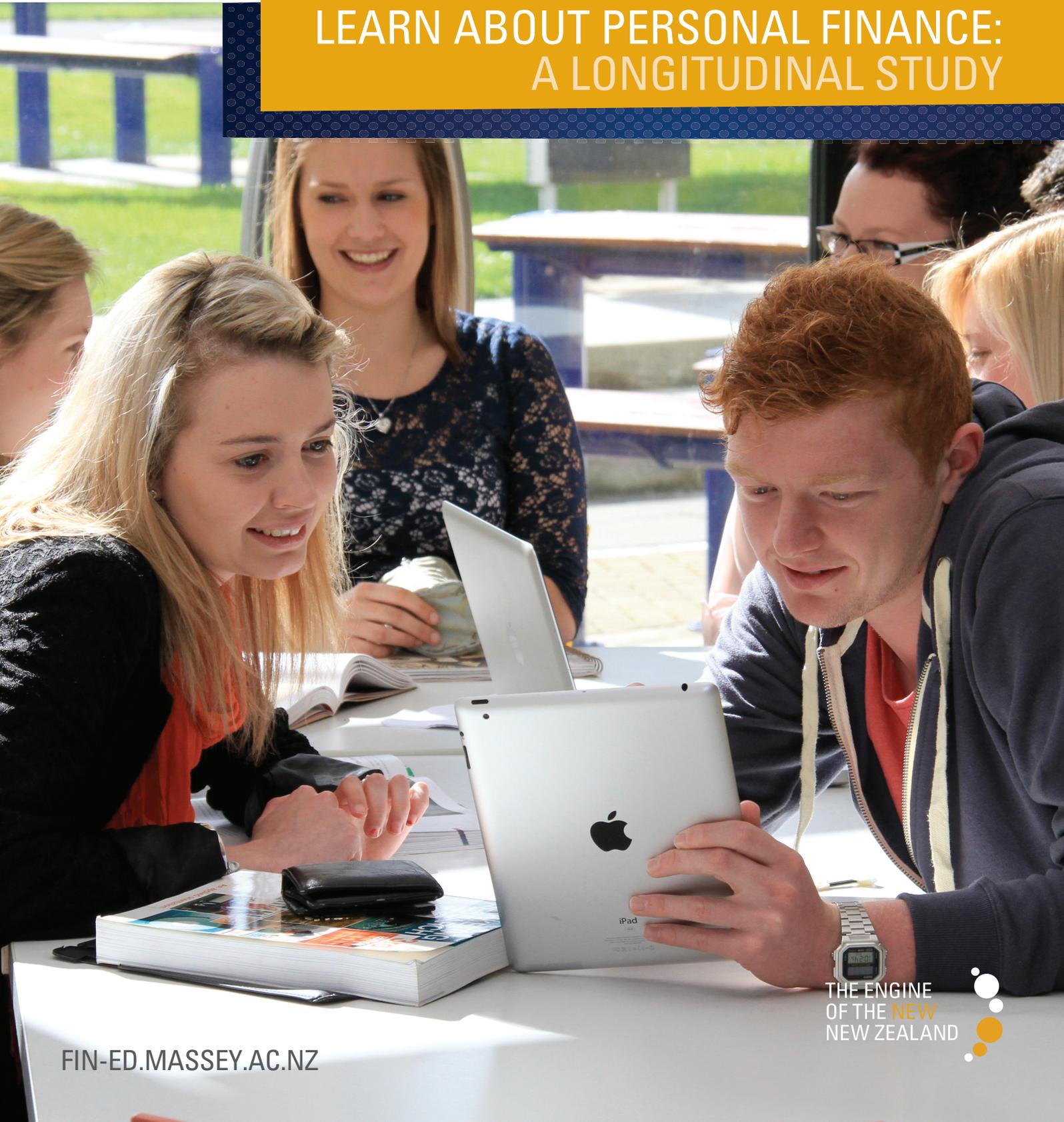


# Fin-Ed Centre



FINANCIAL EDUCATION AND RESEARCH CENTRE

## HOW YOUNG NEW ZEALANDERS LEARN ABOUT PERSONAL FINANCE: A LONGITUDINAL STUDY



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## Fin-Ed Centre



FINANCIAL EDUCATION AND RESEARCH CENTRE

The Financial Education and Research Centre was founded by Westpac New Zealand and Massey University to improve New Zealanders' knowledge, attitudes and behaviour towards money matters. Westpac and Massey University are committed to improving financial literacy for the benefit of the country and this specialist centre aims to improve the quality and access of education on personal finance and identify knowledge gaps and how they can be addressed. Key projects include a 20-year longitudinal study that will follow up to 300 New Zealanders to understand their needs for financial knowledge at different life stages, a multi-level certification programme for personal financial educators and the New Zealand Retirement Expenditure Survey – a joint initiative between the centre and savings industry body Workplace Savings NZ to establish guidelines for 'modest' and 'comfortable' retirement.

### ABOUT THE AUTHORS

**Dr Jeffrey Stangl** joined Massey University in 2004. He has founded and directed several US and Indonesian based SMEs in the manufacturing, transportation, and gift industries, and the focus of his business career has been start-up innovative companies, with broad experience in all aspects of business development and financial management. Jeffrey is a senior lecturer in the School of Economics and Finance, where he primarily teaches investment and personal finance. Jeffrey believes in the responsibility of extending financial literacy. He presently sits as a founding Board Member for the Fin-Ed Centre and Board Member for the New Zealand Society of Chartered Financial Analysts. Jeffrey's recent PhD in finance was *An empirical examination of industry returns for evidence of cyclical performance*, and he is a (CFA).

**Dr Claire Matthews** joined Massey University in late 1996 after nearly 12 years with Trust Bank in a variety of roles. Since January 2009, Claire has been Director, Financial Planning, with overall responsibility for the Personal Financial Planning endorsement of the Graduate Diploma of Business Studies. Claire's primary teaching responsibilities are in the university's financial advice and post-graduate banking programmes. Her research interests centre around consumer's financial behaviour, decisions and attitudes, with a particular interest in payment channels including internet banking, and KiwiSaver. Claire has a PhD in Banking on the subject of *Switching Costs in the New Zealand Banking Market*, and is a Fellow of the Financial Services Institute of Australasia.

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### DISCLAIMER

The views expressed in this report are those of the authors and do not necessarily represent the views of the Fin-Ed Centre, Massey University or Westpac New Zealand Limited.

## SURVEY AT A GLANCE

This report covers the first stage in a 20-year longitudinal study designed to contribute to better understanding of issues related to the level of financial literacy in New Zealand. In particular, the study explores New Zealanders' experience of financial education and its contribution to their financial literacy. While the study builds on previous studies, in New Zealand and around the world, its approach differs by taking a cohort of young New Zealanders, aged 18-22, and following them over a 20-year period at 5-yearly intervals.

The key focus for the study is the question of how personal experience of financial education is related to New Zealanders' financial literacy. This first stage provides a baseline of the participants' financial knowledge and their experience of financial education, both formally and informally.

