Household Finance Insights Report 2023

Table of contents

Authors 04

Financial literacy in achieving financial success: a non-negotiable imperative to improve household finances 05

Moral compass 05

Moral compass and personal finances 05

Summary of households' operating environment in 2022 06

Monthly overview of economic and political events in 2022 07

The state of South African households' financial wellness in 2022 11

Overall scores 11

The five components of financial wellness 12

The financial wellness groups of South Africa 14

Financial literacy 15

What is financial literacy and why is it important 16

Measuring financial literacy 17

Categories to measure financial literacy knowledge 17

Domains that measure financial literacy knowledge 17

The state of financial literacy in South Africa 18

Self-assessed financial literacy versus actual financial literacy 18

Saving towards retirement 20

Who is the financially literate? 21

Education status 21

Age group 22

Gender 23

Province 24

Employed 25

Income group 25

Population group 27

Assessing the effect of financial literacy on household financial outcomess 28

Requirements for the theory to hold: financial literacy should improve financial outcomes 30

Summarised results 30

The effect of financial literacy on achieving financial goals 32

Summarised results 32

Using machine learning to construct a pathway for good outcomes 34

Summarised results 34

Summary of research findings 35

Some compound interest calculations: interest on a savings deposit and the monthly repayment on loans 36

Compound interest: Example 1 39

Compound interest: Example 2 40

Behavioural finance concepts explaining some decisions 41

Practical personal financial management tips 42

Which households did we speak to? 45

Distribution of households according to demographic characteristic 45

References 46

APPENDIX A1: Financial literacy questions asked to the financial knowledgeable person 47

APPENDIX A2: More information on the theory of financial goal-setting 49

APPENDIX A3: The science of financial success 50

What is financial success? 50

The Theory of Change 51

My pledge: committing to my journey to financial success 52

1 Household **Financial Wellness Index** towards the Science of Financial Success.

Authors

This research was compiled by:
Household Chapter

Dr Jacolize Poalses
(Senior Researcher, Bureau of Market Research, Unisa)

Mr Johann van Tonder
(Economist and Researcher, Momentum)

Prof Carel van Aardt
(Research Director, Bureau of Market Research, Unisa)

Prof Bernadene de Clercq
(M&D Coordinator: Department of Taxation, College of Accounting Sciences, Unisa)

Financial literacy in achieving financial success:
a non-negotiable imperative to improve household finances

Moral compass

Human beings grow up with a moral compass, meaning we innately know right from wrong. As we move through life's phases, our moral compass is influenced by many things such as our values, skills, education, culture, life experiences, living environment, leadership, etc. These influences will cause our moral compass to grow stronger or fade away, affecting our decisions.

History is full of examples of people shifting their moral compass aside. Recently, employees of a well-known international vehicle manufacturing company did just that – by installing software in its cars which "artificially reduced" its emissions readings to make it appear more environmentally friendly.

Why are these immoral actions happening if people are supposed to know right from wrong? In a National Business Ethics Survey in the United States of America a very high percentage of employees indicated pressure to meet unrealistic profit targets as very likely to cause them to compromise on their morals.

Other reasons from various other surveys include envy, striving for power, wanting to impress certain people, trying to survive in dire circumstances, etc. For instance, a study by Batson and Thompson (2001) found that such behaviour can be explained by human motivation – firstly self-interest, followed by moral integrity (thus, to have good intentions) being overpowered, and by moral hypocrisy, as many people want to appear to be moral, yet avoid the implications of actually being moral.

Moral compass and personal finances

But what does this have to do with our personal finances? A lot. Our moral compass and life experiences also influence our personal financial decisions. For instance, although we are not financially literate at a very young age, we already know if we borrow money (something), we must pay (give) it back. This research confirmed this understanding, indicating that people with little or no financial literacy skills intuitively possess positive financial senses. Table 1 indicates a remarkable resemblance between the financially literate and financially not literate households in terms of their answers on a question where they would find money for living expenses, should they experience an emergency equivalent to one month's income:

Table 1: Where will money be sourced from following an emergency?

Rank	Financially Literate	Financially Not Literate
1	Take money from savings	Take money from savings
2	Cut back on spending/ spend less / do without	Cut back on spending/ spend less / do without
3	Borrow money from family or friends	Borrow money from family or friends
4	Work overtime / get an extra job	Work overtime / get an extra job
5	Get credit / loan from a bank	Get credit / loan from a bank
6	Pay bills late / miss payments	Pay bills late / miss payments
7	Sell small assets (TV, jewellery, etc.)	Get a loan from a microlender

A clear "good-to-bad-pattern" is discernible. The overwhelming majority of both the financially literate and financially not literate households would first source money from the least expensive, least disruptive, and more easily available sources, namely money from savings and cutting back on spending. By not resolving to borrowing first also puts them more in control of their destiny. The same pattern applies to their borrowing behaviour in that they would first approach family or friends before resorting to external sources, which will be more expensive, more disruptive, more difficult to obtain, meaning it would reduce their control over their finances.

The same thing happened when asked what they would do if they unexpectedly received additional income equivalent to one month's income. The majority of both the financially literate and financially not literate said they would first save/invest the money, followed by buying necessities, repaying debt, spending on luxuries, and donating it. These patterns show that even the financially not literate households have a broad sense of what is financially right or wrong.

But, if people know what is good and bad, or right and wrong, it begs the question whether acquiring a skill such as financial literacy will make a difference in for instance achieving financial success and building wealth. This is the overall purpose of this research.

However, in terms of the outline of this report, the focus is firstly to analyse the health of households' finances, the conditions under which financial literacy was measured and to ascertain the value of financial literacy as a skill in managing household finances.

Summary of households' operating environment in 2022

South African households experienced tough living conditions in 2022, some of which were caused by factors beyond their control, including loadshedding, poor service delivery, food- and fuel price increases and high interest rates. This challenging environment and some of the citizenry's reactions thereto are portrayed by the following indicators:

- Economic growth continued but slowed to 1.9% in 2022 from 4.7% in 2021.
- The number of employed continued to recover from COVID-19 and lockdowns – increasing to an average of 15.544 million workers in 2022 from 14.691 million in 2021.
- Household final consumption expenditure growth also continued but receded from 5.8% in 2021 to 2.5% in 2022.
- A war between Russia and the Ukraine contributed to, among others, rising fuel and food prices.
- The petrol price increased by an average of 30%, or about R5.20/l in 2022 compared to 2021 due to rising oil prices and a weaker rand exchange rate.
- The rand depreciated by 13.7% in 2022 against the US$ – from R14.91 in 2021 to R17.28, adding pressure on consumer price inflation (CPI) to remain elevated.
- The consumer price inflation rate increased by an average of 6.9% (from 4.5% in 2021), reaching a high of 7.8% in July 2022 and ending the year at 7.2%.
- Salaries/wages (at collective bargaining councils) again increased less than CPI – by an average of 6% (CPI 6.9%) from 4.4% in 2021 (CPI 4.5%).
- Households with credit had to contend with rising interest rates – the repo rate increased from 3.75% at the end 2021 to 7.0% at the end of 2022.
- Loadshedding worsened further, contributing to community protests.
- South Africans were not happy with the operating environment. The number of municipal protest actions against poor service delivery increased to 193 in 2022 from 121 in 2021.
- To better afford expenses, labour strikes (mostly for higher salaries) intensified. Working days lost due to labour strikes increased to 2.4 million in 2022 from 1.7 million in 2021.

A more detailed and chronological description of these economic and other events, which impacted households last year, is provided in the monthly overview of events, followed by the state of households' financial health in 2022.

Monthly overview of economic and political events in 2022

JANUARY

The JSE All Share Index (ALSI) started the year at 73 709.4 points. Following an average of 4.6% in 2021, CPI for January was 5.7% while the fuel price decreased by 77c/l. The South African Reserve Bank (SARB) increased the repo rate by 25 basis points following a similar increase in November 2021. The International Monetary Fund (IMF) forecasted lower global economic growth for 2022 and 2023, as well as higher world CPI. Europe tightened lockdown restrictions in response to the COVID-19 Omicron variant. Tensions intensified between Russia and Ukraine and between China and Taiwan.

FEBRUARY

South Africa's Minister of Finance announced slightly lower personal income tax rates as the fiscal deficit came in lower than budgeted due mainly to higher windfall (mining) company taxes stemming from higher international commodity prices. CPI remained at 5.7% and the fuel price increased by 55c/l. A report is released blaming factional battles in the ANC for the July 2021 unrest. Russia started a war against Ukraine, causing energy (natural gas and oil) and some food prices to surge, fuelling fears of higher CPI and many more increases in interest rates. The United Kingdom (UK) announces an end to COVID-19 restrictions. China and Russia oppose a further expansion of the North Atlantic Treaty Organisation (NATO).

MARCH

CPI for March increased to 5.9% and the fuel price by R1.46/l due to higher oil prices. The SARB raised interest rates by another 25 basis points. Other central banks such as the Federal Reserve in the USA (also 25 basis points) increased interest rates to contain runaway CPI, partly fuelled by supply chain disruptions caused by among others, COVID-19 lockdowns and conflicts in the Ukraine and Middle East. Millions of Ukrainians sought refuge in neighbouring countries. The US announced a ban on Russian oil, gas, and coal which increased fears of a shortage, higher prices, and a world economic recession.

APRIL

South Africa is rocked by increasing loadshedding and destructive floods in KwaZulu-Natal, contributing to a weaker Rand exchange rate, declining share prices and rising bond yields. CPI remained at 5.9% and the fuel price increased by 28c/l. South Africa's National State of Disaster ended after 750 days. Globally the scene was dominated by rising fuel and food prices, lower world economic growth, China's COVID-19 lockdowns, the war between Russia and the Ukraine, increasing interest rates, and supply-chain delays.

MAY

CPI jumped to 6.5%, driven by rising food and fuel prices. The SARB raised the repo rate by 50 basis points. The outlook on South Africa's sovereign credit rating was improved from stable to positive by Standard and Poor's. The war between Russia and Ukraine intensified, while the world economy entered a cycle of high CPI, fast rising interest rates and lower economic growth – in an environment still plagued by COVID-19 lockdown interruptions. The IMF reduced their world economic growth forecast for 2022 from 4.4% to 3.6%, for 2023 to 3.6% and for 2024 to 3.4%, also suggesting years of low world economic growth. Brent oil jumps to $123 per barrel from just below $110 in April.

JUNE

South Africa's CPI increased to 7.4%, still driven by food and fuel prices. The latter increased by R2.43/l. Former spy boss Arthur Fraser laid criminal charges of kidnapping, bribery, money laundering, and "concealing a crime" against President Ramaphosa following a theft on Ramaphosa's Phala Phala farm. Eskom workers went on strike for higher salaries, resulting in Stage 6 loadshedding. President Ramaphosa increases the private electricity generation cap (without a license) from 1 MW to 100MW. The Federal Reserve in the USA hiked interest rates by 75 basis points. The EU banned most imports of Russian oil. Oil prices remained around $110 per barrel and natural gas prices spiked all around the world, causing high CPI. China's economy continued to struggle due to trade conflicts, the effects of the Russian-Ukraine war, the negative impact of higher international CPI and interest rates and strict COVID-19 policies.

JULY

The petrol price increased by R2.37/l – to be R11.62c/l higher than in January 2021. This contributed to CPI rising to 7.8%. The SARB raised the repo rate by 75-basis points to 5.5%. Eskom workers returned to work, but Stage 5 loadshedding remained. National Treasury considered taking over some of Eskom's debt. The Federal Reserve in the USA hiked interest rates by 75 basis points and the European Central Bank (ECB) started its interest rate hiking cycle with a 50 basis point increase. High oil and gas prices caused by Russia's threat to halt gas delivery to Germany caused countries to re-evaluate their carbon neutral environmental objectives. Boris Johnson resigned as UK Prime Minister following a cabinet scandal. Mario Draghi resigned as Italy's Prime Minister.

AUGUST

CPI continued to rise in South Africa, albeit at a slight lower pace of 7.6%, assisted by a decline of R1.32/l in the fuel price. Loadshedding intensified further. An expanded world economic downturn - caused by politically driven supply disruptions and aggravated by interest rate increases, is forecasted to be very likely in parts of Europe. Oil prices declined due to rapid increases in interest rates, further fuelling fears of a world economic recession. However, OPEC warned that it would cut production to keep oil prices high – as Brent oil declined to below $100 per barrel. US Federal Reserve Chairman, Jerome Powell, in his Jackson Hole speech, reaffirmed the Federal Reserve's commitment to bring CPI under control. China engaged in military drills around Taiwan.

SEPTEMBER

Loadshedding continued as some power stations were sabotaged, while others failed. The SARB again raised the repo rate by 75 basis points. The petrol price fell by R2.04/l and CPI increased by 7.5%. However, price increases became broad based as core CPI jumped to 4.9% from 4.6%. Statistics South Africa announced the South African economy shrank in Q2, mostly due to floods and loadshedding. Having ended 2021 at R15.94/US$, the rand weakened to more than R18/US$ due to the world economy switching to risk-off mode as the Federal Reserve in the US raised interest rates by another 75 basis points. The US economy contracted by 0.6% in Q2, following a contraction in Q1 2022. The European Central Bank raised interest rates by another 75 basis points. OPEC cuts oil production. Boris Johnson is succeeded by Liz Truss as UK prime minister. The UK capped energy prices for households and cut taxes but failed to convince markets on the financing of these measures.

OCTOBER

The Minister of Finance announced a smaller fiscal deficit for 2022/23 than estimated in February and said the government would take over some of Eskom's debt and that the Social Relief of Distress grant would continue in 2023. Loadshedding continued unabatedly. The rand weakened further to R18.30/US$. Some 36 000 South African freight rail and port workers went on a two-week labour strike for higher wages. The petrol price declined by 89c/l. Fears of insufficient energy in Europe mounted as Russia rationed gas to the continent. Liz Truss resigned as Prime Minister of the UK (following an unconvincing government budget) and was succeeded by Rishi Sunak. The European Central Bank raised interest rates by 75 basis points. The IMF estimated world CPI to be 8.8% in 2022 from 4.7% in 2021 and forecasted world economic growth to slow to 3.2% in 2022 (from 6% in 2021). Giorgia Meloni became Italy's first female Prime Minister. Former Brazilian President, Lula de Silva, defeated incumbent, Jair Bolsonaro.

NOVEMBER

CPI receded to 7.4% from 7.6% in October, while the petrol price increased by 53c/l to R22.57/l. South African public servants went on strike for higher wages. The South African Reserve Bank raised the repo rate by 75 basis points. Eskom forecasts continued loadshedding until 2027 as Stages 4 to 6 were the norm. The Federal Reserve in the US increased interest rates by 75 basis points. The Bank of England raised interest rates by 75 basis points following two previous hikes of 50 basis points. The Soccer World Cup kicked off in Qatar. The Democrats performed better in the US midterm elections and maintained control of the Senate. Elections in Malaysia resulted in the country's first-ever hung parliament.

DECEMBER

The petrol price increased by 59c/l to end 2022 at R23.16/l – an increase of R8.47/l or 57.7% from January 2021 to December 2022. Stage 6 loadshedding continued as Eskom ran out of diesel and power stations failed. Andre de Ruyter resigned as Eskom CEO. Stats SA announced that the economy grew by 1.6% in Q3 2022 (-0.7% in Q2), better than expected, putting the economy on course for 2% growth in 2022. CPI for December slowed to 7.2%. The ANC-led majority in parliament rejected an impeachment process against President Ramaphosa by voting not to accept the Phala Phala investigative report. The ANC re-elected President Ramaphosa as party president by a larger margin. The JSE ALSI ended the year at 73 048.6 points (0.9% lower year-on-year) and the yield on the 10-year bond ended 80 basis points higher at 10.185%. Both the Federal Reserve in the US and ECB increased interest rates by 50 basis points, 25 basis points less than the previous increases. Both, however, warned that further tightening might be needed to bring CPI down to acceptable levels. Argentina won the Soccer World Cup.

