He Rautaki-ā-motu mō te Āheitanga Ahumoni

The National Strategy.
for Financial Capability

WHAT ARE GOOD OUTCOMES FOR FINANCIAL CAPABILITY, AND HOW DO WE MEASURE THEM

A shared measurement tool

TE ARA AHUNGA ORA
Retirement Commission

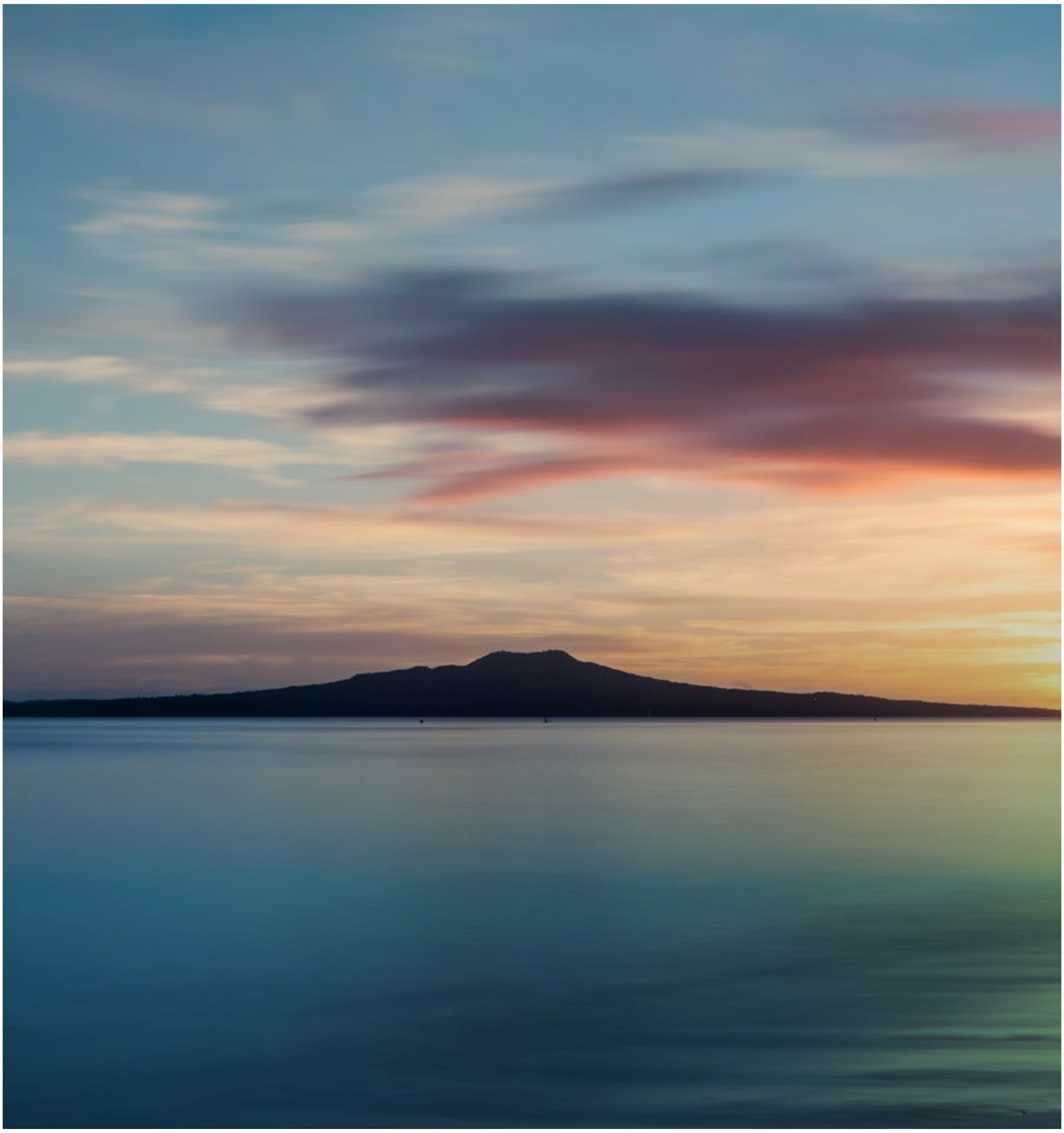
Contents

Executive summary

Financial wellbeing is the ultimate goal of financial capability interventions, but how do we know if they work?

Simply defined, financial wellbeing is: 'The extent to which someone is able to meet all their current commitments and needs comfortably and has the financial resilience to maintain this in the future.[1]'

It is a complex and dynamic process that depends on various factors and skills. Two key components of wellbeing are financial literacy, which is the knowledge of financial concepts and products, and financial capability, which is the skill and motivation to use that knowledge and make good financial decisions. These two building blocks, along with other personal and environmental influences, can help achieve financial wellbeing.



1 (Kempson, E., Finney, A., Poppe, C., 2017)

THE MEASUREMENT PROBLEM

An ongoing challenge for those working in financial capability and wellbeing is the lack of a clear way to measure progress and success. There is significant effort being directed towards getting people to engage with their money worldwide. However, there are also significant assumptions made, without knowing what actually works.

Financial capability providers and educators have not precisely defined collective goals, nor shared measures on whether we are making headway or getting any closer to the goal line. Not having agreed outcomes and common metrics makes it challenging to share progress and extend it further.

Those attending financial capability programmes are often asked questions such as "do you value this programme?" to determine effectiveness, with no objective or ongoing way to see if there has been financial progress or even agreement on what financial progress would look like.

That's not to say that financial wellbeing models and measures are lacking; there are many. They quickly get complex (as the financial world tends to), and they frequently expand to theories of behaviour change without a clear way to utilise them effectively.

OUR PURPOSE

We have scanned the globe delving into research on measuring financial capability and wellbeing and conducted interviews with financial capability providers in New Zealand. We have used this to define 10 good financial capability outcomes and then offer guidance on how to measure changes to these outcomes.

This has long been requested from partners across the financial capability ecosystem and was defined as a project in the **National Strategy for Financial Capability 2021-2024.**

Our goal is for providers to measure activity against these shared outcomes, using an agreed set of questions as a tool to survey participants, pre-and post-interventions, to measure progress.

It needs to be: simple, behavioural, culturally responsive, and evidence-based to work.

DEFINING SHARED MEASURES

We could not have defined these measures alone. We leaned heavily on the expertise of many partners and researchers across the financial capability ecosystem. This included working with an expert steering group who guided the development of this project, interviewing 33 people across 20 organisations, running a workshop with financial mentors, and scanning more than 90 research papers to answer what good and measurable outcomes for financial capability are.

What was learned through this process, including a summary of the rich conversations held through interviews and of the literature reviewed, is covered in this paper. We hope this can provide useful insights to those working in this space and we extend our special thanks to the many contributors.

MEASURING GROWTH AND RESILIENCE

We were able to hone in on 10 important financial capability outcomes. To measure these, 15 questions were identified that could be used before and after an intervention to test for change. The result is a tool that is flexible enough to accommodate the variety of financial situations – yet can still chart progress towards the growth and resilience that we seek.

Seven of these outcomes are focused on financial growth (more money for tomorrow) and three on financial resilience (money to protect you from the unexpected today).

Figure 1: Shared financial capability measures

FINANCIAL GROWTH MEASURES

1. Increase saving regularly
2. Increase amount invested
3. Increase return potential
4. Accelerate repayments on interest-incurring debt
5. Reduce everyday borrowing
6. Meet all financial obligations to avoid consequences
7. Reduce financial product fees and interest paid

FINANCIAL RESILIENCE MEASURES

8. Keep emergency savings
9. Have relevant insurances, wills and enduring powers of attorney in place
10. Review protection regularly

REFINING A SHARED MEASUREMENT TOOL

We also provide guidance on how to measure these outcomes through a questionnaire tool providers can adapt to track the financial progress of participants. The measurement tool covers 15 simple survey questions for use before and after an intervention.

These questions test for the most impactful financial changes that are within the participants' direct control (so not their investment returns, for example, but rather their investment contributions; not their net worth, but their saving or debt repayment rates). We ensure the measurement tool can adapt to any financial position and value progress, no matter someone's starting point.

Figure 2: Summary of questions in questionnaire tool*

SAVING AND EMERGENCY FUNDS

1. Do you typically set aside money for savings?
2. In the last month, have you increased the amount of money you regularly set aside?
3. How much could you access if you urgently needed it without having to borrow?

KIWISAVER AND INVESTMENT

4. Are you actively contributing to investments e.g. KiwiSaver, managed funds, shares?
5. Have you increased the regular amount you invest in the last six months (including KiwiSaver)?
6. Have you checked if your investment / KiwiSaver choices are in line with your goals?

DEBT AND BORROWING

7. Typically, do you borrow to: [pay for essentials, non-essentials, emergency situation]
8. How many of the following debt products do you owe money on?
9. Thinking about a typical month, which reflects your debt repayment? ' Across all my debt products...______'

REDUCING FEES AND INTEREST PAID

10. In the last year have you taken actions to reduce the interest being charged on your debts?
11. Typically, how many times each month do you have to pay extra because you missed a payment?
12. In the last year, were you able to lower the fees associated with your investments like KiwiSaver, or your bank accounts or cards?

PROTECTING WHAT'S IMPORTANT

13. Thinking about the things that are important to you, such as your health, life/funeral, family/whānau, home/property, income, car and your 'stuff' which describes you?
14. How many of these do you have? [will/enduring power of attorney]
15. Have you thoroughly reviewed your insurance cover, your will, or enduring powers of attorney within the past three years?

*The above is a summarised version of the tool. To view the full measurement tool with response options, considerations, and how to score responses **see here.**

FOCUS ON FINANCIAL OUTCOMES

We aimed to focus only on financial outcomes, as non-financial outcomes (such as mental health improvement) are much broader than we could tackle or measure here. While non-financial outcomes aren't in the measurement tool, we do highlight from interviews and research which actions support these outcomes (such as the importance of having a goal).

Financial goals and budgets are valuable tools to creating financial growth and resilience. However, they represent intentions rather than actions. Having a budget or a financial goal without acting on it will not create either financial growth or resilience. The non-financial themes around what supports action typically fit into three buckets we define both through the research chapter and interviews as: self-reflection, motivation, and being empowered. Anything we can learn around what supports action towards the refined measures is highly valuable.

HOW WILL THE SHARED MEASUREMENT TOOL BE USED?

The intention is that the shared measurement tool supports decision making around financial wellbeing activity. It will provide a useful base of evidence for campaigns, research, policy and nudges, empowering people to make better financial decisions and influencing behaviours.

We hope practitioners in this space share their evaluation results from a variety of interventions through a shared resource hub. This hub is currently under development by Te Ara Ahunga Ora Retirement Commission as part of another National Strategy project. This will help institutions, agencies and policymakers in New Zealand promote and fund those activities that in fact help people achieve growth and resilience, and ultimately financial wellbeing.

We intend to use the tool to test the range of programmes run by Te Ara Ahunga Ora Retirement Commission and are looking for partners to test and share their results too. We are also looking for feedback on the shared outcomes we want to measure and the questions we want asked that are outlined in this paper. Contact us **here.**

Part A
The shared measurement tool

1. Introduction

WHAT ARE WE TRYING TO ACHIEVE?

What is the goal when we work on lifting people's financial capability? When we nudge participants towards figuring out their money personalities, tracking their expenses, building budgets, listing their debts and interest rates, weighing up insurance products or funds, or attempting forecasts as to how much they might need in retirement – what is it precisely we are aiming to achieve?

When we educate on the virtues of compound interest, about how too many buy now pay later loans can get you in trouble, or why tiny rate percentages equate to tens of thousands of difference... what is it we want, exactly?

We spend millions around the globe on financial capability aiming for something, whether in the public, private, non-profit or academic sectors. That goes towards programmes, classes and courses, supported by significant resources, tax credits and other funding. There are significant assumptions about what will help – not to mention the worldwide human effort involved in getting people to engage with their money lives.

It is no easy task to keep sights on the target, much less hit it. Is it literacy, education, capability, wellbeing? It's certainly financial. But the scope can span from psychology to macroeconomics, making it overly convoluted to wrap our heads and arms around, much less measure.

Yet financially speaking, we are after something specific. And that something can be measured.

THE IMPORTANCE OF FINANCIAL GROWTH AND RESILIENCE

Essentially – and it helps to articulate what we want – we want people to grow their money. Not necessarily in the sense of more income (although that would be welcome, and it's healthy to acknowledge when there is simply not enough coming in). We want them to have more money for their future, since needs tend to rise over time, from studying to flatting, to establishing families and whānau, to buying homes, culminating in retirement.

We want their trend line to head upwards, their trajectory compounding up so they can meet those future needs securely. We want financial progress; we want growth.

And growth would be enough except... we all carry risks along the path to it. Redundancies, car repairs, business failure, health challenges, even unexpected trips to the vet. So, we also want people to have money for today, at the ready in case they need it urgently, whether it comes from an emergency fund, healthy savings, or insurance policy. We want resilience now so future growth is less compromised.

THE NEED TO MEASURE PROGRESS

In seeking financial wellbeing, we are seeking measurable financial change. As collectives or individuals, we are either growing our positions or not, we are either becoming more resilient or not – no matter how small it may seem at first, no matter our starting points. People need to be better off from investment in financial wellbeing.

Across all those working to lift financial capability here in Aotearoa New Zealand, there has never been shared measurement to gauge financial change and programme impact. And, by extension we rarely learn collectively what works best. That's not from a lack of evaluation on the part of providers, but these have generally been at programme level and therefore specific in scope. But we haven't been keeping score overall.

National Strategy for Financial Capability partners have repeatedly requested metrics that can be used to measure our success and leverage it further.

A SHARED FINANCIAL WELLBEING MEASUREMENT TOOL

This paper is the result of extensive consultation. We spent the last year reviewing more than 90 pieces of international research on what behaviours most lead to good financial wellbeing outcomes, plus interviewing 33 professionals across 20 organisations who work daily to support New Zealanders with their money. We were able to hone in on 10 important financial capability outcomes. 15 questions were identified that could measure progress against these outcomes, by assessing participants' responses both before and after an intervention.

The result is a tool that is flexible enough to accommodate the variety of financial situations – yet can still chart progress towards the growth and resilience that we seek. It is both simple and holistic, taking into account the variety of starting points. It is behavioural, not onerous, evidence-based, and culturally responsive.

"Each person's journey is quite different, but actions are cumulative," as one of our interviewees put it.

"The more actions a person takes, the more they do, the more their score increases – but it increases exponentially, not linearly."

We are eager to measure that progress and learn how best to increase it.

ACKNOWLEDGEMENTS

A special thanks to the following contributors:

Steering group[2]

Interviewees[3]

2 **Special thanks to steering group members:** Dr Pushpa Wood, Karin Dalgleish, Raquel Greive, Nicola Bright, Jo MacDonald, John Natua, Dr Viliame Lewenilovo, Emma Clarke, Olivia Harvey, Josie Crimmins

3 **Thanks to the following interviewees:** Anna Livesey, Bob Forgan, Carl McCullough, Karleen Everitt, David Clay, Rachel Looi, Frances Ronowicz, Jodi Hoare, Larna Findlay, Alice Banfield, Michael Ward, Susan Barrett, Christine Liggins, Matt Halsey, Natalie Vincent, Nicola Eccleton, Jessica Jamieson, Julia Jackson, Dr Pushpa Wood, Ange Smart, Marcela Mingoti, Kip Hanna, Leisa Nathan, David Tupu Tuia, Sarah Lockwood, Peter Cordtz, Mils Muliaina, Vinnie McClafferty, Emma Heaps, Juaina Hoque, Kalo Payne-Smith, Josie Crimmins, Thomas Horton, and the 20+ financial mentors who kindly shared their perspectives at the 'Stronger together' workshop in June.

2. Background and methodology

BACKGROUND

The importance of financial wellbeing

Supporting New Zealanders to grow their money and build resilience is key to helping people get ahead, have more life choices and grow their financial wellbeing.

Low levels of financial wellbeing have lifelong implications on whānau and their communities. Potential impacts include higher stress, isolation, and worse health outcomes such as not accessing health services when they might have otherwise [4].

Many New Zealanders are living from pay to pay with low to no savings [5], high household debt, and reduced choices come retirement.

We know money plays a large role in the quality of later life, alongside health and social support [6]. Wealth is unequally divided throughout New Zealand, with the poorest 50% of New Zealanders owning just 5% of the country's wealth [7].

More than 40% of New Zealanders aged 65+ have virtually no other savings besides NZ Superannuation [8] and this is expected to worsen with an ageing population and reduced housing affordability. Come 2048, the number of those reaching retirement without owning a home is expected to double which will put additional strain on government services.

Additionally, socio-economic gaps have remained especially high for Māori, Pacific Peoples, women, disabled people and migrant communities [9]. This leads to worse financial outcomes which make it much harder for these groups to get ahead by the time they reach retirement.

WHY WE NEED SHARED MEASURES

Studies are mixed on how important knowledge is for financial wellbeing, so promoting financially capable behaviours is very important [10]. It is critical that government, iwi, education, industry, and community work together to support New Zealanders to grow their money over their lifetime and be resilient to financial shocks that happen along the way.

There are many organisations focusing on improving financial wellbeing in Aotearoa New Zealand. What we heard from these organisations when developing the National Strategy for Financial Capability 2021-2024 [11] was that we need to collectively define success measures to determine whether our collective work was having an impact.

4 (Te Ara Ahunga Ora Retirement Commission, 2019)
5 (OECD, 2022)
6 (Collard, S., Hayes, D., 2014)
7 (Rashbrooke, G., Rashbrooke, M., Molano, W., 2017)
8 (Perry, B., 2019)
9 (Galicki, C., 2021)
10 See (Kempson, E., Poppe, C., 2018; Lusardi, A., Mitchell, O. S., 2023) for different perspectives on the knowledge/behaviour correlation.
11 https://assets.retirement.govt.nz/public/Uploads/National-Strategy/National-Strategy-2021-booklet.pdf

HOW TO MEASURE PROGRESS

There are a plethora of financial wellbeing models and measures, however no measurement tool has been universally adopted. Most models are too complicated for providers on the ground to use with participants.

We focus specifically on what actions grow household financial positions or build resilience. This enables us to have a shared focus on supporting these actions both through financial capability interventions and collectively through the National Strategy for Financial Capability. Linking financial education to concrete actions is an approach supported by the OECD to increase the likelihood of behavioural change [12].

We aim for this tool to support decision-making in favour of financial wellbeing, which can provide a useful evidence base for national campaigns, nudges, research, and policy. With so many partners working across the financial capability landscape, it is important to be clear on what we want to achieve together so we can start measuring it. In the words of one National Strategy partner "what gets measured gets done".

METHODOLOGY

Informed by evidence and insights

To support the development of a shared measurement framework, we have reviewed research and evidence on what behaviour directly impacts financial wellbeing. This has led to a focus specifically on two dimensions of financial wellbeing – financial growth and resilience [13].

We have also gathered knowledge and insights from many organisations who play a role in improving financial wellbeing in New Zealand. We spoke to those working directly with whānau, and researchers in this space, to ensure the framework has been drawn from lived experience and is evidence-based.

We are grateful to the many organisations from across the financial capability network who supported this work and volunteered their time to share openly. A special thanks to the members of the expert steering group, and the 33 New Zealand financial capability experts from 20 organisations who were interviewed.

We could not have done this without the contribution of partners across the ecosystem. They offered useful data and insights to ensure the behavioural measures are robust and well-informed by those working to tackle financial wellbeing in New Zealand.

OBJECTIVES

With support from the expert steering group, the objective for this work was refined to:

1. Define behaviours or decisions that make people and their whānau financially better off (impact).
2. Collaborate closely with the finance sector to refine good outcome measures as guiding principles which can be plausibly attributed to an intervention [14].

Financial wellbeing focus areas (what we want behaviour to lead to)

1. People in Aotearoa grow their position so that there is more money for tomorrow, increasing their ability to meet future needs.
2. People in Aotearoa are more resilient, so they are protected and can access more money for today if urgently required.

12 (OECD, 2013)

13 While financial wellbeing can have broad definitions, Kempson categorises wellbeing into three key areas: resilience, feeling comfortable, and meeting commitments (2017). We believe these can be further refined to two areas - growing money and fostering resilience to meet wellbeing.

14 The steering group agreed the measures need to be behavioural when possible, culturally responsive, evidence-based, and easy enough for providers to administer.
An intervention as outlined here is wide-ranging and covers financial capability programmes all the way through to marketing campaigns which could encourage emergency savings for instance.

3. Shared financial wellbeing measurement tool and uses

3.1 Summary of shared measures

REFINING MEASURES

After reviewing international research and gleaning insights from 33 people working in financial capability in New Zealand, the result is 10 simple financial wellbeing measures.

WHAT THE MEASUREMENT TOOL INCLUDES

Defining where to draw the line on what measures to include was the most challenging part of this project. Financial wellbeing can be so broad that other measurement tools often encompass 50-plus questions. Given the challenge of measuring financial wellbeing, we had to zero in on the most important outcomes. The result is 10 measures of financial wellbeing specific to financial growth and resilience.

Refining measures is a start, but there needs to be an easy way to measure progress without exhausting participants or providers with a requirement for complex individual financial data. This is when a measurement tool comes in handy. We suggest 15 easy multi-choice questions that providers can use to assess participants on these measures. There are two sets of questions – one to establish where someone is at pre-intervention, and one post-intervention to capture progress made. We also include a simple way for providers to score answers, which can be useful to help calculate the impact of their intervention.

