



Effective ways to advance responsible financial behaviour



 **Money Wise**

Consumer financial affairs is a hotter topic than ever. Initially, the economic crisis led to stricter regulations and closer supervision of financial institutions. Today, there is increased awareness of the fact that responsible financial behaviour on the part of citizens is vital to financial stability and restoring consumer confidence in the financial sector. This means that government policy-makers, companies and NGOs have embraced the importance of creating financial self-reliance through financial education. And the same applies to the media. Every newspaper and website in the Netherlands now has a section on money matters.

Despite this consensus, there is a great deal of discussion about the effectiveness of financial education. This is useful but not the main issue. The key question that has to be answered is: how can we advance responsible financial behaviour? In this article, Nibud (Dutch National Institute for Family Finance Information) and the Money Wise platform demonstrate that education can be effective, as long as it is approached in the right way. Financial education is one of the ways of advancing responsible financial behaviour, alongside upbringing and providing information and advice. However, none of these is a miracle cure. They are only effective within a sound choice architecture and an effective regulatory and supervisory system. Based on these ingredients, the trick is to develop interventions, comprehensively evaluate them and use the outcomes to increase their effectiveness.



The importance of responsible financial behaviour

Due to several current trends, it is becoming increasingly important that people demonstrate responsible financial behaviour. Financial skills are a basic prerequisite for participating in modern society¹.

1. People have to make more financial decisions

The economy is becoming financialised.² For citizens, this means that financial decisions are increasingly woven into the fabric of daily life. Areas such as education, healthcare and pensions are affected and, as a result, citizens have to make more – often complex – financial decisions.³ Take, for example, the student loan system, choosing a health insurance annually, and the increase in the pensionable age. In addition, citizens are frequently expected to be self-reliant. In areas like housing, education, healthcare and pensions, more responsibility now lies with citizens. If you think you are eligible for rental assistance, you have to do your own research and arrange everything yourself.

2. The world is digitalising at a fast pace

Digitalisation has a dramatic effect on how people deal with money. The opportunity to make PIN payments makes money less tangible. This is even more so when contactless payments are concerned. Moreover, online shopping is lowering the spending threshold (including for impulse buying). All this makes it more difficult to keep control of one's wallet. We also choose and purchase financial products online, increasingly more often. And, we are making more and more use of mobile banking apps.

3. Young people are participating in economic activities at a younger age

At an early age, young people have to make financial decisions which will have a lasting impact on their life, for example, student grants and loans. Without financial skills, young people run the risk of making decisions they will regret in the long term and which will have financial consequences they will have to bear.

4. Money problems are on the rise

The number of households with payment arrears has risen steadily in recent years.⁴ In 2014, over 32% of Dutch households (2.3 million) had to deal with some form of payment arrears compared to 28% in 2011, and 25% in 2009. It is a fact that 7% of Dutch households are actually dealing with a problematic debt situation, and between 8 and 11% are in danger of landing in such a situation.⁵

Responsible financial behaviour is essential in the 21st century. People need support in making financial decisions because these decisions are often complex and have significant consequences. This also means that the relevant skills need to be acquired at an early age. However, 4 out of 10 secondary school students state that their school has never paid attention to money matters (Nibud, 2016).⁶ Especially for vulnerable groups, like secondary school students who are in financial difficulties at home, it is important that schools pay attention to dealing with money. Such students usually receive less support at home as far as money matters are concerned. Their parents have to devote all their attention to keeping their own finances in order which means they pay less attention to the financial upbringing of their children.

- 1 Nibud and the Money Wise platform (2015). [Advies aan het Platform Onderwijs 2032](#).
- 2 WRR (2016). [Onderzoeksproject over financialisering](#).
- 3 SCP (2012) [Een beroep op de burger](#).
- 4 Westhof & Tom (2014). [Monitor betalingsachterstanden](#).
- 5 Westhof, Ruig, & Kerckhaert (2015). [Huishoudens in de rode cijfers 2015. Over schulden van Nederlandse huishoudens en preventiemogelijkheden](#).
- 6 Nibud (2016). [Scholierenonderzoek](#).