The state of South African households' financial wellness in 2022

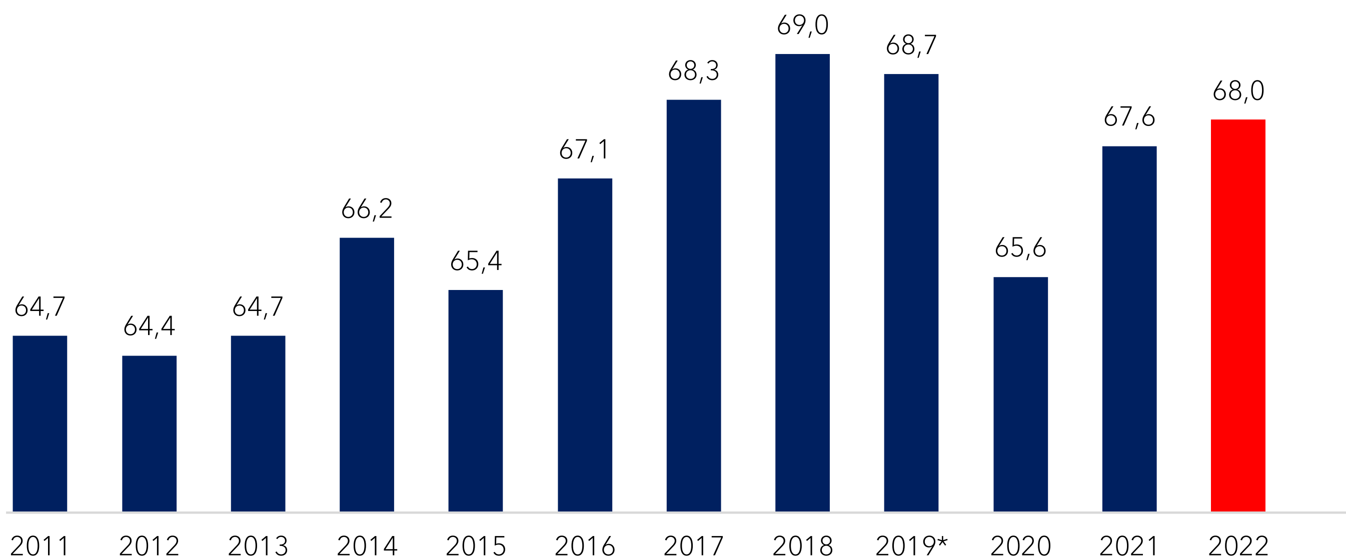
Overall scores

Against this tough environment, a holistic view of South African households' financial health was obtained by assessing the state of their financial wellness – as has been done since 2011 and illustrated in chart 1. Furthermore, measurement of financial wellness serves the additional role of enabling a critical step to determine whether the skill of financial literacy makes a difference in increasing household wealth and achieving financial success.

As Chart 1 shows, the collective state of South African households' financial wellness improved a bit in 2022 to 68 points, but it is still below its high point and closer to a level achieved in 2017.

Financial wellness reached a high point in 2018 but started to deteriorate before the outbreak of COVID-19. The progress achieved since measurement started was wiped out in the pandemic, whereafter a slow recovery started, assisted by continuing economic and employment growth.

Chart1: State of South African households' financial wellness over time, 2011 – 2022



** Estimate for 2019 as no survey could be conducted due to lockdown*
Source: Momentum/Unisa Household Finance Survey, 2023

The five components of financial wellness

As explained in previous reports, the holistic approach to measuring financial wellness considers individuals and households as complex structures influenced by various events and perceptions. As such, and considering the tough economic environment, South Africa's overall household financial wellness was calculated from the state of the five components / capitals (refer to table 2) embedded in each household:

Table 2: The five capitals embedded in each household

Education (Human Capital)	Ability to take control (Social Capital)	Income (Physical Capital)	Wealth (Asset Capital)	Living conditions (Environmental Capital)
An input resource possessed by the household to achieve outputs through personal development. It is determined by the level of educational qualifications and professional skills of household members.	An input resource possessed by the household to achieve outputs through personal empowerment. It reflects a household's ability to take control over its finances, its social networks and trust in institutions.	An achieved output from the input resources through employment and other income sources. It is the income statement of the household, representing its income and expenditure.	An achieved output from the two input resources and income, which displays the value of wealth. Wealth is calculated by subtracting the value of all outstanding debt from the value of all assets, such as property, durable goods, pension funds and saving / investments.	An achieved output from the input resources and income, considering the ownership status and the state, type, and quality of a household's dwelling. It indicates the quality of the household's living environment.

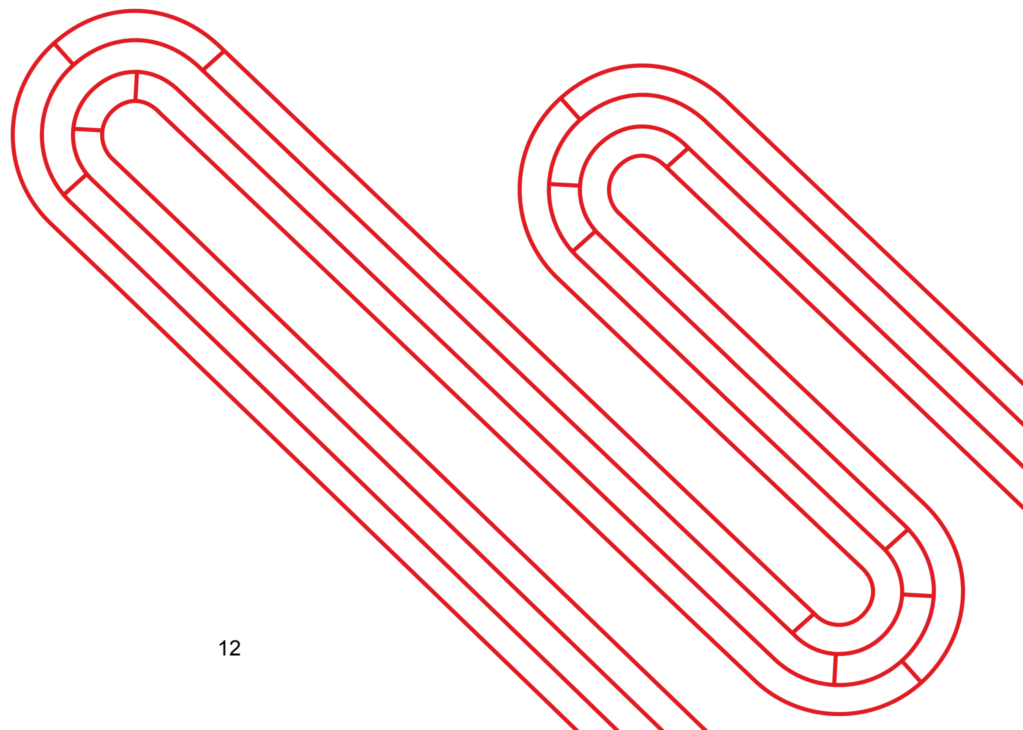


Table 3 indicates improvement occurred in households' level of education, wealth and living conditions, while their income and ability to take control of their financial situation deteriorated.

Table 3: Changes in households' five capitals, 2021 to 2022

Capital	2021	Direction	2022
Ability to take control	5.2	↓	4.4
Education	6.4	↑	7.0
Income	5.4	↓	5.1
Wealth	5.3	↑	5.5
Living conditions	6.6	↑	6.8
Financial Wellness	67.6	↑	68.0

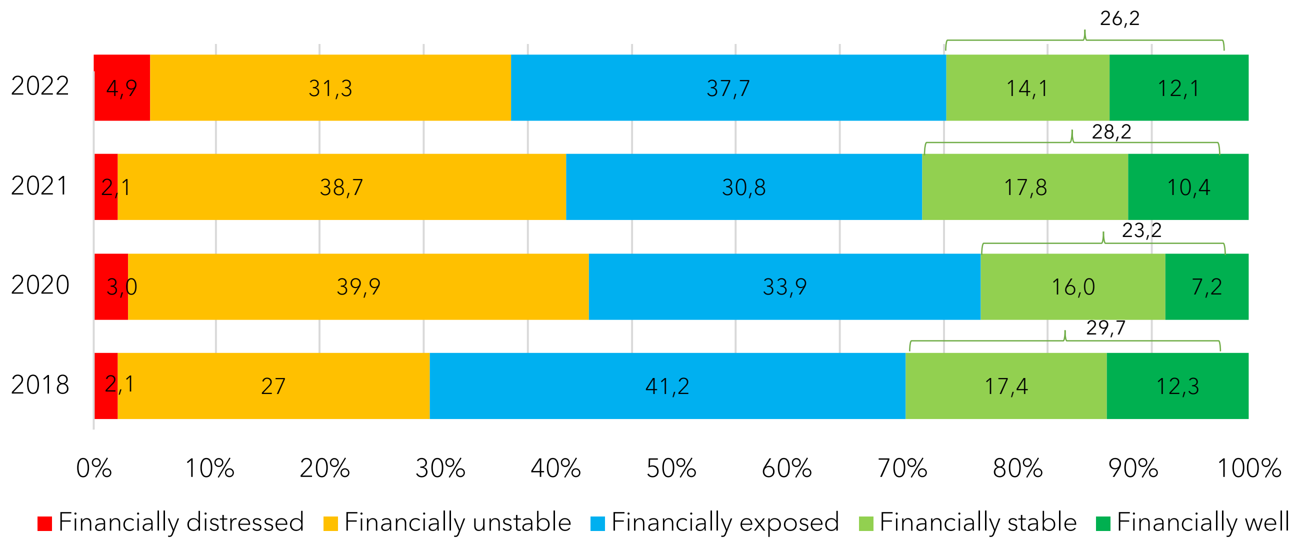
Source: Momentum/Unisa Household Finance Survey, 2023

As alluded to in the section on the tough operating environment, the distribution of financial wellness indicates many households were worse-off in 2022 compared to 2021. Chart 2 shows an increase in the number of financially distressed households from 2.1% of all households in 2021 to 4.9% in 2022 – which is understandable given the negative effect high consumer price inflation, strong rising interest rates and moderate salary increases had on household finances. (A description of the financially distressed and the other four financial wellness groups are provided in table 4).

On the other hand of the scale, the number of financially well households increased to 12.1% from 10.4% in 2021 and is now almost back at levels before COVID-19. However, the combination of the financially stable and financially well is still below pre-COVID-19 levels. Nevertheless, analysis shows households in these two groups benefitted from diversified income sources and investment portfolios, which contributed to them being more resilient in a tough economic environment.

The biggest positive change, though, was the sharp increase in the financially exposed – at the expense of the financially unstable. This means more households were not as financially unwell as in 2021, but they still were in a vulnerable position.

Chart 2: Changes in the distribution of households on the financial wellness scale



**No survey was done in 2020 (measuring 2019) and therefore there is no result for 2019 Source: Momentum/Unisa Household Finance Survey, 2023*

The financial wellness groups of South Africa

The households are clustered into five categories to gain a better understanding of their different financial wellness status as showcased in table 4:

Table 4: Description of the five groups on the financial wellness scale

Financially Distressed	Financially Unstable	Financially Exposed	Financially Stable	Financially Well
0 - 29.9	30 - 59.9	60 - 79.9	80 - 89.9	90 - 100
Households who are deeply rooted in a financially unwell position. They are fully dependent on outside assistance to survive.	Households whose resources are volatile. They are likely to miss normal payments and resort to high-cost credit. Adverse events and wrong financial decisions can cause them to become distressed.	Households who manage to survive with their resources, but it is a struggle. Negative events and wrong decisions can cause them to become financially unstable.	Households who possess sufficient resources to make a stable living. They achieve some financial success and with positive behaviour and good decisions can become financially well.	Households who are financially well in the current political / economic climate. They have sufficient resources to remain financial well and achieve financial success in the short-and-long-run.

The above analysis indicates more households were financially worse-off in 2022 compared to 2021, while some were more resilient.

This brings us to the theme of this research. Did the skill of financial literacy, or the lack thereof, impact the state of household's financial health and achievement of financial success? The next sections will focus on answering this question. To do this, we first have to answer what financial literacy is.

Financial literacy

What is financial literacy and why is it important?

We live in an era of fast technological progress, which brought the use of artificial intelligence (AI) within reach of billions of households around the world. It was therefore opportune to include a bit of AI in this report. Consequently, ChatGPT was asked to define financial literacy and why it is deemed important to achieve financial success. Compared to the literature, the answer was remarkably well on point:

Financial literacy, , the knowledge and understanding of various financial concepts and practices, is an essential tool for individuals seeking to attain financial success and security. In today's complex and ever-changing economic landscape, the ability to navigate financial decisions with confidence is paramount. What follows is an exploration of the profound importance of financial literacy as a key driver of financial success, examining its role in decision-making, wealth accumulation, debt management, and long-term planning.

Informed Decision-Making:

Financial literacy equips individuals with the skills to make informed and thoughtful financial decisions. From simple choices like budgeting and spending to complex decisions like investments and retirement planning, a solid foundation in financial literacy enables individuals to evaluate options, consider risks, and make choices that align with their goals.

Building Wealth and Asset Management:

Understanding the principles of saving and investing is instrumental in building wealth over time. Financially literate individuals are more likely to make informed investment decisions that can lead to growth and compounding of their assets. They recognise the value of diversification and are better equipped to navigate investment opportunities, avoiding common pitfalls that could lead to financial setbacks.

Effective Debt Management:

Debt is a common financial tool, but its management requires careful consideration. Financial literacy enables individuals to understand the implications of different types of debt, interest rates, and repayment terms. Armed with this knowledge, they can make informed decisions about borrowing, manage debt responsibly, and avoid falling into cycles of unsustainable debt.

Planning for the Future:

Long-term financial success requires careful planning and preparation. Financially literate individuals are more likely to engage in retirement planning, setting aside funds for education, and creating comprehensive estate plans. These actions not only ensure their own financial security but also provide for their loved ones and establish a lasting legacy.

Navigating Life Transitions:

Throughout life, individuals face significant financial milestones such as buying a home, starting a family, changing careers, or dealing with unexpected emergencies. Financial literacy provides the tools to navigate these transitions with confidence, minimising stress and maximising positive outcomes.

Guarding Against Fraud and Exploitation:

Financial scams and fraud are prevalent in today's digital age. A strong understanding of financial concepts and practices can help individuals recognise and avoid scams, protecting their hard-earned money from exploitation.

Empowerment and Confidence:

Financial literacy empowers individuals by demystifying financial jargon and concepts. As a result, they feel more confident engaging with financial institutions, asking pertinent questions, and advocating for their financial well-being.

Strengthening Economic Resilience:

A financially literate population strengthens the overall economy. Individuals who make informed financial decisions contribute to a stable economic environment, reducing the risk of financial crises and enhancing overall economic resilience.

Education for Future Generations:

Financial literacy is a gift that keeps on giving. When individuals are financially literate, they are better equipped to educate their children and pass on valuable financial knowledge and habits to future generations.

In conclusion, financial literacy is a fundamental tool for achieving financial success and security. It empowers individuals to make informed decisions, build wealth, manage debt, plan for the future, and navigate life's financial challenges. As society becomes increasingly complex, the role of financial literacy becomes even more critical. By investing in education and cultivating a deep understanding of financial concepts, individuals can pave the way for a prosperous and secure financial future.

Measuring financial literacy

In accordance with international practice, the level of financial literacy in South Africa was measured based on an objective as well as subjective evaluation.

As per Serido (2022:33), objective or explicit knowledge refers to information-based knowledge about established facts, rules, policies, and procedures regarding personal financial concepts and services and is typically measured by the number or percentage of correct answers on tests of financial knowledge.

In contrast, subjective, or tacit, knowledge refers to a self-assessed understanding of financial concepts. To determine the level of the self-assessed financial literacy, households were asked to rate themselves on whether they deemed themselves to be financially literate or not.

Households' objective, or actual financial literacy knowledge was measured from an expanded version of the questions commonly asked by international institutions. It for instance covers the standardised "Big Three" questions used globally (Lusardi & Mitchell, 2011). The internationally asked questions were supplemented with additional questions (a total of eleven questions were asked) to minimise the effect of "correct guesses", but also to ensure the results reflect the basic financial knowledge expected from any consumer who participate in the economy. The questions were clustered in two main categories across seven financial knowledge domains.