Long-term, we want to use the shared resource hub as a place for providers to share interventions and scores (potentially anonymously) with others working in this space, so we can continue to learn from each other.

Figure 1: Shared financial capability measures

	FINANCIAL GROWTH MEASURES
1	Increase saving regularly
2	Increase amount invested
3	Increase return potential
4	Accelerate repayments on interest-incurring debt
5	Reduce everyday borrowing
6	Meet all financial obligations to avoid consequences
7	Reduce financial product fees and interest paid

	FINANCIAL RESILIENCE MEASURES
1	Keep emergency savings
2	Have relevant insurances, wills and enduring powers of attorney in place
3	Review protection regularly

3.2 Shared measurement tool for use in financial capability programmes

A TOOL FOR FINANCIAL CAPABILITY PROVIDERS

The measurement tool is primarily designed for providers' use, but has the added benefit of helping participants see where they could make changes to improve their financial wellbeing. It is up to the provider to decide whether the results are shared with the participant. Sharing results with the participant can be motivating if improvements are seen; however, declines in scores, or no improvement, may reduce motivation.

A CONSISTENT WAY TO MEASURE CHANGE

We recommend using the full questionnaire to allow for indirect consequences of the intervention, service or product to be measured. It also allows the provider to compare the results to other interventions, services or tools that are assessed with the measurement tool in the same way. Over time, a benchmark could be established for that provider, to which each intervention, tool or service can be compared.

The questionnaire can be completed by participants online or on paper. Providers are free to select specific modules that best suit their intervention and adapt the questionnaire to suit. Scoring can be applied to individual modules by using the scoring template provided.

MEASURING BEFORE AND AFTER AN INTERVENTION

The questionnaire is first used before an intervention, to measure someone's baseline. The same questionnaire (with slight differences in wording) is then used after the intervention, to measure progress.

If a provider wants to measure *overall* group changes before and after, unique identifiers/participant names are generally not required and final scoring can be the overall average score of those taking part in the intervention. If the provider wants to understand changes for *individuals*, the provider will need to create a unique identifier (e.g. participant name or alpha-numeric combination) for each person to match the pre- and post-intervention scores. It is important that the identifier is accurately entered by the individual to match the pre and post questionnaire.

It is up to the provider when to survey participant progress following the intervention. We suggest the pre questionnaire can be filled out before or at the start of the intervention. The post questionnaire can be filled out one to three months after the intervention (ideally not too long afterwards, to encourage completion, but long enough to give someone time to make a change). If the intervention is more in-depth (such as a programme held over several weeks), the post questionnaire could be filled out at the end of the last session, which will help to encourage participation. The impact of the intervention is represented by the change in score from pre to post.

If you usually manage your finances on your own, please answer the following questions from an individual perspective.	If you usually manage your finances as a household/family/whānau, please answer from the perspective of that group.

Figure 3: Questionnaire tool for pre and post financial capability interventions

Question	Answer	Pre scoring	Post scoring
MODULE 1: SAVING AND EMERGENCY FUNDS			
Q1. [Pre] Do you or your whānau typically set aside money for savings? [select one] **[Post]** In the time since taking part, have you or your whānau set aside money for savings? [select one]	No	0	0
	Yes, occasionally	2	2
	Yes, regularly	3	3
Q2. [Pre] In the past six months, have you or your whānau increased the amount of money you regularly set aside? [select one] **[Post]** In the time since taking part, have you or your whānau increased the amount of money you regularly set aside? [select one]	No, I/we don't have any spare money to put aside	0	0
	No, it's not something I/we have thought about	0	0
	No, I/we planned to but something got in the way	1	1
	No, I/we increased it a while ago, so won't make any changes for a while	2	2
	Yes	3	3
Q3.[15] How much could you or your whānau access if you urgently needed it without having to borrow? [select one]	$0	0	0
	$1 to $50	1	1
	$51 to $100	1	1
	$101 to $500	1	1
	$501 to $1000	2	2
	$1001 to $3000	2	2
	$3001 to $5000	3	3
	More than $5000	3	3

15 In this situation, we are asking about 'easily accessed' funds, so an asset-rich but cash-poor individual may be in the same situation as a cash-poor individual with fewer assets if their assets are difficult to access urgently. Scores are bracketed equally to accommodate someone with very little money vs someone with a bit more (relative), but it also needs to relate to their ability to pay for specific emergencies (absolute). For instance, the cost of emergency dental work might be the same, regardless of whether the person has a large or small emergency fund.

We decided that answers should be an amount rather than a relative type of answer such as "three months worth of expenses" to better accommodate progress made by people who have just started building an emergency fund.

Question	Answer	Pre scoring	Post scoring
MODULE 2: DEBT AND BORROWING			
Q4. [18] How many of the following debt products do you or your whānau owe money on (not including home loans, business loans or student loans)? [select one] • Buy now, pay later • Store card • Credit card • Bank overdraft • Car loan • Personal loan • Payday loan (a loan that needs to be paid off by your next payday) • Money owed to friends or whānau • Other	3 or more debt products	-3	-3
	2 debt products	-2	-2
	1 debt product	-1	-1
	I/we don't owe money on any of these	0	0
Q4a. Do you or your whānau have a home loan? [select one]	Yes	3	3
	No	0	0
Q5.[17] **[Pre]** Do you or your whānau typically borrow to: [select one] **[Post]** In the time since taking part, did you or your whānau borrow to: [select one]	Pay for essentials (not counting a mortgage)	-3	-3
	Pay for non-essentials	-2	-2
	Pay for an emergency situation	-1	-1
	I/we don't borrow money for anything	0	0
Q6.[19] **[Pre]** Thinking about a typical month, which debt repayment typically reflects you or your whānau? 'Across all of my/our debt products, I/we...______' [select one] **[Post]** As a result of taking part, which debt repayment reflects you or your whānau? 'Across all of my/our debt products, I/we..._______'[select one]	Don't have any debts to repay	0	0
	Have been **unable to pay any** of the required payments	-3	-3
	Have paid **some money** but been **unable to meet all of the minimum** payments	-2	-2
	Have **met all minimum** payments	0	0
	Have paid **more than the minimum** on (or paid off) **at least some**	2	2
	Have paid **more than the minimum** payment on (or **paid off) all** debt	3	3

17 This is a multi-choice question that relates to borrowing for everyday expenses. Home loans are excluded because they are not everyday expenses.

18 This question relates to any change in borrowing behaviour and whether someone has reduced it altogether. An improvement would represent a decline in the number of debt products after an intervention and/or acquisition of a home. We have included buy now, pay later because we believe this product represents borrowing/debt behaviour, even though it is not interest-accruing. We have made all debts the same weight, except home loans, because we wish to avoid 'advising'; however, home loans are typically for a significant asset and will have required a significant deposit, providing some protection.

19 The crux of this question relates to overall debt repayment acceleration, rather than needing the granularity of loan type and repayment category (e.g. minimum, more than minimum, and paid off for each loan type).

Question	Answer	Pre scoring	Post scoring
MODULE 3: REDUCING FEES AND INTEREST PAID			
Q7. [Pre] In the past year, have you or your whānau taken actions to reduce the interest you're paying on your debts, e.g. consolidating loans, balance transfer, switching to a cheaper provider? [select one] **[Post]** As a result of taking part, have you or your whānau reduced the interest you're paying on your debts, e.g. consolidating loans, balance transfer, switching to a cheaper provider? [select one]	I/we don't owe any money	0	0
	No, I/we haven't tried to	0	0
	I/we have thought about trying to but haven't yet started looking	0	0
	I/we have started looking at ways to do this	1	1
	I/we have looked at this but can't get the interest rates any lower	2	2
	Yes, I/we have taken actions to reduce the interest I'm we're paying	3	3
Q8. [Pre] How many times each month do you or your whānau typically have to pay extra because you missed a payment, e.g. late fees, default fees, loss of prompt payment discounts? [select one] **[Post]** Since taking part, how many times in the past month have you or your whānau had to pay extra because you missed a payment, e.g. late fees, default fees, loss of prompt payment discounts? [select one]	I/we don't have any debt	0	0
	Can't remember	-3	-3
	More than four times	-3	-3
	Four times	-2	-2
	Three times	-2	-2
	Twice	-1	-1
	Once	-1	-1
	Never	0	0
Q9. [Pre] In the past year, were you or your whānau able to lower the fees associated with your bank accounts, cards, KiwiSaver or investments? [select one] **[Post]** As a result of taking part, did you or your whānau lower the fees associated with your bank accounts, cards, KiwiSaver or investments? [select one]	I/we don't know/prefer not to answer	0	0
	I/we don't have bank accounts, cards, KiwiSaver or investments	0	0
	No, I/we haven't tried to	0	0
	I/we have thought about trying to but haven't yet started looking	0	0
	I/we have started looking at ways to do this	1	1
	I/we determined that I'm/we're getting value for money with the current fees	2	2
	Yes, I/we made changes that improved the value for money of the fees	3	3

Question	Answer	Pre scoring	Post scoring
MODULE 4: KIWISAVER AND INVESTING			
Q10. Are you or your whānau actively contributing to KiwiSaver or other investments, e.g. managed funds, shares? [select one]	No, I/we don't have any spare money to contribute or invest	0	0
	No, I/we haven't thought about doing so	0	0
	No, but I/we are planning to do so in the near future	1	1
	No, but I/we are actively researching where I/we wish to contribute or invest	2	2
	Yes	3	3
Q11.[16] **[Pre]** In the past six months, have you or your whānau increased the regular amount you contribute to KiwiSaver or other investments? [select one] **[Post]** As a result of taking part, have you or your whānau increased the regular amount you contribute to KiwiSaver or other investments? [select one]	I/we don't have KiwiSaver or other investments	0	0
	No, it's not something I/we have thought about	0	0
	No, I wasn't/we weren't able to	0	0
	No, I/we planned to but something got in the way	1	1
	Yes	3	3
Q12. [Pre] Have you or your whānau checked if your KiwiSaver or other investment choices are in line with your goals, i.e. fund type, or kinds of investments based on your timeframe and risk comfort level? [select one] **[Post]** As a result of taking part, have you or your whānau checked if your KiwiSaver or other investment choices are in line with your goals, i.e. fund type or kinds of investments, based on your timeframe and risk comfort level? [select one]	I'm/we're not sure what this means	0	0
	I/we don't have KiwiSaver or other investments	0	0
	I/we don't know and probably won't check	0	0
	I/we don't know, but intend to check in the near future	1	1
	I/we have checked within the past year and am/are in the process of making appropriate changes	2	2
	I/we have checked in the past year and am/are happy with the investments and types of funds I/we have	3	3

16 Increasing investment contributions will create financial growth, but it's unlikely people are able to actively increase amounts on a frequent basis, so we've have limited this to the past six months, and have grounded any change to the intervention, service or tool. Wording of the post survey is altered to tie any change to the intervention.

Question	Answer	Pre scoring	Post scoring
MODULE 5: PROTECTING WHAT'S IMPORTANT			
Q13.[20] Thinking about the things that are important to you or your whānau, such as your health, life/funeral, whānau, property, income, car and 'stuff', which describes you? ('Insurance' includes things like health insurance, home and contents insurance, third-party or full car insurance, funeral insurance, life insurance, income protection, etc.) [select one]	Don't know	0	0
	I/we don't have insurance to cover any of the things that are important to me	0	0
	I'm in the process of getting insurance for some of the things that are important to me	1	1
	I/we have insurance for some of the things that are important to me/us	2	2
	I/we have insurance for all the things that are important to me/us	3	3
Q14.[21] How many of these do you or your whānau have: a will, enduring power of attorney (health), enduring power of attorney (property/financial affairs)? [select one]	Don't know	0	0
	All three	3	3
	Two of these	2	2
	One of these	1	1
	None of these	0	0
Q15. Have you or your whānau thoroughly reviewed your insurance cover, your will or enduring powers of attorney within the past three years? (This needs to be more than reading an annual review letter but does not necessarily have to be with an adviser or lawyer.) [select one]	Don't know/can't remember	0	0
	I/we don't have any of these	0	0
	No, I/we haven't thought about it	0	0
	No, but I/we have thought about it	1	1
	No, but I am/we are planning to do so in the near future	2	2
	Yes	3	3

20 This was initially a very complex question, asking the participant to identify what in their life they wanted to protect, and then what they used to provide protection, but we had two issues with this. Having an increasing number of things to protect doesn't mean a person is growing financially. Additionally, given the cost of insurance, it is not always a case of having maximum insurance (e.g. life insurance becomes far less important if the mortgage is paid off and children are no longer dependent). Rather, we decided that we simply need to know whether people have insured all the things that are important to them.

21 We have separated out wills and EPAs from question 14 as these represent a different form of protection. We have also removed trusts; as much as they are a means of protecting assets, having a trust doesn't necessarily mean a person is more resilient than a person without a trust if they don't have assets or potential liabilities. In contrast, wills and EPAs relate to everyone.

Optional context questions (no scores)

Are you:	Male Female Non-binary Prefer not to answer Prefer to specify ____________
Which age category do you fall into?	Under 18 18 to 24 25 to 34 35 to 44 45 to 54 55 to 64 65+ Prefer not to answer
Which of the following ethnic groups best describes you? [select multiple]	NZ European Māori Cook Islands Māori Tongan Samoan Fijian Other Pacific Person Indian Chinese Other Asian Other ethnicity Prefer not to answer
Who in your household makes the financial decisions?	Mainly me Mainly someone else I share the financial decision-making with others Prefer not to answer
If you answered this survey from the perspective of your household/ family/whānau, what is your household income per year (before tax)?	Under $10,000 $10,000 to 19,999 $20,000 to $29,999 $30,000 to $39,999 $40,000 to $49,999 $50,000 to $59,999 $50,000 to $69,999 $70,000 to $99,999 $100,000 to $119,999 $120,000 to $149,999 $150,000 to $199,999 $200,000 or more Don't know Prefer not to answer
If you answered this survey from the perspective of yourself only, what is your personal income per year (before tax)?	Under $10,000 $10,000 to 19,999 $20,000 to $29,999 $30,000 to $39,999 $40,000 to $49,999 $50,000 to $59,999 $50,000 to $69,999 $70,000 to $99,999 $100,000 to $119,999 $120,000 to $149,999 $150,000 to $199,999 $200,000 or more Don't know Prefer not to answer
Are there any other comments you'd like to make about your financial situation or how it has changed?	Open-ended

For provider use only – option to calculate final score to a range from 0-100.	
PRE INTERVENTION	**POST INTERVENTION**
('total'+12) x 1.96	('total'+12) x 1.96

Figure 4: Scoring example box

Rosie runs a financial capability programme that sees 12 participants attend a weekly workshop over an eight-week period. The programme focuses on homeownership and covers budgeting, saving, KiwiSaver and debt.

Before the intervention, the average score for participants completing the survey was –5.

To calculate this into a range from 0-100, you can go: (-5 + 12) x 1.96 = **13.92** (score out of 100).

After the intervention, the score was 10. Participants took time during the course and in the months afterwards to make changes to saving, KiwiSaver and debt.

To calculate this into a range from 0-100, you can go (10 + 12) x 1.96 = **43.12** (score out of 100).

That's a lot of progress! You can then subtract the starting number from the post-intervention number to see the shift in score: 43.12 - 13.92 = **29.2**.

On average, participants shifted their financial wellbeing progress score by **29.2 points out of 100**!

USING THE TOOL TO SCORE RESULTS

The maximum score for any question is +3.

Figure 5: What scores represent

Score	What the score indicates for each question
0	No tangible improvement has been achieved for that action.
1	Some form of intention, or minor progress that is unlikely to produce financial growth or resilience.
2	Active engagement, and/or some progress that may produce financial growth or resilience.
3	Actual actions and/or behaviour that will produce financial growth or resilience.
-1	Intermittent behaviour that may produce some minor decline in financial growth or prevent progress in other areas.
-2	Behaviour that may undermine other efforts to produce financial growth or resilience.
-3	Ongoing behaviour that will reduce financial growth trajectory and/or reduce financial resilience.

WEIGHTING OF SCORES

Each question is weighted equally – we are not trying to signal to the provider which behaviour is most important, rather we believe it is up to the provider to determine which areas they wish to target.

A maximum score of +39 and minimum of -12 is possible, but to make the result easier to follow, there is an option to convert the total so it sits between zero and 100. To do this, the equation as outlined at the end of the table is: ('score'+12) x 1.96.

Scoring is manual – impact is the change in total score from pre- to post-intervention. Where appropriate, the provider can use the measurement tool with an individual to focus on areas that have gone well and areas where further attention is required. The scores can also be used in aggregate form to determine the efficacy of the intervention, tool or service, as well as identify areas of unexpected impact.

MANUAL SCORING TEMPLATE

		Questionnaire scoring pre intervention			Questionnaire scoring post intervention			Scoring result
MODULE	**Question**	Input scores per question	Add scores together from column A	Convert the scores into a number from 0-100 (20 points per module)	Input scores per question	Add scores together from column A	Convert the scores into a number from 0-100 (20 points per module)	Your intervention score is column F minus column C
		Column A	Column B	Column C	Column D	Column E	Column F	Column G
1 SAVING AND EMERGENCY	1			Column B x 2.222 = ____			Column E x 2.222 = ____	
	2							
	3							
2 DEBT AND BORROWING	4			(Column B+9) x 1.333 = ____			(Column E +9) x 1.333 = _____	
	4a							
	5							
	6							
3 REDUCING FEES AND INTEREST PAID	7			(Column B+3) x 2.222 = ____			(Column E+3) x 2.222 = ____	
	8							
	9							
4 KIWISAVER AND INVESTING	10			Column B x 2.222 =_____			Column E x 2.222 = _____	
	11							
	12							
5 PROTECTING WHAT'S IMPORTANT	13			Column B x 2.222 ____			Column E x 2.222 = ____	
	14							
	15							
Total average score		Add all scores in column A = ____		(Column A total + 12) x 1.96 = ____	Add all scores in column D = ____		(Column D total + 12) x 1.96 = ____	

If you have any questions or want scoring support, contact us at: **national.strategy@retirement.govt.nz**. We're here to help.

3.3 What are the parameters of the shared measurement tool?

The shared measurement tool is designed to measure the *change* in actions known to be strongly associated with an improvement in financial wellbeing. It does not guide the mechanisms that drive those changes in action. The following are aspects that lie outside the shared measurement tool.

BUDGETING

Budgeting is a topic widely discussed in our interviews, and the development of budgets often constitutes a significant aspect of financial planning. However, we argue that budgeting (and indeed, financial planning) is a means to an end, a part of the process or mechanism for financial growth. The *result* of budgeting (i.e. the outcome to measure) should be having more money available to save/invest or build resilience.

INCOME AND SOCIOECONOMIC DIFFERENCES

When it comes to investing there is unequal distribution of wealth with the poorest 50% of New Zealanders owning just 5% of household wealth [22]. The wealthiest 10% of New Zealanders own most assets outside of housing, particularly business wealth. This brings a challenge to policymakers and financial institutions on how we can support more New Zealanders to grow their money and thrive. There is also growing inequity between those who own their home (with or without a mortgage), and those who rent [23]. Unsurprisingly those who rent have lower financial wellbeing and net worth.

It is important to note there are large socio-economic differences for several groups in New Zealand which means supporting financial wellbeing for these cohorts is important. In particular: Māori, Pacific People, women, migrants, and those with a health condition are worse off than other groups and consequently have lower financial wellbeing. This is not due to capability differences and tends to be due to socio-economic gaps.

We acknowledge that income greatly impacts on whether someone can manage debt, save, and invest. Debt in particular can have a big impact on what income is available for essentials. Those seeing financial mentors in New Zealand are often spending 105% of their income, with debt repayments taking 15% of incomes [24].

While income is an important influencer and commonly leads to higher financial wellbeing scores, wellbeing is better determined by behaviour undertaken [25]. Behaviours such as having a savings habit, restraining spending, preference not to live on credit, and managing a credit card are more important to financial wellbeing than doubling of income [26]. Many people can have lower incomes but high financial wellbeing [27].Psychological factors

22 (Rashbrooke, G., Rashbrooke, M., Molano, W., 2017)
23 (Royal Society Te Apārangi, 2021; Stats NZ., 2020)
24 (FinCap, 2023)
25 (Kempson, E., Poppe, C., 2018)
26 (Haisken-DeNew, J., Ribar, D. C., Salamanca, N., Nicastro, A., Ross, J., 2019)
27 (Predergast, S., Blackmore, D., Kempson, E., 2018)

PSYCHOLOGICAL FACTORS

Financial behaviour is underpinned by many psychological factors which this framework doesn't directly address. This is not because we deem these factors as unimportant, but because there is rich research available around behavioural drivers, alongside other financial capability surveys.

For instance, two of the most important psychological factors that have strong correlations with financial wellbeing are 'confidence with money' and 'locus of control' [28]. Some studies amalgamate these two factors into one 'self-efficacy' component which includes confidence [29]. These are mostly deemed important given their role in influencing action, so financial behaviour would need to result from intervention addressing confidence and control [30].

While we don't delve deeper into psychological factors in this report, we do encourage strong consideration, knowledge-sharing and further research on what interventions or support helps drive behaviour through improving confidence and feeling in control when it comes to money. A caution that it's not necessarily the more confidence the better - overconfidence can result in detrimental behaviour and can be a hidden risk factor to be mindful of [31].

The field of behavioural economics has also been an important emerging contributor but focuses more on the context of how to drive change, rather than how to measure it. Additionally, there are rich insights from interviews with financial capability providers in this report suggesting other factors that support people to take action. To reiterate however, the purpose of the shared measurement tool is to measure changes in outcomes, not the mechanisms for those changes.