The key features of the study are:

- The study comprises a cohort of 300 New Zealanders aged 18-22 years.
- A baseline survey of participants' financial literacy and experience of financial education has been undertaken.
- This stage of the study collected data in two ways.
  - The initial data collection comprised an online questionnaire of 44 questions, including standard financial literacy questions.
  - The secondary data collection comprised face-to-face interviews, which allowed more in-depth information to be collected from participants.
  - Participants completed the online questionnaire immediately prior to the interview, but the responses were not available to the interviewer.
- Participants were drawn from the New Zealand electoral rolls, on a national basis but with some regional clustering for practical reasons. The locations were: Auckland, New Plymouth, Palmerston North, Wellington, Nelson, and Christchurch.

## RESULTS AT A GLANCE

This report provides preliminary findings from the study, with full results to be published in early 2013.

The key findings discussed in this report are:

- There is a relatively low level of financial knowledge compared to studies in other countries.
- Young New Zealanders lack opportunities for formal financial education to assist their development of sound personal financial management skills.
- It is evident that young New Zealanders are exposed to informal financial education, such as the promotions undertaken by the Commission for Financial Literacy and Retirement Income, and that this is having an impact although individuals may not recognise the influence.
- Parents remain the key source of informal financial education for young New Zealanders, although in some cases the parents' own personal financial knowledge may be limited, restricting their ability to provide the knowledge required by their children.
- Young New Zealanders often know the key elements of good financial management, such as the need to save, but may not be putting it into practice.
- Young New Zealanders are scared of debt, particularly in the form of credit cards.

## INTRODUCTION

Financial literacy is a concept that is receiving increasing attention in New Zealand, and around the world, as concerns develop about the level of financial knowledge in the population and the impact this has for individuals as well as for society more generally. Despite the extensive quantities of literature now written on the subject, a comprehensive, agreed definition has yet to be found. In a recent pilot study for the OECD the definition of financial literacy was given as “a combination of awareness, knowledge, skill, attitude and behaviour necessary to make sound financial decisions and ultimately achieve individual financial wellbeing” (Atkinson & Messy, 2012, p. 14), which represents a reasonable reflection of the key elements that are generally agreed should be included. It is important, in particular, to note that this definition goes beyond financial knowledge to include attitudes and behaviour. Financial capability is often used in place of financial literacy because it more clearly includes these additional elements beyond knowledge.

The focus on financial literacy reflects the importance attached to it. According to ANZ (2011), “Financial literacy is an important requirement for functioning effectively in modern society with trends in retirement income policies, work patterns and demography suggesting its importance can only increase in the years ahead” (p. 1). In the Australian National Financial Literacy Strategy, ASIC (2011) expands on the importance of financial literacy suggesting it affects individuals’ quality of life, the opportunities they can pursue and their sense of security, as well as society’s overall economic health. ANZ (2011) notes the G20 has also emphasised the importance of financial literacy in supporting financial inclusion, which enhances community wellbeing.

## NEW ZEALAND

Like Australia, New Zealand has a National Strategy for Financial Literacy, which provides a definition of financial literacy as “the ability to make informed judgements and make effective decisions regarding the use and management of money”<sup>1</sup>. It was launched in 2008, and has an overarching goal of achieving a financially literate population in New Zealand by setting out a high-level framework that outlines a clear direction for the country. Every six months, an Advisory Group reports progress in relation to the Strategy, to the Minister of Finance, stakeholders and the public.

New Zealand also has The Commission for Financial Literacy and Retirement Income<sup>2</sup>, an autonomous crown entity that was established in 1993. The Commission “works to improve the financial wellbeing of all New Zealanders throughout their lives”<sup>3</sup>, with one of its best known activities being the Sorted website, which is described as “the Kiwi Guide to Money”<sup>4</sup>. One of the goals of the Commission is improving the financial literacy of New Zealanders, and it has responsibility for promoting the National Strategy for Financial Literacy. Other Commission activities related to this goal include: a biennial financial literacy summit, with the next due in mid-2013; Money Week, with the inaugural event held in September 2012; hosting and co-ordination of Financial Literacy Community of Practice meetings; and, international collaboration.

Two studies, discussed in the next section, have been commissioned by the Commission for Financial Literacy and Retirement Income to understand the level of financial literacy in New Zealand. The primary ANZ study comprises two surveys in 2006 and 2009, with a third survey due to be reported in 2013. The first study found that “Overall New Zealanders have a reasonable level of personal financial knowledge” (Colmar Brunton, 2006, p. 8). However, the report noted that while “most people have a good basic understanding of financial concepts, there are some topics, such as compound interest, mortgages and investment that are not understood very well.” (p. 8). The survey also found a “strong correlation between financial knowledge and socio-economic status ... [which has also] been observed in studies conducted in other OECD countries” (p. 8). The 2009 survey noted a significant improvement in financial knowledge, although this had not translated into a significant change in the number of New Zealanders saving.

More recently the Commission for Financial Literacy and Retirement Income has developed a financial literacy strategy for Māori, which was released in late 2010 and updated in 2012. Subsequently, the Commission has been working with the Ministry of Pacific Island Affairs to develop a Pacific Financial Literacy Framework aimed at addressing financial literacy issues in Pacific communities, which will be accompanied by a 5 Year Action Plan.

<sup>1</sup> <http://www.cflri.org.nz/financial-literacy/national-strategy/about-financial-literacy>

<sup>2</sup> The Commission for Financial Literacy and Retirement Income was known as the Retirement Commission until October 2011. For consistency, the new name will be used, even in reference to events where the old name was in use.

<sup>3</sup> <http://www.cflri.org.nz/about-> <http://www.cflri.org.nz/about-us>

<sup>4</sup> <https://www.sorted.org.nz/>

## FINANCIAL EDUCATION

The National Strategy for Financial Literacy describes financial education as the “process which leads to financial literacy” (National Strategy for Financial Literacy Advisory Group, 2012, p.4). A more detailed definition of financial education is provided by the OECD as “the process by which financial consumers/investors improve their understanding of financial products and concepts and, through information, instruction and/or objective advice, develop the skills and confidence to become more aware of financial risks and opportunities, to make informed choices, to know where to go for help, and to take other effective actions to improve their financial well-being (cited in National Strategy for Financial Literacy Advisory Group, 2012).

Financial education is important for its contribution to improving financial literacy. In New Zealand, the National Strategy for Financial Literacy and the associated action plan are aimed at encouraging a collaborative approach, to realize the greatest value from the work being done within New Zealand so “all New Zealanders have the opportunity to benefit from financial education and information” (National Strategy for Financial Literacy Advisory Group, 2012, p. 3).