Categories to measure financial literacy knowledge

The two categories measured households' knowledge on:

- Financial Calculation.
- Financial Reasoning.

Domains that measure financial literacy knowledge

The seven domains from where the two categories were composed are:

- Numeracy.
- Simple interest.
- Compound interest.
- Consumer price inflation.
- Portfolio diversification.
- Risk probability.
- Risk diversification.

To be classified as financially literate, at least ten of the eleven questions had to be answered correctly. This may be viewed either as a relaxed or strict criterion. Relaxed, as a person should get all the questions right to be judged as financially literate. Strict, as more than just one wrong answer will result in a financially not literate classification. Refer to Appendix A1 for two examples of financial literacy questions asked to the financial knowledgeable person.

The rationale for the more conservative criterion stems from research which indicated it is more harmful to think you are good at finances when you are not – as overestimating your own knowledge can lead to wrong decisions, which could have long-term detrimental financial consequences for the household.

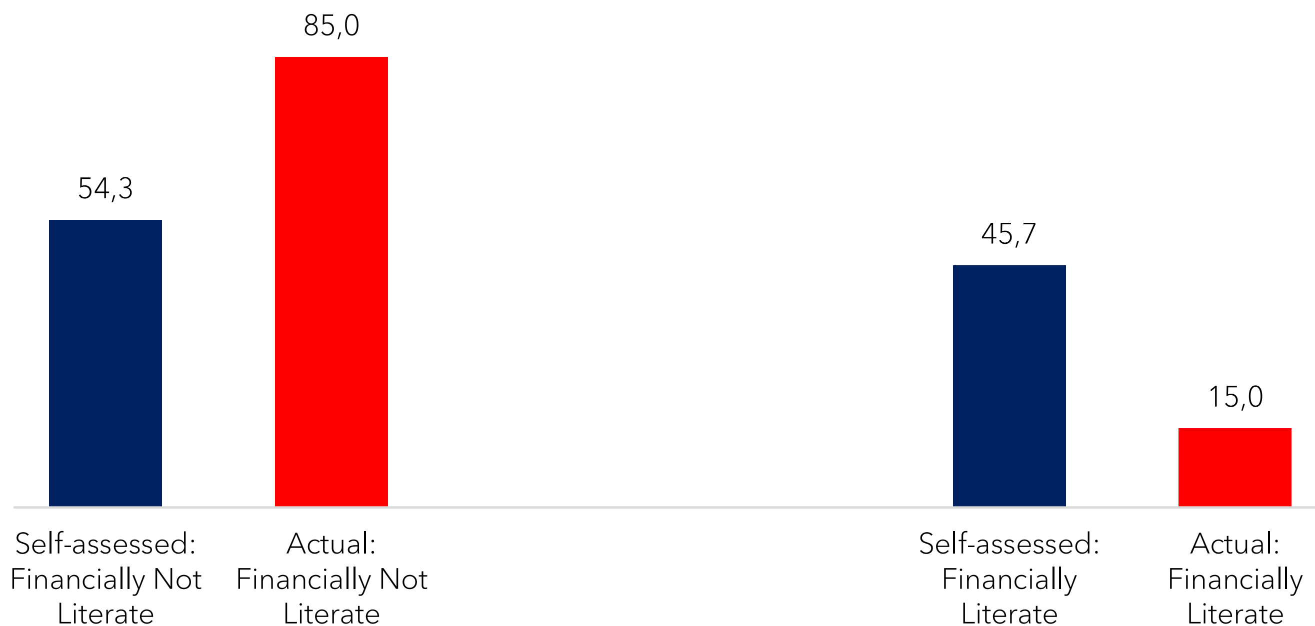
The state of financial literacy in South Africa

Following the above methodology, the level of financial literacy among South African households was calculated. The results indicated South African households in general overestimate their knowledge of personal financial matters.

Self-assessed financial literacy versus actual financial literacy

Whereas 45.7% of the 19.2 million households deemed themselves to be financially literate, only 15% was actually financially literate (see chart 3 below).

Chart 3: Actual financial literacy and self-assessed financial literacy



Source: Momentum/Unisa Household Finance Survey, 2023

The magnitude of the financial literacy challenge South Africa faces is evident from the inverse of the numbers:

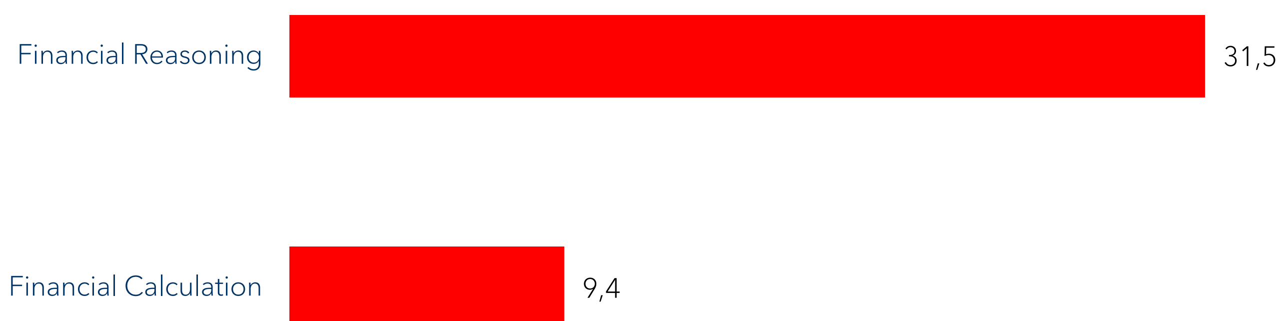
- Most households (54.3%) know (self-assessment) they are financially not literate – a charge against our education system.
- But as an even larger 85% are actually financially not literate, it points to a much bigger problem as financially harmful decisions may flow from a belief of possessing financial knowledge which actually do not exist – and when the damage is done the household may not understand why it happened.

The results, however, contradict that of the Financial Sector Conduct Authority's (FSCA) 2020 baseline assessment which indicated households tend to underrate their level of financial knowledge compared to their actual knowledge. It is possible for this discrepancy to stem from this research's stricter criteria (to be measured as financially literate). However, although stricter than the norm, the risk of being overconfident can be extremely harmful.

In terms of the two financial literacy categories, households tested more financially literate in terms of financial reasoning than on financial calculations – although the results were poor for both categories as indicated by chart 4.

- Only 9.4% of all households tested financially literate on financial calculations (meaning 90.6% could not master basic financial calculations).
- A higher 31.5% tested financially literate on financial reasoning (but 68.5% was not able to correctly answer the reasoning questions).

Chart 4: Percentage of financially literate households by category

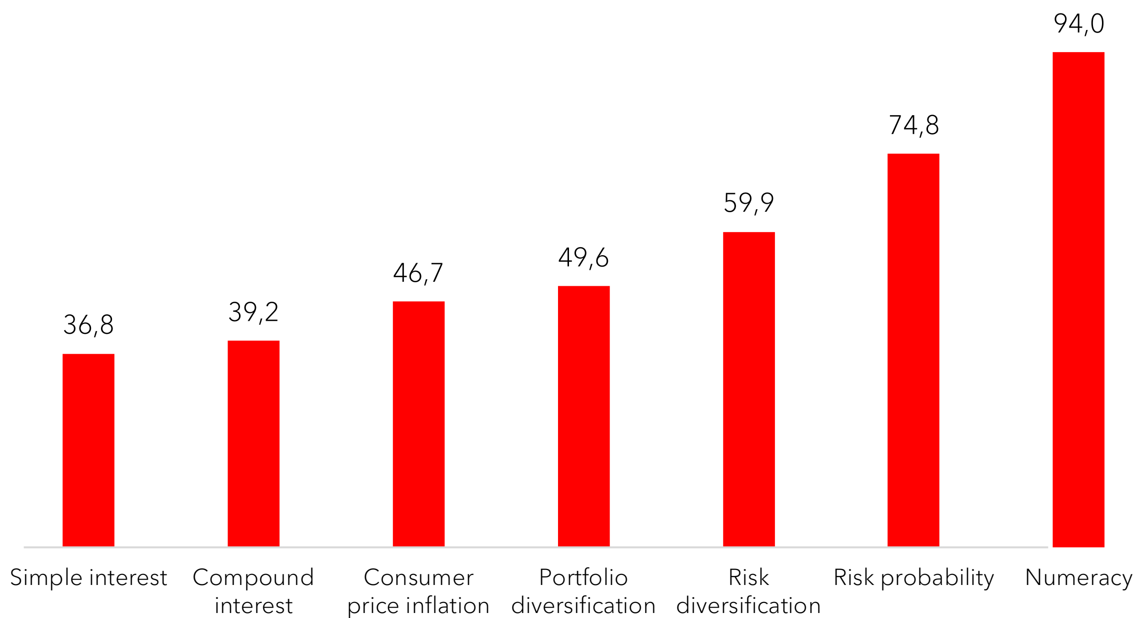


Source: Momentum/Unisa Household Finance Survey, 2023

As households struggled more on financial calculations, analysis was performed to determine where the biggest challenge is. Households' biggest struggle is to calculate interest (and percentages), whether it be interest earned on saving/investments or interest paid on money borrowed.

Chart 5 shows that less than 40% were able to correctly answer questions on interest calculations (on borrowing and saving/investment), while less than 50% was literate on the impact of consumer price inflation and the value of portfolio diversification. Despite 94% answering a simple numeracy question correct (1 000 ÷ 5), it is concerning that more than a million households got the answer wrong.

Chart 5: Percentage of financially literates by knowledge domain



Source: Momentum/Unisa Household Finance Survey, 2023

Saving towards retirement

Another issue households are struggling with is the lack of guidance on how much of their income/resources they should allocate to different types of outlays, such as saving for retirement, repayment of debt, contributions to insurance, etc.

For instance, both financially literate and financially not literate households portrayed a broad understanding of the concept of saving for retirement. Both, however, lacked detail on when (what age) they should start saving for retirement; and how much of their income they should allocate towards retirement provision.

As indicated by table 5, most households know they should start saving for retirement early in their life (almost 70% indicated before the age of 30 years), but the variability in how much they should save (percentage of their income) indicate a lack of knowledge on a more detailed level.

Table 5: Households' view of when and how much of income should be saved towards retirement (% of households)

% of income → Age ↓	0-10%	11-20%	21-30%	31%+	Total
≤ 20 years	4.1	5.3	3.4	3.7	**16.5**
20-24	9.1	8.4	4.9	5.1	**27.5**
25-29	9.0	8.2	3.9	4.7	**25.8**
30-34	4.5	4.2	3.0	3.1	**14.8**
35+	4.1	3.8	3.3	4.2	**15.4**
Total	**30.8**	**30.0**	**18.5**	**20.6**	**100.0**

Source: Momentum/Unisa Household Finance Survey, 2023

The research uncovered some of the reasons for the lack of detailed knowledge. First, it is not readily available in the public domain, and as such it should be sourced from knowledgeable resources. However, 87% of all households indicated they are relying on their own knowledge, online resources, or family and friends when making financial decisions. Only 10% of all households indicated they consult with knowledgeable professionals for financial advice.

The research results on the state of financial literacy in South Africa can be summarised as follow:

- Although most households know what is right and wrong, this knowledge is mostly limited to a very high level.
- Their challenge is on the detail level, such as to know how to make financial calculations, understand the meaning thereof, where to source not readily information, and to make decisions informed by the calculations and knowledgeable sources.
- On financial calculations, households experience difficulty with calculating interest, whether it be on investments, or borrowing money. This compromises their ability to make comparisons when confronted with multiple options.
- Not knowing the detail means households overestimate their own financial literacy skills. Whereas 45.7% think they are financially literate, only 15% was measured as financially literate.
- Although most households possess a skill in one or two financial literacy domains, they do not have a widespread knowledge across the foundational or basic financial literacy domains.

Who are the financially literate?

Demographic analyses of the 15% of households who are actually financially literate revealed that South Africa's financial literacy challenge is widespread and not contained to certain groups – although some groups are a bit more financially literate than others. It also contradicted some beliefs and assumptions on who is supposed to be financially literate or not.

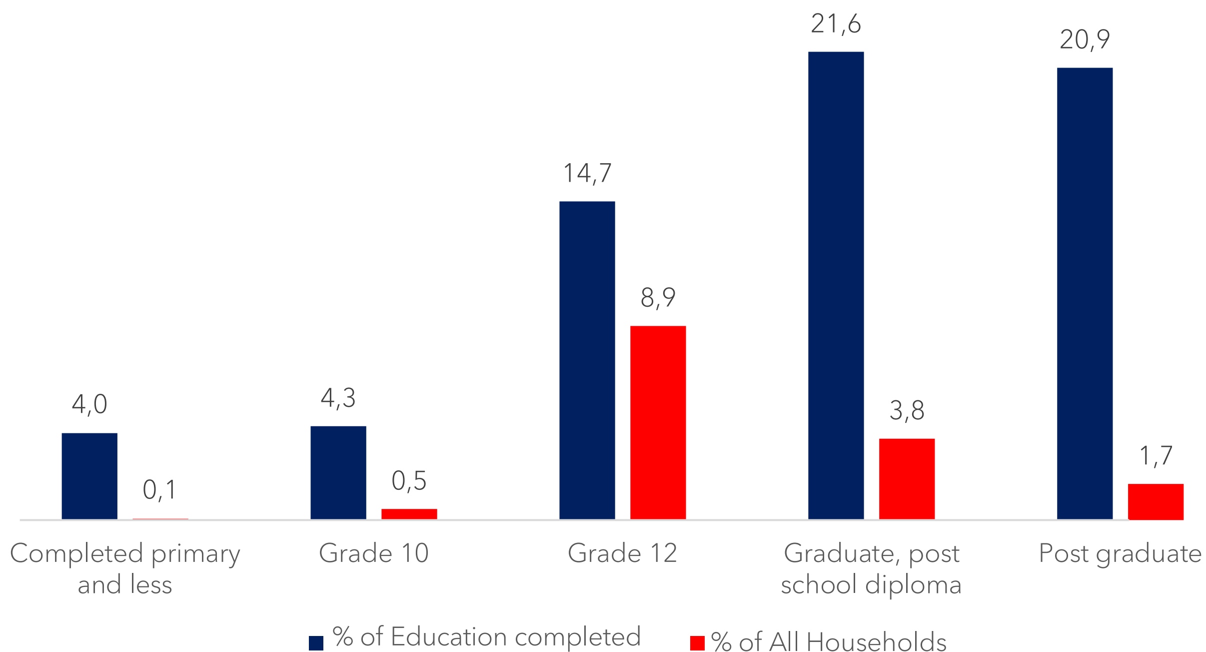
Education status

- Analysis of financial literacy according to education status (see chart 6) indicated that – similar to other national and international assessments – the percentage of financially literate households increases as their level of education increases.
    - However, a high level of education does not automatically guarantee financial literacy of a person or household. The chart shows just more than 20% of graduates and post-graduates are financially literate.
    - Most financially literates' highest qualification is grade 12 (almost 60% of the 15% households who are financially literate).

The low level of financial literacy among graduates (more highly educated) seems counter-intuitive. However, the FSCA's survey shed some light on the reasons behind the low financial literacy level. One reason emanating from the FSCA's survey is that almost 50% of graduates indicated they don't enjoy

dealing with financial matters. Although this may be true for all education levels, it nevertheless provided some indication for the relatively low financial literacy rate of graduates.