FINANCIAL KNOWLEDGE

Financial knowledge and education has been widely suggested as a solution to solving the financial capability problem. However, financial knowledge (literacy) as a component that drives behaviour is not enough on its own. Research is very mixed on how much financial knowledge impacts on behaviour, with some studies linking the two very closely, but others suggesting the effect is generally very small when accounting for other factors [32]. This understanding could partly explain why over time research in this field has largely moved from financial literacy to financial capability, and more recently financial wellbeing.

For instance, it is widely observed that those with lower financial knowledge are more highly indebted with high-cost borrowing and fees and have lower personal savings and investments [33]. The debate on this subject is whether correlation found between financial knowledge and behaviour may be incorrectly interpreted as causation – the thinking that behaviour is caused by knowledge.

An additional consideration is whether studies linking financial knowledge and behaviour might not take into account psychological factors, a large determinant of financial behaviour that could be labelled as knowledge [34]. If individual psychological attributes inform what people choose to know and do with their knowledge, then information-based financial capability interventions are likely to only have modest outcomes. Essentially for financial education to be effective, knowledge gained needs to change behaviour [35].

28 (Kempson, E., Poppe, C., 2018)

29 (Petit, V., 2019)

30 (ANZ, 2021)

31 (Aristei, D., Gallo, M., 2021; Haisken-DeNew, J., Ribar, D. C., Salamanca, N., Nicastro, A., Ross, J., 2019)

32 (Lusardi, A., Mitchell, O. S., 2023; Kempson, E., Poppe, C., 2018; Chern, D., Low, M., Whiting, R., 2012; Fernandes, D., Lynch, J. G., Netemeyer, R. G., 2014; Hathaway, I., Khatiwada, S., 2008; Birkenmaier, J, Sherraden, M., Curley, J., 2013)

33 (Aristei, D., Gallo, M., 2021)

34 (Hathaway, I., Khatiwada, S., 2008; Fernandes, D., Lynch, J. G., Netemeyer, R. G., 2014)

35 (de Meza, D., Irlenbusch, B., Reyniers, D., 2008)

A notable mention of financial knowledge measurement is a well-used framework developed by Lusardi for measuring financial knowledge using five questions [36]. Lusardi finds large links between those with higher financial literacy and better saving and retirement decisions. A few fundamental concepts are outlined as especially important for education to address. Compounding interest, investment diversification, and the eroding effect of inflation could be important educational opportunities for programmes [37]. Additionally, older age groups are more financially literate and have higher financial wellbeing than younger people. This is commonly witnessed as older age groups have more time to acquire knowledge and money, compared with those just starting adulthood with few resources. Supporting younger people to set themselves up for success when they start with few resources is critical.

WHAT ABOUT LIFE STAGE DIFFERENCES?

It is important to caveat that the benefit of active saving and other accumulating behaviours diminishes over the consumer lifecycle. Older age groups after accumulating wealth might then be in a drawing down phase, also known as decumulation. The drawing down phase is evident in New Zealand research from the age of 55 onwards, with median savings peaking in the 45-55 age group [38]. The shared measurement tool doesn't adequately address this with adjustments needed to two categories – savings, and KiwiSaver and investment which become less important for groups that have accumulated enough for their retirement.

Additionally, the tool is best used to measure outcomes for adults as some outcomes don't yet apply to children. Financial education however is an important start for younger age groups prior to getting financial products.

36 (Lusardi, A., Mitchell, O. S., 2023)
37 (Clark, R. L., 2023)
38 (Gibson, J., Stillman, S., Le, T., 2010; Scobie, G. M., Henderson, K., 2009)

3.4 Programme measurement and evaluation challenges and considerations

Evaluating financial education programmes is challenging. We believe that a tool designed to measure good financial outcomes of an intervention, product or service should be:

OBJECTIVE, SPECIFIC AND MEASURABLE

Participant progress has typically been measured subjectively, based on how the participant feels they have progressed, and providers tend to evaluate customer satisfaction and delivery outcomes rather than *behavioural* outcomes, often due to limited resources. However, some studies have shown that perception of learning may only be weakly correlated with knowledge gains [39]. We like to think when we spend the time to attend something that we must be learning.

Additionally, some interventions will likely have a self-selection bias. For instance, people attending a course may be further along in their financial journey and more ready psychologically to take action (i.e., a course by mortgage brokers supporting the goal of homeownership) than those who choose not to participate. It would be important to be mindful interventions will have different scores given this, and the main purpose is to interpret results for each individual pre and post intervention to determine if outcomes have shifted. We may also see self-selection bias through the post intervention survey where participants that are particularly engaged or have made changes might be more likely to fill it out. A low response-rate could suggest poor engagement with the intervention. As such, scores in a low-response situation should be interpreted with caution.

It is also not sufficient to simply measure intentions - studies show only a fraction of intentions are followed through with a desired action so this might not be an effective way to measure impact (unless the action is then followed up on) [40].

In addition, some useful studies linking subjective financial wellbeing questions with objective bank data [41] have shown differences between how people perceive their financial situation. This could indicate other factors not accounted for are impacting wellbeing differently.

We believe it is important that a financial wellbeing measurement tool assesses specific, measurable actions associated with good financial outcomes.

CONSIDER THE SIZE AND SPEED OF CHANGE

Measuring the impact of an intervention requires assessment of the 'change' which may occur in small steps over time. For instance, the Transtheoretical Model (or Stages of Change model) posited by Prochaska and Di Clemente [42] operates under the assumption that behaviour change is not quick or decisive, but rather changes continually in a cyclical process. A related challenge is that people will experience an intervention / tool / service at different stages of readiness or skill than each other so needs to accommodate individual differences in impact.

As such, ideally, a framework that assists in measuring change takes into consideration the progression towards an action, not just the achievement of it (e.g. actively engaging in decision-making or information-gathering, even if change hasn't occurred).

39 (Persky, A. M., Lee, E., Schlesselman, L. S., 2020)
40 (OECD, 2013)
41 (Gladstone, J., Nieboer, J., Raghavan, K., 2020; Haisken-DeNew, J., Ribar, D. C., Salamanca, N., Nicastro, A., Ross, J., 2019)
42 (Prochaska, J. O., DiClemente, C. C., 1982)

BE TIMELY, AND TIED TO THE INTERVENTION, PRODUCT OR SERVICE

Assessment needs to occur as a pre-test at commencement of the intervention, product or service and again following completion, and the survey needs to explicitly ask the participant to answer in the context of the impact of the intervention, product or service. It is possible that the interval of assessment between pre and post could be determined by the practitioner or developer based on when a change in action could reasonably be expected to occur.

However, allowing a lengthy interval to enable change to occur also introduces an increasing risk that changes are the result of unrelated changes to their situation that can't be tied to the intervention, product or service. By allowing for an assessment of *progress* rather than achievement, the interval between pre and post testing could be reduced, lowering the risk of external factors confounding results. Additionally, if scientific rigour is required, practitioners or developers could consider using control and intervention groups to minimise falsely attributing outcomes to the intervention.

Another caution regarding extended assessment interval length is the increasing potential for erosion of memories about the information, particularly if no attempt is made to retain it ('forgetting curve'). In addition, a practitioner or developer will also need to be conscious of the likelihood that fewer people will complete the survey as the interval from completion of the intervention, product or service grows.

ALLOWS FOR INTENDED AND UNINTENDED IMPACTS

It would not be unexpected to observe changes to behaviour that are not directly targeted by the intervention, product or service, such as a decline to risk-taking behaviour [43], or improved interpersonal relationships [44]. It could also extend to psychological aspects such as confidence, self-efficacy and motivation, and even more broadly to include mental or physical health [45]. However as discussed earlier, we intend that the scope of the current project be restricted to impacts on financial growth and financial resilience only. Nevertheless, we recommend the whole survey is used, rather than just modules, so that impact across the full range of actions can be assessed across these outcomes.

ACCOMMODATES SCALE OF REACH, BUT ISN'T TOO BROAD

While the impacts of an intervention may be targeted to an individual, the change in actions may be further reaching, since money is often a shared resource. Examples include behaviour that relates to family/whānau-wide savings goals, or commitment as a whānau to avoid debt products.

Are expected changes resulting from the intervention, product or service targeted to the individual, or to the wider family/whānau, community/hapori, or society? At the micro level, change could be significant, but at the macro level the degree of change may be quite small and/or long-term.

Assessment of impact could therefore consider not just the size of change but the degree of reach it has throughout society. We believe that, in many respects, actioning change starts with the individual and can realistically be extended to whānau/family in our framework. However, societal change is beyond the scope of our framework.

Beyond these considerations, the OECD provides a good set of recommendations when planning to evaluate a programme, and they can be referred to when examining action change occurring as a consequence of the intervention, product or service [46].

We hope the new framework can help address some of these evaluation challenges, making it easier for providers to evaluate.

43 (Koomson, I., Churchill, S. A., Munyanyi, M. E., 2022)
44 (Sturgeon, J. A., Zautra, A. J., & Okun, M. A., 2014)
45 (Kiely, K. M., Leach, L. S., Olesen, S. C., Butterworth, P., 2015)
46 (OECD, 2010)

Part B
Background research to define outcomes and measures

4. The journey to financial wellbeing

4.1 Defining financial wellbeing

Supporting households to grow their money and build financial resilience is imperative to lifting financial wellbeing. Kempson usefully defined financial wellbeing after reviewing international definitions and perspectives of what financial wellbeing means to people. We adopt Kempson's [47] definition of financial wellbeing as:

'The extent to which someone is able to meet all their current commitments and needs comfortably, and has the financial resilience to maintain this in the future.'

Interventions to shift financial wellbeing should therefore lead to New Zealanders being financially better off as well as helping to foster resilience now and for the future.

47 (Kempson, E., Finney, A., Poppe, C., 2017)

4.2 Behaviours most important to financial wellbeing

The most important behaviours that have the greatest impact on financial wellbeing can be refined roughly to four buckets: saving, spending, borrowing, and investment [48].

Different countries surveyed show a slightly different weighting of importance, however 'active saving' and 'not borrowing for everyday expenses' were consistently cited as two categories of behaviour most important to financial wellbeing.

A New Zealand study showed additionally that 'investment' and 'restraining spending' were also important behaviours that directly impact on financial wellbeing [49]. Other money management behaviours such as budgeting, monitoring money, and being informed with products haven't been shown to correlate to higher wellbeing in these studies.

Figure 6: Behaviours most important to financial wellbeing by country

Behaviours most important to financial wellbeing

	Active Saving[50]	Not borrowing for everyday expenses	Spending restraint[51]	Investment	Restrained credit use
New Zealand	✓	✓	✓	✓	
Australia	✓	✓			
Norway	✓	✓	✓		✓
Canada	✓	✓			

Source: (ANZ, 2021) (Predergast, S., Blackmore, D., Kempson, E., 2018) (Kempson, E., Poppe, C., 2018) (Financial Consumer Agency of Canada, 2019)

48 These categories are refined from Kempson's work modelling financial capability and wellbeing across New Zealand, Australia, and Norway.

49 (ANZ, 2021)

50 It is worth noting active saving is much lower for households with mortgages compared to non home-owners. Some households may choose to tackle their mortgages as a form of active saving instead (Gibson, J., Stillman, S., Le, T., 2010).

51 Spending restraint is a behaviour largely driven by psychological factors and has the biggest impact on whether someone actively saves. We therefore focus the framework on debt and saving measures to capture this rather than introducing spending restraint measures itself.

4.3 Why financial wellbeing is so complex

Shifting financial behaviour is complicated. Just because people are told what positive actions they can take to shift their financial position, doesn't mean they will take action. There are many underlying factors that determine whether an individual will take action to improve their financial position.

A REVIEW OF FINANCIAL WELLBEING MODELS

Here we look briefly at other factors that drive behaviour and the evolution of research in this space over time. The purpose of this section is to provide surrounding context of behaviour change, particularly models specific to financial wellbeing and the complexity of what could underpin it. For instance, traditional logic is that knowledge (financial literacy) would lead to behaviour change (financial wellbeing) but we know humans are more complex than that.

Figure 7: The traditional logic of how to change behaviour

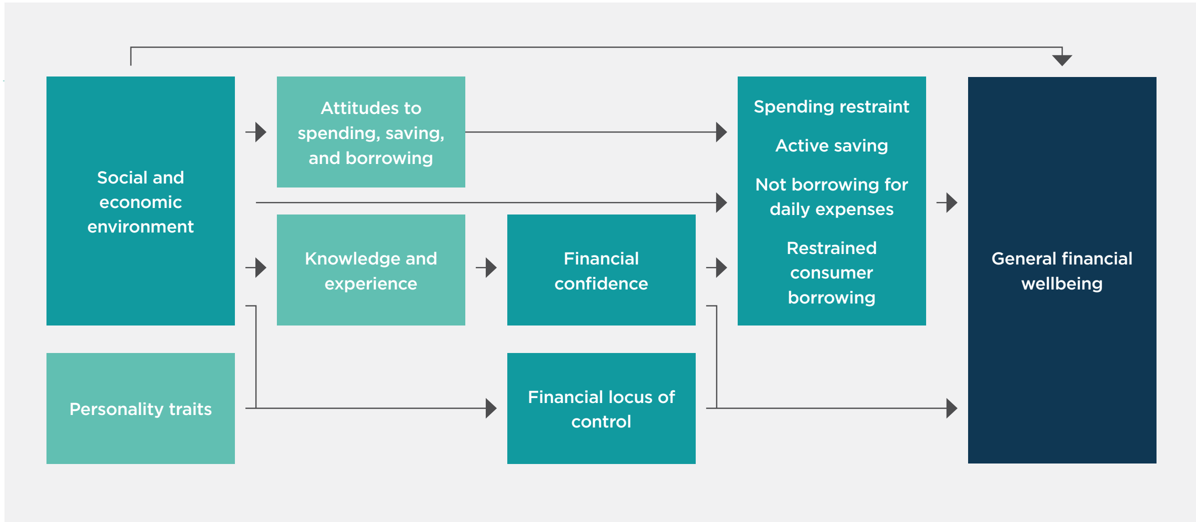
Source: (Petit, V., 2019)

To better understand the components of what makes up financial wellbeing, we look to other models for guidance and pick out a few of the most relevant.

A FINANCIAL WELLBEING MODEL BY KEMPSON

We start with a model by Kempson and Poppe [52] which highlights how financial behaviour directly shifts financial wellbeing. Having financial confidence and locus of control are also highlighted as important influencers of financial wellbeing. Indirectly, there are other factors that help inform changes to behaviour including: attitudes, social and economic environment, personality and knowledge.

Figure 8: Model of key direct and indirect determinants of financial wellbeing

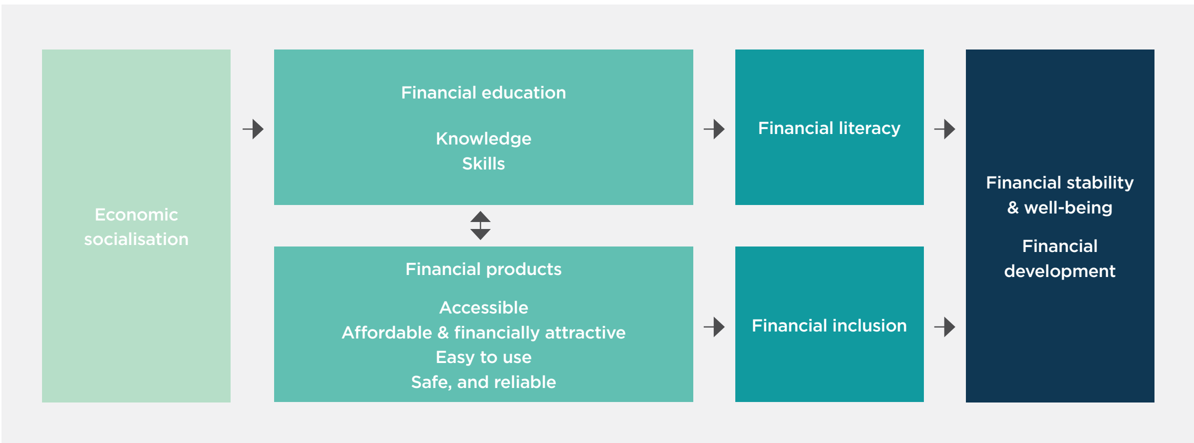


Source: Kempson and Poppe (2018)

A FINANCIAL CAPABILITY MODEL BY SHERRADEN

Sherraden's financial capability model leans more on financial products as an enabler to [1]inclusion which results in financial wellbeing. Sherraden suggests financial inclusion and capability developed through access to products and education lead to improved financial wellbeing.

Figure 9: Financial capability model



Source: (Sherraden, M. S., 2010)

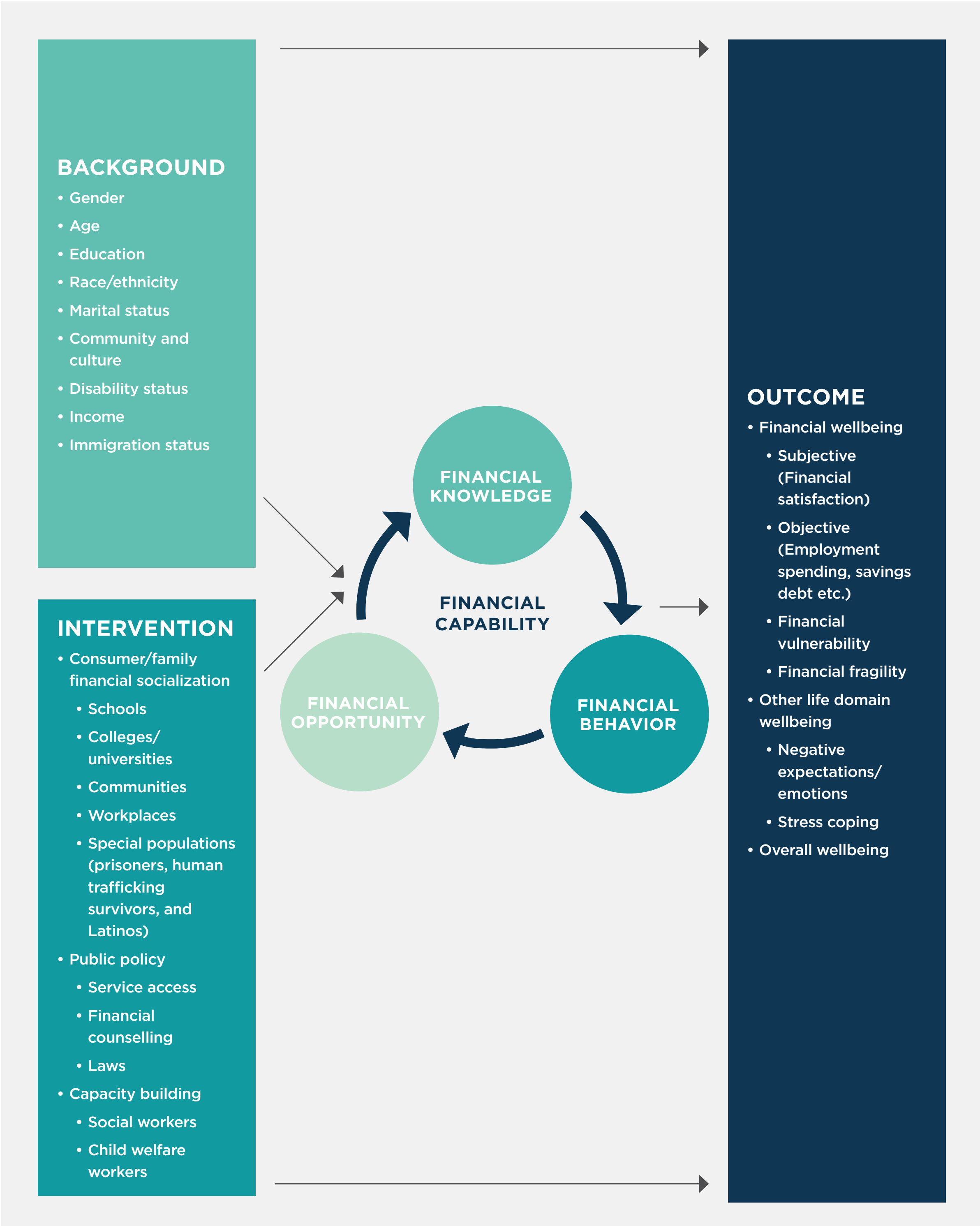
52 (Kempson, E., Poppe, C., 2018)

53 Financial inclusion as outlined by The World Bank means "individuals and businesses have access to useful and affordable financial products and services that meet their needs" – this is more about how the system is working and responding (2022).

A FRAMEWORK OF FINANCIAL CAPABILITY BY XIAO ET AL. (2022)

Xiao goes a step further and has a more holistic view, including elements from the above models. Financial capability as defined by Xiao is “an individual ability to apply appropriate financial knowledge, perform desirable financial behaviours, and take available financial opportunities for achieving financial wellbeing”. Inputs such as background, intervention, and outcome are identified.