## THIS STUDY

This study is intended to contribute to a better understanding of the issues related to the level of financial literacy in New Zealand, and therefore to assist with improving financial literacy and levels of savings. In particular, the study seeks to understand New Zealanders’ experience of financial education and its contribution to financial literacy. This study builds on the previous studies in New Zealand and around the world, as discussed in the next section. However, this study differs from other studies, due to its approach of taking a cohort of young New Zealanders and following them over a 20-year period. This longitudinal element is unique in the New Zealand context, and will enable tracking of pathways to improved financial literacy over time.

## PRIOR RESEARCH

Financial institutions continue to expand and develop the range of products and services they offer, in response to opportunities provided by new technology, demand from consumers, and competition. As a result, consumers face an increasingly complex choice of products and services to meet their financial needs (Core, Paulson & Shastry, 2012). Consumers therefore need a level of financial literacy that enables them to make the sort of informed choice that Hilgert, Hogarth & Beverly (2003) argue is “essential to an effective and efficient marketplace” (p. 309). Hilgert et al also make the point that individuals are being required to take increasing responsibility for their own financial security, with the shift from defined benefit to defined contribution retirement schemes.

Financial literacy is a concern in New Zealand, as discussed in the previous section, but it is also a concern in other countries. International research has demonstrated that financial *illiteracy* is widespread, even in well-developed countries such as Germany, the Netherlands, Sweden, Japan, Italy and the United States, as well as New Zealand (Lusardi & Mitchell, 2011). Financial literacy is important because it affects financial decision-making, with ignorance of basic financial concepts linked to failing to plan for retirement, non-participation in the stock market, and poor borrowing behaviour, according to Lusardi (2009).

Financial education is seen to be one solution to the problem of financial illiteracy. Financial education has grown in importance for educators, community groups, businesses, government agencies, and policymakers since the 1990s (Hilgert et al, 2003), because it is important for communities as well as for individuals and their families. The importance of financial education comes from the improved ability of well-informed, financially educated consumers to make good decisions for their families, thereby increasing their economic security and well being. The financially secure families that result “are better able to contribute to vital thriving communities and thereby foster further community economic development” (p. 309).

Shim, Barber, Card, Xiao & Serido (2009) suggest that “financial literacy is an essential component of a successful adult life” (p. 1467), so it is important that young people are provided with opportunities to gain the financial literacy they need as they move into adulthood. Mitchell, Lusardi & Curto (2009) suggest young people can be burdened with high levels of student loans and/or credit card debt, which can hinder their ability to accumulate wealth.

## WHAT HAVE OTHERS DONE TO UNDERSTAND FINANCIAL LITERACY IN THEIR COUNTRY?

Studies have been undertaken in New Zealand, and around the world, in an attempt to understand financial literacy.

In New Zealand, there have been two key studies of financial literacy. The first comprises two national surveys of financial knowledge commissioned by the Commission for Financial Literacy and Retirement Income with the support of ANZ in 2006 and 2009. The 2006 survey was the benchmark, with the 2009 survey as a follow-up. The 2009 survey “tested the following areas of personal financial knowledge: money management, budgeting, goal setting, financial planning, debt management, home loans and mortgages, managing risk, savings, planning for retirement and investing” (Colmar Brunton, 2009, p. 7). The 2009 study found a significant improvement in New Zealanders’ overall financial knowledge, although the Lowest knowledge group had not changed significantly. The disparities in financial literacy found in 2006 were much less significant in the later survey. Disparities in financial attitude existed and were most evident between the Advanced and the Lowest knowledge groups, being the two most distinct groups in terms of financial knowledge. People were described as more financially uncertain and vulnerable in the 2009 report, but there was little change in financial behaviour between the two surveys.

The other key New Zealand study is the ANZ Ngāi Tahu Survey from 2010, which was commissioned by Te Rūnanga o Ngāi Tahu, with support from the Commission for Financial Literacy and Retirement Income. The purpose of this survey was to provide a benchmark of financial knowledge for members of Ngāi Tahu, in comparison with all New Zealanders. Financial knowledge of Ngāi Tahu was found to be consistent with the national results, including the sizes of the Lowest and Advanced knowledge groups (Colmar Brunton, 2010).

ANZ has also been involved in studies of financial literacy in Australia. The most recent was completed in 2011, which was the fourth in the series that started in 2003. The results were “consistent with people learning and having more exposure to financial products and transactions as they move through their lives” (ANZ, 2011, p. 2). The study found education has an association with some behavioural indicators of financial literacy, which suggests it is important in some areas, such as choosing financial products and staying informed, but not others. The survey also identifies groups where lower levels of financial literacy are more likely to be found, with those groups being very similar to those found in earlier surveys. One of those groups was people under the age of 25 years. The 2011 survey found some changes compared to earlier surveys, including support for the view that “Australians have become more cautious in their financial attitudes and behaviour since the GFC” (p. 3).

Several studies have been undertaken in the United States. The National Survey is part of the National Financial Capability Study commissioned by the FINRA Investor Education Foundation, in consultation with the U.S. Department of the Treasury and the President’s Advisory Council on Financial Literacy. The research objectives for the overall study “were to benchmark key indicators of financial capability and evaluate how these indicators vary with underlying demographic, behavioural, attitudinal and financial literacy characteristics” (FINRA, 2009, p. 24). The National Survey findings painted “a troubling picture of the current state of financial capability in the U.S. adult population” (p. 23).

Another useful United States survey is the APLUS (Arizona Pathways to Life Success for University Students) project at the University of Arizona, undertaken with the support of the National Endowment for Financial Education. The APLUS Survey is a longitudinal study that explores “the connections between financial success and well being in a diverse group of first year college students” by examining “the factors that help shape students’ financial attitudes and behaviours and, in turn, how those attitudes and behaviours affect their current and future success in life” (APLUS, 2009, p. 3). The first wave of data was collected in early 2008, with a second wave of data collected in late 2010. In between these two waves of data collection, an additional, originally unplanned, collection of data was undertaken in early 2009 to understand the effects of the global financial crisis. The majority of students in the study appeared to be fairly financially healthy but a small percentage were found to be at risk for financial difficulties.

An exploratory study to measure levels of financial capability in the UK was commissioned by the Financial Services Authority in 2005. The study “found clear indications that individuals may be particularly capable in one or more areas, but lack skills or experience in others” and were also “able to identify those characteristics most strongly associated with low levels of financial capability” (Atkinson, McKay, Kempson & Collard, 2006, p. 9).

The OECD International Network on Financial Education undertook a pilot study across 14 countries on four continents in 2010-2011. The study sought to help in the development of a survey instrument that could be used “to capture the financial literacy of people from very different backgrounds in a wide range of countries” (Atkinson & Messy, 2012, p. 6). In each of the countries involved, a sizable proportion of the population was found to lack financial knowledge, with wide variations in financial attitudes.

## FINANCIAL EDUCATION

One way of dealing with inadequate levels of financial literacy is financial education, which can take many forms. Lusardi (2003) showed that seminars foster savings, particularly for those with low education and those saving little. She also finds that financial and total net worth increase sharply for families at the bottom, in terms of wealth distribution, as well as those with low levels of education, when financial education is offered.