The role of financial education

There are different definitions of financial education. One defines it as a subject taught at school, the other describes it as providing information about financial products, while a third defines it as helping people in debt to budget. This makes a big difference regarding the expectations you may have concerning financial education.

The OECD provides the following definition:

“the process by which financial consumers/investors improve their understanding of financial products, concepts and risks and, through information, instruction and/or objective advice, develop the skills and confidence to become more aware of financial risks and opportunities, to make informed choices, to know where to go for help, and to take other effective actions to improve their financial well-being.”⁶

Our definition of financial education involves all activities focused on expanding the financial skills of citizens. This includes lessons at school, programmes, workshops and e-learning. It should be made clear that financial education is only one of the ways to advance the responsible financial behaviour of citizens. Other ways include financial upbringing, information provision, online tools, advice and coaching.

None of these is a miracle cure. They only work in combination with a sound choice architecture. The way in which consumers are presented with choices and information has a great impact on the decisions they make. We therefore have to adopt a holistic approach when looking at legislation and regulations, consumer protection, product design, education and other forms of support. This conclusion was also reached by the OECD.⁷

For lack of a better term, in the rest of this publication we use the word **“interventions”** to refer to the mix of resources that can be used to advance responsible financial behaviour.

Professionals all have their own ideas about the goal of interventions aimed at improving financial skills. Most of them agree that the goal of interventions in this area is to advance responsible financial behaviour. However, they are not in agreement about the underlying goals and target groups. For debt assistance providers, it is mainly about solving problematic debt and preventing debt in the future. A pensions expert believes it is important that people are not financially vulnerable at old age.

The OECD regards financial well-being as the primary goal of financial education (cf. the definition quoted above). The American Consumer Financial Protection Bureau (CFPB) openly says that financial well-being is the goal of financial education. They also provide a definition of financial well-being that has been substantiated in a study.⁸

Goals can be classified at different levels. In the first place, interventions are intended to advance the financial literacy, attitude and behaviour of individuals and households.

6 OECD (2005). [Recommendation on Principles and Good Practices for Financial Education and Awareness](#).

7 OECD (2013). [Improving financial education effectiveness through behavioural economics](#).

8 CFPB (2015). [Financial Wellbeing. The Goal of Financial Education](#). CFPB defines financial well-being as “a state of being wherein a person can fully meet current and ongoing financial obligations, can feel secure in their financial future, and is able to make choices that allow them enjoyment in life”.

At the micro-level, interventions are aimed at improving financial self-reliance,⁹ financial resilience (which includes preventing problematic debt) and financial well-being, and increasing consumer confidence in financial institutions.¹⁰ In essence, interventions are about people having control over their own financial situation, now and in the future, so that money problems can be prevented.

At the macro-level, interventions are about creating financial stability (unwise financial behaviour can lead citizens into financial instability), economic growth (offering opportunities to self-employed persons and other small entrepreneurs) and avoiding social costs. The financial problems of households cost society an estimated 10 billion euros a year. This amount involves not only the costs of debt assistance, but also costs related to, for example, reduced work productivity, benefit payments, childcare and evictions.¹¹

9 Nibud defines financial self-reliance: “Someone is self-reliant when he makes well-considered choices in such a way that his finances are in balance in both the short and long term”. Refer to, for example, Nibud (2012). [Goed omgaan met geld. Achtergronden bij de competenties voor financiële zelfredzaamheid.](#)

10 Refer to Money Wise (2016). [Kerncijfers verantwoord financieel gedrag 2015.](#)

11 Madern (2014) concludes in [Een overkoepelen de blik op de omvang en preventie van schulden in Nederland](#) that a household in a debt-risk group entails an estimated €103,787 in total costs and that roughly 13% of households belong to that group.

