

Research for Policy



Anne-Greet Keizer
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Why Knowing What To Do Is Not Enough

A Realistic Perspective on Self-Reliance

WRR

THE NETHERLANDS SCIENTIFIC COUNCIL FOR GOVERNMENT POLICY



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ISSN 2662-3684

ISSN 2662-3692 (electronic)

Research for Policy

ISBN 978-94-024-1724-1

ISBN 978-94-024-1725-8 (eBook)

<https://doi.org/10.1007/978-94-024-1725-8>

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The registered company address is: Van Godewijkstraat 30, 3311 GX Dordrecht, The Netherlands

Preface

This book is a translation and adaption of the Dutch report ‘Weten is nog geen doen’, published by the Netherlands Scientific Council for Government Policy (WRR) in 2017. The report was presented to the State Secretary of Security and Justice, Klaas Dijkhof, on 24 April 2017. In it, the WRR recommends the Dutch government to take a realistic approach on people’s mental capacities when designing rules and institutions. On 22 January 2018, the government gave its formal response in a Memorandum to Parliament, in which it embraced a more realistic approach and announced that new policies will be subjected to a ‘capacity to act test’. More information is available on the WRR website: <https://english.wrr.nl/topics/self-reliance>.

This publication was written by Anne-Greet Keizer, Will Tiemeijer and Mark Bovens. Together they formed a project group, chaired by member of the Council Mark Bovens and coordinated by Anne-Greet Keizer. The group was assisted by interns Gijs Custers, Rodinde Pauw, Rosalie Joosten, Vivian van Wingerden, Emma Hartholt and Maxime Hensels. The original Dutch publication has been adapted for an international audience, but not updated.

This book is the product of an extensive process of consultation and analysis. In addition to studying the academic literature, we conducted more than 90 interviews with experts, policymakers and stakeholders. We are very grateful for their time and effort. Their names are listed at the end of the book. Special thanks go to the experts who were prepared to read and comment at length on an earlier version of this book. The theoretical chapters were reviewed by Prof. Dr. Denise de Ridder and Prof. Dr. Jaap Denissen. In the final phase, part of the publications was discussed with Prof. Dr. Kees van den Bos, Prof. Dr. Wilco van Dijk, Prof. Dr. Michiel Scheltema and Mr. Reinier van Zutphen.

The Hague, The Netherlands

Anne-Greet Keizer
Will Tiemeijer
Mark Bovens

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Mark Bovens has been a member of the Council since 1 January 2013. He is attached to the Utrecht University School of Governance (USG) as Professor of Public Administration. Mark studied law, political science and philosophy at Leiden University and at Columbia University Law School in New York. Central themes in his research include public accountability, democracy, the constitutional state and citizenship in the information society, political trust and success and failure of policy. His most recent book (written with Anchrith Wille) is entitled 'Diploma democracy: the rise of political meritocracy'. At the WRR, Mark has been responsible for publications on internal checks and balances in public organisations, societal divisions and migration.

Chapter 1

The Importance of Mental Capacities for Self-reliance



1.1 A Realistic Perspective on Self-reliance

A focus on self-reliance ...

For many people, it's an annual ritual. They receive their pension fund's end-of-year statement, they open it, it lies on their desk or table for a while, and then it disappears unread into their 'pension' folder. The changing labour market means that there are growing risks associated with this behaviour. A job for life is increasingly being superseded by flexible contracts and self-employment. People need to take action and make choices long before they start approaching retirement age. Filing away information unread can lead to major financial difficulties in the long term.

In the Netherlands, it is compulsory for employees to participate in a pension scheme. Even so, the Netherlands' financial supervisory authority has concluded that at their current rate of pension accrual, a third of the public will be unable to meet their projected spending requirements. It is often thought that these are problems that only people with low incomes face. That is not the case. "Awareness is particularly weak among high-income individuals. Almost 70% do not anticipate their pension shortfall".¹

People must also be on constant high alert in other crucial areas of their lives. Fewer and fewer remain with one employer for years on end. Permanent contracts are giving way to flexible work. Employees and self-employed persons are expected to keep their own employability up to standard and to identify new opportunities and threats themselves. Health care policy has also made freedom of choice and taking responsibility for oneself a priority. People are increasingly expected to take charge of their own care.² Self-reliant patients are well informed, choose their own care providers, and actively take decisions about their own treatment in consultation with medical professionals.

But not everyone is capable of such vigilance. There is a very big difference between what people are supposed to do (expectations) and what they are actually capable of doing (capacities). For example, half of all Dutch people (48%) have difficulty taking charge of their own health, illness and care. They lack the necessary knowledge, motivation and self-confidence.³ One in three Dutch households does not have enough of a financial buffer to absorb a normal setback, for example a broken washing machine. Approximately 650,000 households have problem debt, while another 735,000 households are at risk of accumulating problem debt.^{4,5}

When problems arise, the difference between expectations and capacities becomes even greater. Problems complicate the situation; on top of that, stress impairs people's ability to take informed decisions. It is not unusual for them to take ill-advised financial decisions or become generally passive.

We will see that it is not just a small group of 'vulnerable' individuals, for example those with a low IQ, who have trouble living up to expectations. Even people with a good education and a favourable position in society can end up feeling overwhelmed, certainly when they are going through a difficult patch. That is not because they are not intelligent or knowledgeable enough, but because demands are being made on all sorts of other mental capacities, such as the capacity to take action, to remain calm, and to stick to their resolutions. We will also see that those capacities are difficult to train.

In this book, we argue that part of the solution lies in rethinking rules and institutions so that they are based less on how people *should* behave and more on how they *actually do* behave. Many of the current rules seem to assume, implicitly, that everyone always reads and understands correspondence, responds to reminders, continually educates themselves, organises their pensions in good time, actively chooses between healthcare options and, should something go wrong, knows which channels to go through to correct errors. In reality, however, that is far from being true for everyone.

While it may be true in some cases that people do not do their best and refuse to take responsibility for themselves, in many other cases they struggle because things have simply become too complex for them, in part because government policy itself complicates things. Even people who are obliging and responsible can get into serious trouble if they are momentarily inattentive, put matters off, make a mistake, or succumb to short-term temptations. Smart rules and institutions take this into account. A smart system does not absolve people of their responsibility or take over the wheel, but it does provide a strong enough crumple zone and sufficient crash barriers to prevent fatal errors.

... from a behavioural science perspective

In this book, we look at self-reliance from a behavioural science perspective. The focus is on the *mental* attributes of individual people. This is certainly not to suggest that self-reliance is only the result of individual traits and choices. Social circumstances obviously play a major role. As we will see in the next chapter, for example, problem debt occurs at all levels of society but is relatively common among low-

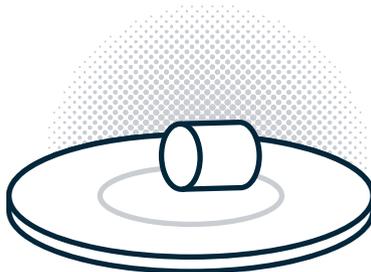
income households. After all, they have fewer reserves to draw upon. And in the labour market, the ratio of job openings to unemployed naturally affects people's chances of finding a job. In short, without prior information, it would be wrong to blame financial and physical hardship entirely on mental traits and capacities.

Having said that, in this book we focus on individual factors. Even in comparable social and economic circumstances, one person will display more self-reliance than the other. The question is: what is the role of mental capacities in that context?

1.2 Knowledge Alone Is Not Sufficient

Marshmallows and self-reliance

What sort of mental capacities are we talking about here? A brief example will help to make this clear. The Marshmallow Test is one of the most famous experiments in developmental psychology. A video made of the experiment has been viewed more than three million times on YouTube. The setting is an office furnished only with a small table and chair. On the table is a plate containing a single marshmallow. A young child is seated on the chair. The researcher says: 'Here's the deal: you can either wait—and I'll give you another one if you wait—or you can eat it now.' The researcher then leaves the room. The film shows a hilarious compilation of children struggling with temptation. Most of them shift around uncomfortably on their chairs, try to look elsewhere, cover their eyes with their hands, but briefly pick up the marshmallow anyway. They smell it and then put it back. Others lick it briefly or bite off a tiny piece. One little girl eats hers up even before the researcher has left the room.