Disappointingly, Chen and Volpe (1998) report that prior studies were consistent in finding that high school students are not receiving good fundamental personal financial education. Mandell (1997) concludes, “students are leaving schools without the ability to make critical decisions affecting their lives” (cited in Chen & Volpe, 1998, p. 108). This view is supported by Perry & Morris (2005) who report young people in the United States leave school without basic personal finance skills, which puts them at risk of becoming adults with excessive debt or inadequate savings or face bankruptcy.

An important finding reported in Wave 2 of the APLUS study, is the importance of ongoing financial education. The study finds those with cumulative education know more about personal finance as well as reporting more positive behaviour. In a related finding, the study also documents a snowball effect whereby earlier financial education increases the likelihood of later financial education exponentially, with the latter including informal education (Shim & Serido, 2011).

Work done by Van Rooij, Lusardi & Alessie (2011) “strengthens the case for investing in economics education of the young, as this might be an important driver in increasing overall levels of financial knowledge” (p. 605). Shim, Barber, Card, Xiao & Serido (2009) suggest that including experiential components in financial education programs may make them more successful, because they find financial knowledge is increased through experience and education.

## SOCIETAL BENEFITS OF IMPROVED FINANCIAL LITERACY

It is recognised that the benefits of improved financial literacy accrue initially to the individual. However, there is also widespread acknowledgement of the benefits of greater financial literacy for society and the economy as a whole. Surowiecki (2010) notes that the point of financial education is to help people avoid the disasters and day-to-day choices that erode their bank accounts, rather than being intended to turn the average American into Warren Buffett. He suggests that the difference between knowing a little about one’s finances and knowing nothing can represent hundreds of thousands of dollars over an individual’s lifetime, and then argues that the cost to society can be far greater.

The troubling level of financial capability found in the National Survey report in FINRA Investor Education Foundation (2009), was described as being important “for the United States as a whole, particularly in tough economic times”, (p. 23), as well as being acknowledged as being important for the individuals themselves. i.e. those who demonstrate low levels of financial capability. The report noted that the cost of poor financial decisions is “often passed on to all Americans through higher prices for financial products, the diversion of economic resources and greater strains on existing social safety nets” (p. 23).

Concern has also been expressed about the issues of financial illiteracy in Australia. ASIC (2011) explains “Improved financial literacy can increase economic participation and social inclusion, drive competition and market efficiency in the financial services sector, and potentially reduce regulatory intervention.” (p. 5). A report on financial literacy in Australia is one of the few documents that attempts to quantify the social benefits expected from increasing the level of financial literacy in the population (Commonwealth Bank Foundation, 2010). This report estimates that an improvement to the financial literacy of the lowest quartile of the population to the top of that quartile would lift the annual income of the least financially literate portion of Australia’s population “by 10%, create 15,000 jobs and increase Australia’s gross domestic product by \$6.2 billion annually over the long term” (p. 5). This means that “financial literacy is a matter of economic significance leading to improved decision-making, greater productivity and more efficient use of capital” (p. 5).

## THIS STUDY

Financial literacy is important, for the individual and for society. This study explores the level of financial literacy of young New Zealanders, and seeks to understand both the causes and the implications. In particular, this study examines the role of financial education, in order to contribute to the discussion regarding the most effective and efficient use of resources for personal financial education in New Zealand. No other New Zealand study has focused exclusively on young New Zealanders as this study does.

## METHODOLOGY

This study has two parts. The first part is an online questionnaire, while the second is an interview used to obtain information that provides additional information to better understand the responses to the online questionnaire. The participants are 300 young New Zealanders aged 18 - 22. Participants completed the online questionnaire prior to being interviewed, although the responses were not available to the interviewer.

The participant group comprises individuals who have responded to a written invitation to be part of the study. Their names were drawn randomly from the electoral roll, using six geographic locations. The locations selected were Auckland, New Plymouth, Palmerston North, Wellington, Nelson and Christchurch. These locations were chosen for their size, their accessibility for the interviews, and to give a reasonable geographic dispersion. A total of 7500 invitations were mailed, so 300 participants gives a final response rate of 4%. The initial response rate was higher, with about 350 of those invited to participate expressing a willingness to be involved, but about 10% of those with whom interviews were arranged failed to arrive for the interview. While the final response rate is low, this is not surprising due to the age group of interest, and the longitudinal nature of the study. The number of returned invitations, due to an incorrect address, was 157 and we had 6 invitees decline to participate.

The online survey instrument comprised a questionnaire with 44 questions; however, some of the questions comprised several statements each of which required a response. The questions included some standard financial literacy questions to provide a measure of the participants' financial literacy. It also contained questions related to their experience of both formal and informal financial education, as well as their attitudes towards finance and their finance-related behaviours. The questionnaire concluded with demographic questions about both the participant and his/her parents. Many of the questions used a 5-point Likert scale of agreement or importance. The questions were drawn from other related studies, including some of those discussed in the previous section; although in some cases the questions had to be reworded for the New Zealand context.

The interviews were conducted by a person recruited specifically for the task. It was considered preferable for the same person to undertake all the interviews to ensure consistency of approach. The interviews were carried out in offices, either on Massey campuses or supplied by Westpac in locations where Massey is not represented. The interviews were all audio recorded and subsequently transcribed, with analysis undertaken using NVivo software. A total of 15 questions were used as the base for the interviews, with additional questions asked as necessary to explore or simply draw our participants' responses. Questions covered topics such as the role of family, friends and others in developing the person's money management skills, the participant's financial behaviour and money management skills, and the participant's life goals.

The interviews lasted 25 minutes on average, in a range of 10 minutes to 35 minutes. The online questionnaire took 10-15 minutes to complete.

## SUMMARY STATISTICS

GENDER		Primary
Male		30.4%
Female		69.6%

AGE		
18 years		20.6%
19 years		32.7%
20 years		31.7%
21 years		14.1%
22 years		0.5%

INCOME		Primary
0-\$14,999		68.7%
\$15,000-\$47,999		24.2%
\$48,000-\$69,999		0.5%
\$70,000-\$99,999		0.5%
Prefer not to answer		6.1%

RELATED EDUCATION			
Accounting	24.5%	0 subjects	7.0%
Economics	38.0%	1 subject	35.0%
Statistics	31.5%	2 subjects	29.5%
Business Studies	16.0%	3 subjects	15.5%
Mathematics	86.0%	4 subjects	9.5%
		5 subjects	3.5%

Table 1: Key demographic information about the study participants

There is a strong female dominance in the sample, which is common in similar studies, unless controlled for. The relatively low incomes reflect the age group involved, which includes students and those starting out in employment.

It is important to acknowledge some limitations with the methodology used. The locations used for the interviews mean that there is an urban bias to the sample. However, it is not exclusively urban, and it is worth noting that 57.7% of New Zealanders aged 15 – 24 live in the electorates used to draw the sample. No attempt has been made to ensure the sample is demographically representative in terms of gender, age or ethnicity. There is likely to also be a self-selection bias in the sample, because those more interested in the study subject and those with a higher level of self-motivation are more likely to have agreed to participate in the study. This bias is stronger due to the low response rate, but the effect of the bias is unknown.

