have low levels of disposable income may develop very good budgeting skills to ensure their money stretches as far as possible.

## Finding 6

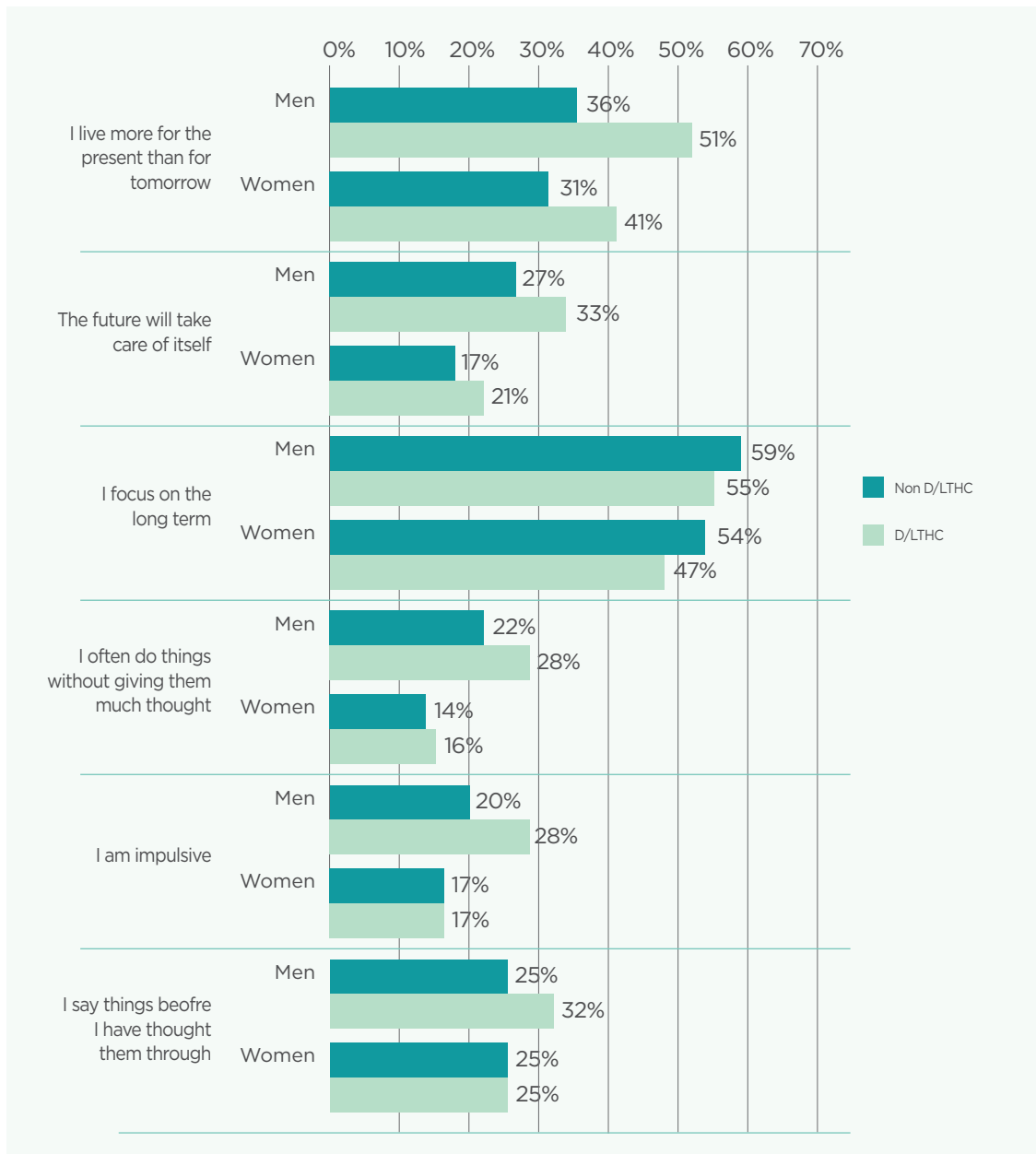
### Participants with D/LTHCs score lower on long-term thinking and higher on impulsivity, while perceptions of control over their financial situation are also lower.