The Marshmallow Test was designed in around 1970 by Stanford psychologist Walter Mischel. He developed a series of experiments testing children's ability to delay gratification. The temptation varied—sometimes it was cookies, sometimes pretzels or crackers—but the point was always to see if and in which circumstances children were capable of controlling their behaviour in order to receive a bigger reward later. Of the hundreds of pre-schoolers that took part, about a third were able to wait long enough to receive the second marshmallow. Mischel continued tracking the children for several decades after 1970. The pre-schoolers who were able to

control their behaviour turned out to be better at exercising self-control later in life, and did better at school. Brain scans carried out in middle age also revealed clear differences between those who had exhibited self-control as pre-schoolers and those who had more trouble doing so.

The Marshmallow Test is only one example in a long research tradition. In the decades following the first Marshmallow Test, psychologists conducted a wide variety of studies into what came to be known in the field as ‘non-cognitive mental capacities’. These are mental attributes other than intelligence or the ability to absorb knowledge. They refer to such personality traits as self-control, conscientiousness, self-awareness, capacity for self-reflection, and ability to think ahead. They involve organising emotions (self-control, regulation, self-efficacy), organising one’s own ‘life’ (thinking ahead, planning, adjusting if necessary, maintaining an overview), and organising the environment (calling in help on time).

Chapters 3–5 examine in detail the outcomes of this very extensive and fertile area of research. One of the main findings is that these capacities offer an important key to explaining differences in school performance, health, and success in society. Whether people finish a study programme, remain fit, and have their finances and lives in order is only partly a question of intelligence or knowledge. The ability to exercise self-control, plan and seek timely assistance is just as important. Research also shows that, just like Mischel’s pre-schoolers, these capacities are not equally distributed across the population. It turns out that such capacities also become weaker in stress situations and that they are only trainable to a limited extent.

Self-reliance and mental capacities ...

Before we go on, we would like to address the terms that we use in this study. The first is the term *self-reliance*. By this we mean the total capacity of individuals to achieve their goals and to get along in life (Fig. 1.1).



Fig. 1.1 Sources of individual capital

Mental capacities are not the only sources of self-reliance, of course. Surviving in modern life also requires social skills, a financial buffer, physical abilities and cultural baggage.⁶ This study deals specifically with the mental capacities that play a role in self-reliance. We distinguish between two types of mental capacities. Researchers have traditionally looked at people’s cognitive capacity, in particular intelligence, knowledge and such basic skills as reading, writing and maths (i.e. literacy and numeracy). It is clear that differences in people’s cognitive capacities play a major role in their ability to manage their lives. Much has already been said and written about this topic. In recent years, researchers and policymakers have also turned their attention to the limitations of human cognitive capacity and judgement.⁷ The behavioural sciences have shown that there are limits to people’s ability to assess information and make rational decisions (see e.g. Daniel Kahneman).

This book takes the next step. It focuses on people’s ‘capacity to act’—something we often refer to in everyday life as ‘personality’ or ‘character’. Here, we refer to such capacities as: taking stock of a situation; identifying goals and making a plan; taking action and carrying out that plan; persevering; and coping with emotions and setbacks. We explain this in greater detail in Chap. 2. Figure 1.2 is an initial attempt to sketch the relationship between the terms that we use here.

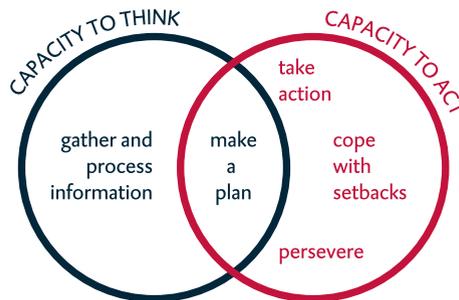


Fig. 1.2 Mental capacities

The distinction between the capacity to think and the capacity to act is not always well-defined; there is a certain amount of overlap. For example, making and executing a plan to achieve a future goal requires not only self-control, but also knowledge. Even so, the distinction is a real one. There are people who are very smart and very knowledgeable but who nevertheless have great difficulty sorting themselves out; conversely, there are people who are not cognitively gifted but who are firmly in control of their lives.

Box 1.1 Terminology: capacity to act as overarching concept

Both the academic literature and popular publications use many different terms to refer to the mental capacities that are the focus of this study, for example grit, self-control, self-regulation, executive functions and executive control. These terms are related and refer to similar mental phenomena. The behavioural sciences use ‘non-cognitive capacities’ as an overarching term, to distinguish them from cognitive capacities. This is, however, a negative label that merely describes what it does *not* refer to. That is why we have chosen to use the term ‘capacity to act’ as an overarching term for the non-cognitive capacities that are the subject of this study. In Chaps. 3–5 we look in detail at what the behavioural sciences teach us; there, we use the more common term in that discipline, i.e. ‘non-cognitive capacities’.

... are not the same as ‘21st-century skills’

We are not the only ones to argue that other mental capacities are important above and beyond knowledge, intelligence, numeracy and literacy. In the worlds of the labour market and economics, there is currently a lively debate about what are called ‘soft skills’ or ‘21st-century skills’. For example, they feature in the debate about what knowledge and skills children need to learn at school to prepare for the future^{8,9}, for example the ability to work effectively with IT, creativity and curiosity, critical thinking, and the ability to work with others. The main argument is that such skills are crucial to our country’s revenue potential and to children’s personal development.

This book does *not* focus on these skills. It is not about what the economy requires from knowledge workers in the 21st century, nor what it takes to develop into a fully realised, whole person. Our question is more basic: what capacities do people need to hold their own in a society in which they are expected to display considerable self-reliance? This question brings other and more general abilities into focus than the aforementioned skills. They include being able to look ahead, coping with delayed gratification and setbacks, optimism and self-control. Such self-organising capacities are important in every aspect of life, and not only with regard to employment in the knowledge-based economy.

We also deliberately refer to *capacities* and not *skills* or *competences*. As Chaps. 3–5 reveal, disposition and social environment are the main factors determining whether or not a person possesses these capacities. It is unclear whether they can be learned or improved through education or training.

1.3 The Growing Importance of Mental Capacities

Mental capacities and meritocracy

Success depends on having access to various resources, such as physical strength, a social network and financial means. The importance of such resources is variable, however. A hundred years ago, physical strength was a more valuable asset in the labour market than it is today. The same was true of one's background: someone from the upper classes could compensate for a lack of talent by having good connections and financial assets.

Mental capacities have become more important in the past century. Nowadays, anyone who does not have the right education and the necessary mindset will not get far in the labour market. Personal merit has become more important than background in many areas. British sociologist Michael Young¹⁰ wrote a satirical essay in which he coined the term 'meritocracy' to refer to this phenomenon. His definition boiled down to a simple equation: 'I.Q. + effort = MERIT'. Merit is the sum of intelligence and perseverance. Today, we would say: the sum of the capacity to think and the capacity to act.

Other sociologists point to trends that undermine people's mental capacities. For example, Zygmunt Bauman¹¹ refers in somewhat apodictic terms to 'liquid times' in which thinking, planning and acting deteriorate over the long term. Collective institutions are 'liquid', i.e. subject to permanent change and without fixed, solidified patterns. We must therefore learn to 'walk on quicksand'. People need to be flexible and adapt constantly to rapid change. Bauman talks about "...a splicing of individual lives into a series of short-term projects and episodes which are in principle infinite... Each next step needs to be a response to a different set of opportunities and a different distribution of odds, and so it calls for a different set of skills and a different arrangement of assets".¹¹ This life of uncertainty is not a temporary stage, but an inevitability. And the expectation is that people will have even more to worry about in the coming decades.¹² That is why it is important for them to have the skills to cope with uncertainty. German sociologist Hartmut Rosa¹³ refers to 'social acceleration', or 'the shrinking of the present', making reliable expectations of the future increasingly problematic and fluid. This means that it is also becoming increasingly difficult to set goals for the future and to work towards them in a purposeful and disciplined manner. Self-reliance is thus becoming increasingly important but more difficult at the same time.

Increased choice overload and temptation

In an earlier publication, the WRR pointed out that people have had more choice and have been exposed to more temptations in recent decades.¹⁴ Liberalisation and privatisation have increased the variety of products and services on offer in finance, health care, insurance, pensions, energy supply and telecommunications. Every person is expected to make informed choices out of a wide range of complex products and services. For example, the 'active' patient, who accesses and uses information

to choose a healthcare practitioner or institution, is a necessary part of the healthcare quality assurance system introduced by the Dutch government.¹⁵ The same applies to critical energy consumers, who are necessary to keep energy prices as low as possible.