Lessons learned from research on the effectiveness of interventions

Advancing financial skills is a relatively new discipline and not a lot of research has been conducted on this topic. Disagreement exists as to the effects interventions have on financial skills, financial literacy and financial behaviour.

The number of scientific articles on the effectiveness of such programmes is increasing rapidly. The outcomes are not consistent but more recent research shows that, more often than not, interventions have a positive effect on financial knowledge, skills and behaviour. The Annex contains a list of the most relevant studies on this subject.

These studies show that when financial education and other types of interventions focus solely on transferring knowledge, they often fail to prompt a change in behaviour.

It is also important to have realistic expectations regarding what you can achieve through education, information and advice provision. You cannot solve every problem for every group through education. When developing interventions, it is important to start by setting down the concrete change in behaviour you want to affect. Only then can you determine what mix of measures is the most promising.

When designing new interventions, scientific and behavioural insights can be used to further improve the effectiveness of interventions. Below is a summary of the most important insights garnered from research which can be useful for developing interventions. They are split into insights for young people and insights for adults.

When interventions (including financial education) are focused on children and young people, it is important to:

- Adopt a structural approach. One-off or short interventions are not enough. It is not realistic to expect that three hours of financial education will have a significant impact on behaviour. More is needed to achieve that.
- Be in alignment with the world as young people perceive it and current real-life situations. Effectiveness is increased by dealing with specific topics that can be put into practice immediately.

- Be in line with the cognitive, social and psychological development of the children and young people concerned and ensure learning continuity.
- Involve education professionals when compiling course material to be used at schools and make use of teaching methods that have been proven to be effective and enabling.
- Integrate financial skills into other themes.
- Involve parents and train teachers.
- Take cultural factors into account.
- Add techniques that bind, for example, setting up direct debits or having people enter into agreements with themselves. This gives people tools they can use to maintain good behaviour.
- Remain in line with the current behaviour, preferences and *customer journey* of the target group and ensure that people see the information at the right time. In the literature, such times are referred to as *teachable moments*. These are moments when what has been learned can immediately be put into practice, so that people are more open to the information. For instance, just before making a certain financial decision or before a significant life event (marriage, birth of a child, moving in together or retirement).

For adults, it is important to:

- Make complex choices easier, structure tasks and split them up into smaller steps (to *expand self-efficacy*). You can do this, for example, by providing decision aids, tools and comparison sites, or with a simple checklist to keep track of progress made. Ensure you stick to *narrow topics* (not too much at once).
- Focus on three levels: *know*, *can* and *do*. Although knowledge (*know*) is not enough to change behaviour, it is a prerequisite for the other two levels. *Can* is about skills and competencies. *Do* concerns the conditions needed to put knowledge and skills into practice. This involves matters such as motivation, attitude and *self-efficacy* (belief in one's own ability to achieve goals).

- Use *social proof*. People are constantly influenced by others and adopt their behaviour. What others do is used as a source of information for what constitutes good behaviour. If it fits in with the goals, it can therefore also be effective to describe what most people are doing.

For both adults and young people, it can be effective to explain how to work with practical psychological concepts like *mental accounting*, *framing*, *anchoring*, *impulsivity* and *self-efficacy* so that people gain more insight into their own behaviour and how it is influenced. People can then use these insights in their daily life and make more conscious, better choices.

Some concepts from psychology and behavioural economics

Mental accounting – consciously or subconsciously, we mentally separate our money into different “money jars” for salary, savings, clothing, etc. We open and close cost items, write off purchases and draw up the balance sheet. If we use our money-jar approach well, it helps us to keep expenditure under control, for example by opening two separate bank accounts: one for all fixed outgoings and the other for all other expenses.

Anchoring – people are influenced by the first information available: the anchor. They use this anchor as a reference when making a financial decision. For example: someone wants to take out a loan and, for the question regarding how much they want to borrow, they see an amount of €25,000 already filled in. It is then likely that they will choose a higher loan than if the amount filled in was €5,000.