Several differences are apparent in general perspectives between those who have D/LTHC and those without.

- Analysis reveals an interaction with gender for impulsivity, so that males with D/LTHC are particularly inclined to agree they are impulsive, while women are less impulsive than men regardless of D/LTHC status.
- In contrast, both men and women with D/LTHCs are more focused on the short term than those without a D/LTHC (figure 4).

**Figure 4**

‘Fits fairly or very well’ by D/LTHC status



Those with a D/LTHC are more likely to say that 'my financial situation is largely outside my control' fits fairly or very well with them (32% compared to 16% of those without a D/LTHC). They are also less likely to say the following fit fairly or very well:

- I can pretty much determine what happens in my life (45% fairly or very well vs 51%)
- I am always in control of my actions (54% compared to 60%)
- When I make financial plans I do everything I can to succeed (56% compared 62%)

However, gender does not play a role in these perspectives.

#### Finding 7

### **Māori are over-represented as having a D/LTHC within each age group, while Pacific People become over-represented from 55-64.**

- 44% of Māori say they have a D/LTHC, compared to only 9% of the Asian sample. However, the Asian sample is younger (mean age: 38.2) compared to Māori (42.4).
- Within each age group starting from 35-54, Māori are over-represented, while Pacific People become over-represented from 55-64 (table 7).
- Asian participants are disproportionately less likely to say they have a D/LTHC in each age group.





**Table 7**

Incidence of D/LTHC for ethnicities within each age group (\*n&lt;30, indicative only).

		N=ethnicity within each age group	% with D/LTHC
18-34	European/Other	467	22%
	Maori	164	26%
	Pacific	62	27%
	Asian	148	7%
	NET	841	20%
35-54	European/Other	608	30%
	Maori	265	<b>50%</b>
	Pacific	93	26%
	Asian	128	<b>6%</b>
	NET	1094	32%
55-64	European/Other	385	41%
	Maori	57	<b>60%</b>
	Pacific	19*	<b>63%</b>
	Asian	25*	12%
	NET	486	43%
65+	European/Other	538	41%
	Maori	41	<b>61%</b>
	Pacific	11*	<b>82%</b>
	Asian	16*	38%
	NET	606	43%

When age and gender are controlled for, Māori are twice as likely to say they have a D/LTHC than European participants, while Asian participants are four times less likely (table 8).

**Table 8**

Association of age, gender and ethnicity to experience of disabilities or long-term health conditions (D/LTHC)

Binary Logit regression	Estimate <sup>7</sup>	Std. Error	z value	Pr(> z )	exp(estimate <sup>8</sup> )
(Intercept)	-1.4	0.2	-7.7	0.0	0.252
Gender.2: Female	-0.1	0.1	-1.5	0.1	0.888
Ethnicity collated: Maori	0.7	0.1	6.7	0.0	2.036
Ethnicity collated: Pacific	0.3	0.2	1.6	0.1	1.313
Ethnicity collated: Asian	-1.4	0.2	-6.5	0.0	0.252
Age bands: 25-34	0.1	0.2	0.3	0.8	1.064
Age bands: 35-44	0.5	0.2	2.4	0.0	1.572
Age bands: 45-54	0.7	0.2	3.6	0.0	2.019
Age bands: 55-64	1.1	0.2	5.7	0.0	3.002
Age bands: 65-74	1.1	0.2	5.5	0.0	2.977
Age bands: 75-84	1.2	0.2	5.3	0.0	3.339
Age bands: 85+	2.0	0.6	3.4	0.0	7.128

*n* = 3,027 cases used in estimation; R-squared: 0.01403; Correct predictions: 67.99%; McFadden's rho-squared: 0.0649; AIC: 3,602.4; multiple comparisons correction: None

7 the magnitude of the coefficient indicates the size of the change in the independent variable as the value of the dependent variable changes. A positive number indicates a direct relationship (y increases as x increases), and a negative number indicates an inverse relationship (y decreases as x increases).

8 transforms the log of the odds back to a probability

## Te Ara Ahunga Ora Retirement Commission

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