These choices must be made in circumstances that are challenging for many people. In his book *The World Beyond Your Head*¹⁶, Matthew Crawford points out the countless distractions—‘the whole world looks like Times Square’—that make it increasingly difficult to concentrate and be a coherent ‘self’. The numerous temptations, available 24 hours a day online, increase choice overload. The importance of a healthy diet and sufficient exercise is well known, for example, but our environment offers us an abundance of unhealthy food and makes it easy to avoid exercise. New train stations are a case in point: escalators and lifts and a wide range of fast food outlets feature prominently. Our genes have not yet adapted to this environment full of ‘obesinudges’.¹⁷ All these treats and amenities play on reflexes that we acquired by natural selection and that helped humanity survive in the distant past, but now make us unhealthy.

Many businesses use subtle techniques to influence customer choice behaviour. For example, Google takes 57 different ‘indicators’ from user profiles into account, and smartphone apps provide companies with detailed insights into our daily behaviour.¹⁸ The result is a service that anticipates our wishes (‘if you liked this series, you may also like ...’), but also our weaknesses (not only the candy display at the checkout, but also push notifications if your favourite brand of chocolate or that new phone that you viewed in the web shop has been marked down in price).

Stringent labour market requirements

A more flexible labour market and the scaling back of employee and pension schemes are making greater demands on people’s mental capacities. Self-organisation is a core competence for the rapidly growing number of freelancers, almost by definition. As self-employed persons, they are responsible for their own safety nets in the event of illness, incapacity or hard times. They also have to save up for their old age. The life of a freelance worker requires many of the characteristics central to our story: thinking ahead, planning, making adjustments if necessary, and maintaining an overview.

The need to self-organise increasingly pertains to employees too, however. In the Netherlands, one in five working people has a flexible job¹⁹ and the size of the severance pay package has declined steadily. Employees are expected to operate like entrepreneurs: maintain their networks, keep their expertise up to date, engage in continuing professional development and transition quickly to another field when work in their sector dries up or their position is eliminated. The plans afoot for a more flexible and varied pension system will also require much more planning and self-control of employees in the future.

Nowadays, employers looking to recruit new employees want more than just a certain level of education, relevant knowledge and specific skills. They are also looking for candidates who have certain character traits, such as resilience, perseverance, discipline, a sense of social norms and motivation. Various studies show that these

characteristics are indeed important for a successful career.^{20, 21} Not only does work require individuals to possess a large number of mental capacities but it also causes mental suffering in many people. In 2014, more than 14% of Dutch employees were suffering symptoms of burnout. “At least a few times a month, for example, they felt empty at the end of a working day, emotionally exhausted by work or tired when they got up in the morning to face another working day”.²² One factor here is that mental capacities do not function as well when they are under pressure due to stress.²³ The labour market therefore requires a whole range of mental capacities, e.g. being resistant to stress and being able to contain impulses, work with others and properly organise personal strengths.²³

Responsibilities shifting between government and citizens

The Netherlands Institute for Social Research (SCP) has shown that, since 1990, people in the Netherlands have been called upon to take more responsibility for many different aspects of their lives, such as healthcare, work and income, housing and social integration.²⁴ The government is asking the public to display much more self-reliance. This is an important factor in what has come to be known as the ‘participation society’. The term was first introduced in the King’s annual speech to Parliament in 2013:

It is an undeniable reality that in today’s network and information society people are both more assertive and more independent than in the past. This, combined with the need to reduce the budget deficit, means that the classical welfare state is slowly but surely evolving into a participation society. Everyone who is able will be asked to take responsibility for their own lives and immediate surroundings. When people shape their own futures, they add value not only to their own lives but to society as a whole.²⁵

The quote reveals the main drivers behind the pursuit of greater participation. First of all, the Dutch government considers it a matter of principle that people should be able to take care of themselves and their families as much as possible. The government also maintains that the welfare state is expensive and that many services will no longer be tenable if nothing changes. That is another reason why it wants the public to refrain as much as possible from claiming government support. For example, it asks people to take an active interest in their own health, employability and old age provision. In short, the government is making greater demands on people in the participation society. Those demands place a heavy burden on their mental capacities. It is a shift in responsibilities between government and the public that is not unique for the Netherlands.²⁶

1.4 Structure of This Book

The starting point for this book is the quest for self-reliant individuals. We concentrate on the mental side of self-reliance and place particular emphasis on the capacity to act. That is not because the capacity to think is not important. Adequate reading,

writing and maths skills are critical to self-reliance. Until now, however, there has been even less emphasis on the capacity to act. In short, our questions are:

- What role does the capacity to act play in an individual's self-reliance?
- What are the implications of the above for public policy?

Chapter 2 first looks at the extent to which the capacity to act plays a role in three important areas of daily life: health, finances and work. We do so based on discussions with experts and on earlier research. Chapter 3 then surveys what research conducted in the behavioural sciences over the past few decades has revealed about the capacity to act. Chapter 4 looks at the impact of external circumstances, such as stress, on that capacity. In Chap. 5, we explore the extent to which it is possible and desirable to train the capacity to act.

Research in the behavioural sciences reveals that under certain circumstances, many people have trouble being mentally self-reliant. First of all, capacities vary widely; people start out with different amounts of capital. Some are naturally better able to manage than others. Second, mental capacities are affected by stressful conditions, for example by life events that can happen to anyone, such as the loss of a job, a divorce, or the birth of a child.

In this book, we therefore recommend that governments adopt a more differentiated view of the public. It is better to assume that different people have very different mental capacities than to think that the vast majority of people are self-reliant and only a small group of people are vulnerable. It would be unwise to take the first group—whether or not explicitly—as the benchmark for policy and consider the latter an exception needing supplementary policy. Doing so ignores the fact that there are many people who manage well under 'normal' circumstances but who may not have the mental capacities that many government policies require when they come up against obstacles. In the final chapter we discuss what a differentiated policy of this kind might entail.

Endnotes

1. AFM. (2015, October).
2. van der Heide, I. (2015).
3. Rademakers (2014).
4. Panteia. (2014).
5. We refer in this book to 'problem debt' and not simply to 'debt' because debt is not necessarily bad or wrong. Many people face major expenses in the first half of their lives—for example, their education or the purchase of a car or house—that they pay for by borrowing against their future earnings. There is also no good reason not to borrow money to cover expenses that are not strictly necessary but that add to the quality of life, such as certain hobbies or nice home furnishings. As long as people can make their payments, there is nothing

- wrong. In the literature, the term ‘problem debt’ is often operationalised as an arrears that a person cannot reasonably pay within three years, given their debt repayment capacity (Tiemeijer 2016).
6. We are following the suggestion of the Netherlands Institute for Social Research (SCP) (Vrooman et al. 2014), i.e. to divide individual capital into four categories: financial, social, cultural and personal. The SCP regards mental capital as a component of personal capital.
 7. This also led national governments to establish special behavioural science units, such as the United Kingdom’s Behavioural Insights Team and the Australian government’s Behavioural Economics Team.
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Chapter 2

Self-reliance in Everyday Life



2.1 The Daily Challenge of Self-reliance

Maintaining a healthy lifestyle, managing personal finances, finding and holding down a job—these are challenges that everyone faces. This chapter focuses on the following question: what mental capacities must an individual have to be able to meet these challenges?

Health, personal finance and the job market are not the subject of this book, but they do illustrate the importance of having the right mental capacities to be self-reliant in our society. In this chapter we describe situations that apply to a relatively large number of people. While the chapter reports on research conducted in the Netherlands, the situations that it describes also occur in similar forms in other Western countries. We make an analytical distinction between the capacities needed to avoid problems (prevention) and the capacities needed to cope with problems (control). In real life, we see that some of these capacities are important in both situations, and that problems do not always have a clear starting point.

This chapter is based on various sources. In each domain, we conducted a number of interviews with professionals and other stakeholders (more than 60 interviews in total, see Appendix I). We asked our interviewees what people must be able to do to be self-reliant and what typifies those who are good or bad at it. To provide solid underpinnings for the information obtained in our interviews, we draw on research conducted within the various domains. Because we aim to reflect on everyday experience in this chapter, we sometimes use the language of daily life. In addition to capacities, then, we also refer to health literacy, financial literacy, and job market skills.