Framing – is a communication technique. The way in which words and images are used has an impact on how people react to a text. How savings are illustrated when switching health insurer, for example, has an effect on whether people actually want to make a switch. If the savings are expressed in years (e.g. 24 euros per year) people are more likely to make the switch than if savings are expressed in months (in this case, 2 euros per month)¹²

Self-efficacy – is the expectation people have regarding their own capacity to behave in a certain way, to perform a specific task successfully.¹³

Don't assume something works – test it first!

Perhaps the most important lesson to be learned from behavioural sciences is that you should always test what the effect of your intervention is. Sometimes, interventions can have unexpected outcomes. For example, researchers used social proof to reduce energy consumption in a neighbourhood in California: people were not only notified of their own energy consumption but were also told what the average neighbourhood consumption was. On the one hand, the desired effect was achieved: energy-guzzlers adjusted their behaviour positively and reduced their consumption. However, the researchers discovered an undesirable “boomerang effect”: energy-conservers also adjusted their behaviour and increased their below-average consumption so that their behaviour became more like that of their neighbours.¹⁴

This demonstrates you cannot assume that because a certain intervention works in one situation it will also work in a different one. Testing interventions – preferably in randomized controlled trials (RCTs)¹⁵ – is therefore crucial in order to gain insight into how an intervention works. However, it is not always possible to perform an RCT. There may be situations in which an evaluation study delivers the necessary insight, or is the best and most feasible form of testing. This form of testing is also valuable. Testing enables you to further improve and develop your interventions so that they are better able to achieve the envisaged goals.

12 Madern, Van der Werf, and Schonewille (2015). *Financieel gedrag en psychologische principes*. Nibud.

13 Bandura (1977). *Self-efficacy: Toward a Unifying Theory of Behavioral Change*.

14 Schultz et al. (2007). *The constructive, destructive, and reconstructive power of social norms*. *Psychological Science*, 18(5), 429-434. Brief information: the boomerang effect can be influenced by using smiley face emoticons (for households that consume less energy than the average) and frowny face emoticons (for households that consume more than the average) on notifications about energy consumption.

15 The most important part of an RCT is that an intervention is always compared to a control group. The idea of a control group is that it is identical to the other group in the trial, except that the control group is not involved in the intervention. This means that any effects observed can be attributed to the intervention and not to the fact that this group was treated differently or that contextual factors played a role.

Conclusion

Citizens have to make increasingly more financial decisions which often have far-reaching consequences. Buying a house, saving for children to study and choosing a health insurer are just a few examples. Such decisions can be complex and wrong decisions can have a significant impact, leading to financial problems that can be severe.

In this publication, we argue that advancing responsible financial behaviour is vital in our modern, digital society. Vital not just to the financial resilience and financial well-being of individuals, but also vital to stability, economic growth, preventing social costs and restoring consumer confidence in financial institutions. Financial education is one of the resources we can use alongside, for example, information provision, upbringing, regulations and supervision.

When developing interventions, it is important to make use of insights from behavioural science, effectiveness research and evaluations. Traditional forms

of education and information provision, which focus mainly on expanding knowledge, have turned out to be less effective in bringing about the desired change in behaviour. Research shows – ever more clearly – what does work.

However, there is still a lot we do not know about financial education. It is therefore important to continue to experiment, test interventions and improve them further. The goal is to allow people to have more control over their finances, both consciously and subconsciously. After all, money doesn't necessarily make you happy, but having control over your money surely does!

Annex: Research into advancing responsible financial behaviour

An increasing amount of research is available which shows that financial education – as long as it is approached properly – can contribute to expanding financial skills and help advance responsible financial behaviour. At the same time, various meta-analyses show that financial education programmes contribute little or nothing to changing behaviour, especially if they focus on expanding knowledge.