Figure 10: The conceptual framework of financial capability



FINANCIAL WELLBEING MODEL LIMITATIONS

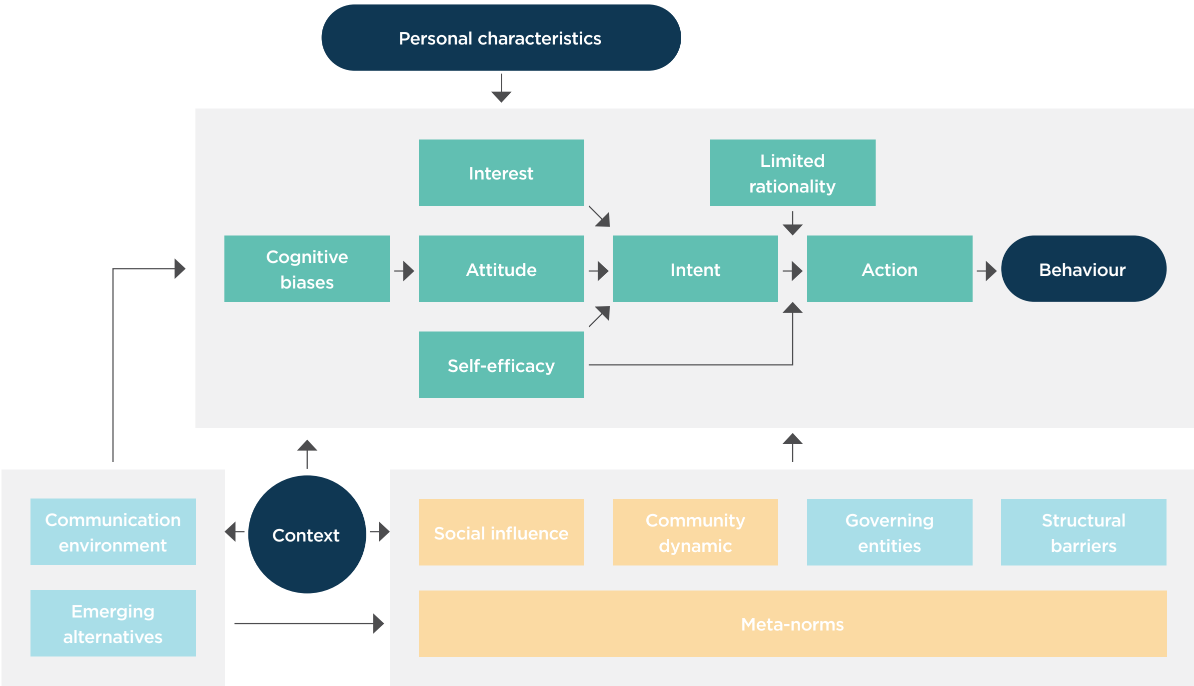
The above models are useful in that they are specific to financial behaviour. However, for the most part, they rely on rational drivers of behaviour and are useful when understanding major decisions, or new situations where careful consideration is required. They assume that given the right information and the right resources, people will undertake the 'correct' financial behaviour. This is not always the case [54].

A UNICEF BEHAVIOURAL DRIVERS MODEL

Searching outside of the financial wellbeing literature, we find a comprehensive behavioural drivers model outlined by Petit for UNICEF.

Petit outlines that behavioural drivers fall into three key categories – psychology, sociology, and environment. This is similar to Kempson's model where sociology and environmental factors support psychology to shift behaviour. Petit's model is perhaps one of the most extensive explanations of behavioural drivers components, capturing well the complexity in shifting behaviour.

Figure 11: Behavioural drivers model



Psychology	The unique cognitive and emotional state of someone.
Environment	The surrounding environment and structure someone lives in such as institutions, policies, systems and services, infrastructures, information, etc.
Sociology	Interactions within families, communities, groups and society at large.

Source: (Petit, V., 2019)

54 Rich insights can be found from the field of behavioural economics which best explains mental shortcuts and why people don't behave rationally. Some useful papers include: (Kahneman, D., Knetsch, J. L., Thaler, R. H., 1991; Zhang, C. Y., Sussman, A. B., 2018; Kahneman, D., 2013; Reeson, R., Dunstall, S., 2009; Benartzi, S., Thaler, R. H., 2013; Chivers, L. L., Higgins, S. T., 2012)

PSYCHOLOGY

The components Petit outlines in psychology alone show that behaviour isn't straightforward. People come with biases that are informed by their environment. Their attitude and interest in the topic alongside their perspective on whether or not they can control what happens to them influences whether they intend to take action.

People also don't make perfectly rational decisions as the field of behavioural science acknowledges. Behavioural economists believe the best intervention response is to recognise and design around psychology instead of informing consumers of the problem or trying to change them[55]. These psychological components work together to shift consumer intention into action and then behaviour (hopefully long-lasting change). Self-efficacy (the sense of control someone feels towards an action) in this model also includes a confidence component, whereas Kempson's model separates financial confidence from financial locus of control.

ENVIRONMENT

The influencers of psychological factors are the person's surrounding environment and sociology. Environmental components include the communication environment (what information someone is exposed to), and emerging alternatives (what is new out there). Additionally important environmental components are governing entities (how institutions influence action), the context in which someone lives, and structural barriers which can prevent someone from acting.

SOCIOLOGY

Humans are social creatures and influenced by surrounding opinions and actions. It is unsurprising therefore that social factors have an important role in driving behaviour. Social influence and community dynamic are important components of sociology. Meta-norms are also important, the ideas and unwritten rules entrenched in culture and identity which can condition behaviours (i.e. what is normal here).

Source: (Petit, V., 2019)

HOW CAN PRACTITIONERS WORK TOGETHER TO SHIFT BEHAVIOUR?

Supporting behaviour change is complex but not impossible. The financial wellbeing and behaviour drivers models indicate that many different intervention types are needed and can usefully complement each other.

Given the complexity of behaviour change, a central repository of knowledge would be useful where practitioners in this space are willing to share evaluation from different interventions where behavioural results are measured. This could help inform institutions, practitioners, and policymakers in New Zealand on what interventions are supporting consumers to take action. The aim is for a shared resource hub to help connect the dots on this.

55 (de Meza, D., Irlenbusch, B., Reyniers, D., 2008)

5. A research summary on good financial outcomes and what supports them

This chapter covers a literature review on what good financial outcomes look like with a focus on growth and resilience. To complement this section, we also looked at research around what supports people to take action.

5.1 Important actions that grow financial positions

We have looked at literature and research on what actions households can undertake that have a direct effect on growing financial positions. There are three broad categories covering debt and fees, saving, and investment. There are specific ways to measure behaviour to grow financial positions within these categories. We note there is some crossover between saving, spending restraint, and having money left over.

DEBT AND FEES

Avoiding unnecessary fees and interest through effective debt management is a critical part of optimising money to improve financial wellbeing. However self-assessing money management ability isn't always a good match with the financial behaviour shown.

A financial capability survey in the United States [56] showed that 64% of respondents agreed they were good at dealing with day-to-day financial matters while at the same time were engaging in behaviours that produced high fees.

Similarly, buy now pay later isn't always seen as debt by young New Zealand adults [57]. New Zealand households are using more debt products with the increase over time largely driven by credit cards and buy now pay later [58]. We therefore need to look at objective measures that inform whether someone is avoiding fees or interest and using debt in ways that don't disadvantage them financially.

CREDIT CARDS AND BUY NOW PAY LATER PAID OFF

There are several objective measures that can indicate whether debt is leading to high costs. One measure is whether credit cards and buy now pay later purchases are being paid off in full to avoid interest and fees [59].

In New Zealand, buy now pay later and credit cards are the most common debt product with more than a third of young adults (18–34) having one or more of these products [60]. Approximately 40% of buy now pay later users had incurred late fees, with 10% incurring late fees three times or more. The most common reason named for not repaying on time was forgetting to pay it, followed by not being able to repay it. In the United Kingdom, [61] 56% of adults are incurring interest on credit and store cards, with 19% paying the minimum required payment leading to high interest.

56 Finra (2009)
57 (Gilbert, A., Scott, A., 2023)
58 (Te Ara Ahunga Ora Retirement Commission, 2023b)
59 (Lin, J. T., Bumcrot, C., Mottola, G., Valdes, O., Ganem, R., Kieffer, C., Lusardi, A., & Walsh, G., 2022)
60 (Gilbert, A., Scott, A., 2023)
61 (MAPS, 2022b)

PAYING BILLS ON TIME

In addition, we also need to look at the ability to meet bill payments on time, therefore not paying late fees or being overdrawn. Two in five New Zealanders frequently have problems paying on time [62].

The United Kingdom measures whether adults are behind on bills and credit commitments at a point in time and finds 21% are behind [63]. Another study looks more precisely at the number of months in the last year payments weren't met and scales to different financial wellbeing scores [64]. Research by Gladstone et al. [65] shows the more days in overdraft per month (both arranged and unarranged) is largely correlated with reduced financial wellbeing.

REDUCING FINANCIAL PRODUCT FEES

Financial product fees are another type of fee that can be detrimental and add up adversely over time. One example is the variation in KiwiSaver fund fees. A useful measure is if a customer is taking a step to reduce fees by switching financial products to a beneficial alternative or taking action to prevent fees.

A study by Gatherhood et al. [66] shows credit card users who have a history of paying penalty fees often reduce future late fee events from the time they set up automatic payments. Those on manual payments were less likely to change behaviour. It is critical that fees are clearly communicated to aid informed product choice.

ACCELERATING DEBT REPAYMENTS

Paying more than minimum payments on debt is another useful financial wellbeing indicator that enables people to pay less interest and fees over time. Twenty percent of New Zealanders are found to pay only the minimum on debt repayments [67].

Several studies of people who had multiple debt accounts showed that when they tackled one debt at a time, their motivation increased which led them to paying their debts more aggressively and becoming debt-free quicker [68]. A study from a debt settlement firm showed that the biggest predictor of clients getting debt-free wasn't account balance size but was more about closing accounts.

These studies suggest that starting with smaller, more achievable tasks could be more motivating when it comes to consumer debt [69]. This is sometimes known as the avalanche vs the snowball method, where the consumer chooses to tackle smaller debts and snowball to larger debts rather than the highest interest debt first (avalanche method).

Debt repayments in this category includes paying more than the minimum on home loan payments as well. While home loans are one of the more productive forms of debt, paying more than the minimum is beneficial where possible. Having a paid-off home has a huge correlation with financial wellbeing, and especially so come retirement.

62 (ASB, 2022)
63 (MAPS, 2022b)
64 (Botha, F., de New, J., Nicastro, A., 2020; Haisken-DeNew, J., Ribar, D. C., Salamanca, N., Nicastro, A., Ross, J., 2019)
65 (Gladstone, J., Nieboer, J., Raghavan, K., 2020)
66 (Gathergood, J., Sakaguchi, H., Stewart, N., Weber, J., 2020)
67 (Kiwi Wealth, 2019)
68 (Kettle, K. L., Trudel, R., Blanchard, S. J., Häubl, G., 2016)
69 (Gal, D., McShane, B. B., 2012)

REDUCE BORROWING

Reducing fees by switching products or transferring debt balances can be useful short term, but without reducing the debt overall, customers can remain in a tricky debt cycle. This becomes particularly challenging when there is a reliance on debt to meet essential household needs, [70] which can limit the capacity of people to grow their money and have choices long-term.

One New Zealand study [71] shows that 18% of New Zealanders are sometimes, often, or always needing to borrow or go into debt to pay for food or expenses. This tracks closely with a study in the United Kingdom [72] which shows 17% of adults are using credit and borrowing to buy food or bills due to not having the money available.

Not borrowing for day-to-day expenses is the most important behavioural driver of meeting commitments and has a positive effect on other financial wellbeing components [73]. It can snowball and make it challenging for people to meet commitments when a large portion of their income is going out in debt repayments. Organisations like Ngā Tāngata Microfinance and Good Shepherd do great work in New Zealand offering interest free loans to stop debt from spiralling and help customers get on top of reducing borrowing. Reducing borrowing overall is an important indicator of improved financial wellbeing outcomes.

SAVING

SAVING REGULARLY

Having a savings habit has been well-researched to have the largest positive effect on financial wellbeing, even more so than income [74]. This means it is the most important behaviour to support New Zealanders to make.

Saving regularly (also known as 'active saving') alongside restraining spending are the key distinguishing features of those who meet their commitments, feel financially comfortable, and have resilience for the future [75].

One financial wellbeing survey in the United Kingdom [76] shows saving has huge wellbeing implications that impact on other areas of life. Those who don't save are less likely to be satisfied with their life and keeping up with bills and credit commitments is much more of a struggle.

While saving relies on having income to do this, starting with even small amounts each month can help form a positive habit and relationship with money. Interviews with New Zealand alternative lenders such as Ngā Tāngata Microfinance held similar sentiment, where they recommended their clients start saving with small amounts such as $1 per month. This was seen to create a positive feedback loop and helped with habit creation, even though clients had unmanageable debt at the time.

One Australian study measures a saving habit by looking at months in a year the customer spent more than 80% of income [77]. It also measures savings balances relative to the average savings of that age group.

Here we suggest any saving habit is a good start, no matter how small and it can be built up over time.

70 (Kempson, E., Finney, A., Poppe, C., 2017)
71 ANZ (2021)
72 (MAPS, 2022b)
73 (Galicki, C., 2021)
74 (ASB, 2021; Predergast, S., Blackmore, D., Kempson, E., 2018; Galicki, C., 2021)
75 (Kempson, E., Finney, A., Poppe, C., 2017)
76 (MAPS, 2022)
77 (Haisken-DeNew, J., Ribar, D. C., Salamanca, N., Nicastro, A., Ross, J., 2019)

USING SAVINGS INSTEAD OF DEBT

While a savings habit is one of the most important behavioural changes we want to support New Zealanders to make, there are times when it's more important for savings to be used for unavoidable costs or to avoid debt.

There is evidence of a tendency for people to prefer taking on high-interest debt so they don't have to withdraw lower-interest savings [78]. It was found people were more likely to borrow when the savings account was earmarked to children, education, or retirement. This could be due to 'mental accounting', a common psychological tendency to create artificial budgets for different spending and saving categories which can lead to seemingly irrational decisions [79].

Emergency savings, as outlined in the resilience section, go some way to ensuring money is available to help cover this risk.

SPENDING RESTRAINT

A component of being able to save regularly is reducing expenditure. While not always possible, taking steps such as reviewing spending (spending diaries were cited in interviews as useful), and reviewing providers to determine if there are cheaper options can all help towards reducing spending.

Spending restraint is widely used as an important determinant of financial wellbeing [80], however is mostly driven by psychological factors such as impulse control [81]. A common way to measure spending restraint is whether households are spending less than income [82]. This behaviour can also be captured by growing saving or investing amounts.

Research shows half of ASB's customers in New Zealand spend more than they earn in a month [83].

The good outcome measures capture spending restraint through reducing debt and increased saving measures rather than a standalone spending restraint measure.

INVESTMENT AND RETURNS

KIWISAVER

Having a retirement account is a notable measure that contributes to financial wellbeing [84]. In New Zealand, KiwiSaver is a voluntary personal retirement savings scheme where contributors can get both an employer match starting at 3% and an annual government contribution of $521. As at 2023, KiwiSaver had 3.2 million members, with 1.9 million of those making contributions [85]. Sixty-three percent of adults are making contributions toward their KiwiSaver [86]. To benefit from the employer match alongside the government contribution, New Zealanders need to contribute at least 3% of their wage.

78 (Sussman, A. B., & O'Brien, R. L., 2016)
79 (de Meza, D., Irlenbusch, B., Reyniers, D., 2008)
80 (ANZ, 2021),
81 (Galicki, C., 2021)
82 (Lin, J. T., Bumcrot, C., Mottola, G., Valdes, O., Ganem, R., Kieffer, C., Lusardi, A., & Walsh, G., 2022; Predergast, S., Blackmore, D., Kempson, E., 2018)
83 (ASB, 2022)
84 (Lin, J. T., Bumcrot, C., Mottola, G., Valdes, O., Ganem, R., Kieffer, C., Lusardi, A., & Walsh, G., 2022)
85 (FMA, 2022)
86 (Te Ara Ahunga Ora Retirement Commission, 2023b)

KIWISAVER LIMITATIONS

While the benefits of KiwiSaver are well known, several challenges remain. Contribution rates are low and the scheme is voluntary, whereas many other OECD countries have mandatory savings schemes [87]. There have been calls for an increase to the current default contribution rate [88], as those that do contribute won't necessarily be able to rely on KiwiSaver to fully plug their retirement income shortfall.

One additional concern is the proportion of employers watering down the employer match incentive by offering this as part of total remuneration. Forty-five percent of employers offer the KiwiSaver employee match as part of salary packages to at least some of their employees (through total remuneration), which means the employee could receive it as direct compensation instead [89]. While total remuneration isn't prohibited, New Zealand Retirement Commissioner Jane Wrightson cautions that this doesn't appear to be in the spirit of KiwiSaver [90].

Additionally, more than 300,000 KiwiSaver members haven't actively chosen their KiwiSaver fund. This means they could be missing out on compounding returns by being in a less suitable fund for their life stage, although the recent change to move default members to a balanced fund helps some way towards this [91].

OTHER INCENTIVISED INVESTMENT SCHEMES

There are also other incentivised investment schemes to help grow long-term financial wellbeing of members. A notable mention is Whai Rawa – a scheme set up by Ngāi Tahu which pre-dates KiwiSaver. Whai Rawa members receive an annual iwi contribution and can withdraw funds for tertiary education, homeownership, and retirement [92].

Whai Rawa has been hugely successful in encouraging Ngāi Tahu whānau to set up accounts for newborns (95% of newborns are members of this scheme).

Matched and incentivised schemes such as Whai Rawa can be a great wealth-building option and demonstrates KiwiSaver isn't the only beneficial product helping to bridge the homeownership and retirement gap.

HOUSING AND WEALTH

Investing is a key behavioural indicator of financial wellbeing in New Zealand [93]. Here we define investing to include homeownership given housing wealth makes up 45% of total household wealth in New Zealand [94].

Homeownership is especially beneficial behaviourally as a form of forced savings, contributing to household wealth.

Increasingly, more are reaching retirement age as renters which widens inequity between those who own and those who don't [95]. One caveat to note is that while homeowners have higher net worth, their active saving is much lower than non-owners [96]. Given this, there will likely be crossover between those repaying mortgages as a form of saving instead.

87 (Coleman, A., 2011)
88 (MacDonald, K., Bianchi, R. J., Drew, M. E., 2012)
89 (Te Ara Ahunga Ora Retirement Commission, 2023a)
90 (Birdsey, N., 2022)
91 (FMA, 2022)
92 (Ngāi Tahu Whai Rawa, 2022)
93 (ANZ, 2021)
94 (Rashbrooke, G., Rashbrooke, M., Molano, W., 2017)
95 (Symes, L., 2022)
96 (Gibson, J., Stillman, S., Le, T., 2010)

MAXIMISING SAVING THROUGH INVESTING

Investing can perhaps be one of the most challenging areas to support households with given the endless choices and perception of what investing is. Risk and diversification have to be considered, alongside fees, returns, and timeframe.

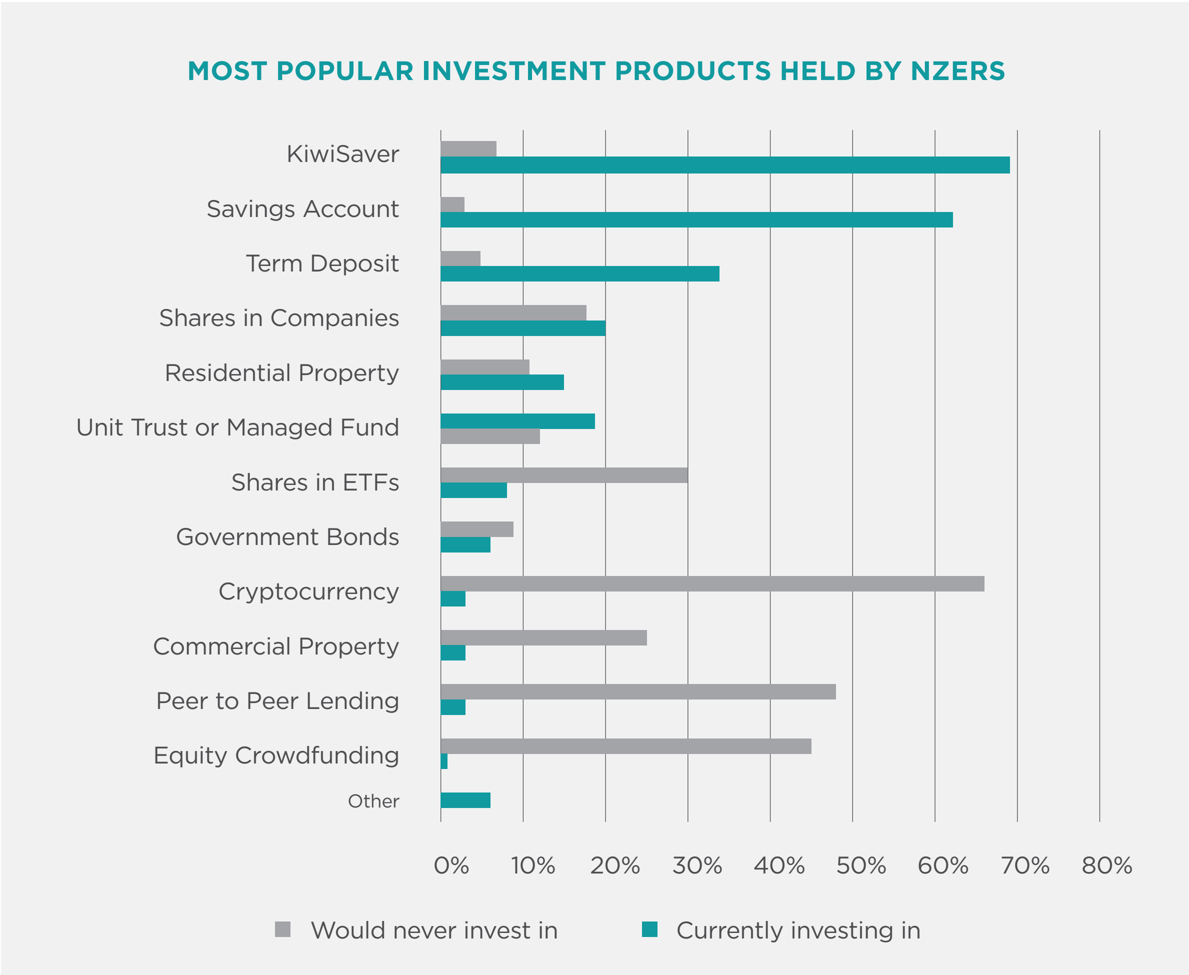
Additional to choice overload, perception is also a challenging barrier to address. Many New Zealanders think that saving money in a bank or term deposit will generate them the most wealth for retirement (43%)[97]. This belief is especially high for Māori and Pacific People (55%).