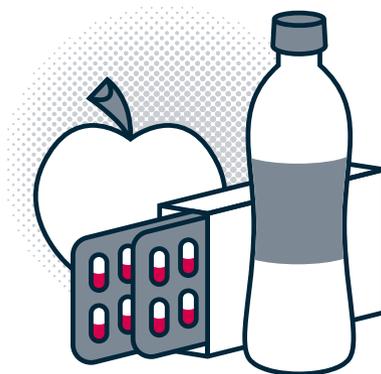
In the following sections, we review what is required of people in each domain and then discuss the role mental capacities play in each context.

2.2 Health

2.2.1 More Freedom of Choice and More Personal Responsibility

The Dutch systematically rank health as one of the most important life assets.¹ Good health allows them to do what they want. In recent years, Dutch people have been given more scope to take charge of their own health. Freedom of choice and autonomy are paramount; people are increasingly allowed to ‘take control’ of the care they receive. Patient organisations have been fighting for this for years and healthcare providers increasingly share this view. Healthcare professionals believe that they looked after ‘clients’ too much in the past, making them too dependent on care.²

In addition to making healthcare more affordable, the Netherlands’ new healthcare system, introduced in 2005, was also meant to give people more control. The point was to allow the public more choice but also greater individual responsibility for ensuring the affordability of care. “The client must become a critical care consumer who is encouraged to make responsible choices”.³ The Healthcare Insurance Act, introduced on 1 January 2006, turned the funding system for curative care into a regulated market, the assumption being that people would behave in accordance with the rules of that market. As care consumers, they had to be well informed and choose their own insurer and practitioner.⁴ Policymakers assumed that the public would force care providers and insurers to deliver good quality at a competitive price.⁵ In addition, there were growing references to the ‘active patient’, the primary aim being to let those who wanted to take charge do so, for example by communicating with care providers, engaging in shared decision-making about treatment, and (to some extent) by treating themselves (self-management).⁶ In other words, the role of critical care consumer and active patient not only means having more options but also taking more responsibility.



Our attitude towards lifestyle has also changed. Emphases and priorities have varied over the years, but more recently successive Dutch governments have argued

that lifestyle is, first and foremost, the responsibility of the individual.⁷ People can make choices that are aimed at staying healthy or improving health. “The government emphasises the personal responsibility and strengths of the individual. This applies equally to matters concerning health. Accordingly, primary responsibility for improving public health rests not with the government but with the people themselves”.⁸

However, people are not always able to determine for themselves the circumstances in which they make lifestyle choices. For example, more and more public environments in the Netherlands encourage people to eat a lot of unhealthy food and not take enough exercise. In an obesogenic environment, the unhealthy choice is often the easiest one.⁹

The reality thus differs from the ideal. Despite valuing good health, many people do not have a healthy lifestyle or have difficulty maintaining one.¹⁰ Only about a quarter of the Dutch population complies with the Dutch Dietary Guidelines issued by the Health Council of the Netherlands.¹¹ Of the entire Dutch population, 43.1% are overweight and 11.7% are seriously overweight.¹² An unhealthy lifestyle, obesity, smoking and excessive drinking are not limited to a particular subgroup. These problems are also found among those who have attained a higher level of education (see Table 2.1), although to a lesser extent.

Table 2.1 Relationship between educational level and lifestyle

Educational level	Seriously overweight	Satisfy Dutch standards for physical activity	Smokers	% of all drinkers who are heavy drinkers
Primary	25.7	53.7	33.3	12.6
Pre-vocational secondary, VET1, general secondary, lower secondary	17.4	57.3	26.2	10.3
Senior general secondary, pre-university, VET2	14.4	58.5	27.3	10.7
Bachelor’s (university or higher professional)	10.4	59.2	20.2	9.8
Master’s, Ph.D.	6.1	63.3	16.5	9.1
Unknown	17.2	57.2	17.1	–

Statistics Netherlands, adapted by WRR (figures refer to 2015, percentages of the Dutch population 12 years and older, seriously overweight percentage of Dutch population 4 years and older)

Many people also find it difficult to be a ‘critical care consumer’. Patients do not always appear to choose care providers based on price and quality comparisons but instead let themselves be guided by other factors, such as ‘Is the care close by and is the care provider known to me?’, or ‘Have I had positive or negative experiences in the same hospital?’, even if the specialism concerned was completely different.¹³ Almost half of the Dutch population has trouble playing an active role in their own care.¹⁴ The care professionals whom we interviewed confirm this and indicate that they do not always know whether the patient has made a conscious choice. The question is whether every person is willing and able to be an active patient. A passive attitude may also be the result of habit, the patient’s social circumstances or a stressful situation.

Nevertheless, every person has to deal with health problems, whether major or minor, at some point in their lives. Although the Dutch are relatively healthy and there has been an upward trend in recent decades on important indicators such as ‘life expectancy’ and ‘life expectancy in perceived good health’, sooner or later almost everyone faces a chronic or other illness or physical disability (Fig. 2.1).¹⁵

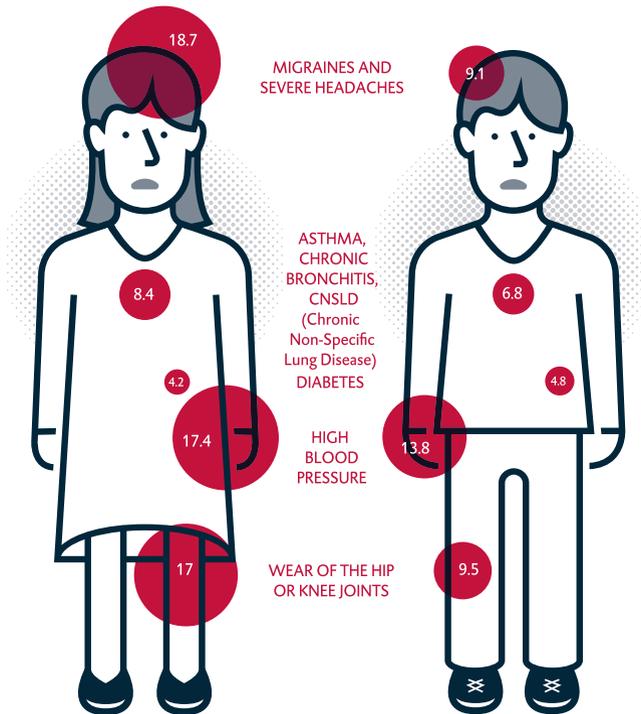


Fig. 2.1 Chronic illnesses and physical disabilities. *Source* SCP¹⁶

Their numbers are also growing. All of the top-10 chronic conditions were more common in both women and men between 2011 and 2013 than between 2005 and 2007.^{16, 17} That means that at some point in their lives, more than half of the Dutch population will need the appropriate mental capacities to manage their chronic illness properly.

2.2.2 Health Challenges: Live Healthily and Be an Active Patient

A person’s health is affected by various factors, only a few of which are receptive to influence. After all, even people who live very healthy lives can get sick. However, self-reliant individuals are expected to take active steps to remain healthy and, if they do become ill, to know their way around the care process.^{6, 18, 19}

The challenge that the public faces in this domain is multifaceted and includes both prevention and control. Both call on mental capacities. However, this is an analytical distinction, because prevention applies to everyone and is even more important for patients with certain conditions. After all, lifestyle can have a direct impact on the course of an illness (Table 2.2).

Table 2.2 Health challenges

Prevention	Choosing to live healthily and maintaining a healthy lifestyle
Control	In the event of illness, finding one’s way around the care process and playing an active role in that process as a patient

Choosing to Live Healthily and Maintaining a Healthy Lifestyle

On paper, it’s easy enough to live a healthy lifestyle: maintain a healthy dietary pattern, don’t smoke, consume little or no alcohol or drugs, and get enough exercise but also enough rest and relaxation.²⁰ Individuals themselves choose what to eat, drink and how much exercise to take. We might therefore conclude that a person who lives unhealthily has chosen to do so and that it is his or her own responsibility. In reality, it’s not that straightforward. Eating, drinking and exercising are complex aggregates of what are at times very diverse behaviours.²¹ The determinants of an unhealthy diet can also differ considerably from those of not exercising enough or of lighting up a cigarette.

Choosing to live healthily and to maintain a healthy lifestyle requires a variety of different capacities of people. First of all, they must gather and process the relevant information. It is widely known that certain food products are unhealthy, but there is now so much information available on healthy nutrition—some of it contradictory—that it can be hard to identify the most sensible choice.²² Sometimes the problem is how best to apply that information. For example, do squeezed oranges count towards the two pieces of fruit that we’re supposed to eat every day?