Chart 6: Percentage of financially literate according to education status



Source: Momentum/Unisa Household Finance Survey, 2023

Age group

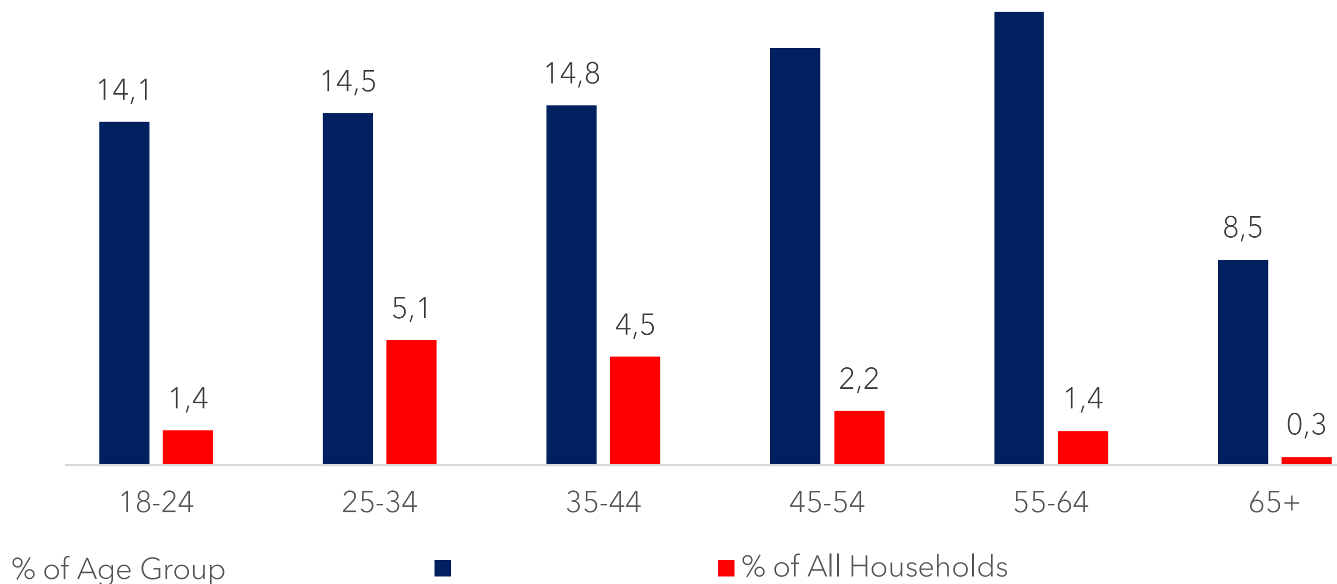
- Analysis of financial literacy according to age group confirmed the traditional "hump-shape" (as per Lusardi, Mitchell and Curto, 2014), where the youngest and oldest age-groups were the least financially literate.
    - Chart 7 shows just more than 14% of the 18 to 34-year age groups tested financially literate, whereas it is more than 18% for the 55 to 64-year age group, before declining to around 8%for the 65-year and above group.
    - In terms of all households, most of the financially literate are in the 25 to 34-year and 35 to 44-year age groups.

The reasons for the "hump-shape" are well-researched globally. The challenge for younger adults is that they are in a transition phase from being cared for to becoming financially independent. This gradual withdrawal from parental control and influence requires young adults to become financially literate as soon as possible to help them navigate the complex financial sector. However, this is a complicated task as they likely did not have previous exposure to financial products and financial decision-making – partly because these are not compulsory school subjects. Furthermore, young adults wanting to borrow money to purchase a car or home do not have credit scores that will allow them access to "affordable" and "formal" lending institutions.

On the other end of the spectrum, the decline in financial literacy beyond a certain age has been reported by numerous researchers. One such example is the international comparison conducted by the OECD/INFE in 2020, using data from a sample of 125,787 adults across multiple economies worldwide.

This highlighted that older adults (60+ years) were less financially literate compared to several age groups. This phenomenon can be attributed to a possible decline in the cognitive functions due to ageing, but also to changing and more complex financial markets and products compared to those they grew up with. This emphasises that the requirement to become and remain financially literate is never ending – a dynamic challenge that requires many stakeholders and a concerted effort.

Chart 7: Percentage of financially literate according to age group



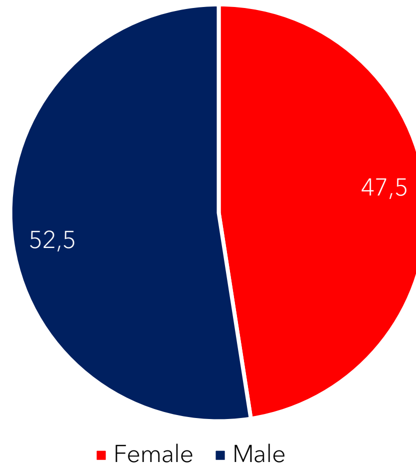
Source: Momentum/Unisa Household Finance Survey, 2023

Gender

- The analysis (see chart 8) shows more males (17.5%) than females (12.9%) are financially literate. This is not surprising as more males than females are generally interested in, and studying in numeracy fields such as engineering, mathematics, and statistics.
- Males therefore comprised 52.5% of all the financially literate households.
- Females struggled more with the calculation category (comprised only 35.7% of everyone who was literate with calculations).
- However, females were better in financial reasoning (57.9% of all who was literate in terms of financial reasoning).

This knowledge gap between males and females remains a key policy priority area across many countries as the results presented here is not limited to South Africa. Many studies reported this knowledge gap can be attributed to many women's late or no entry to the employment sector. Patriarchal systems are still prevailing in many cultures, contributing to women's lack of confidence in taking ownership of their own financial journey.

Chart 8: Percentage of financially literate by gender group

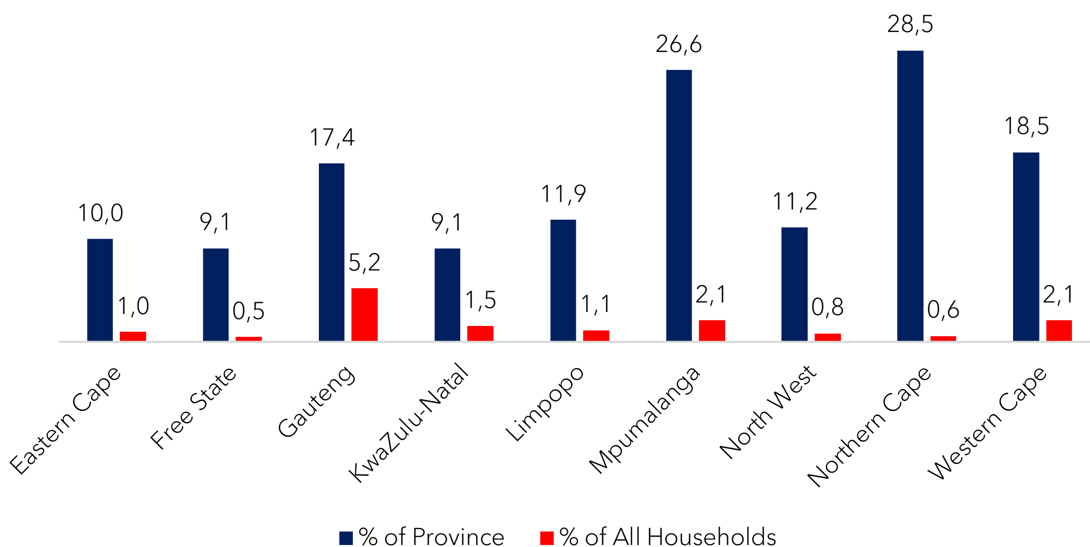


Source: Momentum/Unisa Household Finance Survey, 2023

Province

- Financial literacy according to province revealed the Northern Cape and Mpumalanga as the two provinces whose populations were comparatively more financially literate (see chart 9).
- However, most financially literates lived in Gauteng. This is because Gauteng is the most populous province in South Africa and the economic hub of the country, requiring more people to be financially literate.

Chart 9: Percentage of financially literate by province



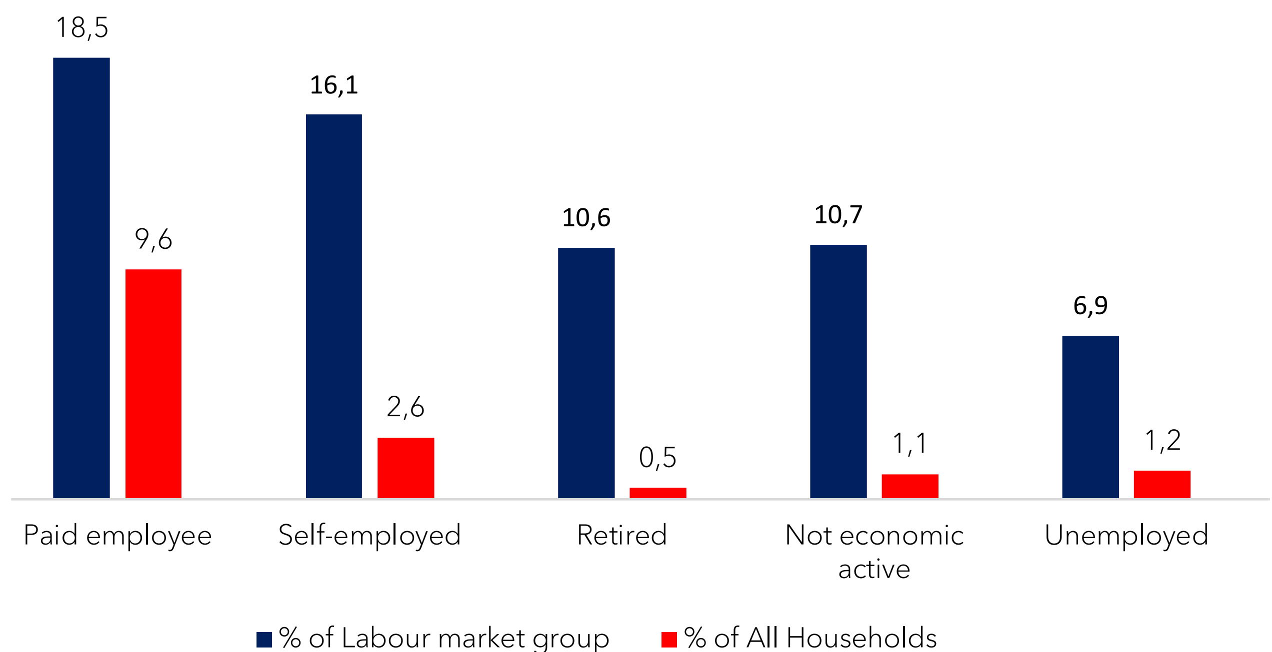
Source: Momentum/Unisa Household Finance Survey, 2023

Employed

- The employed are not necessarily financially literate. Just more than 18% of paid employees were financially literate and just about 16% of the self-employed (see chart 10).
- Nevertheless, of all the financially literate almost 66% were paid employees.

While employment can provide individuals with a source of income, it does not automatically mean they possess the relevant financial skills, behaviour, knowledge of financial products, and spending habits necessary to make informed financial decisions and manage their finances to accumulate wealth.

Chart 10: Percentage of financially literate according to labour market status



Source: Momentum/Unisa Household Finance Survey, 2023

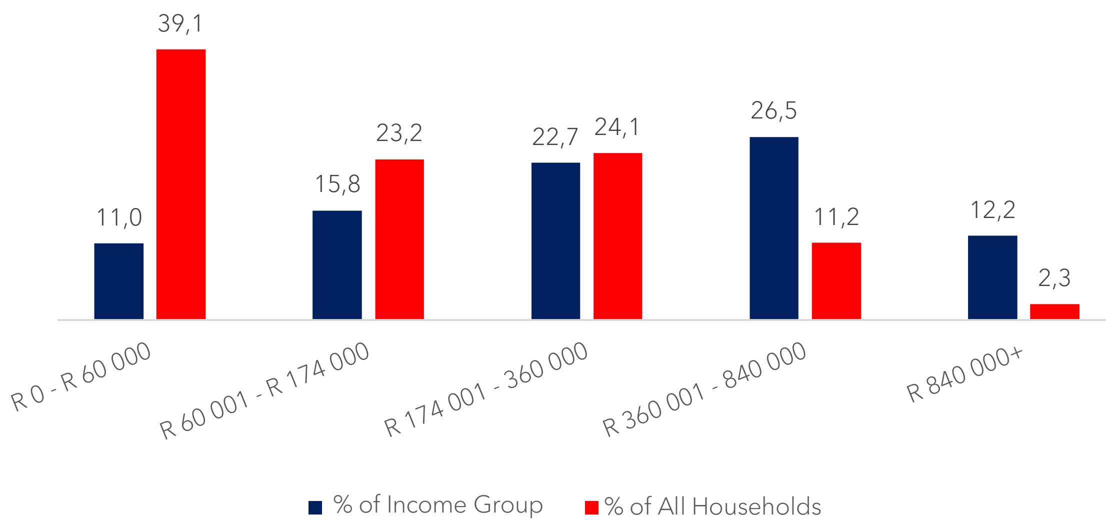
Income group

- As was the case with a good education and paid employees, earning a good or high income does not automatically translate into meaning a person is financially literate. Most financially literates are in the income group earning up to R60 000 per year (see chart 11).
- And, although the percentage of financially literate households in an income group increases as the income increase, this does not apply to all high-income groups. The chart indicates just more than 10%of households in the R840 000+ per year income group were actually financially literate.

Many research studies busted the myth that high-income earners are financially literate. These studies confirmed that many high-income earners are more indebted, bad at managing their finances and often guilty of instant gratification (because they think they can afford it). Unfortunately, South African legislation is not supportive of the high-income earners and also assumes they are financially literate. The GN500 Guidance Note on the Measurement of the Consumer Education Element of Broad-Based Black Economic Empowerment prescribes the target market for financial education as LSM 1 – 8 (individuals with an annual income of less than R250 000).

However, given South Africa's high income inequality level, the financial "mistakes" of the high-income households are very damaging to society as many are expected to support other households, while they also pay the majority of income taxes. Therefore, the legislation must be reconsidered to ensure that all target groups can benefit from financial education, regardless of income group.

Chart 11: Percentage of financially literate by income group



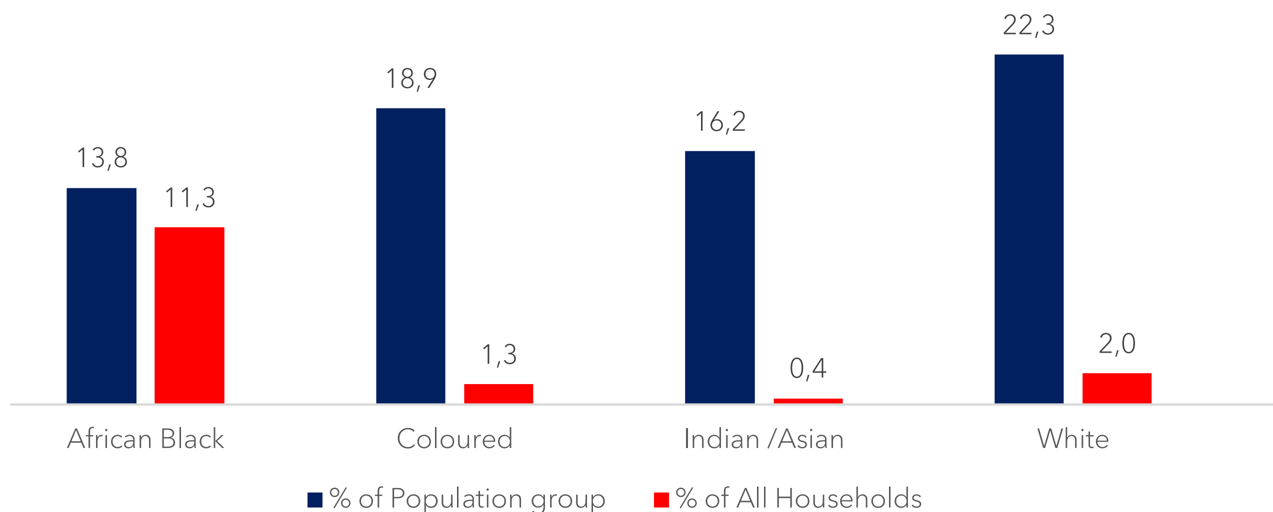
Source: Momentum/Unisa Household Finance Survey, 2023

Population group

As indicated by chart 12:

- Most financially literate households (11.3% of all households) are Black African.
- The White population group was most financially literate (22.3%), albeit still low.

Chart 12: Percentage of financially literate households by population group



Source: Momentum/Unisa Household Finance Survey, 2023

In conclusion, the analyses on the state of the financially literate households and how they are distributed among demographic groups revealed that a relatively small percentage of households could truly be considered as financially literate, while no one group dominated in terms of being financially literate.

This means the lack of financial literacy is widespread across all demographic groups, prevalent in both financial literacy categories (calculation and reasoning) and in almost all financial literacy domains.