## RESULTS – FINANCIAL LITERACY, BEHAVIOUR AND ATTITUDES

### FINANCIAL KNOWLEDGE

The online questionnaire included seven standard financial literacy questions, which were included to provide an assessment of participants' knowledge about personal finance. The following table provides the questions and the response options – the correct answer is highlighted.

The owner of a lost or stolen credit card is legally responsible for what?	Any unauthorized charges
	Any unauthorized charges until the loss or theft is reported
	Only the first \$50 of any unauthorized charges
	Only the first \$500 of any unauthorized charges
	No unauthorized charges
	Do not know
John inherits \$10,000 today and Elizabeth inherits \$10,000 6 months from now, whose inheritance is worth more?	They are equally rich
	Elizabeth
	John
	Do not know
Suppose you have \$100 in a savings account and the interest rate is 20% per year for the next five years. You never withdraw any money or interest. After 5 years, how much would you have in this account in total?	Exactly \$200
	More than \$200
	Less than \$200
	Do not know
Imagine that the interest rate on your savings account is 2% per year and inflation is 3% per year. After 1 year, how much would you be able to buy with the money in this account?	More than today
	Less than today
	The same amount
	Do not know
When a person invests money among different types of financial assets, such as stocks and bonds, compared to investing in only one type of financial asset, the risk of losing money	Increases
	Decreases
	Stays the same
	Do not know
If you have any negative information on your credit report, a credit repair agency can help you remove that information.	True
	False
If the interest rate on a home loan with a floating interest rate goes up, your minimum monthly mortgage payments will also go up?	True
	False

Table 2: Financial literacy questions

None of the participants got all the questions correct, primarily because only one person got the question about unauthorized charges on a credit card right. At least 40% got each of the other questions right, but more than 20% got each question wrong except the inflation question, which only 13.2% answered incorrectly. But, as can be seen in the following graph, there was a substantial portion for most questions where the participants simply didn't know the correct answer.

Only two participants didn't get any of the questions right, and nearly half (48.7%) were able to answer more than half the questions correctly.

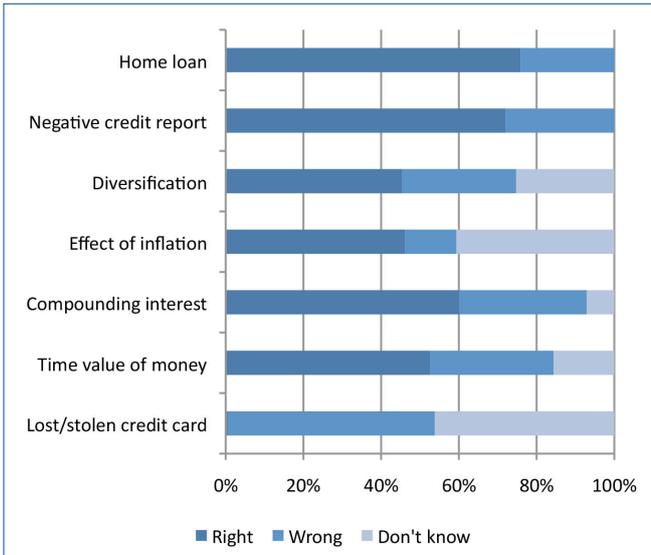


Figure 1: Proportion that answered each question correctly

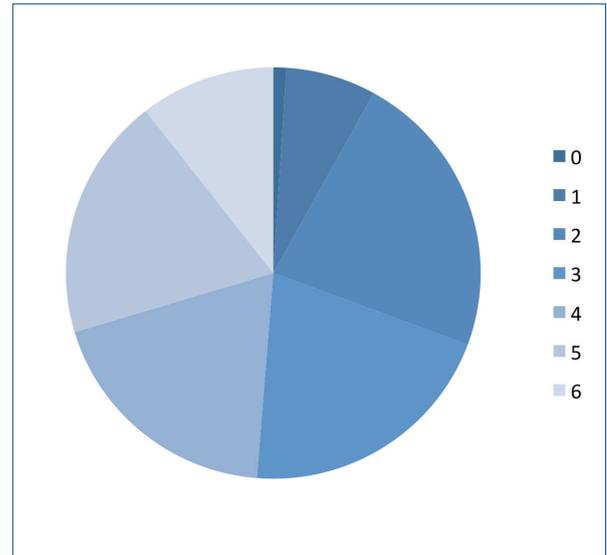


Figure 2: Total number of correct answers

## FINANCIAL ATTITUDES

The online questionnaire included several questions to ascertain how confident young people feel about their ability to manage money. The results are shown in Figure 3, but it is important to remember that two items (“I am uncertain about where my money is spent” and “My finances are a significant source of worry or “hassle” for me”) are negatively worded, so disagreement represents confidence. The responses indicate 70-80% are confident about money management. This can be contrasted with the substantial 32.2% who agree<sup>5</sup> that their finances are a source of worry or “hassle”, which suggests that their financial situation may be stretched.

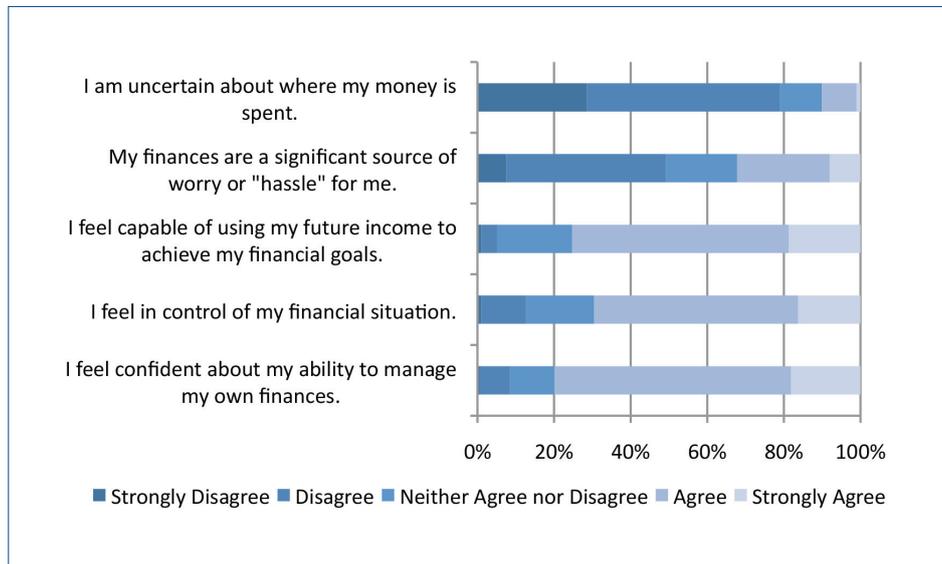


Figure 3: Confidence about money management

<sup>5</sup> Unless it is stated otherwise, ‘agree’ includes responses of both ‘agree’ and ‘strongly agree’, and disagree includes responses of both ‘disagree’ and ‘strongly disagree’.