Concerningly, diversification isn't well understood either. Twenty-three percent of New Zealanders believe that investing all money in a tech company with high returns is diversified.

Investing in shares also has perception challenges, with 18% of New Zealanders suggesting they would never invest in shares. It is however the most popular investment to make following KiwiSaver and saving accounts or term deposits (20%). The rise of micro-investment platforms in New Zealand has been an important contributor in making share investing more accessible in recent years.

The perception challenge suggests many New Zealanders might not have enough knowledge or support to be comfortable making share investments. This could be an opportunity for policy and institutions to make good decisions easier for customers who could otherwise be overwhelmed with inertia – a tendency to delay hard decisions and not act at all. Residential property is still perceived to be the highest wealth generator for retirement (46%).

Figure 12: Investment products held by New Zealanders (%)



Source: (Kiwi Wealth, 2019)

97 (Kiwi Wealth, 2019)

5.2 Important actions that build financial resilience

Financial resilience can be explained as the ability to 'bounce back from adverse financial events' [98]. Here we review literature and research focusing on financial resilience.

We find resilience generally falls into two main categories that protect against shocks: emergency savings and insurance.

EMERGENCY SAVINGS

Having money set aside for emergencies is an important part of households being able to withstand financial shocks either due to loss of earnings or unexpected expenses. This is different, but complementary, to having a regular savings habit which is primarily to meet future aspirations and security rather than earmarked for an emergency situation that could occur today.

Without savings set aside for an emergency, many households need to resort to borrowing which can be a costly and difficult cycle to get out of, reducing resilience further. Financial shocks were found to happen more often than expected and hit lowest income households the hardest, which suggests more support could be needed for this group to build a buffer over time [99].

While there is broad agreement on the importance of emergency savings for household resilience [100], the specific amount recommended to have set aside differs widely across countries and studies.

A financial capability survey in the United States [101] looks at how many Americans could come up with $2,000 within a month if an unexpected need arose. It finds 43% of those surveyed were certain they could, leaving the majority of respondents either unable to or uncertain if they could.

One Australian study looks at how many days across the year someone could raise between 1-3 months of expenses using their available savings or credit [102]. This could be more useful in the sense the emergency savings measure is more tailored to the needs of that person.

ASB [103] looks at whether New Zealanders have the ability to access $1,000 and finds 40% of customers have less than $1,000 available. Those with less than $1,000 in savings scored much lower in overall financial wellbeing, almost half the wellbeing score of the average New Zealander [104].

While other studies commonly look at larger emergency savings, such as having three months of expenses set aside, there is also evidence that it can be demotivating to save if goals seem out of reach [105].

Ideally, we would encourage households to have larger emergency savings funds, but recognise that everyone is at different points in their financial journey, so the amount they need and contribute will vary.

New Zealand financial capability community providers told us that for some people, having $100 set aside is a massive undertaking for them and something to still celebrate.

98 (Salignac, F., Marjolin, A., Reeve, R., 2019)

99 (Sun, L., Small, G., Huang, Y., Ger, T., 2022)

100 (McKnight, A., Rucci, M., 2020) recommends three key policy approaches to help households build financial resilience. Having a well-designed social safety net, improving financial capability and assisting households to build emergency savings.

101 (Lin, J. T., Bumcrot, C., Mottola, G., Valdes, O., Ganem, R., Kieffer, C., Lusardi, A., & Walsh, G., 2022)

102 (Haisken-DeNew, J., Ribar, D. C., Salamanca, N., Nicastro, A., Ross, J., 2019)

103 (ASB, 2021)

104 (ANZ, 2021)

105 (Zhang, Y., Wilcox, R. T., & Cheema, A., 2020)

Interventions could support people to build this up over time and consider ways to encourage a suitable emergency savings amount that is tailored to different circumstances.

An interesting finding from United Kingdom research shows that those with a concrete connection to their future selves were much more likely to have high levels of emergency savings [106] (66% of households vs 22%).

A caution from one provider was that low asset limit thresholds to accessing government support in New Zealand doesn't incentivise having emergency savings.

INSURANCE AND PROTECTION

Having appropriate insurance to manage and protect from risks is an important component of household resilience. While the importance of insurance is well understood, knowing how much insurance to have is challenging and complex for households to understand.

Risk is highly unique to everyone and making sweeping statements on what insurances households need can be unhelpful. People also have a tendency to underestimate this risk, particularly the likelihood of negative events happening to them [107].

There is broad agreement from providers that homes and cars need insurance when owned (a minimum of third-party for cars). While third-party could be perceived as a useful product for lower-income clients, research from Good Shepherd and Vero shows otherwise [108]. Their clients didn't see third-party insurance as useful as it wouldn't protect their own car. Perceptions from uninsured customers were that the other car insurer would cover costs if they caused accidental damage.

The exact point to which someone is underinsured or overinsured is hard to specify given circumstances are so unique to each household. An additional challenge, as raised in one Massey University study, is the lack of a review period on cover levels (especially life insurance) [109].

The Financial Services Council suggests 70% of New Zealanders are underinsured when it comes to health and life insurance, with cost being the major barrier [110]. Interviews with NZ providers suggested a good rule of thumb is to have insurance when there's a debt over something, and when you'd need to go into debt if something went wrong (like losing an income).

106 (Aegon., 2023)

107 (OECD, 2013)

108 (Good Shepherd NZ, 2021) – Good Shepherd staff shared with us that their clients don't see third-party insurance as beneficial and worked with Vero to come up with an affordable insurance product to address this.

109 (Naylor, M., Matthews, C., Birks, S., 2011)

110 (Financial Services Council, 2022)

5.3
What supports people to take action

Inspired by the fields of psychology and behavioural economics, we look to research to answer the question “what supports people to undertake actions and decisions to lead to desirable financial outcomes?”. Here we aim to form a deeper understanding around what works to motivate, empower, and help consumers to reflect, leading to improved financial wellbeing.

Consistent with provider interviews in the following chapter, we group research into three main categories: self-reflection, motivation and being empowered. There is some crossover across all three. Given this section focuses on non-financial factors and many theories of behaviour change, we don’t include measures for these in the shared measurement tool. We hope this section can instead be useful to inform intervention design around what works to influence change. This is by no means an exhaustive overview, and merely scratches the surface.

SELF-REFLECTION

HOW SELF-REFLECTION INFLUENCES BEHAVIOUR

Self-reflection can be an important catalyst for action when it comes to money. Reflecting on past experiences helps uncover new insights that influence positive behaviour [111]. When people have a stronger sense of financial self-awareness, there are positive effects to: managing debt, controlling spending, investing, and saving [112]. When someone increases self-awareness, they strengthen their confidence in managing their money.

Self-reflection questions and exercises therefore could be useful additions to financial capability interventions, helping support participants to think about their habits and take action.

REFLECTING ON ONE’S RELATIONSHIP WITH MONEY

It’s important for people to understand their habits and relationship with money to support them to make changes. By understanding their relationship with money, people can self-evaluate their financial behaviours and see if there is alignment with their goals and cultural needs.

Ways in which people can self-reflect could include:

- Recall past experiences
- Understand their money personality
- Consider the value and influence of money in whānau and cultural context [113]
- Consider social factors and their potential influences
- Explore relationships and meanings associated with past experiences
- Think about what brings happiness and purpose in life [114]
- Picture future self
- Think about long-term goals
- Think about different possibilities and potential changes that can be made in future [115]

---

111 (Boud, D., Keogh, R., Walker, D., 1985)
112 (Chowdhry, N., Dholakia, U., 2020)
113 (Falicov, C., 2001; Henchoz, C., Coste, T., Wernli, B., 2019)
114 (Aegon., 2023)
115 (Fleck, R., Fitzpatrick, G., 2010)

KEEPING TRACK

The ability to monitor and self-evaluate can play a motivating role in supporting people to change their behaviour [116]. Keeping a spending diary is often suggested as a useful 'aha' moment for participants, that helps them with this evaluation process. People have varying relationships with money, however often they haven't reflected, and when brought to light these reflections can be instrumental in changing habits.

MOTIVATION

Motivation is what invokes, directs, and sustains behaviours [117]. It is an important factor to consider as we help New Zealanders undertake desirable financial behaviours with the goal of improving their financial wellbeing.

While motivation is psychological and therefore challenging to measure, it's useful to know the different ways motivation can be influenced. If people aren't motivated, they are not going to take action which makes motivation a critical building block of financial wellbeing. There are several different types of motivation, all of which can play a role in influencing action [118].

Figure 13: Types of motivation

Rewards and punishment	Motivation can be fueled by rewards and punishment[119]. People are motivated to behave in ways that result in rewards or incentives and are motivated to avoid actions that result in a punishment. The effectiveness of rewards and punishment differ from person to person.
Self-fulfilment	Motivation can be fueled by the need for self-fulfilment where someone is influenced by self-esteem, and self-determination as shown in Maslow's[120] hierarchy of needs. This is more about personal growth and a need for 'self-actualisation' for someone to realise their full potential. Since this is intrinsic motivation, external influences are less impactful.
Hard work or luck?	Motivation and behaviour is driven by how people think[121] such as their beliefs, excuses, explanations, and what they attribute to success or failure (hard work vs luck). Do people believe that the changes they make will result in positive outcomes, or do they believe that hard work isn't enough, and that luck is required?
Can I and should I?	Motivation towards a task can be determined by someone's expectation of reaching a goal, and the value that the goal provides them. If either is zero, then the individual will not be motivated to proceed with the goal[122].
Identity and community	People are motivated to learn and demonstrate the values and norms of their chosen communities as a way of reinforcing and affirming their identity as a member[123]. People develop financial management behaviours through a process of financial socialisation and learning from their parents, friends, and influences from the media[124] .

116 (Prochaska, J., Velicer, W., 1997; Cooper, J., Heron, T., Heward, W., 2013),
117 (Woolfolk, A., Margetts, K., 2015)
118 (Woolfolk, A., Margetts, K., 2015)
119 (Skinner, B., 1953)
120 (Maslow, A., 1943; Ryan, R., Deci, E., 2000),
121 (Weiner, B., 1985; Graham, S., 2020),
122 (Wigfield, A., Eccles, J., 2000; Bandura, A., 1993)
123 (Lav, J., Wenger, E., 1991)
124 (Goyal, K., Kumar, S., Hoffman, A., 2023)

BEING EMPOWERED

"A financially empowered person is both informed and skilled. They understand how they spend their money, make wise financial decisions, and have access to resources to help them reach their goals."[125]. This definition alongside the responses obtained from our interviews demonstrate that there are discrete features that all together provide a sense of empowerment for people in their financial journey. Here we touch on a couple of key components that support someone to be empowered with their money.

FINANCIAL KNOWLEDGE

Financial knowledge is an important part of someone being empowered to make financial decisions. Improvements to knowledge can influence financial decision-making, which in turn can help increase return potential and better manage debt [126].

However, as financial knowledge can fall off over time, improving knowledge can help maintain a evel of financial literacy to equip people as they navigate new financial tools, services, and providers when introduced [127].

BEING FINANCIALLY INCLUDED

Financial inclusion supports financial wellbeing [128]. Financial products need to be accessible, affordable, safe, and reliable, and not difficult to use and understand. While financial inclusion and access are important factors for good financial outcomes, if people have low confidence and understanding in financial matters it can result in reduced engagement in financial products and services[129]. This highlights the need for a financial system that supports consumers in their product choice, access to products, and capability.

THE ROLE OF CONFIDENCE IN SEEKING HELP

Increased confidence can help people set greater goals and deal with failure by developing new strategies [130], as opposed to giving up altogether. Being overconfident or optimistic has the potential to improve someone's financial position when it comes to investment growth[131]. There is also a possibility that overconfidence can result in detrimental debt management behaviours. However, if people are aware of the gaps in their knowledge or skills, they are more likely to seek help [132].

TALKING ABOUT MONEY

Having the confidence to speak with family members about money has been demonstrated to have two-way flow on effects. Parents pass down financial knowledge, norms, and behaviours to their children [133]. When children speak with their parents about money, they often show better financial habits when they grow up. One useful point to note, as shown in one NZ longitudinal study, is that parental influence drops over time, with life experience replacing parents as the most popular source of financial information come early 30s [134].

One study from lower-income households highlights the benefit parents received when their children were provided financial education [135]. This shows the importance of talking about money in households when kids are younger, and the positive influence one person can have on household financial wellbeing.

125 (Los Angeles County, n.d.)
126 (Lusardi, A., Mitchell, O. S., 2023)
127 (Lusardi, A., Mitchell, O. S., 2023)
128 (Sherraden, M. S., 2010)
129 (Regan, N., Bhattacharya, A., Salutin, G., Corfe, S., 2023)
130 (Bandura, A., 1993)
131 (Goldman Sachs, 2023)
132 (Galariotis, E., Monne, J., 2023)
133 (Agnew, S., 2018; Almenberg, J., Lusardi, A., Säve-Söderbergh, J., Vestman, R.,)
134 (Matthews, C., Stangl, J., Wood, P., 2023) 2020)
135 (Frisancho, V., 2023)

6. Findings from New Zealand

6.1 Interviews with financial capability providers and researchers

Here we look at themes raised through interviews with New Zealand financial capability providers and educators to support this work. It has allowed us to delve more deeply into the question of 'what are the most impactful decisions or behaviours New Zealanders can make that grow their financial position and build resilience?'.

Rich conversations were held with a variety of professionals who work to help New Zealanders with their money. Represented were financial institutions, financial capability educators, community support organisations, iwi and financial advisers, including mortgage advisers. Eight of these organisations shared perspectives as Māori and Pacific People working in this space, which was highly valuable and reiterated the need for any measurement tool to be able to be used collectively, too often missing in financial services.

The following provides a summary of these conversations, which brilliantly displayed the inspiring work so many people are doing for communities across Aotearoa New Zealand. These interviews held insights which typically included actions New Zealanders can take and indications of what supports those actions.

We start by covering action-orientated themes that support growth and resilience, consistent with the scope of this report. (A 'theme' is defined as any point raised in more than one interview.) Themes are grouped into the following four categories: reducing debt and fees, saving, investing, and insurance and protection.

These interview themes would eventually underpin the development of shared outcome measures, alongside international research.

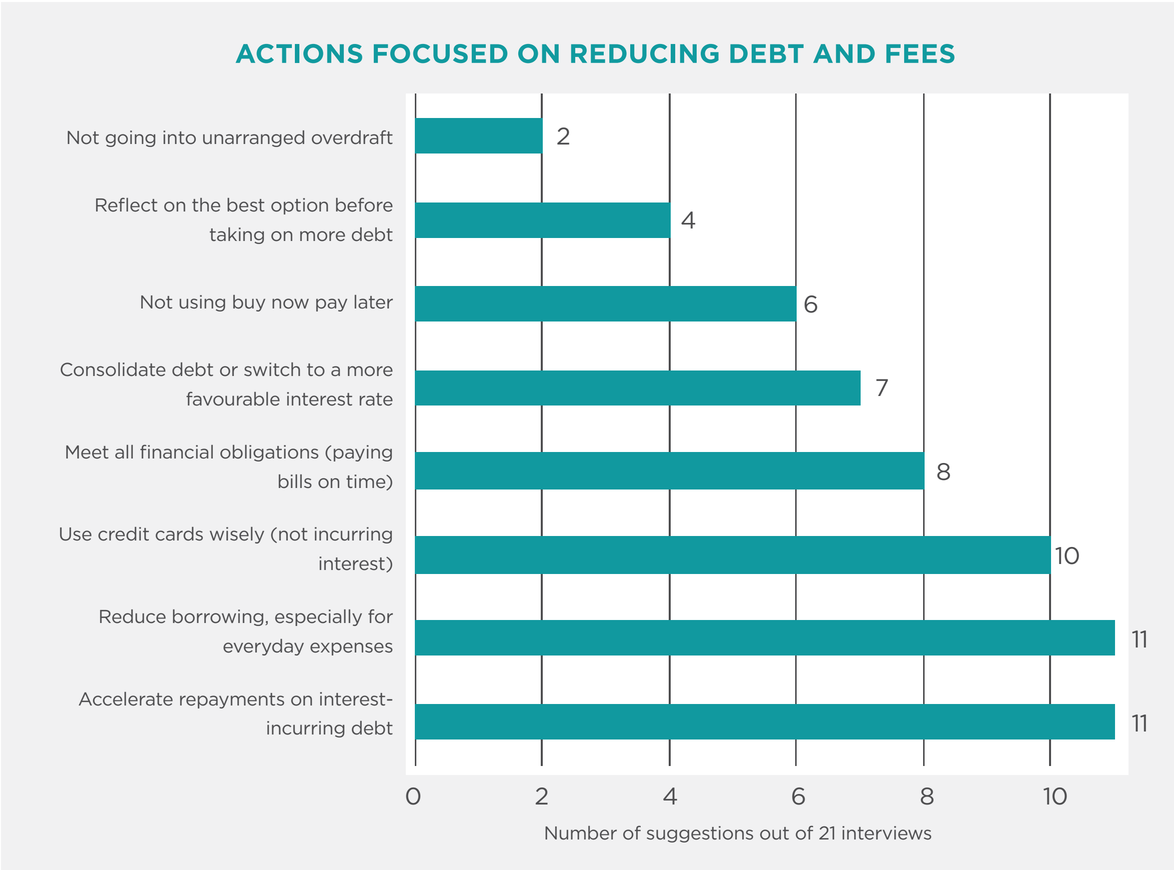
Many themes also focused on what supports people and whānau to take action to grow their money or build resilience. Themes in this section therefore aren't included as part of the shared measurement tool, but we recognise how valuable this information is to help us understand what works in supporting the desired outcomes we want to measure.

We broadly group these themes into the following three categories on what supports action: motivation, self-reflection, and being empowered. It is worth noting there is a lot of crossover within these categories. For example, to be empowered to seek help or have a spending plan, you will likely need to be motivated and self-reflect on your habits, etc.

6.2 Interview themes focused on actions to grow money and build resilience

ACTIONS FOCUSED ON REDUCING DEBT AND FEES

Figure 14: Interview themes on debt and fees



ACCELERATE REPAYMENTS ON INTEREST-INCURRING DEBT

Accelerating repayments on debt was the biggest debt-related theme from interviews, with half emphasising the importance of this. This theme related to all types of debt that carried interest, including mortgages.

Comments included:

- "They could be exceptional budgeters and pay bills on time but have debt that has compounding interest that they just include in their budget. We tell them they should focus on paying the debt off first."
- "List all the debts, prioritise them and build a strategy to tackle them. The snowball method works very well, paying off the smaller debt first helps people see the impact of their change faster."
- "Pay off debt in a way that minimises cost and duration."
- "Make extra home loan repayments."

REDUCE BORROWING, ESPECIALLY FOR EVERYDAY EXPENSES

The next biggest theme in this category was about decreasing reliance on borrowing, especially for everyday expenses. This included not taking on further borrowing and considering other options so people aren't locked into a debt spiral.

Comments included:

- "Some of those really struggling are borrowing often for lower-cost things that should be covered by a savings buffer."
- "Distinguish between safe vs riskier or expensive loan; this empowers them. They can go to a financial mentor and say I have this debt and heard about this company (with reduced interest) and want to accept that. Awareness brings empowerment. They have options."
- "Loan sharks are heavily marketed and it's becoming traditional for the family. There is a role of parents/grandparents who have strong relationships with lenders – high levels of trust. Banks won't lend to them so they have to go somewhere else, and that consolidates their perceptions that this must be the way we do things here."
- "Fa'alavelave. Cultural giving. Originally was a shared burden with people giving what they could. Now it's more a question of what they can get in terms of debt than what they can give. This creates an intergenerational debt spiral."
- "Deciding not to take debt out for other people. Stop taking on unnecessary debt."
- "Not borrowing for everyday expenses (is an important measure)."
- "Our focus has been a 'feel good' factor, they are proud, but have they reduced their debt level and are still borrowing at the same rate. If they reduce their borrowing by 50%, there's hope they might reduce the other half, but if they still fluctuate and borrow we haven't done anything. Managing progress relative to baseline (is important) but you can't have one baseline for everyone."

USE CREDIT CARDS WISELY

Not incurring interest on credit cards was widely suggested.

Comments included:

- "People come in worried they have to drop their credit card, but we say a credit card when used right can be awesome."
- "Making sure people understand how a credit card compounds against you (is important)."
- "Paying credit card interest can be a measure of distress."
- "Pay the credit card balance in full every month."