The next section will focus on whether the skill of financial literacy made a difference, meaning whether it actually benefitted households' financial health.

Assessing the effect of financial literacy on household financial outcomes

Research in the field of financial literacy, especially over the last decade, measured the role of financial literacy across several outcomes. It revealed several positive outcomes can be achieved via financial literacy. According to Goyal and Kumar (2021) financial literacy positively contributes to wealth accumulation, retirement planning, home ownership, borrowing decisions, investment decisions, financial inclusion, and many other outcomes.

Whether the same holds true for South Africa or not, an exercise was performed to determine whether the financial outcome of the financially literate households was better than that of the financially not literate households.

As explained earlier, the research based its analysis on the five capitals/components of household wellness in this report. The Science of Financial Success (evolved from the Theory of Change, see Appendix A3) as explained in past reports, was used as basis for this analysis. In broad terms, it postulates that:

- households can combine their two embedded inputs, namely their ability to take control and level of education,
- to achieve the output of earning an income,
- and then using the income in combination with financial activities to accumulate wealth.

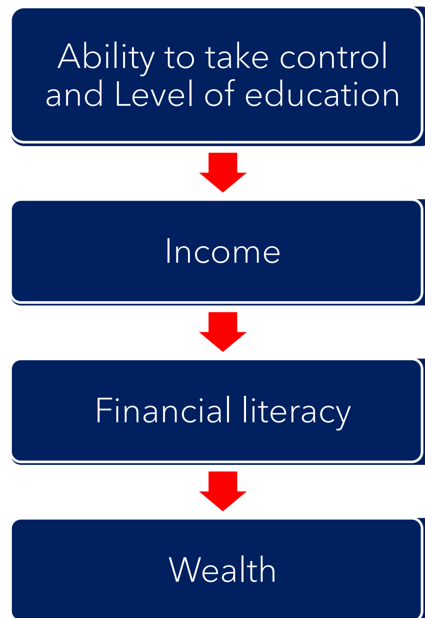
The Science of Financial Success was expanded for this particular analysis:

- The expanded process is still for the two input components to impact the income earned.
- However, the income earned is then complemented by the level of financial literacy.

This means households apply their level of financial literacy to accumulate wealth from the income they earn (see exhibit 1).

In summary, the theory tested suggests that financially literate households should achieve a better outcome in the form of wealth accumulation compared to financially not literate households.

Exhibit 1: Phase 1 - The role of financial literacy in the financial wellness pathway



Given the above process:

- The first exercise entailed the formation of two groups (comprising more than 80% of all households) based on their two input capitals, namely their ability to take control and level of education.
- The first group has a high ability to take control and a high level of education (H&H).
- The second group consisted of households with a low ability to take control and a low level of education (L&L).
- Both groups were then divided into financially literate and financially not literate groups.
- Their income and wealth scores obtained from the financial wellness exercise, as well as the main wealth ratios, were calculated for comparison purposes. It is visually illustrated in exhibit 2:

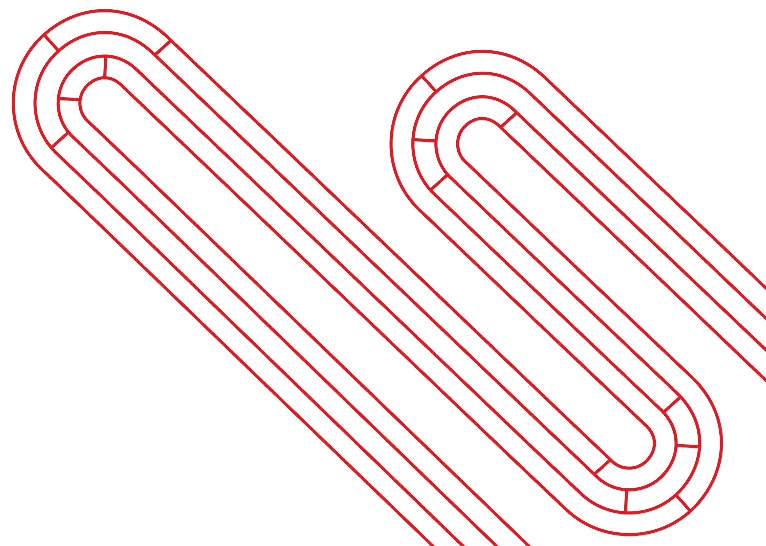
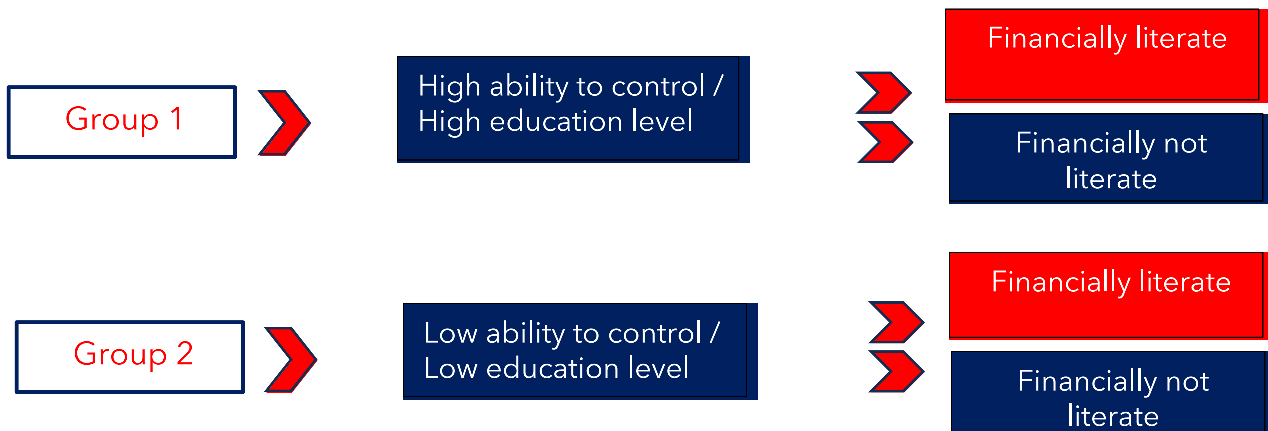


Exhibit 2: Phase 2 - The role of financial literacy in the financial wellness pathway



Requirements for the theory to hold: financial literacy should improve financial outcomes

The following is required for the theory to hold in order to confirm that financial literacy should improve financial outcomes:

- The H&H group's income and wealth scores should be higher than that of the L&L group.
- The financially literate in both the H&H and L&L groups should perform better than the financially not literate, meaning they applied their financial literacy skills to convert their income into higher wealth levels than the financially not literate.
- Their wealth ratios should be higher than that of the financially not literate groups.

Summarised results

The results are indicated in tables 6 and 7 – and confirms the theory:

- The **income scores** of both H&H groups (a score of 9 and above) are higher than that of the L&L groups (ranging from 4.4 to 5.3), showing the value of a high ability to take control and high level of education.

- The **wealth scores** of the H&H groups (8.5 and 8.8) were much higher than that of the L&L groups (5.3 and 4.4).

- When distinguishing between the financially literate and financially not literate in the H&H group, the financially literate have a much better outcome as their **assets and wealth-to-income ratios** outperformed that of the financially not literate group by far. For instance, their wealth-to-income-ratio of 537.3% was much higher than the 372.1% of the financially not literate group.

- A similar result occurred in the L&L group, where the **wealth-to-income-ratio** of the financially literate group of 310.4% exceeded the 266.3% of the financially not literate group.

Table6: Impactoffinancialliteracyon financial outcomes – households with a high ability to take control and high level of education

Input components: High ability to take control & High education (H&H)		
Number of Households	355 020	
	Financially Literate	Financially Not Literate
Number of Households	72 881	282 139
Output: Income score	9.0	9.7
Output: Wealth score	8.5	8.8
Assets to Income ratio	592.5	422.5
Debt to Income ratio	55.1	50.4
Wealth to Income ratio	537.3	372.1

Source: Momentum/Unisa Household Finance Survey, 2023

Table7:Impactoffinancial literacy on financial outcomes – households with a low ability to take control and low level of education

Input components: Low ability to take control & Low education (L&L)		
Number of Households	15 447 580	
	Financially Literate	Financially Not Literate
Number of Households	2 040 024	13 407 556
Output: Income score	5.3	4.4
Output: Wealth score	5.3	4.9
Assets to Income ratio	374.2	316.3
Debt to Income ratio	63.8	50.0
Wealth to Income ratio	310.4	266.3

Source: Momentum/Unisa Household Finance Survey, 2023

The analysis suggests financial literacy as a particular skill can improve the financial health of a household. Put differently, although a high level to take control and high level of education increase the level of income earned, the skill of financial literacy then assists households to better convert their income into higher wealth levels.

The results of the above analysis confirmed international research (Lusardi, Michaud and Mitchell, 2017) findings that closing the financial literacy gap can reduce wealth inequality. As such, improving financial literacy can reduce wealth inequality in South Africa.

This section validated the theory that financial literacy enabled households to, via more informed decisions, make better use of their income to accumulate assets and wealth.

However, further analysis is needed to determine whether the financially literate performed better at achieving financial success. This is the topic of the next section.

The effect of financial literacy on achieving financial goals

In previous research financial success was defined as achieving short-term targets in pursuit of long-term goals. To understand this better, households had to answer questions on 27 specific financial goals. This included whether they had set a particular goal, whether they had short-term targets and action plans in place in pursuit of these goals and whether they were on track to achieve the goal.

The answers of the financially literate and financially not literate was compared to ascertain whether the financially literate was better at goal setting and pursuing these goals via action plans (financial activities to be performed). This is important as research on goal setting also indicated that being financially literate does not automatically mean they will set goals, and compile action plans to pursue goals. Setting financial goals and the reasons for doing so/not doing so is a science field on its own (see Appendix A2 for more information).

The analysis produced interesting but not unsurprising results. As expected, some households did not explicitly set a goal (they did not view something as a goal, such as saving for a holiday) but had an action plan in place to pursue the goal. In addition, some households did set a specific goal, but did not have action plans in place (did not view something as part of an action plan – such as a debit order to pay for insurance) in pursuit of the goal, though they were on track to achieve the goal.

Summarised results

The following is a summary of the results confirming that the financially literate performed better at achieving financial success (as indicated in table 8):

- The financially literate in general were better at goal-setting, having action plans in place and being on track to achieve the goal. This was the case in 19 of the 27 goals.
- Analyses confirmed the previous finding that the financially literate were better at calculating interest/returns on saving/investment. For almost all the saving/investment goals (except for saving for emergencies), a much higher percentage of the financially literate (compared to the financially not literate who set the goal), had an action plan in place to pursue the goal and being on track to achieve the goal. This also explains why the assets-to-income ratio and wealth-to-income-ratio of the financially literate were much higher than that of the financially not literate.
- The financially literate had a much higher uptake in the setting and pursuit of long-term, short-term and health insurance goals. This was the case for all types of insurance, except for cell phones.
- The financially literate were also much more inclined to have estate and tax planning as goals compared to the financially not literate.
- Another observation from the results is in accordance with "Freakonomics research" conducted by Sudhir Venkatesh, namely that the financially not literate:
    - are overstating having a financial action plan for a variety of reasons, such as although it is not clear to many what a financial plan is, as it seems desirable to have a financial plan.
    - are not able to accurately calculate whether they actually have sufficient income to cover their outlays.
    - will, due to their relative inability to engage in the correct financial activities aimed at optimising their asset values and wealth, remain locked in a financially less favourable position.

Table 8: Financial literacy and goal setting, planning and goal achievement

Goal	Financially Literate			Financially Not Literate		
	% Households with GOAL	% Households with ACTION PLAN	% Households ON TRACK with goal	% Households with GOAL	% Households with ACTION PLAN	% Households ON TRACK with goal
FINANCIAL MANAGEMENT						
Having a financial plan	33.1	14.9	9.9	34.9	14.3	9.8
Having sufficient income	27.1	21.0	9.7	30.4	22.5	10.5
Managing expenses	19.3	16.0	6.8	21.5	16.2	8.3
SAVING AND INVESTMENT						
Saving for retirement	29.6	16.8	13.5	21.6	15.7	8.3
Saving to fund my children's or my own education	26.6	21.4	12.5	19.7	13.3	6.4
Investing for wealth creation	16.6	17.7	3.9	13.4	10.6	3.6
Saving or investing to leave a legacy/inheritance	15.5	9.1	5.0	12.6	5.6	4.2
Saving for emergencies	25.7	8.7	8.1	22.7	7.5	8.8
Saving for a holiday	13.6	13.3	4.6	12.2	14.7	3.5
Saving for home improvements	19.4	8.0	6.2	17.6	7.2	5.8
Saving for a car	8.6	11.5	1.4	6.0	10.5	1.2
DEBT REDUCTION						
Repaying a home loan	7.3	5.2	2.5	3.9	2.1	2.0
Repaying a car loan	3.1	4.7	1.7	2.9	2.9	1.9
Repaying short-term debt	3.3	3.1	1.3	3.7	2.5	2.1
INSURANCE / RISK MANAGEMENT						
Having adequate life insurance	8.9	2.5	4.1	5.7	2.8	3.2
Having adequate disability insurance cover	3.7	6.9	1.6	3.4	4.5	1.2
Having adequate critical illness cover	4.0	2.7	2.0	3.5	2.3	1.1
Having adequate funeral insurance cover	7.5	3.2	4.6	6.2	1.8	3.9
Having adequate short-term insurance should anything happen to my car (accident or stolen)	6.2	6.7	3.4	3.5	4.9	1.8
Having enough short-term insurance should my household items be stolen/house damaged	4.2	5.5	2.9	3.8	2.4	1.7
Having insurance should I lose my cell phone	3.3	2.8	0.7	1.9	2.6	0.7
Having adequate medical aid cover	10.8	1.5	3.9	6.7	1.5	3.3
ESTATE PLANNING						
To optimise my wealth through effective estate planning and minimisation of estate duty	8.0	7.6	2.7	2.6	4.6	0.8
TAX PLANNING						
To optimise my tax planning opportunities	4.0	4.8	1.0	2.2	1.5	0.6
Owning my own house	22.1	2.0	5.4	20.6	1.5	6.9
DURABLE GOODS ACCUMULATION						
Owning my own car	19.7	13.6	6.1	14.8	11.5	5.3
Owning appliances, like a fridge or television	8.9	11.4	3.2	8.4	8.3	4.8

Source: Momentum/Unisa Household Finance Survey, 2023

****Grey-scaled goals where the percentage financially not literate exceeded the financially literate in being on track to achieve the goal.***

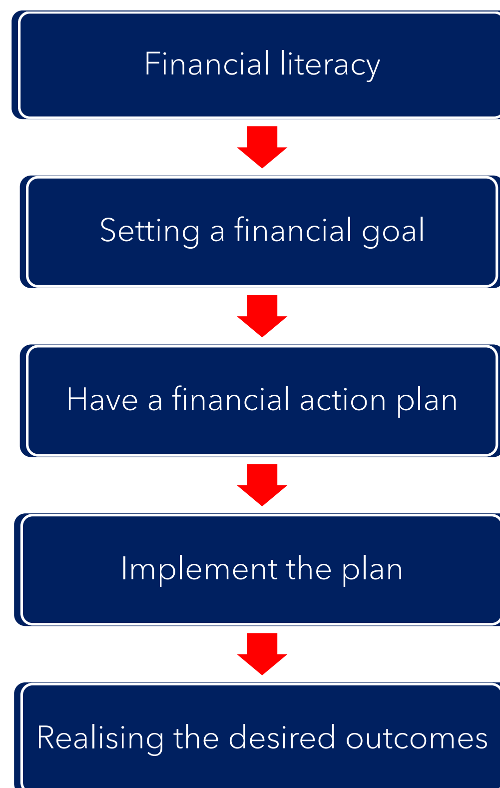
Given the research results on the impact of financial literacy on financial outcomes and achieving financial success, additional testing was performed to determine whether an optimum pathway for achieving better financial outcomes could be constructed. This will be discussed in the next section.

Using machine learning to construct a pathway for good outcomes

Machine learning as an instrument to obtain faster and clearer results from an abundance of data is becoming more popular by the day. Given the vast amount of information from the survey, the benefits of machine learning (in combination with statistical modelling) were harnessed to ascertain whether financial literacy can assist in a pathway for households to achieve better financial outcomes.