Nowadays we no longer refer to an unhealthy diet but to an unhealthy dietary pattern. People are not only expected to know about nutrition, but also to have an overview of their own situation. What are healthy or unhealthy choices for them? That requires them to plan and set personal goals. A healthy lifestyle is not contingent on choices made at specific moments but is an aggregate of many choices that are made every day and that influence each other: if you eat too much or exercise too little one day, you can compensate the next day. But it is up to the individual to actually do so.

The next step, then, is to take action: get off the couch and actually do the sensible thing. Even more important is to persevere with these sensible choices. Many people are capable of losing weight, but keeping the weight off is another story altogether, especially in an obesogenic environment with its many tempting but unwise choices. Perseverance is particularly important when people are facing setbacks or experiencing life events. The ability to cope with stress and sorrow is therefore also crucial to a healthy lifestyle.

Box 2.1: Obesity Clinic CGG²³

It can be very hard for people to develop a healthy lifestyle for themselves. That was one of the main reasons for setting up the Obesity Clinic CGG in Rotterdam. Whereas the usual interventions are geared to averages and mainly focus on nutrition and exercise, the Obesity Clinic looks at the individual patient from a ‘holistic and multidisciplinary perspective’. Our rapidly growing knowledge about obesity makes it increasingly clear that a multitude of different factors are at work. These factors are partly socio-psychological and cultural, but to a significant degree they are also biological or related to medicine use, for example. That is why the Obesity Clinic first examines the root cause of each individual’s overweight and adjusts his or her treatment accordingly.

Individual treatment of this kind is important because it would otherwise not only be ineffective but even counterproductive. The well-known ‘yo-yo effect’ occurs not just because people revert to old habits; it also has a biological basis. For example, a low-calorie diet can interfere so much with a person’s appetite and feelings of satiety that a healthy dietary pattern becomes an even greater challenge. Ineffective treatment also induces frustration, stress and sometimes even depression, putting pressure on people’s mental capacities.

Once the biological and medical factors have been examined and treated, people who are clearly capable of losing weight from a medical perspective qualify for an 18-month group training programme. Mental capacities play an important role in this group. The programme focuses on learning healthy lifestyle habits, with weight loss as a side effect. The participants are usually highly motivated and lead active lives, but have difficulty taking action in this specific domain. They often find it hard to actually carry out their plans. That is because they are very focused on the short term, have trouble controlling their impulses, and find it unfair that they have to cut down on portion size and deny themselves certain foods (‘Why am I not allowed to eat that?’).

Participants often have enough general knowledge about healthy dietary patterns but lack the insight to apply that knowledge in their own situation. Sometimes the devil is in the detail, for example not knowing that 250 g of uncooked rice will weigh 600–700 g once cooked, resulting in unintentional excess calories.

Many of the patients have trouble dealing with emotions, such as anger or sorrow. Life events—often several at a time—play a major role. They need not always be events as significant as the death of a partner or a job loss; they can also be more minor events that disrupt their routine, such as changing jobs or going to live on their own. The participants are very concerned about others, but often have low self-esteem. After every failed diet, they feel more stress and lose self-confidence. If they lose weight, their self-image often improves.

The Role of an Active Patient

When people develop health problems, the role of the active patient comes into play. What that role requires of the individual differs from one condition to the next, but there are many disorders that call on the same capacities. The healthcare professionals we interviewed stress that the perception of what patients want and what they must be able to do has changed dramatically in recent years.²⁴

First of all, an active role requires patients to be able to articulate their problem clearly and to understand and carry out the doctor's orders properly.²⁵ It is especially important that they communicate clearly and honestly with their GP, the first point of contact for complaints. Once diagnosed, patients need to learn about the disease and be able to act accordingly, for example when and how to contact a health care professional about their chronic disorder. When should they go to their GP and when should they contact their specialist? This type of question requires more than knowledge alone; patients must have an overview of the situation, take action when necessary, and be able to cope with the emotions and limitations that their illness entails.

The next step is to engage in shared decision-making about treatment. Most patients find this important, but not all of them want to talk about treatment options and share in decision-making.^{24, 26} It requires people to be able to communicate properly with their healthcare professional, but also to understand themselves and what they need as patients. That is not always easy, certainly in situations in which the diagnosis is (as yet) unclear. After all, in order to engage in shared decision-making about treatment, they need to understand and assess the various treatment options. That is why so much effort has gone into making information available to patients in recent years.¹³

However, the ideal image of the patient who takes decisions with his or her practitioner is often contradicted by reality when someone receives a diagnosis or suffers physical complaints. Most people are not very assertive once they enter a hospital as a patient. "An unexpected illness makes people anxious and they do not always know how to behave as patients and what they can ask or say".²⁷ After receiving the diagnosis, they first have to process the news and learn to deal with the accompanying uncertainty and fear. Studies show that people forget more than half of what doctors tell them in the consulting room.^{28, 29}

Some conditions require only a brief period of treatment, after which patients can resume their lives, where necessary under orders to live a very healthy lifestyle.

Increasingly, however, people are being diagnosed with chronic disorders. With all the treatment options now available for many chronic conditions, patients may remain under treatment for a lengthy period of time—in many cases, for the rest of their lives. The more serious the illness, the older the patients or the more disorders they have, the more self-management tasks they are obliged to shoulder.^{30, 31}

In response, the healthcare sector increasingly offers chronic patients specialist support, such as specialist nurses and nurse practitioners assigned to general practices. However, the success factors for self-management lie largely with the patient. Their motivation, opinions and intentions are very important.³² When patients enter the consulting room, it is difficult for the care provider to assess the capacities that they may or may not have.³¹ Objective parameters such as age, educational level or migration background do not necessarily provide an accurate basis for predicting someone's ability to cope with their illness.³³ Some interviewees indicate that they lack the necessary knowledge to make such assessments.

In recent years, the healthcare sector has devoted more attention to helping patients take an active role. For example, patients are now involved in drafting guidelines for doctors and the national government supports the development of protocols for patient-care provider dialogues.³⁴ But existing interventions in support of patients will only go so far in meeting expectations. Heijmans et al.³¹ conclude that interventions should be more 'personalised' and make allowance for patient characteristics such as motivation, preferences and what an individual chronic patient is capable of doing.

Box 2.2: Using e-health applications to capitalise on the capacity to act

Recent years have seen a surge in e-health applications that are said to make patients more self-reliant.²⁴ In many cases, however, websites and apps are mainly designed to transmit information. What is truly interesting is an app that capitalises on an individual's capacity to act. One example in the United Kingdom is the 'Baby buddy',³⁵ an app that tracks an expectant mother's pregnancy, offers relevant information at each stage, and allows her to ask questions. Women can also use the app to set goals for themselves, for example to get at least 20 min of exercise a day, and are encouraged by the app to meet those goals. The app keeps track of doctor's appointments and check-ups and issues timely reminders. Women can also personalise their avatar, for example by changing its outfit. That makes the app more fun and motivates women to continue using it for a 15-month period.

Not Everyone Is Health Literate

Until recently, researchers focused mainly on what people need to know and must be able to do to process information properly. The voluminous literature on health literacy was limited to reading, writing and maths skills. Later, researchers added

the ability to deal with oral and digital information, and more recently that has been extended to include motivation and other factors.³⁶ Today, researchers are also looking at non-cognitive attributes under the ‘health literacy’ heading, albeit sporadically. Health literacy is not a goal in and of itself but rather influences health in different ways. It is a determining factor in: (1) the individual’s level of knowledge; (2) lifestyle; (3) healthcare use and access to care; (4) communication with healthcare professionals; (5) self-management and medicine use.⁶

Various tools have been developed both in the Netherlands and abroad to create patient profiles that chart patients’ (self-management) skills.³⁷ Hibbard et al.³⁸ developed the Patient Activation Measure (PAM),³⁹ a scale that analyses why some patients work actively on their health and others do not. The scale consists of four levels of patient activation, running from low (1) to high (4): (1) believing that one’s own (patient) role is important; (2) having the confidence and knowledge necessary to take action; (3) actually taking action to maintain and improve one’s health; (4) staying on course even under stress.⁴⁰ People with a low score are more likely to feel overwhelmed with the task of managing their health; they have little confidence in their ability to have a positive impact on their health; they misunderstand their role in the care process and have limited problem-solving skills.⁴¹ Negative experiences have led them to become passive, and that means that they would rather not think about their health.⁴²

Rademakers tested the PAM tool in the Netherlands.^{43, 44} Her studies show that, as elsewhere, not everyone in the Netherlands is equally health literate and that the differences between people cannot all be reduced to educational level (see Table 2.3). High-educated persons do have higher scores, but even there, only 29.1% attain level 4 and 16.1% never go beyond level 1.