MEET ALL FINANCIAL OBLIGATIONS

Meeting financial obligations by paying bills on time and not paying late fees was another common suggestion to measure.

Comments included:

- "Prevalence of payment problems (is a measure). Acknowledge behaviour changes over time with particular events such as school fees, birthdays."

- "Being up to date with payments. Ensure your obligations are paid on time."
- "Unarranged overdraft and Ministry of Justice fines. People talk about fines as something you pay, that you always have – it's normalised."
- "It starts with meeting minimum requirements, such as not going into negative balance, then a savings buffer, then long-term savings."
- "Paying bills on time, such as paying weekly to make it fit within the budget (is important)."
- "A client might choose to designate to something specific in parallel to going debt free. For example, this might be 'I need to clear my power bill' and someone putting extra away to do that, which is still a worthy goal – they need to put effort into how they are going to achieve it."
- "They might have a goal to save money for firewood, essential costs but not urgent, so they might designate their savings towards that as well as paying off debt. WOF, tyres that need to be replaced, people are encouraged right at the beginning to put aside money for those future essential items."

CONSOLIDATE DEBT OR MOVE TO A MORE FAVOURABLE INTEREST RATE

Debt consolidation was raised several times throughout the interviews as being a great option for some people.

Comments included:

- "Consolidation. They may not understand they are attracting different interest rates. Assessing total situation and better ways of structure. They will come to us with a mortgage and car loan and credit card debt. (we say) Let's break it all down and try and work out most cost-effective way of doing this."
- "Actively looking for better consolidation or better interest rates." (success measure)
- "Most people would benefit by borrowing in a lower-cost, safer way."
- "Debt consolidation is an intervention with a clear impact – get the right service that meets your need, shows there is an end in sight."
- "Are they still borrowing at the same rate?" (success measure)

NOT USING BUY NOW PAY LATER

We regularly heard concern about buy now pay later products and the impact on New Zealanders. Comments focused on the product, more so than smart use of it (which was interesting, compared to credit cards where it was suggested paying off interest rather than concern with the product itself).

Comments included:

- "Buy now pay later is just the beginning of a downward spiral."
- "Downfalls of Laybuy and buy now pay later. People using buy now pay later for 'bougie food'."
- "(Success can look like) understanding and cutting up Afterpay because it stops us borrowing money, not cutting it up because someone saying so (more reactive)."

REFLECT ON THE BEST OPTION BEFORE TAKING ON MORE DEBT

There were a couple of suggestions that discussed the need for people to reflect before borrowing. Success could look like borrowing in a safer way when the need arose.

Comments included:

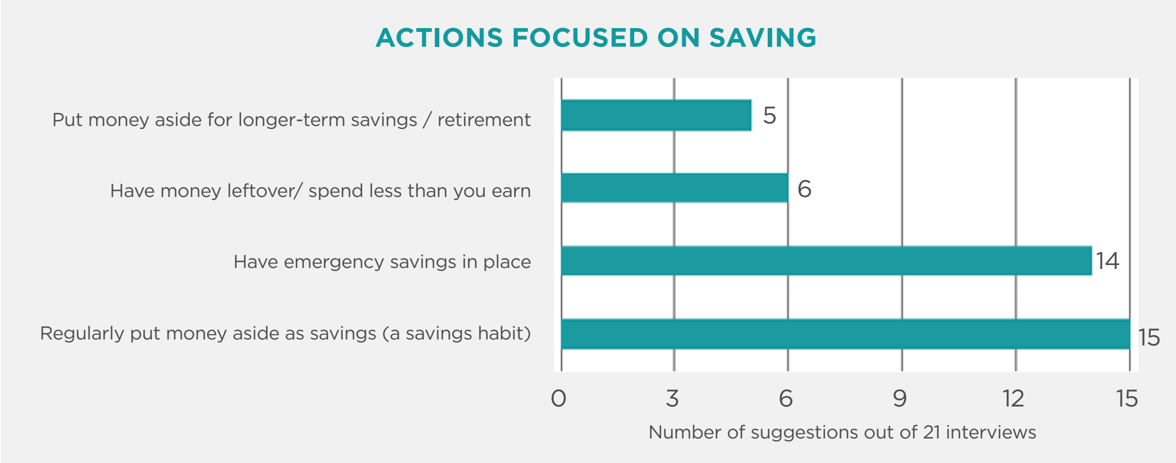
- "Choose and use wisely the best solutions when you need to borrow."
- "(Success looks like) once they have been through the programme, if they hit a tough spot, they don't refer back to a high cost lender, they actually pause and reflect on a safer way. In microfinance they can be just managing and then have a car issue - so the impact of not getting a loan is bad and actually need to go into debt. So, it's about 'managing' – this is a significant outcome that doesn't look like change. But it still looks like success."
- "Understanding the implications of taking on debt, productive vs unproductive."

NOT GOING INTO UNARRANGED OVERDRAFT

Unarranged overdraft was raised as being a behaviour that could suggest someone was struggling. Comments were mostly verbatim to the name of this category.

ACTIONS FOCUSED ON SAVING

Figure 15: Interview themes on saving



Saving was a big theme with many providers suggesting it's important for people to actively set money aside and have access to emergency savings. It was also raised that longer-term savings (retirement) were important but noted it seemed to be a more advanced behaviour and likely builds on a savings habit and emergency savings.

REGULARLY PUT MONEY ASIDE AS SAVINGS

Regularly setting money aside was widely suggested as a good outcome and the most important contributor to financial wellbeing.

Comments included:

- "People who have a regular savings habit have financial wellbeing scores 5x higher than those who don't save. This is more important to their financial wellbeing than if their income were to double."
- "Regular behaviour, even $5 per week, creates momentum. With a practice of saving you are more likely to keep saving and increase that saving."
- "Even saving $1 a day - look at that over time. Understanding products so they know how it works for them (such as ASB's 'Save the change') – more engaged they are. It comes up to them ownership of the journey."'
- "How can you modify lifestyle or get other income streams, or change savings habit? Plug that in and often we find small behavioural adjustments make signification financial changes."
- "The game changer is to see clients being able to save money, even $1 per week, when they have no savings to begin with. If they understand that they can save at least 50c per week - it is the habit that makes a difference in the future. Encourage participants to have separate savings account, and round up the amounts to a separate savings account, many banks provide this and is something they can access. We want to see them leave this savings aside. Believe the work of financial mentor makes a difference, more able to keep to that budget, more open to tips."
- "Even putting some money aside, no matter how small is habit forming."
- "Saving is pretty tough to talk about after the three years we've had and the current state of the economy with the cost of living. It's a luxury. Saving for a specific goal like a car can help, but there are still all the same traps. Any saving is a good sign."
- "Going through different scenarios is great such as 'what would happen if you put $100 regularly away into a term deposit or KiwiSaver?'. You are not going to do this yourself so it really is useful to do it in groups. People can't always get $25k pay rises but they might be able to save $5 per week."

HAVE EMERGENCY SAVINGS IN PLACE

The importance of having access to emergency savings was regularly raised as being crucial to prevent people getting tripped up and having to borrow. Amounts suggested widely differed between just having something (such as $100) through to three months of expenses set aside.

Comments included:

- "A buffer fund is absolutely critical. Difficult, but an important part of surviving the rough weather."
- "An emergency fund is so important, there are cultural obligations that can happen in unplanned fashions and so having access to funds to help cover the associated costs is very important. Do a budget, look at the surplus, direct surplus to emergency funds / first house deposit, they need to prioritise and figure this out themselves."
- "Aspiration would be three months expenses (set aside as emergency savings) but just make sure you've got a couple of grand in the bank to withstand a shock. An emergency fund allows you to change insurance policies to higher excess."
- "We encourage our customers to plan for the unexpected. In one pilot programme, 57% set an emergency fund as a goal which indicates low financial resilience. It possibly makes sense that emergency funds are last. Until someone has control, they are not going to be able to actively save."
- "Separate emergency savings to weather a life event – could be for positive events such as a birth of a baby but also unexpected like a flood where in the past they may have gone to a creditor or hidden it from their partner."
- "One of our students built an emergency savings fund of $120 and that was amazing for her as when Covid hit she could afford to buy nappies and other things at the grocery store when we were going into lockdown when otherwise she would have had to wait a few days. That's really empowering."
- "Emergency funds is a big thing we've been talking about, always fa'alavelaves. Now people learning how to say 'no' or say this is how much I can give. Learning how to manage their money, but also being respectful of our cultural traditions. Usually, I say $1000 but it's up to you, as long as you have money in there that caters to unexpected amounts. Put money aside, $20 or $30, better to put it in to the account than go to KFC."

RUN A SURPLUS

This theme is very similar to regularly saving, but given it focused more on spending we have pulled it out as a standalone theme.

Comments included:

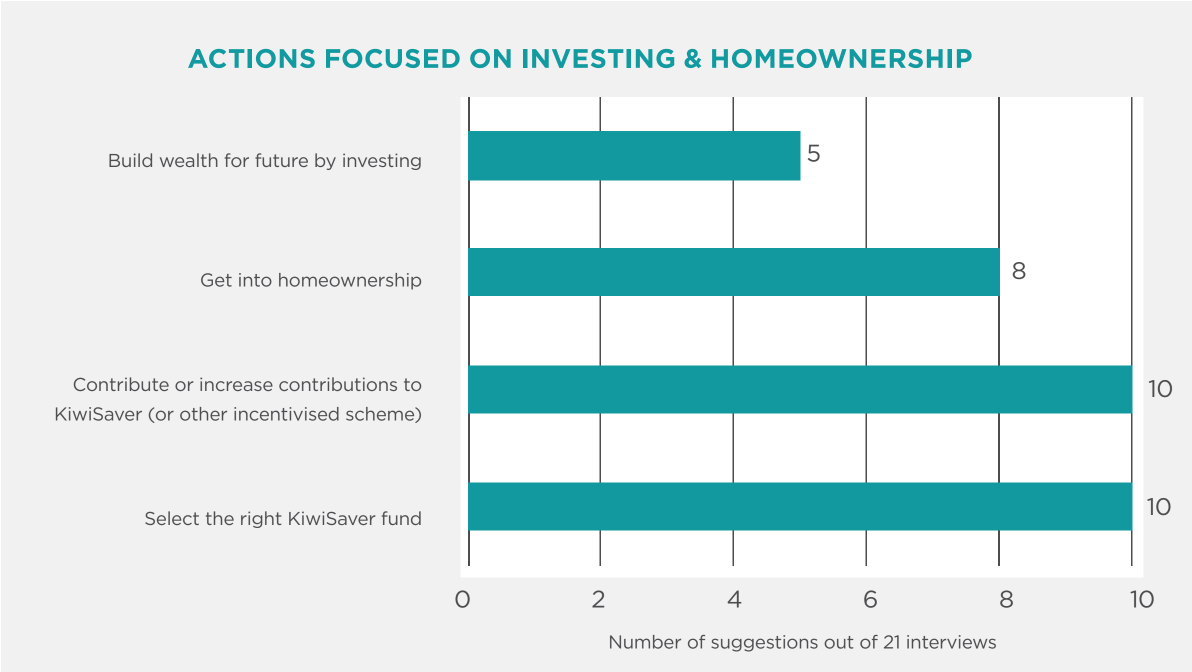
- "Spend less than you earn."
- "Have as much money at the end of it (pay cycle) as possible. If you don't, these are the behaviours we need to change."

PUT MONEY ASIDE FOR LONGER-TERM SAVINGS

This theme focused more on longer term saving and growing net worth outside KiwiSaver and investment. Most comments here suggested the importance of long-term saving verbatim to the category title.

ACTIONS FOCUSED ON INVESTING

Figure 16: Interview themes on investing and homeownership



The investing category was often explained as more of an advanced behaviour for people. KiwiSaver and homeownership are covered in this section.

SELECT THE RIGHT KIWISAVER FUND

The importance of being in the right KiwiSaver fund was often pointed out given how much it can impact someone's financial trajectory.

Comments included:

- "Educating them where it is – don't necessarily choose where it is. KiwiSaver settings are one thing – they don't realise it's their money. Even telling them that – ring your provider – it's your money, it's exposed. If you are wanting homeownership you should be more conservative."
- "How often they investigate should I still be in this fund?"
- "Awareness is not knowing what you don't know, 'hey did you know that not every KiwiSaver provider is the same?. Let's plug in some numbers and see what difference is over a massive period of time'. Show fee difference between minimum and max, never seen someone go oh I'll give them my extra $50k."
- "Lots of Pacific people have KiwiSaver but don't know you can change it. This is one of the things that stirs people up. When I ask them if they have shares in property. And they say no, but then when I tell them that actually they do if they have KiwiSaver. Then I take them to Fund Finder, then that really takes off. It makes a big difference."
- "Fund selection of KiwiSaver (is important), women are often in more conservative funds."
- "Four harms of investing: emotional harm from volatility, harm of panicking and jumping, under-specking your risk for long-term, over-specking your risk for short-term (if you need funds for a house)."

CONTRIBUTE OR INCREASE CONTRIBUTIONS TO KIWISAVER

Actively contributing to KiwiSaver was a big theme.

Comments included:

- "KiwiSaver. At least match what your employer is going to put in."
- "KiwiSaver has been a godsend. Particularly young people using it for a first home and for the long run."
- "KiwiSaver forced saving is so good for people who lack self-control or procrastinate."
- "We do suggest KiwiSaver is a smart option – money working for you makes sense."

GET INTO HOMEOWNERSHIP

Homeownership was a big theme raised that contributes to improved financial wellbeing.

Comments included:

- "Financial wellbeing is a spectrum. Renters have lower financial wellbeing than mortgage holders, and those with mortgages paid off have higher financial wellbeing than everyone."
- "When we asked what financial security means to you, two responses came up regularly (40–60%). Meeting basic necessities, and security of living (could be stable rental, Kāinga Whenua, homeownership)."
- "Homeownership is success. Those driven to buy a home is the most common theme with those making financial changes."
- "Most impactful decision is taking a mortgage out. Obtaining a home loan is the biggest financial decision that individual is going to make."
- "Housing is a key pathway for intergenerational wealth. Can use equity within a house to help leverage whānau (children) to get into their own home. It's encouraging and inspiring when they become aware of how they can help their kids."
- "Take away the barriers, 'this is how you can do it'. Bring in a bank representative to help provide information on how they need 3–6 months' worth of bank statements, debt etc."
- "When people leave the islands, they want to buy a fale – to get a home."

BUILD WEALTH FOR THE FUTURE BY INVESTING

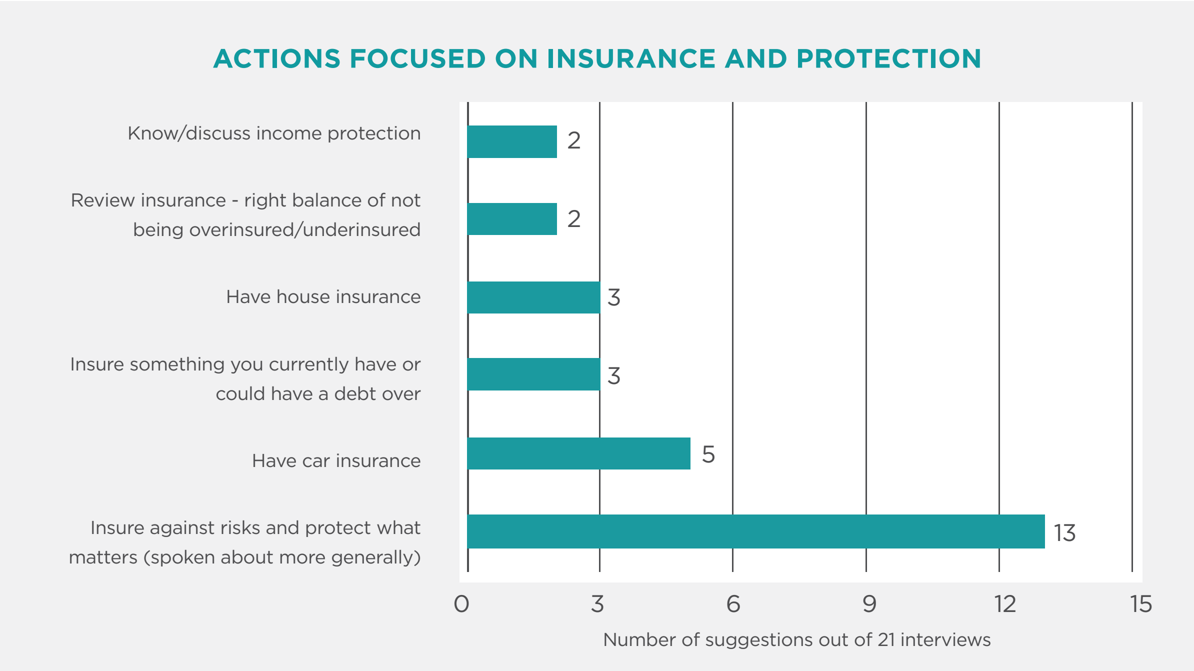
There weren't many comments in this category, mostly because it was deemed to be more of an advanced behaviour compared to saving and debt management. Comments suggested more generally that investing was a good action to improving wealth. There could be some perceived crossover with "long-term savings" as at a certain point it likely becomes investing.

Comments included:

- "Mortgage paid off, more investment. Continuing to grow that wealth."
- "Investing."
- "Only a handful of people who come through that know about investments. Majority are at ground zero."

ACTIONS FOCUSED ON INSURANCE AND PROTECTION

Figure 17: Interview themes on insurance and protection



Insurance and protection was another commonly heard theme. It was spoken about more generally with some discussing the importance of specific insurances such as a car at a basic level.

INSURE AGAINST RISKS AND PROTECT WHAT MATTERS

There were general comments on the importance of insurance with lots of products discussed in general terms.

Comments included:

- "Insurance is a tricky one, what can they afford? What do they want to prioritise? It's typically the tangible assets, car, house, general, but they don't think about themselves such as life insurance, income protection, health insurance. It's a balancing act between priorities and realities of the budget."
- "Active conversation on insurances. Not linear. We can't really expect someone to be open to a conversation about insurance or resilience if they can't get on top of their weekly financial commitments and demands."
- "On the insurance side – it's such a personal measure because it varies dramatically from customer to customer. People in New Zealand are quite under insured, yes insurance is expensive, this is how it can impact your life."
- "Had clients we assumed didn't understand how insurance worked but actually make astute decisions, like not insure car but have life insurance, so that family is well cared for if they die. "
- "Minimum insurances should be car insurance (third-party at least) and home and contents. Other insurances such as general, life and health and income protection would be seen as a luxury."
- "For Pacific people, illness is a big thing. They left the Islands to provide for their kids. They don't want to die and leave nothing to kids or worse - debt. Funerals are expensive, and you put the person that's grieving in debt."

INSURE VEHICLES

Car insurance was commonly raised as a minimum level of insurance most important for people to have.

Comments included:

- "We are seeing everyday people who are paying down a car they no longer have. Some people have life insurance as a benefit receiver but no car insurance (we question what income are you protecting?)."
- "Car insurance is important, majority aren't insured for car, majority are buying a car but uninsured."
- "Car insurance (as a minimum), third-party at least."

INSURE SOMETHING YOU CURRENTLY HAVE OR COULD HAVE A DEBT OVER

It was usefully suggested insurance needs to cover a debt or what could lead to debt if something goes wrong.

Comments included:

- "Insuring something you have a debt over. Or something where you have the ability to accrue a debt above the cost of that item."
- "Approach for insurance and mortgage is if there is a life event and you can't meet mortgage obligations what does that mean? You might have to sell your home, but don't want that, okay, how do we wrap some protection around that?"
- "Interruption in income, how would you cope (that's the measure of cover). If you couldn't work, what sort of level of fund would you need, and what level of time. Older people need less but younger people need this."

HOUSE INSURANCE

House insurance was also discussed as mandatory for those that own a home, unless they are able to self-insure this risk.

Comments included:

- "House insurance is non-negotiable. You must get the house insured."

REVIEW INSURANCE

Several comments suggested the need to review insurance given situations change over time.

Comments included:

- "So many clients overinsured or underinsured. In terms of reviewing annually – people get older. Things change. Educating them what they need to do if they access the funds. Someone's been paying for something, but it was never explained to them. They have been paying 15 years but don't know what they are paying for."
- "How often they check their insurance policies (is a useful measure)."

KNOW ABOUT AND DISCUSS INCOME PROTECTION

There were a couple of suggestions on income protection.

Comments included:

- "Discuss income protection... no surprises."
- "Insurance too regarding the protection side. What happens if the main income earner can't work anymore, or loses their job?"