By means of machine learning modelling (K-Means Clustering) the impact path from financial literacy to formulating a financial goal, to having a financial action plan, to implementing such a plan through dedicated activities, to realising higher outputs (incomes, asset values, wealth, and financial wellness) was determined. The theorised pathway is illustrated in exhibit 3 below:

Exhibit 3: The role of financial literacy in achieving desired financial outcomes



Summarised results

The results of the analysis indicated that financial literacy is very strongly co-integrated (variables possess and are driven by the same underlying elements) with having financial plans, implementing such plans, and realising positive outputs in the form of higher incomes, asset values and wealth – confirming the previous research results.

However, a different picture emerged when households' ability to take control and level of education were added to the pathway. The results revealed that although a high ability to take control and high level of education (H&H) did not hinder the co-integration prevalent in the mentioned pathway, the level of co-integration of financial literacy with the said path weakened. This is because the ability to take control and level of education are also co-integrated with the said path from formulating a financial plan to realising higher outputs.

This suggests the optimal way to ensure better financial outcomes are via:

- Being financially literate; in conjunction with
- Possessing a high ability to take control and high level of education; while also
- Having financial plans in place and actively implementing such plans.

In support of this finding, the machine learning modelling process also identified two (negative) opposing and co-integrated clusters, namely:

- Cluster 1: Low financial literacy, low financial planning, low activities in support of the said financial plan, low personal incomes, low asset values, low wealth, and low financial wellness.
- Cluster 2: High financial literacy, high financial planning, high activities in support of the said financial plan, high personal incomes, high asset values, high net wealth and high financial wellness.

The modelling implications for the financially not literate households are:

- Should households not possess a high ability to take control and high level of education, they may experience a strong and immediate payoff with respect to improved financial planning, implementing activities, and realising better financial outcomes if they acquire the skill of financial literacy.
- It became clear that especially lower income households with a low ability to take control and low level of education can gain immensely from financial literacy skills development – as it will assist them with conducting financial planning and engaging in the required financial activities to realise better financial outcomes.

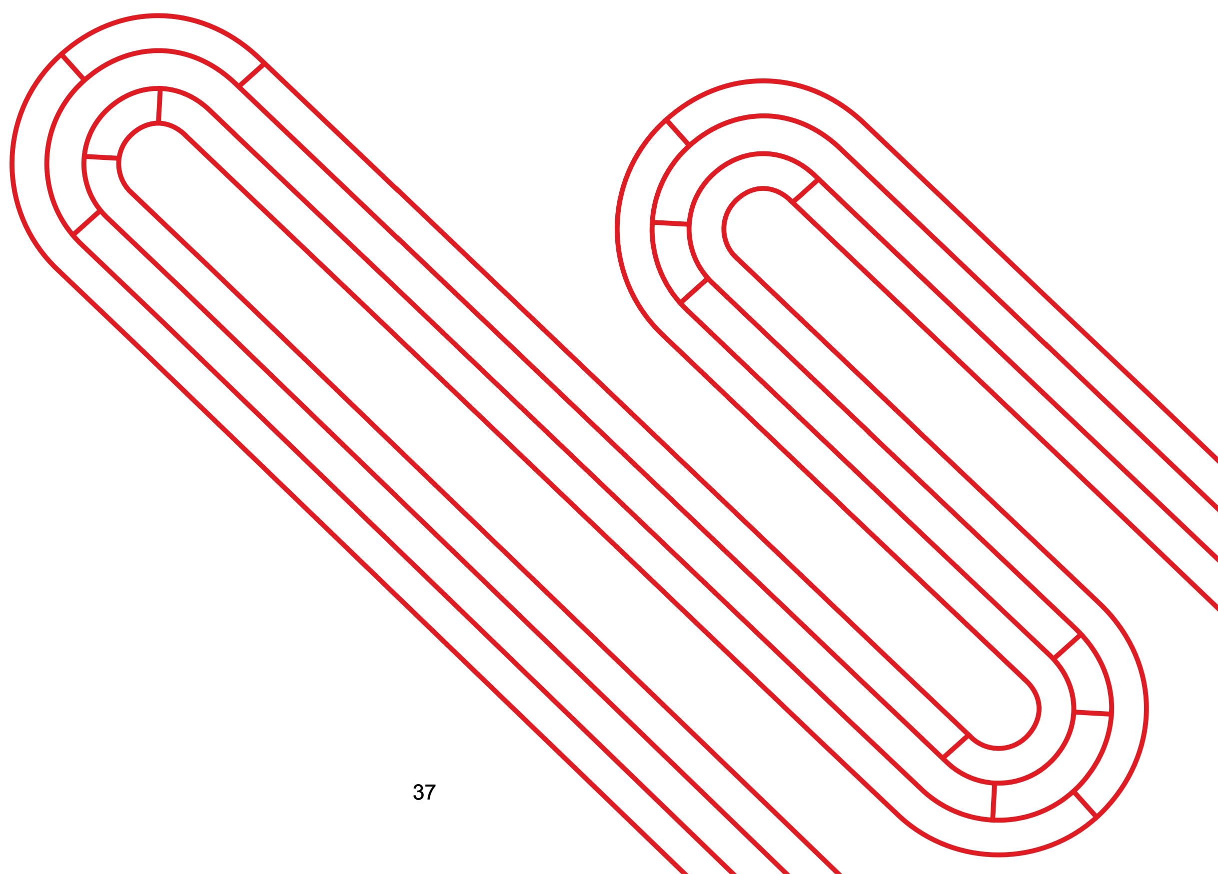
Summary of research findings

- South African households experienced a tough economic environment in 2022 within which they had to manage their finances.
- Overall, the state of households' financial health, as measured via the Financial Wellness Index, increased to 68 points from 67.6 points in 2021. However, it was still lower than the high point achieved in 2018.
- Two of the five indicators used to measure household wellness deteriorated (ability to take control and income), while the other three improved (education status, wealth and living conditions).
- Although an improvement occurred in overall household financial wellness, distributional analysis indicated many households were worse-off. The number of financially distressed households more than doubled from 2.1% of all households in 2021 to 4.9% in 2022. This was mostly due to the negative effect of high consumer price inflation, strong rising interest rates, and moderate salary increases.
- On the other extreme, the number of financially well households increased to 12.1% from 10.4% in 2021. They benefitted from diversified income sources and investment portfolios, which contributed to them being more resilient in a tough environment.
- The theme of the research was to determine whether the skill of financial literacy contributed to better financial health. To determine this, eleven questions were asked, clustered in two main categories (financial calculations and financial reasoning) covering seven domains (numeracy, simple interest, compound interest, consumer price inflation, portfolio diversification, risk probability and risk diversification).

- The number of actual financially literate households was much lower than households' own assessment of their financial literacy. Only 15% were measured to be actually financially literate, while 45.7% deemed themselves to be financially literate.
- Most households (54.3%) know (self-assessment) they are financially not literate, which is a charge against our education system.
- As an even larger 85% are actually financially not literate, it points to a much bigger problem as financially harmful situations may occur from a belief of possessing the correct financial knowledge to make correct financial decisions.
- Only 9.4% of all households tested financially literate on financial calculations (meaning 90.6% could not master basic financial calculations).
- A higher 31.5% tested financially literate on financial reasoning (but 68.5% was not able to correctly answer the reasoning questions).
- Households' biggest struggle in terms of financial calculations was to calculate interest and returns, whether it be interest paid on borrowing or returns earned on saving/investments.
- Less than 40% of households were able to correctly answer questions on interest calculations (on borrowing and saving/investment), while less than 50% was literate on the impact of consumer price inflation and the value of portfolio diversification.
- Although most households know what is right and wrong, this knowledge is mostly limited to a very high level, meaning they struggle at the detail level preventing them to make well informed financial decisions.
- A high education level does not automatically mean a person is financially literate. Just more than 20% of graduates and post-graduates are financially literate.
- The youth and eldest are the least financially literate compared to other age groups. Just more than 14% of the 18 to 34-year age groups tested financially literate, increasing to more than 18% for the 55 to 64-year age group, before declining to around 8% for the 65-year and above age group.
- More males (17.5% of all males) than females (12.9% of all females) tested financially literate. Males were much better with financial calculations, while females just outperformed on financial reasoning.
- The populations of the Northern Cape and Mpumalanga were comparatively more financially literate than other provinces, although the most financially literates lived in Gauteng.
- Being employed does not guarantee being financially literate. Just more than 18% of paid employees were financially literate, while the percentage for the self-employed was around 16%.
- Earning a high income also does not automatically mean high financial literacy. Just more than 10% of households in the R840 000+ per year income group were financially literate. Most financially literate households earned less than R60 000 per year.
- Most financially literate households are Black African (11.3% of all households), while the White population group was most financially literate (22.3%).
- Analysis revealed possessing financial literacy as a skill do improve financial outcomes.
- The lack of financial skills on the detail level (such as calculations to inform better decision-making) is the big difference between a good and sub-optimal financial outcome.
- A comparison between two groups, both with a high level of financial control, high level of education and high income, but one financially literate and the other financially not literate, revealed the financially literate group had a much healthier outcome in the form of higher wealth.

- Similarly, a comparison between two other groups, both with a low level of financial control, low level of education and relatively low income, but one financially literate and the other financially not literate, revealed the financially literate group had a much healthier outcome in the form of higher wealth.
- Financially literate groups used their financial literacy skills to convert their income into higher wealth levels.
- Additional analyses were performed to determine whether financially literate households were better at setting financial goals, implementing financial action plans to achieve the financial goals and still being on track to achieve the goals. The financially literate households overwhelmingly performed better than the financially not literate on the twenty-seven (27) financial goals – ranging from financial management, saving /investment, debt reduction, insurance / risk management, estate planning, tax planning and durable goods accumulation.
- It was also evident that being financially literate does not automatically translate into setting goals and undertaking financial activities to achieve goals.
- Lastly, machine learning and statistical modelling were used to combine the two analyses – the impact of financial literacy on wealth and the impact of financial literacy on goal setting and achievement – to determine if an optimal pathway could be constructed for households to improve their financial outcomes.
- Households with a high level of education; high ability to take control; who are financially literate; and who actively pursue financial action plans to achieve their unique financial goals will achieve better financial outcomes.
- Even households with a low level of control and low education, but who possess a high level of financial literacy may experience a strong and immediate payoff with respect to improved financial planning, implementing activities, and realising better financial outcomes.

In summary, our lives can be so much better if we become financially literate.



Some compound interest calculations:
interest on a savings deposit and the monthly repayment on loans

As seen in the financial literacy assessment, calculating interest, especially compound interest, is one of the biggest challenges for households. Compound interest is the interest that is earned/paid on both the original saving/loan and any accumulated interest from past years.

Albert Einstein described compound interest as the eighth wonder of the world, saying: "Those who understand it, earn it… those who don't pay it."

Given that high or rising interest rates hinders borrowing, makes buying on credit more costly, contributes to saving and investing being more attractive, it is imperative to understand the effect of interest on financial decisions. In fact, it is a key competency every person should have.

On the positive side of compound interest, it is necessary to reiterate how much savers and investors can benefit from the "magic" of compound interest as shown in the following example:

Compound interest: Example 1

Mrs M deposited R15 000 into a fixed term savings account that earned 15% compound interest (per year). She left the investment for ten years so that it can earn compound interest, meaning she has not withdrawn any of the deposit amount (capital) or interest earned over the period. Her initial investment of R15 000 at the end of ten years amounts to R60 683. The following example explains how it can be calculated.

The future value (after ten years) of Mrs M's deposit is calculated as follows:

$FV = A \times (1 + i)^n$

where,
FV = the future value of the deposit
A = the amount saved/deposited
i = the interest rate
n = the number of years the money has been in the deposit.

Note: $(1 + i)^n$ means (1 + i) "to the power of n" in other words the answer of the formula in the brackets will increase exponentially (see table 9). The answer to the calculation is provided below!

$FV = 15000 \times (1 + 15\%)^{10}$
$FV = 15000 \times (1 + 0.15)^{10}$
$FV = 15000 \times (1.15)^{10}$
$FV = 15000 \times (4.045558)$ (Refer to table 9 for an illustration of how this is calculated)
$FV = 60683.37$

Mrs M's saving is worth R60 683.37 after ten years.

The total value of the compound interest earned is R45 683.37.

Table 9: Calculating compound interest

Year 1	1x1.15	=	1.15
Year 2	1.15x1.15	=	1.3225
Year 3	1.3225x1.15	=	1.520875
Year 4	1.520875x1.15	=	1.749006
Year 5	1.749006x1.15	=	2.011357
Year 6	2.011357x1.15	=	2.313061
Year 7	2.323061x1.15	=	2.66002
Year 8	2.66002x1.15	=	3.059023
Year 9	3.059023x1.15	=	3.517876
Year 10	3.517879x1.15	=	4.045558

Table 10 and the explanatory notes (below the table) provide a more detailed explanation of the calculation. It also indicates the interest earned each year, as well as the value of the initial deposit at the end of each year.

Table 10: Interest earned per year and value at the end of each year

Year	Balance at the beginning of the year	Interest earned at 5% per annum	Balance at the end of the year
1	15 000.00	(1) 2 250.00	17 250.00
2	17 250.00	(2) 2 587.50	19 837.50
3	19 837.50	2 975.63	22 813.13
4	22 813.13	3 421.97	26 235.09
5	26 235.09	3 935.26	30 170.36
6	30 170.36	4 525.55	34 695.91
7	34 695.91	5 204.39	39 900.30
8	39 900.30	5 985.04	45 885.34
9	45 885.34	6 882.80	52 768.14
10	52 768.14	7 915.22	60 683.37

1. R15 000 x 15% = R2 250. Thus, the value of the investment at the end of the first year is R17 250 (R15 000 + R2 250).
2. For the second year, the value of the investment at the end of Year 1, R17 250, will be the starting point for the calculating the interest in Year 2 – namely R17 250 x 15% = R2 587.50. Thus, in year 2, R337.50 more interest will be earned compared to year 1 (R2 587.50 – R2 250). This higher interest earned explains the compound interest effect.

Compound interest: Example 2

On the borrowing side, it is important to know the terms of the loan. For instance, whether the interest rate is a monthly or annual rate and whether compound or simple interest will be charged on the loan. A monthly interest rate of, for example 12%, means much more interest will be paid than on an annual interest rate of 15%. The monthly rate can be 144% per year (12 months multiplied by 12%).

The example provides the formula to calculate the monthly repayment on a R15 000 loan with an interest rate (compound) of 15% per year to be repaid in 10 years.

$MP = A \div \{[(1 + i)^n] - 1\} \div [i \times (1 + i)^n]$

where,
MP = monthly payment
A = amount borrowed
i = interest rate
n number of payments

Note: As the loan repayments will be made monthly, we will have to divide the annual interest rate by 12 (12 months in a year) and convert the repayment period to months (multiply the years by 12).

First, we divide the interest rate by 12 = 15% ÷ 12 = 0.0125 Multiplying the years by 12 = 10 years x 12 = 120 payments

The formula looks intimidating, but it is not. We just need to know how to divide and multiply and how to do the order of calculations. In this respect, when doing the calculations, we need to calculate the formula in the brackets first. When there are brackets within brackets, we calculate it inside-out, meaning calculating the formula in the inside brackets first, moving outward.

$MP = 15\,000 \div \{[(1 + 0.0125)^{120}] - 1\} \div [0.0125 \times (1 + 0.0125)^{120}]$
$MP = 15\,000 \div \{[(1.0125)^{120}] - 1\} \div [0.0125 \times (1.0125)^{120}]$
$MP = 15\,000 \div \{[4.44021323] - 1\} \div [0.0125 \times (4.44021323)]$ MP
$= 15\,000 \div (3.44021323 \div 0.055503)$
$MP = 15\,000 \div 61.9828472$
$MP = 242$

Should the interest rate remain the same over the whole period, the monthly repayments will be R242.00. Because we know the monthly repayments, we can calculate the total amount that will be paid over the ten years by multiplying the R242 by 120 months. This is R29 040, almost double the amount initially borrowed.