Participants' comments reinforced their responses to the online questionnaire. Some participants were feeling positive about their current financial situation, with comments such as "I am pleased with my current financial situation at the moment" and "I feel like it is going a lot better than it was". Others were struggling; for example, "It is pretty tragic at times – I run out of money by the end of the week", while a student was "finding it quite a struggle really" noting that prices were going up and everything is expensive.

Some participants were confident about their ability to manage their money, although it was relative, with comments including "At this stage, for my current situation, I am very confident". While others were less confident, with comments such as "At this point, not that confident by myself, but with my parents' help, yes I could" and "I am not overly confident at the moment, but I believe I will get better over time ahead when I work fulltime and have money to work with".

Participants were also asked about their attitude towards particular aspects of money management, such as debt and savings, as shown in Figure 4. It is interesting to note the strongly negative attitudes towards credit cards, with most (76.7%) disagreeing with the statement that credit cards are safe and risk free, and more than half (56.1%) were not comfortable with only making the minimum payment. In both cases, the opposing view was held by a very small proportion (5.1% and 6.6% respectively, with the balance expressing a neutral position). In addition, nearly half (46.0%) are afraid of credit and credit cards. In a separate question, most (80.3%) agreed it was better to make purchases from savings rather than buy on credit.

Participants' comments during the interviews reinforced that the message about the dangers of credit card debt are getting through. Comments included:

- "I try to keep away from credit cards as much as possible."*
- "I hate credit cards" (from someone who has one).*
- "I don't think I would be that keen for a credit card, just because it seems like a bit of a trap if you are not very responsible."*
- "I am not against it, but I don't personally think I will take out a credit card. I don't want someone to hold that kind of power over me that I am in debt to them."*
- "I think credit cards are good things, but only if they are used properly, and I am afraid that if I had one, I wouldn't use it properly"*.

Most recognized the importance of saving on a regular basis (91.9%) and having insurance (55.8%). Comments included "My savings are kind of good. Whenever I get money from something I try and put a little away and keep the rest for spending", while another participant described their spending and saving habits as good, but noted "I remember I used to be really bad. I used to like very time when I went out, I had this need to buy something. But not anymore." However, while participants recognised the importance of saving, this did not always translate into action. For example, one participant commented, "I spend more than I save ... If I save, I tend to save for a short-term".

Views on the importance of purchasing things for happiness were relatively evenly split, with 32.0% agreeing, 33.5% disagreeing and the balance (34.5%) being neutral on the issue. However, a number of comments suggested that impulse purchasing was an issue, such as "I love shopping, especially if I see a sale, I can't stop myself" and "... of course, I buy things I shouldn't and things I could possibly do without and then I regret it later. I'm a bit impulsive".

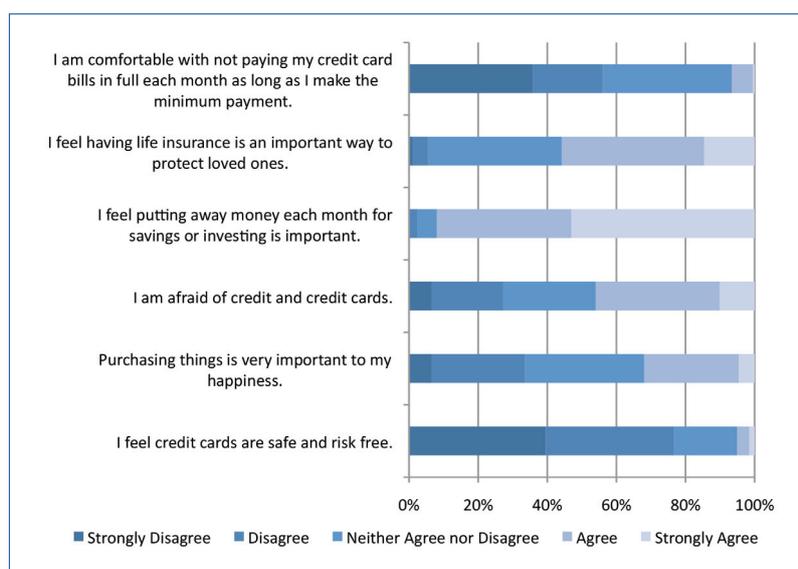


Figure 4: Attitudes towards elements of money management

The positive attitudes towards money management were reinforced with questions related to the importance of budgeting and related issues. Participants were asked about the importance of spending within the budget, paying credit card balances in full each month, learning about money management regularly, and setting and achieving financial goals. The mean responses (4.1, 3.9, 3.6 and 4.0 respectively) indicated that these are all seen as important.

Participants were asked what aspect of money management they would like to improve, and to explain why. Some wanted to improve their budgeting, with comments including “I would say budgeting. Not over-spending on food doing all that type of thing. Just planning ahead in time instead of just worrying about it when it comes” and “I suppose I would like to, if I set myself a budget as to how much I should spend each week, to actually be able to stick to that”. Others wanted to deal with their credit card debt; for example, “Probably paying off my credit card would be right up there, because I tend to put a few things on it like I think that I can pay for something with EFTPOS ... and I tend to forget it is there and it kind of adds up very quickly”, and “I think sometimes the temptation to use the credit card is still there and I will try to get out of the habit of using the credit card”.

In response to the question of what aspect of money management they would like to improve, some participants simply identified a need for basic personal financial education. One participant commented, “I like the idea of savings but the actual nitty-gritty stuff I would like to learn more about” with a focus on better understanding the options available. Another said, “Basically, I would like to know more about term deposits and stuff like that, and maybe investments. I should probably know a bit more, but I have never really taken the time to do it, because it seems just too boring and dull”.

## FINANCIAL BEHAVIOUR

The important question, however, is how financial attitudes translate into financial behaviour. Table 3 highlights the key responses in relation to elements of financial behaviour, which generally demonstrate that young people are behaving in a way that represents good financial management. The small proportion that read to increase their financial knowledge is disappointing. It would be desirable to see a higher proportion making contributions to an investment account, but this may reflect a lack of disposable income sufficient to allow this for this age group. It is perhaps not surprising for this age group to still be trying to determine the best financial management style for them, and it is reassuring to see the high proportion who disagree that they haven’t considered whether they are a spender or a saver. Most participants (66.8%) indicated they are able to stick to their plans if they want to, while a further 16.6% have resources to help them stick to their plans.