6.3 Interview themes around what supports action

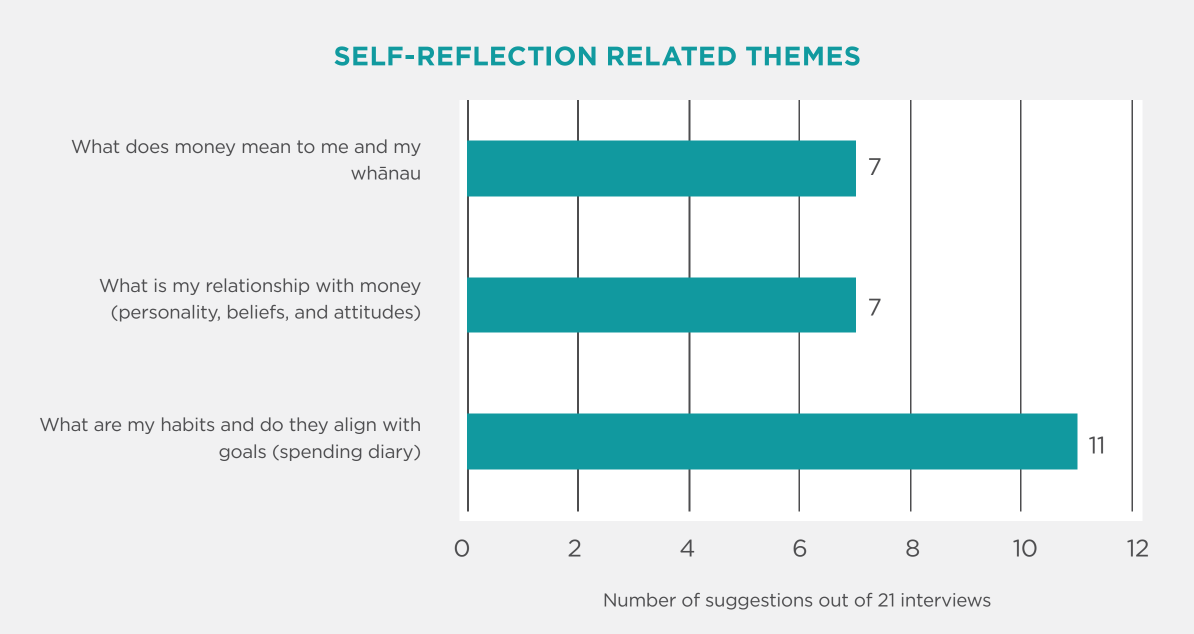
There were many themes through our interviews around what supports people to take action. We refine these non-financial themes into three broad categories that raise the importance of: self-reflection, motivation, and being empowered.

Figure 18: Themes around what supports action

What supports action towards these outcomes?		
Self-reflection	**Motivation**	**Being empowered**
• Reflect on habits and whether they align with goals (i.e - spending diary) • What is my relationship with money (personality, beliefs, attitudes) • What does money mean to me and my whānau	• Have goals and aspirations • Use money as a tool to benefit whānau, community • Plan for the long term • Leverage life changes that trigger change	• Planning spending or budgeting • Informed and confident to make choices and decisions • Improve knowledge (product risk and compound interest etc) • Seek help • Comfortable talking about money with whānau and establishing boundaries • Organising money • Being financially included

SELF-REFLECTION

Figure 19: Interview themes on self-reflection



Many comments related to people reflecting on what they are spending and what money means to them ahead of making changes. Here we categorise these into three themes with a bit of crossover between them.

REFLECT ON HABITS AND WHETHER THEY ALIGN WITH GOALS

This theme mostly related to spending psychology and someone understanding their spending ahead of making changes. Having a spending diary was a big part of this theme and often this is coupled with having a goal or aspiration as the 'why' to change spending.

Comments included:

- "A large portion think they have budgeting in their heads, but when they get the statements out they usually get a shock understanding how they see where their money goes. There is a dissonance between what they think and the reality of their spending."
- "We say, 'here is your trajectory based on what you are doing today, what do you think of this? Does it make you happy, or sad? Does your life right now match the thing that is important?"
- "One test is 'do you know what you spent your money on yesterday?'. A spending diary is encouraged. Getting them into habit on keeping track of spending and thinking before they spend (do I need it? can I do without it?)."
- "The first person to be honest with is themselves. What am I spending on? Is it all necessary? All productive? Just being able to see is the first step."
- "We find the wife is always the driver – she's the boss. She'll say, 'I spoke to my husband and he's closed the account'. Women are proactive and the husband does what they are told."

IMPROVE YOUR RELATIONSHIP WITH MONEY

This theme related to someone understanding their beliefs and attitudes towards money as well as their money personality that was affecting their behaviour.

Comments included:

- “Choosing to find out your relationship with money. Most impactful decision is when people understand their relationship with money, when they are actively involved with their money – savings, borrowing and investing. They need to understand their relationship and why they are making these decisions.”
- “Money personality profiles help quite a lot. They see parts of themselves in the profiles. It helps them understand how they can change.”
- “Relationship with money content is critical. ‘What’s our perspective on pūtea, do whānau talk about money? how do we behave? Digging deep to the psychological elements. People take a step back to realise their value and belief system and re-evaluate.”
- “Transformative work includes: how do people feel about money, own confidence, relationships with others, whānau relationships around money, how do they make financial decisions.”

WHAT DOES MONEY MEAN TO ME AND MY WHĀNAU?

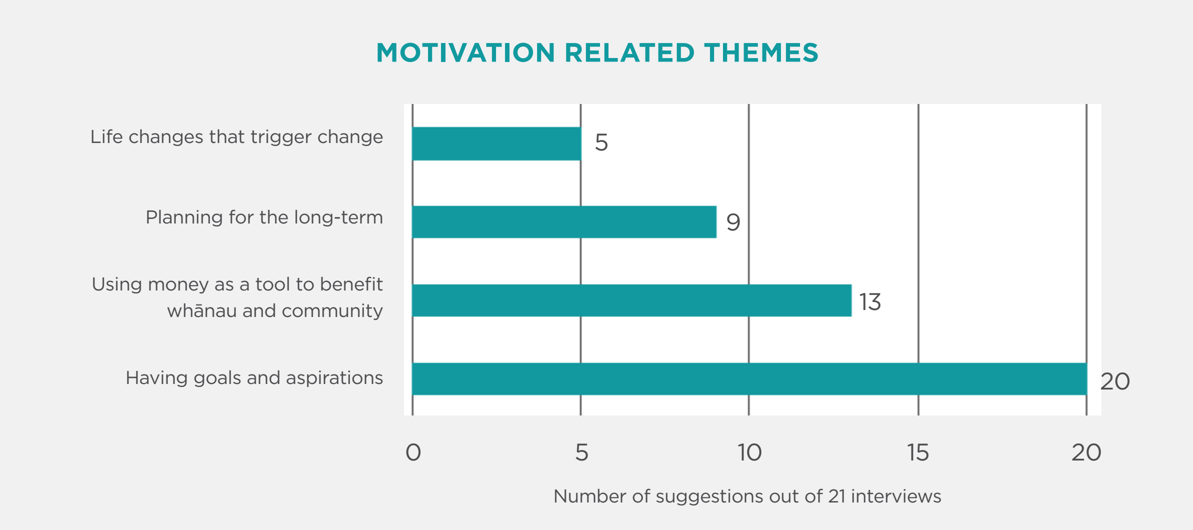
This theme is similar to prior self-reflection themes but unique in the sense that it focused on reflecting on the ‘why’ of money, rather than one’s relationship with it currently.

Comments included:

- “Do I respect money as an entity, or do I use it as it comes and goes with no long-term value in my life?”
- “The biggest changes we see with people in the worst situations is when we share here’s what life looks like, with X changes look at this. It’s a light at the end of tunnel. If people don’t have a reason to change, they won’t.”
- “Unless you take stock of what money means, it won’t consolidate. Money isn’t everyone’s priority; it’s taboo to talk about it and has negative connotations for some that others might take for granted. It’s more about ‘what do you want to achieve’ – not as a destination. Without that you can’t change a habit or behaviour. It’s a means to an end.”

MOTIVATION

Figure 20: Interview themes on motivation



Motivation is categorised here as anything that supported someone to know their 'why' before they then make changes to their financial behaviour. Here we group motivation into four main themes with the biggest theme from all our interviews being having goals and aspirations.

SET GOALS AND ASPIRATIONS

Almost all (20 out of 21) interviews suggested the need for whānau to have goals and aspirations before they can shift behaviour.

Comments included:

- "I do think it's important to have goals. You need to know what you're chasing."
- "How do we keep them in it when they are not ready? When they see it as a goal, they don't tend to fall into bad habits. Can't change everyone but those that have a goal aren't getting that unsecured loan as wanting to get into homeownership. They have to be open and ready to be on that journey to change."
- "Saving for a goal and separating out from emergency savings, so they still save a goal. This supports behaviour change and their budget now reflects that person's values to include an annual trip to see whānau up north, or to compensate for giving to their local church. As it changes over time it reflects their values, not just dictated by the urgent."
- "One gentleman wanted a family reunion in Melbourne – worked out budget, needed to take gifts and then realised he was only going to be able to save $10 per week which would take years. Had to go investigate and looked at what his habits were costing (smoking, pokies, pub) and decided to pull back himself and put it into savings. It's showing them a mirror and giving them tools to feel they have the power in their own hands to do it and don't need someone else to do it."
- "Step 1 is what's important to you – setting goals. I don't want to feel like I'm poor, I don't want to tell kids we can't go to this place. What's important to you drives what's going on under the hood. It's intentional spending and intentional direction."
- "The cultural aspect - tithing is a big one. Massive challenges. We go in there and talk to the pastor – can they pause their tithe for a year and once they get into a better position they can tithe again. Got to get creative on that."

USE MONEY AS A TOOL TO BENEFIT WHĀNAU AND COMMUNITY

Using money as a tool to benefit whānau and community focused more on the collective why and knowing how money supports whānau and community. This was especially important for Māori and Pacific providers.

Comments included:

- "Wealth for Māori is sharing your abundance with others. We ask at the start 'what does wealth mean to you?' How do we reconcile that with being able to create that? For some it might be work less, so it's important to have long-term goals so we can use money as a tool to meet aspiration. It's important to have a healthy view of money – gathering food, serving community, collective – currency/manaakitanga."
- "Kids and intergenerational security and stability are motivators for why people want to make change and get a house."
- "Securing the next generation's future plays heavily on their minds. Māori and Pacific Peoples, similar to Asians, have joint decision-making. If one is struggling everyone needs to pull their resources together."
- "Families is where we see wealth, not about how much savings you have. Homes and savings means very little. It's about how much family you have around. Success is being able to retire back in the islands, time to see the children, having a homestead to go back to."
- "The most common theme with those making changes is that they're driven to buy their own home."
- "There always needs to be a why, a collective why. It is about whānau. People need compelling reason to make changes. Some indigenous frameworks focus on seven generations."

PLAN FOR THE LONG TERM

Planning for the long term was raised as an important theme but some cautioned long-term planning needs to adapt as life happens and is more of an advanced behaviour.

Comments included:

- "The need for retirement planning before choosing a fund is an emotional load. Why would you put people through this ridiculous exercise? It might delay them for 10 years!"
- "Build for irrationality. In behavioural science we get distracted on nudges and tend to forget it's within an environment with structure and rules of the game. It's far more impactful to make the rules of the game easier, rather than make people better players. How can we structure this so it's really easy for them to do the right thing that is beneficial to them?"
- "Advanced behaviours are – how engaged are they with their money? Are they saving and investing? How often looking at accounts? How often check their insurance policies? How often they investigate should I still be in this fund, actively managing their money in a nutshell."
- "Planning for the long term is the focus."
- "Life happens, we don't expect people to rigidly adhere to their plan. We sit down with them and work out where we are at now then modify based on personal circumstances."

LEVERAGE LIFE CHANGES THAT TRIGGER CHANGE

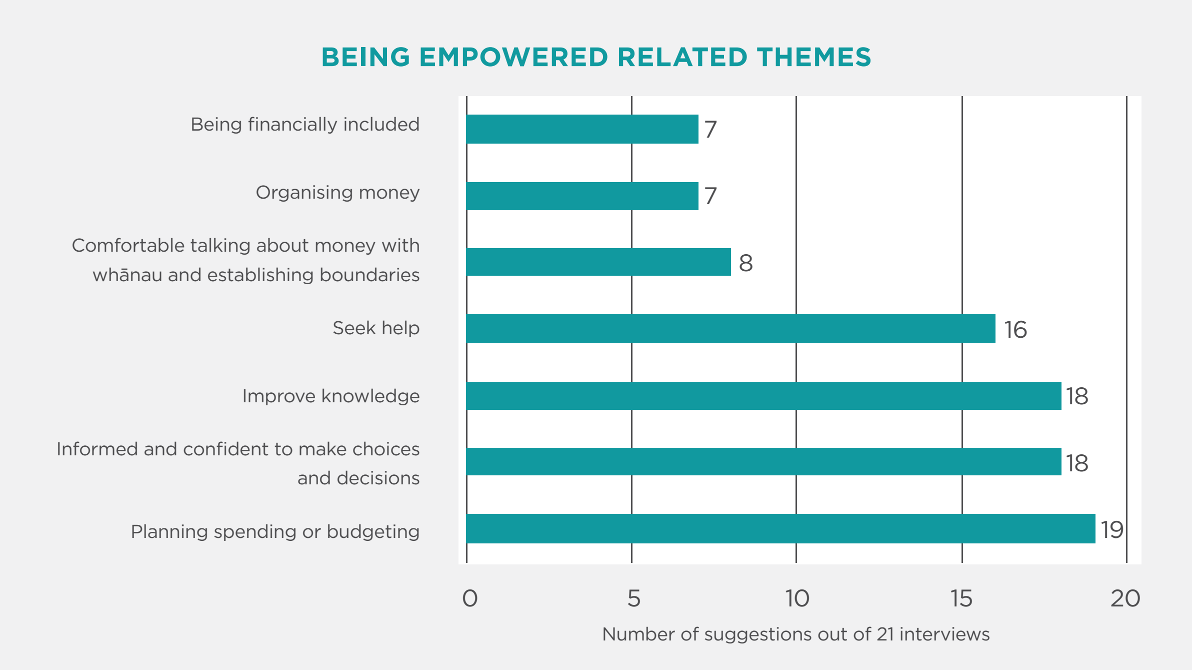
Life changes were seen to be a common motivating factor that triggered change.

Comments included:

- "Trigger needed for someone to want to (change), we see a lot of apathy. What we see on a day-to-day basis is that it takes a shock to change spending patterns and general money behaviours. One life event can bring change."
- "Some people have been set back and had to borrow money because of something happening back home. We say, 'it is what it is, let's carry on'."
- "Might be separated and don't know how to handle the money. Consequences of now, then solutions as to how to get out of it. Have you checked your phone bill etc step by step? Emotional stress, money is last thing on mind. Let's calm down, give breathing space. Might now have to move house, buy them out of the mortgage, get them a car. More resilient for next time. Help them set up power on weekly payment plan vs monthly."

BEING EMPOWERED

Figure 21: Interview themes on being empowered



Many comments related to steps people can take that lead to great outcomes. Many times, we heard the word 'empowered', that people were empowered when presented with choices they could pick from rather than when they were simply told what to do. Here we tabulate themes related to a broad 'being empowered' category.

PLAN SPENDING OR BUDGETING

Planning spending was the biggest theme in this category. It wasn't always specified as a 'budget', however, as there were different ways for people to plan their spending.

Comments included:

- "Budget – Tai Manu – learning to identify the things they spend their money on. Pacific people love to eat. People cutting down on things like McDonalds helps them with the money and their health too."
- "They need to reflect and share first. Then they can look at what a budget is, different strategies around budget such as setting up an AP to go out when you get paid."
- "Difference between needs and wants. Best definition of need and want was by an 8-year-old who said, 'So you are saying anything that I cannot live without is a need and everything else is a want?' Dividing spending between needs/wants."
- "Providing for cultural norms. Being financial capable doesn't mean you can't be Tongan, you can't be Samoan. It gives you the ability to save for cultural obligations, church, weddings, funerals."
- "Our job as providers is to show options of what could be achieved if they are on a different spending plan. It's quite powerful with tools – if we show them that as dollars or years is secret sauce to them, they really get that. It becomes quite addictive, and they want to pay more off."
- "What we are working on is having as much money at the end of it. If you don't these are the behaviours we need to change. These are the things to focus on – don't go out to McDonalds."

BE INFORMED AND CONFIDENT TO MAKE CHOICES AND DECISIONS

This theme related to people knowing about their options and being empowered to make decisions that best suit them.

Comments included:

- "It's about giving people options that they can make for their situation and their reality. For debt it is about visually showing them compound interest – what do these products cost? Their eyes are then open, realising a perceived bargain is a huge rip-off. As part of the course, we provide a resource for them to make assessments on whether to take out debt – it has about 15 questions and provides them with a decision-making tool to decide for themselves and pause first."
- "The different possibilities, KiwiSaver deposit, first home buyers grant, rent to buy schemes. Take away the barriers, this is how you can do it."
- "The model we use is a direction of travel, you are here and want to be here, multiple paths, empowering them with choice. Clients we work with, we let them know there is no possible way this is sustainable, options you can downsize house, spend less, higher risk profile strategy, can do any of these things to put you back of this path. Which one do you want to do? If we told everyone they need to be in a job and contribute 3% to a growth fund, they don't understand any of that – they'd almost be angry we are controlling their direction."
- "In the main it's about having choices. And having choices implies having a measure of control."
- "Confident use of products. Notice the bubbling up of hope. Got a plan now, there's a road out."

IMPROVE KNOWLEDGE

This theme is sometimes known as financial literacy, having or growing financial knowledge.

Comments included:

- "Knowledge and skills are an essential component of financial wellbeing. Concepts and skills such as budgeting, understanding interest and credit, saving and investing, protection, retirement planning."
- "Behavioural adjustments – power of financial education to explain and demonstrate benefits if you modify spending behaviours. It's really what are the behaviours, getting them to understand modifications in spending or saving leads to these outcomes. The biggest thing we find when we talk to clients is, 'I didn't realise the options, I thought I had to have my loan for 25 years'."
- "Financial literacy can't be prescribed as everyone learns in a different way – it could be Sorted, working with financial mentors, CAP, Money Mates course. Could be counselling, addiction help, etc."
- "Fighting misinformation from family members – if one has it wrong, everyone gets it wrong. Educating our way out of this is not the solution. It needs to be where the population is at."

SEEK HELP

When people get stuck at different points of their financial journey, seeking help becomes a key theme.

Comments included:

- “The hope is that we have contact before someone makes a poor decision (like seeing a payday lender), that they have someone to talk to who has their best interests at heart.”
- “Working with us relieves their pressure. Common-sense has gone out the window often. People can’t even remember to pay rent sometimes. This helps some of them get back on track.”
- “Advocacy role – I don’t feel on my own, I know where to get expert help, I’m comfortable to ask for help, I know someone I trust to help me. Those who have been advocated for may be more likely to feel comfortable talking to banks. Someone feeling like they could ring their bank is a massive indicator of behaviour change.”

BE COMFORTABLE TALKING ABOUT MONEY WITH WHĀNAU

Being comfortable talking about money was seen as a big indicator of someone’s financial progress, showing evidence of reduced shame.

Comments included:

- “Conversations at the dinner table, where speaking about money is not taboo but a part of who we are.”
- “Financial conversations and exposure to financial decisions at a young age was shown to be a determinant of future financial confidence. Involving children to financial decision making. A small step is having these financial conversations.”
- “Involving and engaging with their families – e.g. no longer taking on other people’s financial responsibilities, establishing financial boundaries for the self and the whānau – feeling confident in doing so.”
- “Talking about money. Up from the kids and down from the parent.”

BE ORGANISED WITH MONEY

This theme was all about setting up money systems for success.

Comments included:

- “If the client has set up an automatic payment (making sure bills are paid, then savings) that is a win, an impact. Help them set up power on weekly payment plan vs monthly.”
- “Savings going straight to savings account.”
- “Simple things like aligning your income with your expenses. Research shows that people manage better when their mortgage payment goes out the same day or close to it. It gives a better idea of how much money they truly have. Getting pay and transfering into their bills account.”
- “Planning – role of each type of account for each plan – savings for later, every day for now, KiwiSaver for much later.”

BE FINANCIALLY INCLUDED

A final theme in the 'being empowered' category was around financial inclusion and how inclusion can foster better outcomes.

Comments included:

- "Helping young people get bank accounts. We make it particularly hard. No ID or birth certificate in transitional homes makes it challenging. It's important to see inclusion and exclusion rates."
- "Access to financial resources such as income, appropriate products and services, help and guidance. External factors that impact financial situation such as family or cultural influences, life events, social skills and abilities, health, addiction, underlying vulnerabilities. If you are financially well, you have the ability to be resilient; if you are not included, you can't be financially well."
- "A while ago we started greeting every single call with 'Kia ora'. It was widely reported that changed the nature of the conversation immediately."
- "Access to hardship terms in banking."

7. Conclusion

This project set out to establish financial capability outcomes that can be shared, measured and help inform choices across those working in the financial wellbeing sector. What's working best for people? Which programmes are serving communities best? Are we making progress?

These questions have never been entirely answered in New Zealand. Leaving them unanswered risks funnelling significant amounts of effort and funding into the status quo, without knowing if people are in fact any better off or prepared for the unexpected – clear financial drivers of wellbeing.

Are we winning? Essentially, we need to keep score.

The proposed solution distils a wide array of financial wellbeing frameworks and methodologies around the globe, builds on input from New Zealand experts, and focuses on financial change brought about by actions. Either people's positions are improved through increased saving, investing, debt repayment, decreased fees and interest costs, less reliance on costly borrowing… or not. The same for resilience: either it is increased by building more robust emergency savings, having more relevant insurances in place covering risks… or it isn't.

What is it we can do to have the most impact in this regard? We look forward to learning from the data to be gathered and guided by it.

The implications of cracking this puzzle of shared measurement are profound. Not only can we envisage leveraging rich data to inform our efforts at lifting financial capability, we can envision that data leading to bespoke support for those we serve. After all, there are various ways to achieve financial growth and resilience – one person's best next steps to progress are not the same as others. The potential for bespoke plans (or at least tailored next steps) at scale is a welcome possibility.