Table 2.3 Relationship between educational level and patient activation level (in %), based on Rademakers et al.⁴⁴

Patient activation level	Educational level		
	Low	Medium	High
1. Believe one’s role is important	31.4	21.2	16.1
2. Have confidence and knowledge to take action	23.3	27.7	23.3
3. Take action	31.8	29.2	31.5
4. Stay on course	13.5	21.9	29.1

Being knowledgeable is therefore not enough to meet the challenges of self-reliance in health matters. Based on our interviewees’ experiences and the literature, we have produced an outline of the necessary capacities (Table 2.4).

Table 2.4 Health

Health challenges	Prevention <i>Healthy lifestyle</i>	Control <i>Take an active role in the care process</i>
Gather and process information 	Gather and assess information on healthy diet, exercise and the negative effects of smoking and drinking alcohol	Be knowledgeable about the illness and assess one’s own complaints in the light of that knowledge
Have an overview of the situation, set a goal, make a plan 	Be able to evaluate one’s lifestyle and make a plan to improve it, make healthy choices today to prevent health issues later in life	Have an overview of one’s personal situation, identify goals and work with the doctor on a treatment plan, understand what treatment options mean for one’s health later on
Take action, implement plan 	Get off the couch, eat healthily and quit smoking	Contact the doctor when necessary, ask for a second opinion
Persevere 	Resist the temptations of the obesogenic environment, get enough daily exercise, believe that people can influence their own health	Stick with the treatment, adopt a healthy lifestyle, believe that people can influence their own health
Cope with emotions 	If there are disappointments or setbacks, do not turn to cigarettes or alcohol or take refuge in an unhealthy dietary	Accept the illness and be able to cope with emotions and limitations

2.3 Personal Finance

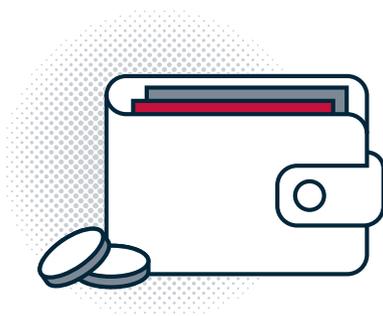
2.3.1 More People with Problem Debt

The temptations and the level of complexity have also increased in the domain of personal finance. Instead of an obesogenic environment, Jones et al.⁴⁵ refer to ‘debtogenic urban landscapes’. In the UK, it is precisely in poorer neighbourhoods that main streets are lined with casinos, ATMs and pawnbrokers. This is less extreme in the Netherlands, but the Dutch can still spend money 24 h a day at web shops or online casinos, and there are ads for mortgages that can be taken out in the space of a week.⁴⁶

It is not always clear to the public what lies behind these temptations. Financial products, such as mortgages, investment products or insurance, are by their very nature difficult to fathom.⁴⁷ They are complicated and often involve hidden risks. These are products that people often purchase only a few times in their lives, lim-

iting their ability to fall back on prior knowledge and experience. Nevertheless, in recent years Dutch households have increasingly purchased a wide range of financial products, such as investments, supplementary pensions and savings and investment insurance, including many risk-bearing capital insurance policies and other complex investment products.

At the same time, the public has assumed or acquired greater responsibility for covering financial risks. Examples include the rise in the number of self-employed persons who are not covered by the pension system and the transition from student grants to a student loan system. Governments also add to the complexity of financial planning in other ways. In 2013, the National Ombudsman of the Netherlands concluded that government schemes are so complex and their effects often so unclear and unpredictable that they lead to more problem debt. There are so many government schemes that many people no longer know what they are entitled to, making financial planning almost impossible.⁴⁸ In the spring of 2014, Deloitte counted a total of 27 different income-support schemes that households could potentially claim to supplement their own income. The calculations that determine what an individual is entitled to under these schemes apply a total of seven different definitions of income and assets. For example, people must be able to distinguish between such concepts as aggregate income, means-test income, disposable income and net income. And in order to request a waiver of municipal taxes, for example, applicants sometimes have to submit up to 15 supporting documents. In addition, the rules change regularly.



A substantial number of Dutch people face or are at risk of getting into financial difficulties. One in three households does not have a big enough buffer to absorb a normal setback, such as a broken washing machine.⁴⁹ Only 37% of households have more than 3,500 euros in reserve.⁵⁰ Approximately 650,000 households have problem debt, while another 735,000 households are at risk.^{51, 52} These are not hard figures but estimates based on large-scale surveys.⁵³ There is no Dutch database of people who have (or are at risk of) problem debt, and not everyone in debt reports to official bodies.

The debt problem has grown since the 2008 financial crisis. More people found themselves facing a drop in income, unemployment and falling house prices. Household purchasing power declined sharply for a number of years.⁵⁴ The increase in the number of debtors is now levelling off. BKR Financial Registration Office observed that in the second half of 2015, the number of consumers with payment arrears on

loans had not increased but remained stable for the first time since 2008 at three quarters of a million. In the past ten years, more and more people have applied for debt assistance. Figure 2.2 shows the number of requests for assistance submitted to members of the NVVK, the sector organisation for debt assistance services.⁵⁵ The average debt of those who register currently stands at to €42,900.

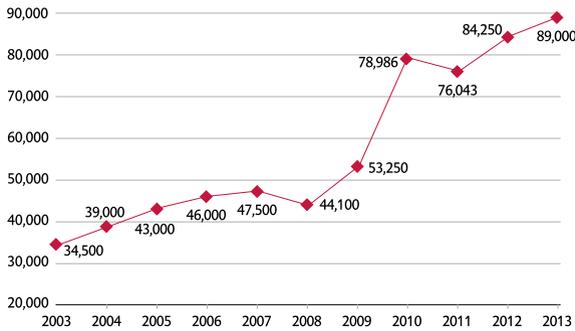


Fig. 2.2 Applications for debt assistance submitted to NVVK. *Source* NVVK annual reports

In recent years we have seen that problem debt occurs at all levels of the population, not only among the traditional underclass, but also among those with a good education and a decent income. It is relatively common among people with little education, a low income and rented accommodation, but certainly not limited to these groups (see Fig. 2.3). Other factors apparently also play a role.

Level of education	
Up to and including prevocational secondary education (VMBO)	55%
Senior general secondary education (HAVO), Pre-university education (VWO), Senior secondary vocational education (MBO)	29%
Higher professional education (HBO), University education (WO)	16%
Total	100%
Net monthly income	
≤ 1,000	11%
1,000 - 2,000	49%
2,000 - 3,000	32%
≥ 3,000	8%
Total	100%
Type of home	
Owner-occupied home	42%
Rented home	58%
Total	100%

Fig. 2.3 Personal characteristics problematic debts. *Source* Panteia⁵¹

2.3.2 Financial Challenges: Display Healthy Financial Behaviour and Get Out of Debt

What you must be able to do to be financially self-reliant depends on your personal situation. It is easy to manage your finances when a fixed salary is deposited into your account every month that automatically covers your regular expenses, with money left over to save. But it is precisely when problem debt arises that people's mental capacities are put to the test. In this section, we look at what we must be able to do to avoid financial problems, and what happens if we do end up with problem debt or a debt restructuring arrangement (Table 2.5).

Table 2.5 Challenges for personal finance

Prevention	Display healthy financial behaviour
Control	Get out of problem debt

Display Healthy Financial Behaviour

Avoiding payment arrears is what healthy financial behaviour is all about. This means that spending does not exceed income, that people plan ahead for the longer term, are aware of financial risks and take appropriate steps, such as accumulating a financial buffer.⁵⁶ More specifically, it means being able not only to purchase a complex financial product such as a mortgage, but also to perform basic tasks such as opening the post and paying bills on time.

Financially healthy behaviour does not always prevent payment arrears. Bad luck can still plunge people into a precarious financial situation. On the other hand, individuals with a positive bank balance do not always exhibit financially healthy behaviour. They manage to stay out of trouble as long as their income exceeds their spending. In other words, simply having the right mental capacities is not enough to be financially self-reliant.