FINANCIAL BEHAVIOUR	DISAGREE	AGREE
I budget and track spending.		62.6%
I get cash advances from my credit card.	67.2%	
I compare prices when shopping for purchases.		92.4%
I read to increase my financial knowledge.	42.1%	25.4%
I make contributions to an investment account in my name	35.8%	31.3%
I've spent time thinking about financial goals, credit cards, and spending habits, and I've decided on a money management method that will work best for me.		51.8%
I really don't know what kind of financial management style is best for me. I'm still trying to figure out what sort of savings and spending patterns feel right to me.	29.1%	49.2%
I don't think about money much. I just kind of take it as it comes.	56.8%	
I haven't really considered whether I am more of a saver or a spender. Finances just don't interest me much.	70.9%	

Table 3: Financial behaviour

The negative attitudes towards credit cards are reflected in the fact that little more than one third (37.7%) of participants had a credit card. Of those with a credit card, 84.0% reported they had never reached or exceeded their limit over the previous six months. It is interesting to compare this to the findings of the APLUS study, where 58% of students *had at least one* credit card (Shim, Serido & Xiao, 2007).

## RESULTS – EXPERIENCES OF FORMAL FINANCIAL EDUCATION

This age group has had limited opportunities for formal financial education. A large majority (85.9%) had not attended any form of formal financial education in the form of seminars, workshops or after school programs, while a similar proportion (84.2%) had not attended any school provided financial management classes. These high proportions mean that most (77.2%) had not attended any form of formal financial education during their high school years.

Comments during the interviews reinforced the lack of formal education, with many noting the limited opportunities available, for example “my school didn’t offer it as far as I know, or it was never offered to me” and “at school there was nothing on financial management”. However, it is important that what is offered is relevant. One participant commented, “I think I remember once, last year, they did a talk on managing money, but it was not really in the right language”.

However, as noted in Table 1, many of the participants, as part of their high school education, have taken subjects that are not personal finance specific but that may assist them in managing their finances. Less than 2% had not taken any of the relevant subjects and about a third (33.6%) had taken at least three of the subjects. However, while these subjects may assist in money management, they do not necessarily explicitly provide practical money management skills. For example, one participant noted “of course, there has been the odd – in like the Economics class – it wasn’t uncommon to offer advice, well it felt like that, but nothing planned – like we are going to sit down and actually talk about this”.

The key issue is whether formal financial education has any impact on their financial knowledge or behaviour. Analysis indicated there was no difference in financial knowledge (measured as being the total number of questions correct) related to respondents’ experience of formal financial education, in the form of workshops etc.

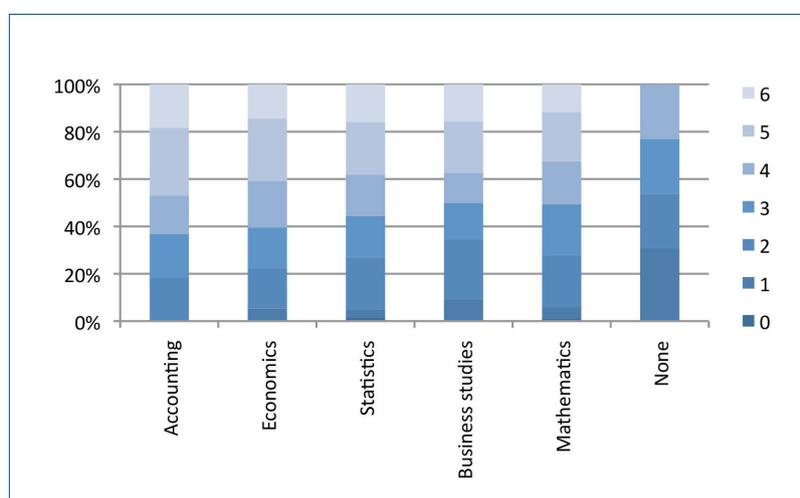


Figure 5: Number of correct financial literacy questions and subjects taken at high school

However, there were differences related to the subjects taken at high school. Students who had not taken any of the subjects did not do as well on the financial literacy questions, with none getting more than four correct. Accountancy students did well, with nearly half (46.9%) answering at least 5 questions correctly, while mathematics students tended to not do so well relative to the other subjects, with fewer than one third (32.6%) getting at least five questions correct.

Some participants noted the value of the financial education they had received, with comments including:

*“I now put a lot of thought in the decisions I make, rather than blindly making a purchase, I make more intelligent decisions”*

*“I do think that having some kind of seminar or free kind of group lessons that you can go to – like how to save, or just things that you can do to save money better. That would be so much better if the world had – if they taught you how to save, if they taught you how to spend, then people would understand and people wouldn’t be living in little Government houses all the time.”*

*“Well it was quite good, it pointed out to me that I should start saving for my retirement.”*

But others were less convinced of the value, with one participant commenting “I think it is all about your upbringing rather than what you get taught in school” and going on to suggest “it is pointless”. Another participant considered their savings habits would have been the same whether they took finance-related subjects or Spanish, and commented, “I don’t think my studies in financial areas have impacted much on me as a person”. However, such comments were in the minority, with most expressing regret for the lack of personal financial education received.

## RESULTS – EXPERIENCES OF INFORMAL FINANCIAL EDUCATION

There are many opportunities for informal education, with family and friends, the internet and life experiences among the possible sources of informal education. The online questionnaire listed ten possible sources of informal education, and asked how much participants had learned about managing their money from each of them. The results appear in Figure 6.

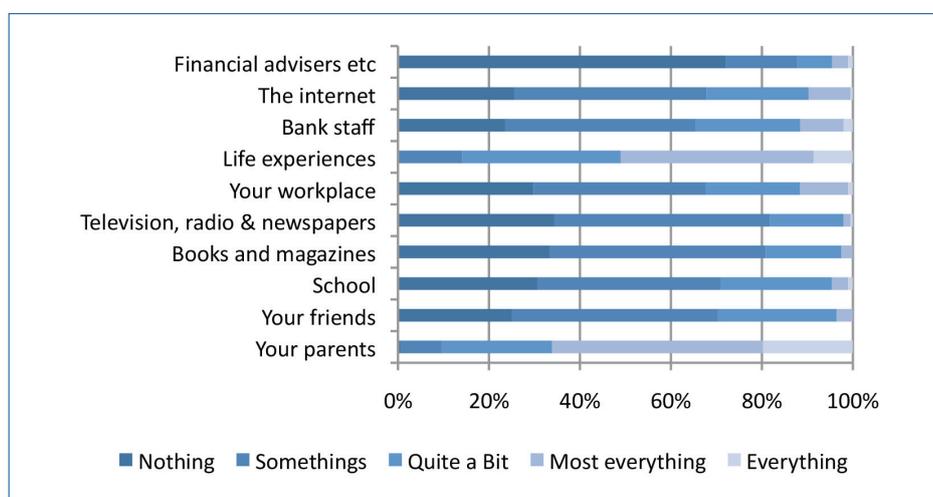


Figure 6: Sources of informal education

Clearly parents are the most important source of information, with most (66.2%) participants indicating they had learned everything or almost everything from their parents. This was reinforced with participants' comments, such as "Mum and Dad have basically shaped the way I use my money a lot", and "My mum has played a big part in that. We used to sit down and do little calculations of how much I could save per year and how much I would have by the time I was 40". Of course the parental influence can come in different ways, for example "I have learnt a lot from my mother, from what she has done wrong sort of thing", and "my dad helps me out a lot, whereas Mum, she likes to spend money ... so I have two very conflicting parents". Some comments also added to the responses where parents were not a source of education; for example, "None really ... my parents have always been 'do as you wish' ". However, there is always the question of how involved parents should be, with one participant explaining "Well, my parents took a very authoritative role in my bank account. They were always like 'do this, do this, do that' but they never really explained it, maybe because at that time they thought he is too young to understand it for whatever reason so I never really learned".