Further, the choice to pinpoint financial change should have positive ramifications in optimising decision making. It's not farfetched to imagine a tool (potentially AI aided) that provides real-time feedback as to the long-term impact on growth and resilience that our everyday decisions have in aggregate, and therefore direct us to the most effective solutions. Beginning by tracking saving, investing, debt repayment, fees and continued borrowing in real time, a long-term trajectory can project which choices make more or less difference… and help us all make better choices to lift our financial wellbeing.

Once again we thank the many organisations across our financial capability network who generously volunteered their time to contribute. Special thanks to the members of our expert steering group and the many New Zealand financial capability providers and educators who were interviewed. This would not have been achievable without valuable input from our National Strategy partners, particularly for data and insights which informed this work.

8. Reference list

1. Aegon. (2023). Our insight to the nation's financial wellbeing 2023. Aegon: https://www.aegon.co.uk/employer/financial-wellbeing/research##/content/dam/auk/assets/publication/marketing-support/financial-wellbeing-index-summary.pdf

2. Agnew, S. (2018). Empirical measurement of the financial socialization of children by parents. Young Consumers, 19(4), 421-431. doi:10.1108/YC-07-2017-00717

3. Almenberg, J., Lusardi, A., Säve-Söderbergh, J., Vestman, R. (2020). Attitudes towards debt and debt behavior. The Scandinavian Journal of Economics, 123(3), 780-809. doi:10.111/sjoe.12419

4. ANZ. (2021, December). Financial Wellbeing: A survey of adults in New Zealand. ANZ: https://www.anz.com.au/content/dam/anzcomau/documents/pdf/aboutus/esg/financial-wellbeing/anz-nz-adult-financial-wellbeing-survey-2021.pdf

5. Aristei, D., Gallo, M. (2021). Financial Knowledge, Confidence, and Sustainable Financial Behavior. Sustainability. 13 (19), 10926.

6. ASB. (2021, October 28). ASB data shows financial wellbeing improving but many 'just coping'. ASB: https://www.asb.co.nz/documents/media-centre/media-releases/asb-data-shows-financial-wellbeing-improving.html

7. ASB. (2022, April 12). ASB research insights helping the two in five Kiwis experiencing frequent payment problems. ASB: https://www.asb.co.nz/documents/media-centre/media-releases/asb-research-insights-helping-kiwis.html

8. Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. Educational Psychologist, 28(2), 117-148. doi:10.1207/s15326985ep2802_3

9. Benartzi, S., Thaler, R. H. (2013, March 8). Behavioral Economics and the Retirement Crisis. UCLA Anderson School of Management: https://www.anderson.ucla.edu/sites/default/files/documents/areas/fac/accounting/Benartzi%20and%20Thaler%20Science.pdf

10. Birdsey, N. (2022, April). How a KiwiSaver loophole short-changes employee. Consumer.: https://www.consumer.org.nz/articles/the-kiwisaver-loophole-that-lets-your-boss-pay-their-contribution-out-of-your-wages

11. Birkenmaier, J, Sherraden, M., Curley, J. (2013). Financial Capability and Asset Building: Research, Education, Policy, and Practice. New York: Oxford University Press.

12. Botha, F., de New, J., Nicastro, A. (2020, March). Developing a short form version of the Commonwealth Bank-Melbourne Institute Reported Financial Wellbeing Scale. MELBOURNE INSTITUTE: Applied Economic & Social Research: https://melbourneinstitute.unimelb.edu.au/__data/assets/pdf_file/0011/4752731/CBA-MI-Technical-Report-No.-5.pdf

13. Boud, D., Keogh, R., Walker, D. (1985). Promoting reflection in learning: a model. In Reflection: turning experience into learning (pp. 18-40). Taylor & Francis Group.

14. Chern, D., Low, M., Whiting, R. (2012, June 25). Towards a study of Ngāi Tahu financial literacy and its effect on financial well-being: A literature review. Otago University: https://ourarchive.otago.ac.nz/bitstream/handle/10523/2349/Financial%20literacyLowWhiting2012rev25June.pdf;sequence=1

15. Chivers, L. L., Higgins, S. T. (2012). Some Observations from Behavioral Economics for Consideration in Promoting Money Management among Those with Substance Use Disorders. Am J Drug Alcohol Abuse. 38(1), 8–19.

16. Chowdhry, N., Dholakia, U. (2020). Know thyself financially: how financial self-awareness can benefit consumers and financial advisors. Financial Planning Review, 3(1), e1069. doi:10.1002/cfp2.1069

17. Clark, R. L. (2023). Effectiveness of employer-provided financial education. Journal of Financial Literacy and Wellbeing, 1, 154–168.

18. Coleman, A. (2011). Mandatory Retirement Income Schemes, Saving Incentives, and KiwiSaver. Motu: https://www.motu.nz/our-research/wellbeing-and-macroeconomics/fiscal-issues/mandatory-retirement-income-schemes-saving-incentives-and-kiwisaver/

19. Collard, S., Hayes, D. (2014, March). The Open University. Financial Wellbeing In Later Life: Evidence And Policy: https://oro.open.ac.uk/40171/1/Financial-wellbeing-later-life.pdf

20. Cooper, J., Heron, T., Heward, W. (2013). Applied behavior analysis: pearson new international edition pdf ebook. Pearson Education Limited.

21. de Meza, D., Irlenbusch, B., Reyniers, D. (2008, July). Financial Capability: A Behavioural Economics Perspective. Financial Conduct Authority: https://www.fca.org.uk/publication/research/fsa-crpr69.pdf

22. Falicov, C. (2001). The cultural meanings of money: the case of Latinos and Anglo-Americans. American Behavioral Scientist, 45(2), 313-328. doi:10.1177/00027640121957088

23. Fernandes, D., Lynch, J. G., Netemeyer, R. G. (2014). Financial Literacy, Financial Education, and Downstream Financial Behaviors. Management Science Vol. 60, No. 8, 1861-1883.

24. Financial Consumer Agency of Canada. (2019, November). Financial well-being in Canada: Survey results. Financial Consumer Agency of Canada: https://www.canada.ca/en/financial-consumer-agency/programs/research/financial-well-being-survey-results.html

25. Financial Services Council. (2022, December 1). Money and You: Taking Cover. Financial Services Council: https://blog.fsc.org.nz/media-release-1-december-2022

26. FinCap. (2023, September). Voices. Indicators of financial wellbeing for whānau supported by financial mentors in 2021 and 2022. FinCap: https://www.fincap.org.nz/voices-report/

27. finra Investor Education Foundation. (2009, December). Financial Capability in the United States, National Survey - Executive Summary. https://www.sec.gov/spotlight/invadvcomm/finranationalfinancialcapabilitystudy.pdf

28. Fleck, R., Fitzpatrick, G. (2010). Reflecting on reflection: framing a design landscape. Proceedings of the 22nd Conference of the Computer-Human Interaction Special Interest Group of Australia on Computer-Human Interaction, 216-223. Retrieved from https://doi.org/10.1145/1952222.1952269

29. FMA. (2022). KiwiSaver Annual Report 2022. FMA: https://www.fma.govt.nz/assets/Reports/KiwiSaver-Annual-Report-2022.pdf

30. Frisancho, V. (2023). Spillover effects of financial education: the impact of school-based programs on parents. Journal of Financial Literacy and Wellbeing, 1, 138-153. doi:10.1017.flw.2023.2

31. Gal, D., McShane, B. B. (2012). Can Small Victories Help Win the War? Evidence from Consumer Debt Management. Journal of Marketing Research, Volume 49, Issue 4, 487-501.

32. Galariotis, E., Monne, J. (2023). Basic debt literacy and debt behavior. International Review of Financial Analysis, 88, 102673. doi:10.1016/j.irfa.2023.102673

33. Galicki, C. (2021). New Zealand Financial Capability Survey 2021. Te Ara Ahunga Ora Retirement Commission: https://assets.retirement.govt.nz/public/Uploads/Research/TAAO-RC-NZ-FinCap-Survey-Report.pdf

34. Gathergood, J., Sakaguchi, H., Stewart, N., Weber, J. (2020). How Do Consumers Avoid Penalty Fees? Evidence from Credit Cards. Management Science. vol.67 (4), 1993-2656.

35. Gibson, J., Stillman, S., Le, T. (2010). Household Wealth and Saving in New Zealand: Evidence from the Longitudinal Survey of Family, Income and Employment. Motu Economic and Public Policy Research Working Paper No. 10-06, 1-32. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1673584

36. Gilbert, A., Scott, A. (2023, August). PROBLEM DEBT, BUY NOW PAY LATER (BNPL) & YOUNG ADULTS IN AOTEAROA NEW ZEALAND: REPORT. AUT: https://acfr.aut.ac.nz/__data/assets/pdf_file/0009/817803/FINAL-YA-Debt-Study-Industry-Report-v250823.pdf

37. Gladstone, J., Nieboer, J., Raghavan, K. (2020, October). Understanding consumer financial wellbeing through banking data. UK.

38. Goldman Sachs. (2023). Retirement Mindset Matters. https://www.gsam.com/content/dam/gsam/pdfs/common/en/public/articles/2023/am-retirement-behavioral-report-2023.pdf?sa=n&rd=n

39. Good Shepherd NZ. (2021, May 14). Creating access to affordable car insurance. Good Shepherd NZ: https://goodshepherd.org.nz/news-and-media/creating-access-to-affordable-car-insurance/

40. Goyal, K., Kumar, S., Hoffman, A. (2023). The direct and indirect effects of financial socialization and psychological characteristics on young professionals' personal financial management behavior. International Journal of Bank Marketing, 41(7), 1550-1584. doi:10.1108/IJBM-09-2022-0419

41. Graham, S. (2020). An attributional theory of motivation. Contemporary Education Psychology, 61, 101861. doi:10.1016/j.cedpsych.2020.101861

42. Haisken-DeNew, J., Ribar, D. C., Salamanca, N., Nicastro, A., Ross, J. (2019, February). Improving the Commonwealth Bank of Australia - Melbourne Institute Observed Financial Wellbeing Scale. MELBOURNE INSTITUTE: https://fbe.unimelb.edu.au/__data/assets/pdf_file/0009/3045708/CBA_MI_Tech_Report_No_3.pdf

43. Hathaway, I., Khatiwada, S. (2008, April). Do Financial Education Programs Work? FRB of Cleveland Working Paper No. 08-03, Available at SSRN:: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1118485

44. Henchoz, C., Coste, T., Wernli, B. (2019). Culture, money attitudes and economic outcomes. Swiss Journal of Economics and Statistics, 155(2), 1-13. doi:10.1186/s41937-019-0028-4

45. Kahneman, D. (2013). Thinking, fast and slow. Farrar, Straus and Giroux.

46. Kahneman, D., Knetsch, J. L., Thaler, R. H. (1991). Anomalies: The Endowment Effect, Loss Aversion, and Status Quo Bias. Journal of Economic Perspectives (5,1), 193–206.

47. Kempson, E., Finney, A., Poppe, C. (2017). Financial Well-Being: A Conceptual Model and Preliminary Analysis. University of Bristol: https://www.bristol.ac.uk/media-library/sites/geography/pfrc/pfrc1705-financial-well-being-conceptual-model.pdf

48. Kempson, E., Poppe, C. (2018). Assessing the Levels of Financial capability and Well-Being in Norway. A summary report. ODA Open Digital Archive: https://oda.oslomet.no/oda-xmlui/handle/20.500.12199/1326

49. Kettle, K. L., Trudel, R., Blanchard, S. J., Häubl, G. (2016). Repayment Concentration and Consumer Motivation to Get Out of Debt. Journal of Consumer Research, Volume 43, Issue 3,, 460-477.

50. Kiely, K. M., Leach, L. S., Olesen, S. C., Butterworth, P. (2015). How financial hardship is associated with the onset of mental health problems over time. Social Psychiatry and Psychiatric Epidemiology, 50, 909–918.

51. Kiwi Wealth. (2019, May). State of the investor nation. KiwiWealth: https://www.kiwiwealth.co.nz/assets/Documents/State-of-the-Investor-Nation-Reports/SOIN-2019/Kiwi-Wealth-_-State-of-the-Investor-Nation-Report-_-May-2019.pdf

52. Koomson, I., Churchill, S. A., Munyanyi, M. E. (2022). Gambling and Financial Stress. Social Indicators Research, 163, 473–503.

53. Lav, J., Wenger, E. (1991). Situated Learning: Legitimate peripheral participation. Cambridge University Press.

54. Lin, J. T., Bumcrot, C., Mottola, G., Valdes, O., Ganem, R., Kieffer, C., Lusardi, A., & Walsh, G. (2022, July). Financial Capability in the United States. Finra Foundation: https://www.finrafoundation.org/sites/finrafoundation/files/NFCS-Report-Fifth-Edition-July-2022.pdf

55. Los Angeles County. (n.d.). Financial Tips. Center for Financial Empowerment: https://dcba.lacounty.gov/financial-empowerment-tips/

56. Lusardi, A., Mitchell, O. S. (2023, April). The Importance of Financial Literacy: Opening a New Field. NBER: https://www.nber.org/papers/w31145

57. MacDonald, K., Bianchi, R. J., Drew, M. E. (2012). Kiwisaver and Retirement Adequacy. Australasian Accounting Business and Finance Journal, 6(4), 61-78.

58. MAPS. (2022, September). UK Adult Financial Wellbeing Survey 2021 Nation of Savers Report. Retrieved from Money and Pension Service (MAPS): https://maps.org.uk/wp-content/uploads/2022/09/MAPS_AFW_Nation_of_Savers_-_report.pdf

59. MAPS. (2022b, December). UK Adult Financial Wellbeing Survey 2021 Credit Counts Report. Money and Pensions Service (MAPS): https://maps.org.uk/wp-content/uploads/2022/12/MAPS-Use-of-Credit-AFW-survey-2021.pdf

60. Maslow, A. (1943). A theory of human motivation. Psychological Review, 50(4), 370-396. doi:10.1037/h0054346

61. Matthews, C., Stangl, J., Wood, P. (2023, August). Young New Zealanders' Ongoing Personal Finance Journey. A Longitudinal Study– Stage 3. Massey University: https://www.massey.ac.nz/documents/1500/Longitudinal_Study_Stage3_August_2023.pdf

62. McKnight, A., Rucci, M. (2020, May). The financial resilience of households: 22 country study with new estimates, breakdowns by household characteristics and a review of policy options. London, United Kingdom.

63. Naylor, M., Matthews, C., Birks, S. (2011). ISI Underinsurance Project 2011. Massey University.

64. Ngāi Tahu Whai Rawa. (2022). Ngāi Tahu Whai Rawa. Ngāi Tahu Whai Rawa: https://whairawa.com/

65. OECD. (2013, June). Improving financial education effectiveness through behavioural economics. OECD: https://www.oecd.org/daf/fin/financialeducation/TrustFund2013_OECDImproving_Fin_Ed_effectiveness_through_Behavioural_Economics.pdf

66. OECD. (2022, May). Household savings (indicator). OECD Data: https://data.oecd.org/hha/household-savings.htm

67. Perry, B. (2019, November). Household incomes in New Zealand: Trends in indicators of inequality and hardship 1982 to 2018. Ministry of Social Development: https://www.msd.govt.nz/about-msd-and-our-work/publications-resources/monitoring/household-incomes/household-incomes-1982-to-2018.html

68. Persky, A. M., Lee, E., Schlesselman, L. S. (2020). Perception of Learning Versus Performance as Outcome Measures of Educational Research. American Journal of Pharmaceutical Education 84 (7)., 993-1000.

69. Petit, V. (2019). The Behavioural Drivers Model: A Conceptual Framework. UNICEF: https://www.unicef.org/mena/media/5586/file/The_Behavioural_Drivers_Model_0.pdf%20.pdf

70. Predergast, S., Blackmore, D., Kempson, E. (2018, September). Financial well-being: a survey of adults in Australia. ResearchGate: https://www.researchgate.net/publication/327467669_Financial_well-being_a_survey_of_adults_in_Australia

71. Prochaska, J. O., DiClemente, C. C. (1982). Transtheoretical therapy: Toward a more integrative model of change. Psychotherapy: theory, research & practice, 19(3), 276-288.

72. Prochaska, J., Velicer, W. (1997). The transtheoretical model of health behavior change. American Journal of Health Promotion, 12(1), 38-48. doi:10.4278/0890-1171-12.1.38

73. Rashbrooke, G., Rashbrooke, M., Molano, W. (2017, March). Wealth Disparities in New Zealand: Final Report. INSTITUTE FOR GOVERNANCE AND POLICY STUDIES: https://www.wgtn.ac.nz/__data/assets/pdf_file/0008/1175246/WP17-02-Wealth-Disparities-in-NZ-Final-2017.pdf

74. Reeson, R., Dunstall, S. (2009, August 7). Behavioural Economics and Complex Decision-Making. Retrieved from The Commonwealth Scientific and Industrial Research Organisation: http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.619.9530&rep=rep1&type=pdf

75. Regan, N., Bhattacharya, A., Salutin, G., Corfe, S. (2023). Squeezed out or opting out? Social Market Foundation. https://www.smf.co.uk/wp-content/uploads/2023/01/Squeezed-out-or-opting-out-February-2023.pdf

76. Royal Society Te Apārangi. (2021, September). SPOTLIGHT ON HOUSING. Royal Society Te Apārangi: https://www.royalsociety.org.nz/assets/Spotlight-on-housing-Te-Tapeke-digital.pdf

77. Ryan, R., Deci, E. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. American Psychologist, 55(1), 68-78. doi:10.1037//0003-066x.55.1.68

78. Salignac, F., Marjolin, A., Reeve, R. (2019). Conceptualizing and Measuring Financial Resilience: A Multidimensional Framework. Social Indicators Research, 17–38.

79. Scobie, G. M., Henderson, K. (2009, December). Saving Rates of New Zealanders: A Net Wealth. NEW ZEALAND TREASURY WORKING PAPER. NEW ZEALAND TREASURY: https://www.econstor.eu/bitstream/10419/205601/1/twp2009-04.pdf

80. Sherraden, M. S. (2010). Financial Capability: What is It, and How Can It Be Created? Washington University Open Scholarship: https://openscholarship.wustl.edu/cgi/viewcontent.cgi?article=1643&context=csd_research

81. Skinner, B. (1953). Science and Human Behavior. Macmillan.

82. Stats NZ. (2020, December 8). Housing in Aotearoa: 2020. Stats NZ: https://www.stats.govt.nz/reports/housing-in-aotearoa-2020

83. Sturgeon, J. A., Zautra, A. J., & Okun, M. A. (2014). Associations between financial stress and interpersonal events: A daily diary study of middle-aged adults and their life circumstances. Psychology and Aging, 29(4), 803–813.

84. Sun, L., Small, G., Huang, Y., Ger, T. (2022). Financial Shocks, Financial Stress and Financial Resilience of Australian Households during COVID-19. Social Resilience and Household Economics: Perspectives for Sustainability. 14(7), 3736; https://www.mdpi.com/2071-1050/14/7/3736.

85. Sussman, A. B., & O'Brien, R. L. (2016). Knowing When to Spend: Unintended Financial Consequences of Earmarking to Encourage Savings. Journal of Marketing Research, 53(5), 790–803.

86. Symes, L. (2022). House prices and wealth inequality in New Zealand. Policy Quarterly. Wellbeing and Child Poverty. Vol. 18 No. 3, 32-37. https://ojs.victoria.ac.nz/pq/article/view/7713/6863

87. Te Ara Ahunga Ora Retirement Commission. (2019, September 25). Financial stress impacts mental wellbeing. Te Ara Ahunga Ora Retirement Commission: https://retirement.govt.nz/news/latest-news/financial-stress-impacts-mental-wellbeing/

88. Te Ara Ahunga Ora Retirement Commission. (2023a). KiwiSaver Total Remuneration. Te Ara Ahunga Ora Retirement Commission: https://assets.retirement.govt.nz/public/Uploads/TAAO-RC-Policy-Brief-2023_Kiwisaver_4.pdf

89. Te Ara Ahunga Ora Retirement Commission. (2023b, July). Money matters: how New Zealanders are feeling about their finances. Te Ara Ahunga Ora Retirement Commission: https://assets.retirement.govt.nz/public/Uploads/Research/2023/August/Insights-Tracker-update-Q4-23-for-media.pdf

90. The World Bank. (2022, March 29). The World Bank. Financial Inclusion: https://www.worldbank.org/en/topic/financialinclusion/overview#1

91. Weiner, B. (1985). An attributional theory of achievement motivation and emotion. Psychological Review, 92(4), 548-573. doi:10.1037/0033-295X.92.4.548

92. Wigfield, A., Eccles, J. (2000). Expectancy-value theory of achievement motivation. Contemporary Educational Psychology, 25, 68-91. doi:10.1006/ceps.1999.1015

93. Woolfolk, A., Margetts, K. (2015). Educational Psychology (4th Ed.). Australia: Pearson Education.

94. Zhang, C. Y., Sussman, A. B. (2018). Perspectives on mental accounting: An exploration of budgeting and investing. Financial Planning Review. Volume 1, Issue 1-2.

95. Zhang, Y., Wilcox, R. T., & Cheema, A. (2020). The Effect of Student Loan Debt on Spending: The Role of Repayment Format. Journal of Public Policy and Marketing, 39(3), 305–318.

Te Ara Ahunga Ora Retirement Commission

Level 15, 19 Victoria Street West, Auckland and
Level 2 Solnet House, 70 The Terrace, Wellington.
PO Box 106-056, Auckland 1143. Phone +64 9 356 0052.

retirement.govt.nz sorted.org.nz sortedinschools.org.nz