We provide a few examples of each group of research. This is just a selection. Far more research has been conducted on the effectiveness of financial education programmes and other types of interventions. A short list of studies that conclude financial education can be effective follows below.

- In a recent meta-analysis of 115 studies, Kaiser and Menkhoff (2016) show that financial education programmes have a small but significant effect on financial behaviour, and a greater effect on financial literacy. They go further than Fernandes et al. (see below). Kaiser and Menkhoff also examine what factors ensure that financial education has an impact on behaviour. They conclude that programmes with a focus on budgeting, planning, building capital and saving are more effective than programmes which focus on borrowing behaviour. Furthermore, they conclude that when a programme is offered is of the essence. If what has been learned can be put into practice immediately, the impact is significantly greater. And, the intensity of the programme is also important: the more hours invested in education, the greater the impact.¹⁶
- The study conducted by Bruhn et al. in Brazil (2013) is well known. They performed a large-scale randomised controlled trial in 2010 and 2011 in six states and 868 schools. The study involved some 20,000 secondary school students aged between 15 and 17. The results show that high-quality financial education improves financial literacy, attitude and behaviour. Success factors included: a comprehensive approach, the involvement of educational experts, training teachers, alignment with the financial issues relevant to the target group at the time and, in the course material, paying practical attention to the psychological factors which influence behaviour. They also found that effectiveness increased when parents were involved in the programme.¹⁷
- Urban et al. (2015) described the effect of including a financial education programme at secondary schools in three American states. They compare this effect to schools that do not provide a financial education programme and they list the critical success factors. The main conclusion is that providing financial education at school can be effective in advancing responsible financial behaviour, as long as a structural approach is used.¹⁸

16 Kaiser & Menkhoff (2016) *Does Financial Education Impact Financial Behavior, and if So, When?*

17 Bruhn et al. (2013). *Financial education and behavior formation: Large-scale experimental evidence from Brazil.*

18 Urban et al. (2015). *State Financial Education Mandates: It's All in the Implementation.*



- Drever et al. (2015) examined how the development of the attitude, knowledge and skills of children aged between 3 and 21 influences their financial well-being as adults. They conclude that when building financial skills, the focus of the education must be in line with the stage of development of the participants concerned. Between the ages of 3 and 5, the emphasis should be on developing executive functions, from 6 to 12 on financial socialisation, and from 13 to 21 on the development of “real” financial skills. They also observed that if children learn self-control at an early age they are significantly better at dealing with money later on in life.¹⁹
 - Batty et al. (2015) examined the effect of a programme for primary schools on the specific subject of saving and money management. They found that it had a significant effect on the knowledge, attitude and behaviour of the participants. This effect was still visible a year later. According to the authors, this can be partially explained by the fact that the teachers were well prepared and the lessons were integrated into other subjects.²⁰
 - Miller et al. (2014) performed a meta-analysis based on 188 studies into the effects of financial education programmes. They found significant effects for some subjects (including saving and keeping records) and no significant effects for other subjects (including borrowing). If financial education is provided on a specific subject and the acquired knowledge can be put into practice immediately, behaviour regarding the subject concerned improves significantly.²¹
 - Atkinson et al. (2015) mapped what was known about the effectiveness of interventions focused on long-term saving behaviour. They presented a balanced picture and state that as of yet, there is little rigorous evidence of the effectiveness of such interventions. The researchers also indicate that a meta-analysis of such programmes is of little use because the programmes vary too greatly in terms of duration, design and content. Atkinson et al. found the interventions to have both positive and negative effects. Effectiveness increases if the programmes are of sufficient duration and are given with adequate frequency (one-off programmes have hardly any effect) or are given on the work floor, are combined with an opportunity and incentives to save, are strategically timed, make use of technology, and are combined with specific information that is relevant to the participants.²²
- A number of studies that conclude financial education has little or no effect on financial behaviour are listed below.
- In a much-cited meta-analysis, Fernandes et al. (2014) examined 168 studies into effects and concluded that the effect of financial education accounted for only 0.1% of the change in behaviour. Fernandes himself points out the limited spread of the studies involved in the meta-analysis. The programmes examined mostly focused on traditional methods of information provision and transferring knowledge. According to the authors, little research has yet been conducted into innovative forms of financial education.²³

19 Drever et al. (2015). Foundations of Financial Well-Being: Insights into the Role of Executive Function, Financial Socialization and Experience-Based Learning in Childhood and Youth.