The Netherlands' Institute for Budgetary Information (NIBUD) describes what someone must be able to do to be financially self-reliant, based on five areas of competence (see Box 2.3). Some of these competences are required every day, others only occasionally.

Box 2.3: Competences needed for financial self-reliance

NIBUD has identified five competences associated with financial self-reliance.⁵⁷ These competences describe the knowledge and skills that consumers need to ensure that their spending does not exceed their income in the short and long term.

- Having an overview. Consumers have an overview that helps them to understand how best to manage their personal finances.

- Sensible spending. Consumers spend their income in such a way that they can manage their household finances properly in the short term.
 - Looking ahead. Consumers realise that their desires and certain events over the medium and longer term will have consequences, and they adjust their current spending accordingly.
 - Making informed choices. Consumers choose financial products in line with their budget and appropriate to their personality and personal household circumstances.
 - Having enough knowledge. Consumers have all the relevant knowledge they need to manage their household finances in the short, medium and long term.
- Source Nibud*⁵⁷

Nibud's list describes very precisely which tasks and actions an individual should be able to undertake. Knowledge is a factor, but it is clear that knowledge alone is not enough. Nevertheless, until now financial literacy has been the main focus of international literature, which emphasises people's ability to process economic information and the extent to which they make informed decisions.⁴⁹ Although broader definitions now apply, which also include behavioural aspects, the focus is still on knowledge. The prevailing hypothesis in this field of research is that people get into financial difficulties because they lack financial knowledge and that increasing that knowledge is the key to improvement. Recent research has raised growing doubts about this.^{58, 59, 60} When personal characteristics such as risk attitude, preference for planned behaviour, confidence in one's own abilities and numeracy are taken into account, the correlation between knowledge and behaviour almost completely disappears.

The debt relief workers we spoke to confirm this picture. For example, it is not the case that higher educated people always make a better job of managing their finances than lower educated people. Problem debt is not limited to certain groups. Only some of those affected belong to the traditional underclass, the group of people who have trouble managing their personal finances themselves, under any circumstance, because they do not have the necessary cognitive capacities. Debt relief workers note the rise of two new groups with problem debt. The first are the 'nouveau poor', people who, until recently, had a job and a reasonably well-regulated lifestyle, but who suddenly find themselves in serious trouble owing to setbacks. Many of these people do not have large and immediately available financial buffers, making them relatively vulnerable to changing circumstances. The second group consists of the well-off, people who have a good income but who get into financial difficulties due to divorce, illness or another life event. High recurring costs, often combined with an inability or unwillingness to alter their familiar lifestyle, cause this group to run up considerable debt in a short space of time, despite their comfortable income. Debt relief workers note that both groups are unable or unwilling to adapt to the changed circumstances.

The foregoing shows that financial problems seldom occur in isolation. Various studies⁵¹ and interviews make clear that life events play a major role in whether or not someone falls into debt. Such events, such as having a child, being dismissed or losing a partner, can happen to anyone. Whether they lead to financial problems has to do with the impact of the event and whether the individual has a financial buffer. Not everyone sees the event and associated loss of income coming, or has even given thought to the possibility that such an event might occur.⁵⁴ Unforeseen circumstances combined with a tendency to underestimate risks and optimism about the future mean that people do not spend enough time reflecting on future events that could have major financial consequences. How people react to a life event is also a factor. They must be capable of assessing their personal situation, accepting changes and adjusting their goals. That requires adaptability and confidence in their ability to quickly turn a situation around.

Dealing with Problem Debt and Debt Restructuring

Once people have problem debt, they find themselves in a complex situation, one that requires vigilance. They will most likely be dealing with several creditors and claims, each with its own rules and payment arrangements. The debtor needs to know what information to pass on when and to whom, must be able to deal with the many forms and requisite documentation, procedures and waiting times, be aware of any opportunities for objection, know where to turn for assistance, and understand the bureaucratic rules and logic involved. In addition, debtors must be assertive and persistent in the face of a bureaucracy that is not always set up to support the individual. They must be able to defend themselves against creditors that may intimidate them and abuse their ignorance.^{61, 62} Debt collection agencies are not always subtle in their actions, often exacerbating the problems of debtors. The Netherlands Authority for Consumers and Markets (ACM) concludes that debt collection agencies ‘regularly exert undue pressure’ to get bills paid.⁶¹ For example, they threaten to take steps for which they have no legal authority, such as summons, forced sale, eviction or seizure. This kind of pressure often produces results, since most debtors are not sure what a debt collection agency is and is not authorised to do.

The creditors often include various government entities, such as the Tax and Customs Administration, the Central Judicial Collection Agency (CJIB) and the Health Insurance Board (CVZ).⁶³ Although they are all part of government, they do not apply the same rules and procedures. Each government entity has its own regime, and there is virtually no coordination between them. As a result, they sometimes get in each other’s way. It is conceivable, for example, that a bank will unexpectedly refuse to execute payment of a CJIB fine because another government agency has just emptied the debtor’s bank account the day before to cover a debt. This is particularly frustrating because the CJIB then immediately charges a hefty penalty if required to send a reminder for late payment.

All the experts agree that it is important to take action without delay. At the same time, however, they also note that it often takes quite a while before people acknowledge their problem. People are ashamed of their own failure, blame themselves and therefore believe that it is up to them to fix the problem. Sometimes their problems are so severe that debt relief or restructuring is necessary. This is yet another situation that calls on the debtor's mental capacities.

To begin with, the debtor must be able to ask for help. For many people, requesting debt assistance is a major step. On average, it takes about five years from the first arrears in payment before people register for municipal debt assistance.⁶⁴ This is not only because they are ashamed, but also because access to the scheme is subject to strict requirements and precisely these people find it most difficult to satisfy them.⁶⁵ Many local authorities, for example, will refuse assistance if the debtor's divorce has not yet been finalised, and those who own a home or a car not required for commuting will have to sell them first. In addition, the municipal authorities examine the debtor's behaviour. The latter must abide by agreements, have their accounts in order and not incur any new debts. The issue here is that people struggling with problem debt have often lost their grip on things. They spend all their time addressing urgent problems, can no longer plan ahead and are constantly under pressure from creditors. It is not easy for them to have a clear grasp of their financial situation in such circumstances, and their loss of control is precisely why the problem arose in the first place.

The debt restructuring process is difficult and requires considerable perseverance and discipline. Of those who are accepted, around 30% do not complete the process, despite the strict selection criteria.⁶⁶ Not everyone is sufficiently motivated. Sometimes people do not seem willing to abandon the lifestyle to which they are accustomed or to give up what they see as necessities. Professionals point out that people need time to recognise and accept their situation and to make real choices. This is partly because of the stress of the situation itself.

What you must be able to do involves much more than knowledge, in other words. Research shows that having a positive attitude—thinking beyond the short term, being able to resist temptation and being willing to save—has a greater impact than possessing practical skills, for example having a clear overview, actively keeping up with paperwork, or having a savings account.⁶⁷ Based on our interviewees' experiences and the literature, we have produced an outline of the capacities that are required to be financially self-reliant. Getting out of debt requires other actions than preventing debt in the first place, but the necessary capacities are very similar (see Table 2.6).

Table 2.6 Personal finances

Financial challenges	Prevention <i>Take an active role in the care process</i>	Control <i>Get out of debt</i>
Gather and process information 	Choose financial products consciously and understand what they entail for your personal financial situation	Know and understand the rights and obligations associated with allowances and schemes
Have an overview of the situation, set a goal, make a plan 	Keep financial records up to date, balance incomings and outgoings, build up financial buffers that allow you to absorb life events (savings)	Get financial records in order, adjust spending and income to personal situation, choose strict debt restructuring programme to get out of debt
Take action, implement plan 	Open post, pay bills, increase income, believe that it is possible to rein in spending so that it does not exceed income	Get in touch with creditors, ask for assistance, believe that you yourself can have a positive impact on your debt problem
Persevere 	Resist advertisements and sales/discounts	Resist the temptation to buy things that people without debt buy
Cope with emotions 	Don't make any impulse purchases	Overcome shame and ask for assistance

2.4 Labour Market

2.4.1 Flexible Work and Individual Responsibility

In the Dutch participation society, everyone is expected to participate, preferably through gainful employment. That means being employable and finding and keeping a job. Many people support this basic premise, but an individual's job opportunities are influenced by various factors.