Knowing the formulas and being able to calculate the effect of compound interest on saving and loan repayments will improve financial literacy immensely and therefore assist in making better financial decisions, increasing the likelihood of a better financial outcome.

Behavioural finance concepts explaining some decisions

We are living in an era of complexity which is bound to overwhelm us with an abundance of information, obligations, options, decisions, stress, influences, and so on. It therefore is not surprising if we struggle to always stay in control of everything.

Against this background, while our behaviour may at times seem to be irrational, research conducted in the field of Behavioural Psychology taught us that our behaviour is more predictable as we may think.

Knowing some of these behavioural concepts (to understand us and others better) and applying it in conjunction with the research findings, can assist us with both more informed and effective financial decision making and avoiding some of the pitfalls when confronted with similar challenges.
Here are some practical lessons from Behavioural Psychology research that can improve financial literacy and contribute to financial success:

Anchoring and Framing:

People tend to rely heavily on the first piece of information they receive (anchoring); and the way information is presented (framing) when making decisions. Marketers, advertisers, and salespersons are very good at this. However, we can use it to our advantage by negotiating with this understanding in mind, and frame financial choices in a way that highlights their benefits. For example, when negotiating a salary or price for a product or service, consider making the first offer. This anchors the negotiation around your initial proposal. When discussing investment options with a financial adviser or researching investments yourself, pay attention to how the options are framed. Are they framed as potential gains or potential losses? Words such as "guaranteed" or "risk-free" are framing techniques that can hide underlying risks if you don't pay attention it.

Loss Aversion:

For most people the fear of making a loss has a stronger impact on decision-making than the potential for gains. This normally occurs in the investment arena where risk-taking forms an integral part of the investment decision. Recognize that this preconceived opinion can lead to avoiding necessary financial risks. But if it is a long-term investment, also focus on the potential gains – and maintain a long-term perspective to counteract loss aversion. Define your long-term financial goals and objectives clearly. When you have a clear sense of what you're working toward, you're less likely to be swayed by the fear of short-term losses. In addition, when diversifying your investments, you reduce the impact of potential losses in any single area.

Herd Behaviour:

Individuals often follow the actions of others, even if those actions don't make logical sense. This is especially true when sudden and strong declines occur in financial markets. Loss aversion kicks in and the "herd" sell the asset, causing declining prices. Be aware of trends and market movements but make decisions based on well-informed research and financial goals rather than simply following the crowd. Seek professional financial advice to provide objective guidance based on your specific financial situation and goals. Financial advisers can help you resist the urge to follow the crowd. Safety in numbers doesn't always apply.

Confirmation Bias:

People tend to seek information that confirms their existing beliefs while ignoring (sometimes correct) information that contradicts them. Counteract this by actively seeking out different perspectives and conducting thorough research before making financial decisions. Let the research guide you, not your will to be right. Actively seek out diverse perspectives and opinions on financial matters. Engage with people who have different financial philosophies and backgrounds to challenge your own views and preconceived opinions.

Present Bias:

People often prioritise immediate gratification over long-term rewards. When some investment promise seems too good to be true, it probably is not true. When something is on sale at a discount, we don't have to buy it if we don't have enough money. Combat this bias of instant gratification by setting up automatic savings and investments, making it easier to save for the future without relying solely on willpower. In most instances a decision of delayed gratification will lead to better financial outcomes. Practice patience when making purchases and consider the long-term impact of your decisions.

Sunk Cost Fallacy:

Lots of people often continue to invest in a project/asset/something because they already invested a lot of money in such project/asset/something. They do so because of some form of "loss aversion", meaning they don't want to "lose" their previous investments – even when it is clear that such continued investment is no longer a wise choice. As such, we should recognise when we are holding onto an investment or expense based solely on past investments and evaluate whether it is still truly beneficial. The term "cut your losses and move on" is applicable here. Instead of dwelling on what you have already invested, think about the opportunity cost – what you might lose (or gain) by continuing versus abandoning the project or investment. Financial advisers can provide an objective perspective on your decision and may offer insights you have not yet considered. When starting a project or investment, have predefined exit strategies in place. Knowing when to cut your losses can be financially beneficial. These strategies might include predetermined stop-loss levels for investments or milestones for projects.

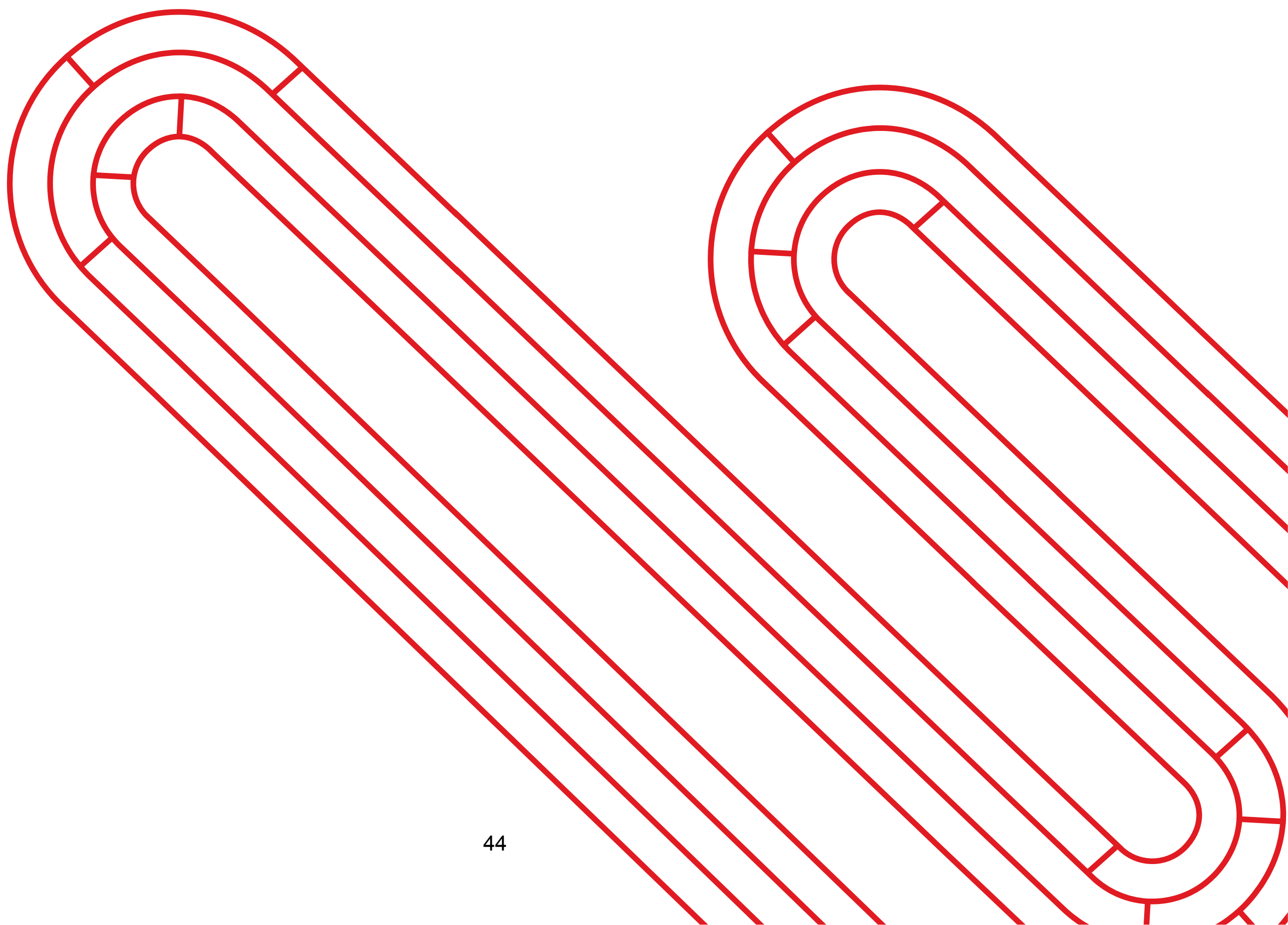
Practical personal financial management tips

Financial literacy is an imperative ingredient of the science of financial success. It is part of the recipe to accumulate wealth. It contributes to peace of mind, which comes from knowing we are prepared for whatever life throws our way. It is the key to unlocking doors that were once closed and embracing a life of security, and opportunity. It is about gaining power to shape our destiny. Imagine a life where financial worries no longer control our decisions, where we have the freedom to pursue our passions without constraints, and where our futures are secure. We can do this by educating ourselves on financial matters, have a good idea of what we want, make prudent choices, and remember that each small step we take today builds the foundation for a more prosperous tomorrow.

Achieving financial success is a culmination of consistent daily habits and decisions informed by financial literacy. There are lots of practical suggestions which we can incorporate into our daily routine to guide us on the journey to becoming more financially successful. If we follow those tips applicable to us, it should guide us to a better financial outcome.

1) **Establish routine:** Establish a structured daily routine that includes time for work, personal development, leisure, and sleep. A well-organised day helps us manage our time e· ectively and make better financial choices.
2) **Be adaptable:** Although routine is good to reduce uncertainty, life happens. We need to be adaptable for whatever life throws at us. Learn from "The bed of Procrustus". The world is not going to change to suit us, we have to be flexible and ready for changes and setbacks, because it will happen.
3) **Educate Yourself:** Devote time to learn about personal finance. Ask your financial adviser, read articles, listen to podcasts, or watch videos that cover topics such as investing, insurance, and debt management.
4) **Review Your Budget:** We should make time to review our budgets frequently. This helps us to stay on track with spending and assess whether we have sufficient money available for purchases and saving.
5) **Structure budget expenses:** We will gain lots of insights into our outlays by structuring it in a few categories, namely total debt repayments (home loan, vehicle loan, store- and credit cards, other loans), total savings and investments (pension fund, annuities, emergencies, unit trusts, other investments, etc.) total insurance payments (medical, life, funeral, vehicle, household content, etc.) and general household operations (groceries, fuel, entertainment, subscriptions, school fees, maintenance, etc.). This will show us whether most of our after-tax money flows towards debt repayments or keeping the household running. If, for instance, more money flows towards debt repayments than to the other categories combined, we should prioritise debt reduction.
6) **Track Expenses:** Technology makes this easier. We can now record our expenses using cell phones, in a budgeting app, or a notebook. This practice promotes awareness of our spending habits and allows us to identify areas where we can cut back if needed. However, financial fraud in the form of illegal deductions from our bank accounts happens more frequently. By tracking our expenses, we will "spot" this and can then notify our banks to take corrective measures.
7) **Avoid Large Amount Impulse Purchases:** Practice the 30-Day Rule. We can easily "fall" for large discount sales on non-essential items. Before making a large purchase, we should strive to wait 30 days. This helps creates time to reflect on whether such purchases align with our budgets and the impact thereof on future budgets.
8) **Avoid Peer Pressure:** We should not let others' spending habits influence ours. We all have different lives and should therefore focus on our own unique needs and goals and make decisions that align with our financial priorities.
9) **Automate Savings:** Setting up automatic transfers to your savings or investment accounts. This ensures that we consistently save a portion of our income without having to think about it.
10) **Saving enough:** We should ascertain what portion of our income we should save, especially for retirement and then take steps to work towards that amount.
11) **Prioritise Insurance:** Insurance protects us against the unexpected, which occurs more frequently than we think. Health, life, funeral, disability, car, household content and property insurance provide peace of mind and prevent financial setbacks.
12) **Insurance Policies Review:** Periodically review your insurance coverage (e.g., home, car, life) to ensure it is done at the best price and aligns with your current needs and budget.

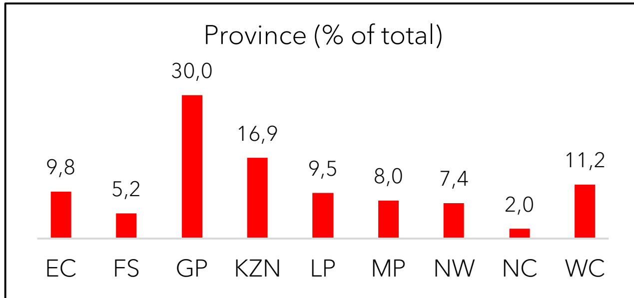
13) **Build an Emergency Fund:** If we do not have the appropriate short-term insurance policy, we should consider an emergency fund. The money in the fund should be large enough to cover the expense of the most expensive large appliance in our home. An emergency fund also acts as a safety net which will shield us from having to borrow money when the unexpected happens.
14) **Use Cashback and Rewards:** If you use cards for purchases, opt for cards that offer cash back or rewards. It can save lots of money if used appropriately.
15) **Repay Debt Wisely:** Allocate a portion of your income towards paying off debt. Either target the smallest amount or highest interest debt (like credit cards and personal loans) first, whatever suits the budget. The sooner debt is eliminated, the more financially free we are and the more we are in control of our finances.
16) **Explore ways to diversify your sources of income:** This could include starting a side business, freelancing, renting out a spare room, or pursuing a hobby that generate in come. Having multiple streams of income make us more resilient to shocks.
17) **Stay Active:** Physical health is closely tied to financial health. Regular exercise can reduce medical expenses in the long run, contributing to your overall financial wellness.
18) **Involve the children where possible:** Passing down financial knowledge to the next generation ensures that they enter adulthood equipped with the skills to make informed financial choices. Teaching children about budgeting, saving, bank accounts, insurance, and the value of delayed gratification prepares them for a lifetime of financial responsibility. This can be done in fun ways.

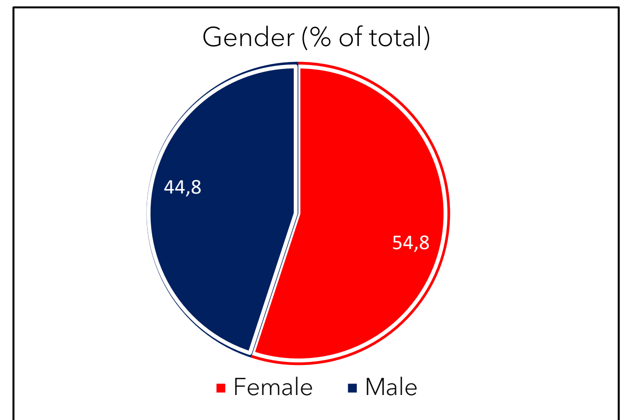


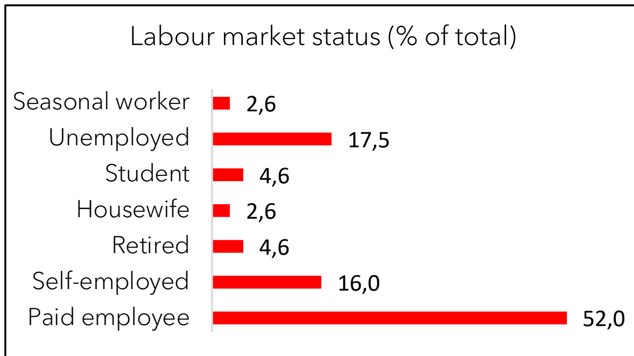
Which households did we speak to?

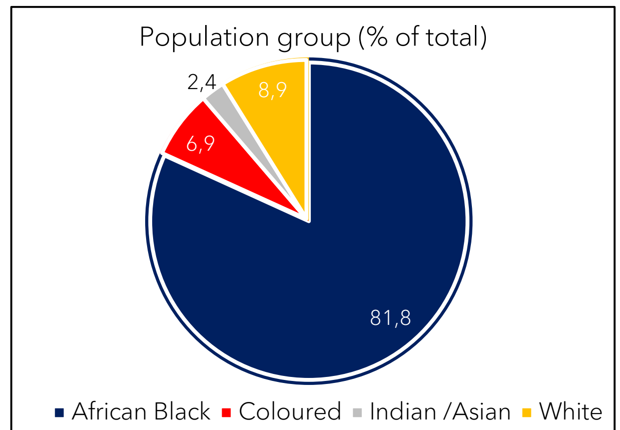
We spoke to 2 000 nationally representative households who were randomly selected.