20 Batty et al. (2015). Experimental Evidence on the Effects of Financial Education on Elementary School Students' Knowledge, Behavior, and Attitudes. *Journal of Consumer Affairs*, 49: pp 69– 96.

21 Miller et al. (2014). Can you help someone become financially capable? a meta-analysis of the literature. A Meta- Analysis of the Literature (January 1, 2014). World Bank Policy Research Working Paper, (6745).

22 Atkinson, A. et al. (2015). Financial Education for Long-term Savings and Investments: Review of Research and Literature, OECD Working Papers on Finance, Insurance and Private Pensions, No. 39, OECD Publishing, Paris.

23 Fernandes et al. (2014). Financial Literacy, Financial Education, and Downstream Financial Behaviors. *Management Science*. On p. 30, the authors state: “Those wishing to draw policy conclusions from our work must understand that many innovative forms of financial education have never been studied empirically.”

- O'Prey and Shepard (2014) analysed 21 experimental studies into the effect of financial education on children and young adults. The studies had been performed in wide range of countries, and varied in design and duration (ranging from 3 hours to 72 hours of lessons). The research methods used also differed greatly. O'Prey and Shepard concluded that financial education mainly has an effect on knowledge and that it has only a modest effect on attitude and behaviour.²⁴
- Hastings et al. (2013) examined various types of interventions aimed at influencing financial literacy and economic choice behaviour. The interventions included financial education, strict regulation, improving choice architecture, simplifying the information provided, and rewards for taking action. They concluded that less effect should be attributed to financial education than to other types of interventions.²⁵
- In 2013, the OECD stated that the traditional approach to financial education is based on the economic principle that if people have sufficient knowledge and information, they will make good financial decisions. Behavioural scientists have convincingly shown that people often make irrational decisions, and that their behaviour is systematically influenced by emotional and psychological factors. Given these psychological factors, financial education needs to address the fact that people need tools that enable them to improve their financial well-being. This type of education does not specifically focus on knowledge and information, but rather on acquiring new skills, self-conscious, and techniques for self-improvement.²⁶
- In line with the above, in a recent study into problematic debt, the Netherlands Scientific Council for Government Policy (WRR) concluded that financial education that focuses on transferring knowledge and information has hardly any effect. However, if attention is also paid to non-cognitive factors like self-control and *self efficacy*, financial education may be effective. But, according to the WRR, little research has yet been conducted on this.²⁷
- Jungmann and Madern (2016) concluded that there is little evidence for the effectiveness of financial education programmes. The researchers raise a number of footnotes in this regard: the diversity of interventions is limited, only total effect size is examined (and not the sub-effects on specific groups) many interventions are focused on *expanding knowledge*, and only a limited portion of the interventions are used in a comparable way in the Netherlands.²⁸

24 O'Prey and Shepard (2014) Financial Education for Children and Youth: A Systematic Review and Meta-analysis. Aflatoun Working Paper 2014.1C.

25 Hastings et al. (2013). [Financial literacy, financial education and economic outcomes](#).

26 OECD (2013). [Improving financial education effectiveness through behavioural economics](#).



27 Tiemeijer (2016). [Eigen schuld? Een gedragswetenschappelijk perspectief op problematische schulden](#). WRR. Amsterdam University Press.

28 Jungmann & Madern (2016). [Duurzame verbetering van gezond financieel gedrag. Droom of werkelijkheid?](#) WRR Working Paper No. 23.



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