Of course it can be difficult for parents to balance the need to be supportive, while also encouraging their young adults to be independent. One respondent illustrated this well with the following comment:

*"Yes, my sister has moved out, she is flatting, but then Mum and Dad still support her as well. I said that to Dad the other day; 'how are we supposed to learn if you keep handing things to us'. He said 'could I get that in writing!'"*

The influence of parents was also evident in responses to other questions, with most (72.4%) agreeing that they look to their parents as positive role models. A smaller proportion (59.6%) agree their parents know what's best for them in terms of how they should take care of their own finances.

The online questionnaire included a series of statements related to parental influence around financial management, and sought the extent of participants' agreement or disagreement with them. Around two-thirds (66.8%) agreed that their parents regularly spoke to them about the importance of saving. A similar proportion (69.2%) agreed their parents had taught them how to be a smart shopper. While most (68.7%) respondents agreed their parents believed they should save money each month for the future, less than half (45.5%) agreed that their parents think they should invest for long-term financial goals regularly.

The other key source of informal financial education, from Figure 6, is life experiences, with around half (51.0%) indicating they had learned everything or almost everything from life. Perhaps unsurprisingly for this age group, financial advisers etc were not identified as being a source of education for participants.

The influence of friends was less than might have been expected, with only 3.6% of participants indicating they had learned almost everything from friends, and no-one suggesting they had learned everything from their friends. Many of the comments suggested friends could, at the same time, be more of a negative influence; for example, "we don't really discuss it, but I tend to spend more money when I am with them than when I am not", and "Well, with friends, they just encourage me to spend it all". However, friends are not all bad. One participant reported "I find my boyfriend keeps me quite a bit in check with money, because he is quite frugal, I am not". Another participant had a friend who is working and has about \$16,000 in savings and noted having "learnt a lot of tricks from him, how to save".

No differences were found between participants based on the sources of their informal education

## DISCUSSION OF RESULTS

It is clear that young people are getting little in the way of formal financial education and they generally recognise the disadvantages this generates. The most common response to the question about experience of financial education during the interviews was “Nothing”. Some participants clearly wanted to know more, with comments such as “I want to know what else I can do”; and “I would like to know what I am talking about ... I guess I just don’t know how banks work and how everything comes together”. This is in line with the findings of Perry and Morris (2005) that young people in the United States leave school without basic finance skills, and of Chen & Volpe (1998) that high school students don’t receive good fundamental personal financial education. The APLUS study has demonstrated the importance of financial education at high school, with financial education at secondary school level leading to more financial knowledge at university, which then links to what are described as more healthy financial behaviours (Shim, Serido, & Xiao, 2007).

At the same time there is a lot of informal education going on, some of which young people may not even recognise. Parents clearly play a very important role in providing knowledge about financial matters, but this raises a concern about the extent of the parents’ knowledge. If parents’ own financial knowledge is limited, there will be limits on the extent of knowledge that they are able to pass on. Many parents play a very active role in getting their children’s finances set up initially, assisting with bank accounts etc. For example, one participant explained “I guess [developing my money management skills] could be mostly through my family, mostly my dad and things just setting me up and giving me basic savings targets, encouraging savings, setting up bank accounts, things like that”.

The important role of parents found in this study supports the findings from the APLUS study. In the first report they note, “children learn about the world and how to thrive in it by listening to and observing their parents, but that role doesn’t end when those children turn 18” (Shim, Serido, & Xiao, 2007, p. 25). This study showed that in some cases participants had learned from watching their parents’ poor financial management, which supports the surprise finding in an Australian study that “participants who rated their parents as having poor money management skills had significantly higher financial literacy scores than those who felt their parents were good at managing money” (Commonwealth Bank Foundation, 2011, p. 12).

The relatively limited peer influence is surprising, and it will be interesting to observe how this changes over the 20-year course of the study. The participants are at an age where peers are generally seen as the key source of influence of behaviour and attitudes, but the results suggest that finance may be an exception to that rule. Will peers become more important as the parental bonds weaken further? Or will there be a continuing reluctance to discuss financial issues with friends, with a preference to use sources, such as parents, that may be seen as more reliable for something as important as finances? The APLUS study suggests that the parental influence will weaken, as it found parental modelling declined between Wave 1 and Wave 2, although parents continued to be an influence (Shim & Serido, 2011).

The strongly negative views towards credit card debt suggest that there has been absorption of the messages from the Commission for Financial Literacy and Retirement Income and their Sorted website. The Commission has recently placed emphasis on avoiding ‘dumb’ debt such as credit cards, and this message was evident in participants’ responses reported earlier. The strong message from participants was that they are frightened of credit cards because of the perception of temptation associated with them. There was also some negativity towards other forms of debt, but this was tinged with a realisation that some debt may be appropriate.

As one participant noted, “I don’t like to think I owe so much for my student loan, but at the same time I realise that in that context, it is a good thing ... so I think debt is good and bad at the same time”.

Looking at the level of knowledge of participants, it is relatively low. The average score was 3.5 out of the possible 7, which is just 50%. This compares to an average of 59% in the APLUS study (Shim, Serido, & Xiao, 2007), which is described as a failing grade, and a range of 58-76% for the 14 countries in the OECD study (Atkinson & Messy, 2012).

The consensus view of participants about their financial situation can be described as ‘they feel poor but they are coping’, but the range of views covered the spectrum from struggling to comfortable. Most felt they had the ability to locate resources to assist them if necessary, although in many cases this would be their parents for both information and/or money. While young people recognise the importance of savings, this doesn’t yet translate into a regular part of their financial management in many cases, sometimes because they don’t have the surplus funds available.

## SUMMARY CONCLUSION

The overwhelming conclusion from the study is that there is a lack of formal financial education, and a reliance, that may not be appropriate, on parental influence to develop financial management skills. This suggests there is a need to reconsider the place of personal financial education in the secondary school curriculum, if New Zealand is serious about raising the financial literacy of the population and realising the benefits that will bring. However, it is important that the content and delivery of any formal education be appropriately set, to ensure it meets the needs of the young people involved.

Informal education, such as that provided by the Commission for Financial Literacy and Retirement Income, is helping fill the gap left by formal financial education. This reinforces the importance of the work being done by the Commission and the value of the Sorted website. Therefore it is important that this work continues.

## WHAT'S NEXT?

This report presents the preliminary results from the study and a full report will be published early in 2013. The full report will explore the results in more detail, and will include additional results such as retirement planning, current wellbeing, and current financial situation.

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