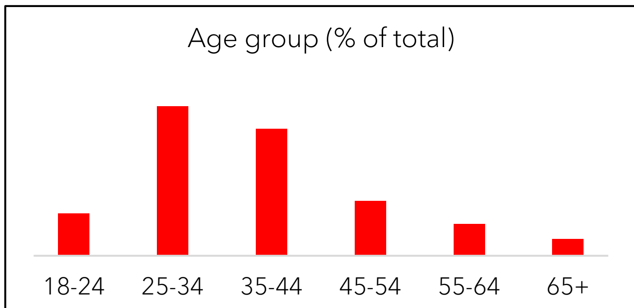
Distribution of households according to demographic characteristic[1]

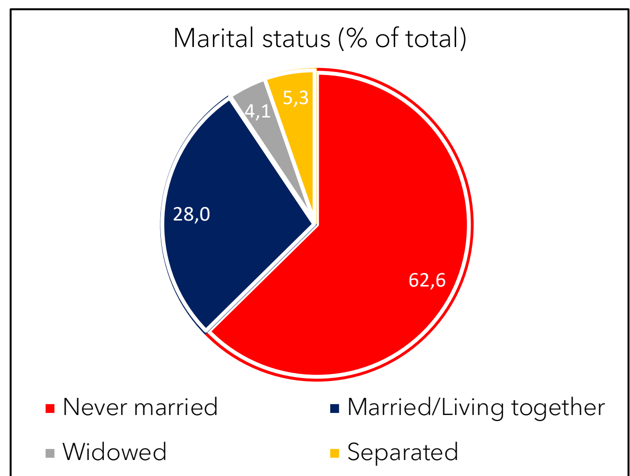


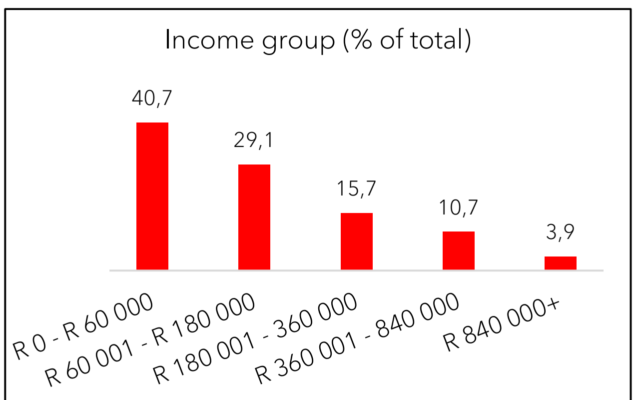












[1] *Source: Momentum/Unisa Household Finance Survey, 2023*

References

Changwony, F.K., Campbell, K. and Tabner, I.T. (2021) 'Savings goals and wealth allocation in household financial portfolios', Journal of Banking and Finance, 124, p. 106028.

ChatGPT.

FSCA (2022). Financial literacy Baseline assessment.

GN500 Guidance Note on the Measurement of the Consumer Education Element of Broad-Based Black Economic Empowerment

Goyal, K. and Kumar, S. (2021) 'Financial literacy: A systematic review and bibliometric analysis', International Journal of Consumer Studies, pp. 1–26. Journal of Political Economy 125(21), pp. 431 – 477.

Lusardi, A., Michaud, P. and Mitchell, O.S. (2017) 'Optimal financial knowledge and wealth inequality.'

Lusardi, A., Mitchell, OS and Curto, V. (2014). 'Financial Literacy and Financial Sophistication in the Older Population.' Journal of Pension Economics & Finance 13(4), pp 347 – 366.

Lyons, A.C. and Kass-Hanna, J. (2022) 'A multidimensional approach to defining and measuring financial literacy in the digital age', in The Routledge Handbook of Financial Literacy. Routledge, pp. 61–76.

OECD/INFE International comparison (2020).

Serido, J. (2022) 'Financial literacy among young adults', in The Routledge Handbook of Financial Literacy. Routledge, pp. 31–47.

South African Reserve Bank. Quarterly Bulletin. June 2023.

https://www.ethics.org/global-business-ethics-survey/

APPENDIX A1

Financial literacy questions asked to the financial knowledgeable person of the household

1. Self-assessment: How would you rate your own financial knowledge and skills in the management of personal finances?

1. No knowledge and skills.
2. Unsatisfactory knowledge and skills.
3. Satisfactory knowledge and skills.
4. Good knowledge and skills.
5. Excellent knowledge and skills.
6. I find it difficult to answer this question.

2. Imagine that five friends are gifted with R1 000. If the friends have to share the money equally among themselves, how much will each one receive?

3. Now, imagine that the friends have to wait for one year to get their share of the R1 000. In one year's time will they be able to buy:

1. More with their share of the money than they could today.
2. The same amount.
3. Less than they could buy today.
4. I don't know.

4. You lend R25 to a friend one evening and he returns your R25 the next day. How much interest has he paid on this loan?

5. Suppose you put R100 into a savings account with a guaranteed interest rate of 2% per year. You don't make any further payments into this account, and you don't withdraw any money. How much would be in the account at the end of the first year, after you received the interest?

6. If no withdrawal has been made over a period of five years and all the interest received has been left in the account, how much would be in the account at the end of five years?Would it be:

1. More than R110.
2. Exactly R110.
3. Less than R110.
4. It is impossible to tell from the information given.
5. I don't know.

7. Considering a long-term period (for example 10 or 20 years), which asset normally gives the highest return?

1. Savings account.
2. Government bonds.
3. Shares.
4. I don't know.

8. Do you think the following statements are true or false?

1. If someone offers you the chance to make a lot of money, it is likely that there is also a chance that you will lose a lot of money.
2. High inflation means that the cost of living is increasing rapidly.
3. It is less likely that you will lose all your money if you save it in more than one place.
4. Buying property (like a house) is a safe investment.
5. A 15-year home loan typically requires higher monthly payments than a 30-year home loan, but the total interest paid over the life of the loan will be less.

APPENDIX A2

More information on the theory of financial goal-setting

It is not difficult to set a goal, including financial goals. However, as every household differs, the challenge is to set the correct goals, and then ensuring that the number of goals set correspond with the unique needs of each individual household – so that too many or too few goals don't derail the outcome of goal achievement.

As outlined in the section below, goal-setting developed into a "science" in itself and should provide guidance to people who are serious about setting financial goals and pursuing them.

According to Changwony et al (2021) goal-setting theory asserts that setting a goal influences task performance by motivating a person to achieve it (Locke and Latham, 1990). This goal-performance relationship manifests itself through at least four goal mechanisms.

First, goals direct attention and effort towards goal-linked activities; second, they energise, leading to more effort towards task accomplishment; third, they elongate and intensify effort, and hence incentivise persistence; and fourth, goals motivate the discovery of task-relevant knowledge and strategies (Locke and Latham, 2002).

Studies show that setting specific rather than vague goals lead to a higher level of task performance, and that if an individual is committed to a goal, has the required ability to attain it, and has no conflicting goals, there is a positive and linear relationship between goal difficulty and task performance (Locke and Latham, 2002, 2006).

Additionally, goal commitment increases with a person's belief that they can accomplish their goals, referred to as self-efficacy (Bandura, 1977). Over the years goal-setting theory has been extended and enriched, allowing for the inclusion of other important underlying goal mechanisms and moderating factors, including the number of goals, implementation intentions, self-control problems, and self-regulation (e.g., Soman and Zhao, 2011; Dalton and Spiller, 2012; and Changwony, Campbell and Tabner, 2021).

Setting a goal does not in itself guarantee that it will be achieved. Success may also depend on the number of goals set and whether there is a plan that specifies an implementation intention.

Findings are mixed about the impact of the number of set goals on performance. Some studies show that having multiple goals increases the accomplishment of goals because they tend to complement one another rather than compete against each other (Locke and Latham, 1990, 2002).

In contrast, compared to having no goal, multiple goals can be counterproductive and reduce savings, especially when goals are not attained, as failure can be demotivating (Soman and Cheema, 2004). Similarly, having multiple savings goals (or no savings goal) relative to a single savings goal reduces savings rates if the incremental goals are difficult to accomplish or if they compete with one another (Soman and Zhao, 2011).

This finding is consistent with the argument that planning may be less beneficial when applied to multiple goals versus a single goal because it draws attention to the difficulty of executing planned actions, which undermines commitment and, in turn, goal success (Dalton and Spiller, 2012). (Changwony, Campbell and Tabner, 2021).

APPENDIX A3
The science of financial success

What is financial success?

Before a household can determine whether they are financially successful, they need to understand what financial success is.

Our research, as well discourse from international institutions, has shown that true financial success

should be assessed in terms of each individual's and household's level of financial knowledge and to have the unique ability to take control of financial situations, and not by simply looking at how much they earn or how wealthy they are. Financial success is a goal that resonates with people around the world, regardless of their background, culture, or socioeconomic status. Whether it's achieving personal financial security, building wealth, or realising financial independence, the journey toward financial success is paved with various challenges and opportunities. In this pursuit, one crucial factor often overlooked but profoundly influential is financial literacy. The role of financial literacy in the attainment of financial success cannot be overstated, as it serves as the cornerstone for making sound financial choices and securing one's financial future.

Financial literacy refers to the knowledge, skills, and understanding of financial concepts and principles that enable individuals to make informed and effective decisions about their finances. It equips them with the right mindset and tools to prosper in an increasingly complex economy. It encompasses a broad range of topics, including goal-setting, budgeting, investing, saving, debt management, and understanding financial instruments and markets. However, being financially literate empowers individuals to manage their money wisely, make strategic investments, navigate financial challenges, and ultimately build a solid foundation for long-term financial well-being.

Financial success can therefore only be pursued and achieved if a person is financially literate. Financial literacy plays a pivotal role in attaining financial success by actively pursuing financial knowledge and acquiring the ability to take control of one's personal financial situation. Financial literacy is not just a personal skill but a societal imperative as improved financial literacy is required to reduce poverty rates, increased economic stability, and enhanced overall quality of life. Through education, awareness, and a commitment to lifelong learning, individuals can harness the power of financial literacy to shape their financial futures and turn their aspirations for financial success into reality.

The Theory of Change

The Science of Financial Success evolved from our Theory of Change (refer to graphic illustration 1), which places the household in a political, social, and economic environment where they must deal with factors that either are within or beyond their control. There are many factors in the macro-environment that are beyond the control of the household, such as the rise in Brent Crude oil prices or international wars, which had extensive financial and social impacts on millions of households.

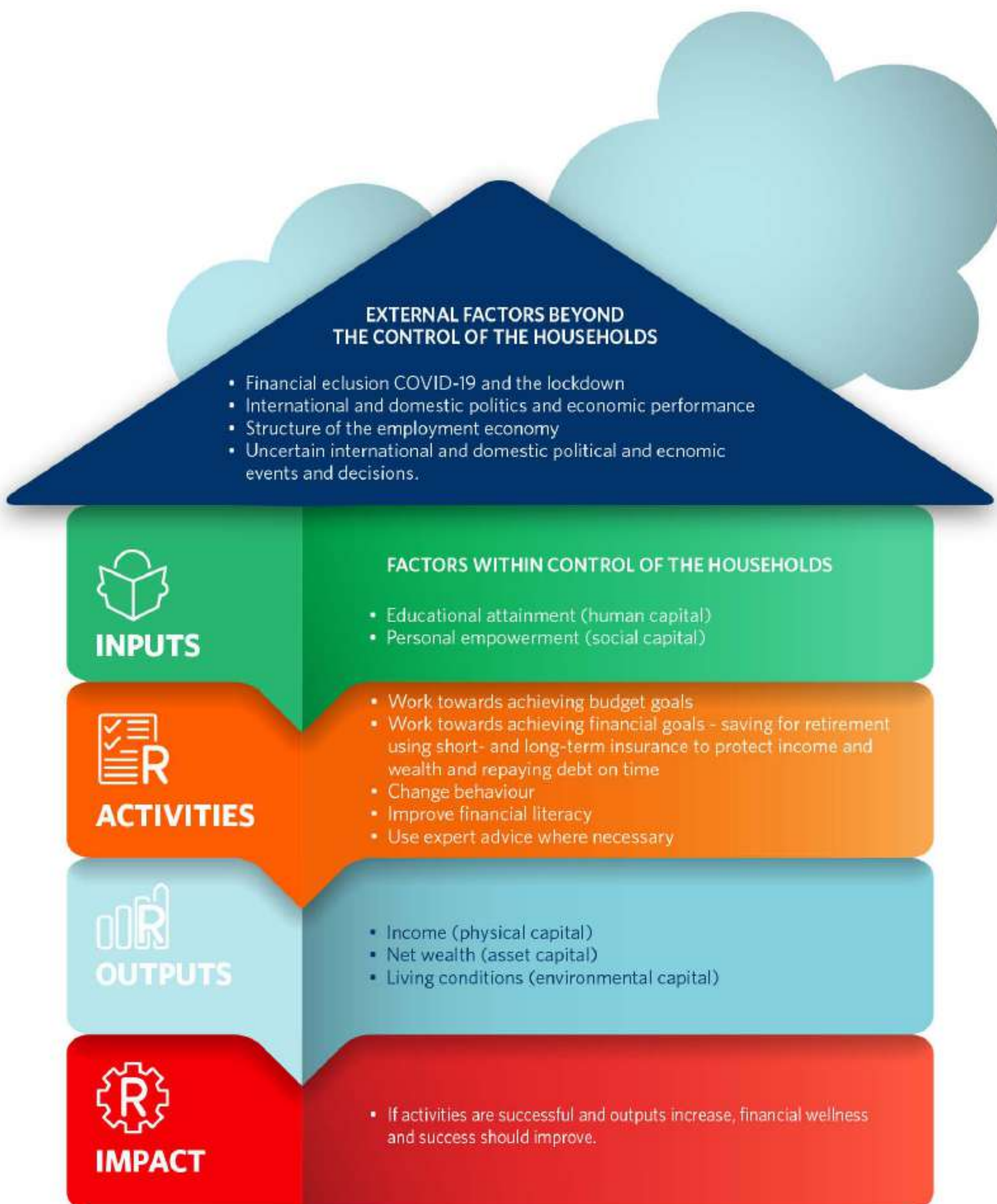
To be better prepared for the journey towards financial success, households must identify, understand, and differentiate between those factors that are within their control and those that are outside their control. There will always be factors that are beyond a household's control, but there are ways to limit the damages that may be caused by these factors. Households can do various things or activities to manage their finances, become more resilient to factors beyond their control by absorbing the shocks and in fact become antifragile by benefiting from self-improvement, growth, and progress towards achieving their own goals, whatever those might be.

A detailed explanation of the Science of Financial Success as explained by our Theory of Change is provided in previous year's Momentum/Unisa Household Finances Insights reports. In short, it is a carefully designed tool, based on academic insights, to empower households to improve their financial success, even if there are many things they cannot control. It shows the following:

1. Households can improve their income, net wealth and living conditions (outputs)....
2. .... when they use their internal resources, like educational qualities and personal empowerment capabilities (inputs)....
3. .... to do certain things (behavioural activities), such as improving financial literacy, setting budgeting goals, setting short- and long-term financial goals, investing in insurance, and making use of advice shared by experts, to name a few.

This report focused on financial literacy as a non-negotiable imperative to the science of financial success.

Illustration 1: The Science of Financial Success as explained by the Theory of Change



My pledge:

Committing to my journey to financial success

I pledge my commitment to become financially successful based on my own personal financial goals. I understand that the path is as unique as I am, so it is up to me to see my dreams, goals and aspirations become a reality. I know that financial success is not something others can give me, nor is it something that the government or the economy can guarantee to provide me. I trust myself, my innate potential to succeed and the momentum I have built to achieve the financial success I envision for myself. I hereby pledge to embrace my journey with all its challenges and victories.

I am committed to stay true to my course as:

- I am committed to educating myself about personal finance, investing, and wealth for the rest of my life
- I am committed to fully understanding my finances
- I pledge to live within my means and save for my future self
- I pledge to know the difference between my short-term as well as long-term needs and wants
- I pledge to take equal pleasure in saving as I do in spending
- I pledge to value anticipation over instant gratification
- I pledge to define myself by who I am, not what I have
- I pledge to align my spending with my values, vision and goals

Every thought I think, every word I speak, and every action I take from this day forward will reflect my commitment to this journey, which will lead to peace, fulfilment, empowerment, and financial security.

Signed

Date