The first is the economy. For example, after the 2008 crisis began, the unemployment rate in the Netherlands rose. Job losses increased from 80,000 a year in 2008 to between 105,000 and 125,000 in subsequent years.⁶⁸ Unemployment rose from 3.7% in 2008 to 6.6% in 2015,^{69, 70} declining to 5.7% in the third quarter of 2016.⁶⁹ The group of unemployed persons is not homogeneous. Older people are more likely to be long-term unemployed than young people, and the low- and medium-skilled are somewhat more likely to be unemployed than high-skilled workers. But the differences are relatively small and although some groups are more at risk, unemployment can happen to anyone.

Second, flexible labour market practices mean that people have to compete more often for jobs during their careers.⁷¹ The Netherlands is at the forefront of Europe in this regard: one in five Dutch workers has a flexible job and one in ten is self-employed.⁷² In 2005, 72% of the active labour force had a permanent employment contract; by 2015 this had fallen to 62%.⁶⁹ Over the same period, the number of flexible contracts rose from 15 to 21%. The number of self-employed is also growing. Whereas in 2005 they represented only 13% of the working population, in 2015 they accounted for 17%. The vast majority of these, about 70%, are self-employed.⁶⁹ We also see more hybrid forms of work, where people have a permanent job and are self-employed at the same time. So far, the economic climate seems to have had little impact on the upsurge in flexibility.⁷³ That upsurge is not an organic phenomenon, however, but is influenced by various factors that are susceptible to change, such as employer behaviour and labour market tightness (Fig. 2.4).

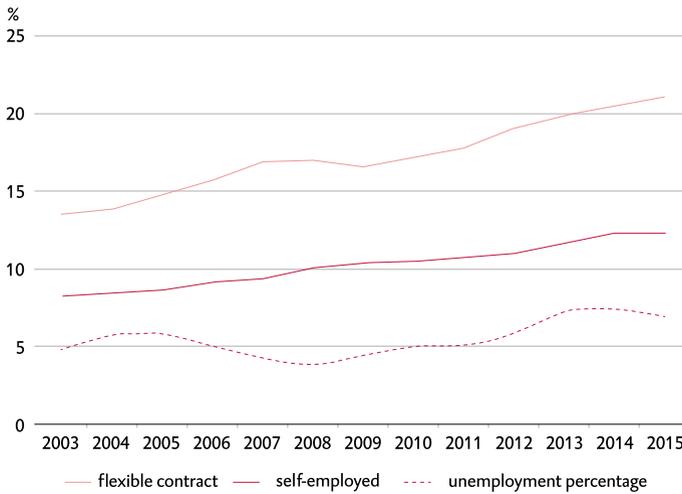


Fig. 2.4 Percentage of the total working population with a flexible employment contract or that is self-employed. *Source* Bolhaar⁷³

Flexible contracts do not always lead to a permanent contract. At the end of the 1990s, 43% of employees on temporary contracts received a permanent contract within a year, but between 2008 and 2011 this had dropped to 28%.^{74, 75} Employees on a flexible employment contract change jobs up to twice as often as employees on a permanent contract, and are more likely to be offered a flexible contract again.⁷⁶



Flexible employment practices affect job security. For example, the likelihood of people on temporary contracts still having a job two years later is 10% points lower than for people on permanent contracts.⁷⁷ And because the self-employed have to bring in their own commissions, they are less certain of work. The implications are all too palpable; in 2013, about half of the Dutch population were worried about their jobs, 45% were thinking about other employment, and 23% actually took steps to find another job.⁷⁸

Third, technological advances mean that the nature of work is increasingly subject to change.⁷⁷ Routine work will be ever more automated. As a result, creativity, social skills, adaptability and other meta-skills appear to be gaining importance in the job market.⁷⁹ Over the past 25 years, the demand for labour in the middle segment has fallen, while the demand at the high and low ends of the labour market has grown.^{80, 81} This job polarisation means that many medium-skilled workers have been pushed to the lower end of the labour market or are obliged to make their way to the upper end of the labour market, for example by retraining.

As the nature of work changes, so does the type of organisation. More knowledge-intensive production can lead to less division of labour and more demand for broadly employable workers who can handle complex tasks and a large measure of individual responsibility. A broadly employable workforce can help a company to remain flexible and competitive.^{82, 83} Employees feel this too: between 45 and 59% of workers say that they need training.⁸⁴ The need is strongest among those who are worried about their jobs and weakest among those who are not worried.

A fourth factor is that government has shifted more of the responsibility for maintaining an income and finding work to the individual. Income security had already started to decline in the 1990s, with the introduction of the Participation Act (see Box 2.4) representing the most recent step.⁸⁵ Eligibility criteria have been tightened and the amount and duration of benefits restricted.⁸⁶ People are therefore under greater financial pressure to look for work. Workers accrue entitlement to unemployment benefit more slowly nowadays, and the period of entitlement has been curtailed to a maximum of 24 months. In addition, government expenditure on coaching and job mediation for the unemployed has fallen in recent years.⁸⁷ The budget for active labour market policies was halved between 2002 and 2013, even as the unemployment rate rose.

In exchange for the benefits that it does pay out, the government has imposed more obligations on recipients. Van Echteld and Josten⁸⁶ have noted a shift from ‘caring’ to ‘disciplining’. There is stricter monitoring of compliance with the obligation to apply for a job, the definition of appropriate work has been extended, and people are more likely to be obliged to accept work below their level of competence. Moreover, government now plays a less active role in the reintegration process. Unemployed persons only have their first personal appointment at the Employee Insurance Agency (UWV) three months after registering. In other words, they are obliged to do more and more by themselves.

Box 2.4: Stricter rules and more obligations

The Unemployment Act (WW) was cut back even further as from 1 January 2016. Former employees receive unemployment benefit, giving them income security during their search for work. The benefit covers 70% of their last-earned wage and is paid out for between three and 24 months, depending on their employment history. The UWV’s services include an online environment through which the unemployed can contact their client manager, find tips, take self-tests, gather information and take online training courses. Only after three months do they sit down with an advisor, followed if necessary by another appointment in the seventh or tenth month of their unemployment benefit. Additional services are available, but only for specific target groups, such as people over 50.⁸⁷

Since 2015 a new law has been in place. The Participation Act that focuses on people who are able to work but who need support from the local authority to find and hold down a job. That support consists primarily of coaching and mediation by a client manager, if necessary supplemented by education, training or a wage cost subsidy for the employer.⁸⁷ In addition, people on social assistance receive income support of up to 70% of the minimum wage.

The introduction of these laws has imposed more obligations on people. For example, recipients of a social assistance benefit have a duty to work and reintegrate into the labour market and to reciprocate to the best of their ability. The recipients of unemployment benefit are obliged to undertake job-search activities four times in a four-week period.⁸⁸ For the first six months, they need only apply for work commensurate with their level of competence; thereafter, all work is deemed ‘appropriate’. Regardless of whether they are receiving social assistance or unemployment benefits, recipients must be prepared to travel up to 3 h a day or to relocate for appropriate work. In addition, they must report any changes, from days off sick to volunteer work and odd jobs they do for friends. If the recipients do not comply with these obligations, their benefits may be cut.

2.4.2 Labour Market Challenges: Be Employable and Find and Keep Work

Finding and keeping appropriate work are the most important challenges in the job market. What must you do or be able to do to find and hold down an appropriate job? Workers must maintain their employability, not only in their current job, but above all with a view to their future careers. An unemployed person focuses primarily on finding a job and must be employable for that to happen. Both situations require the right training and work experience. But these attributes do not fully explain why one person can find and keep a job much more easily than another. Other capacities also play an important role (see Table 2.7).

Table 2.7 Challenges in the job market

Prevention	Employability and continuous professional development
Control	Finding and holding on to appropriate work

From Job to Job

Flexible labour market practices mean that working people are less certain that they can hang on to their current job for the rest of their careers. Workers therefore face two main tasks: to hold onto their current job by performing well while simultaneously preparing for their next job. A new position often involves a different set of tasks, requiring additional knowledge and skills. Employees must adapt and continue to work on their professional development.

The focus on professional development has intensified in recent decades, and is often referred to as ‘employability’.⁸⁹ The term is also used to indicate that employees have more freedom to pursue their own careers. It is the ideal image of an emancipated worker who stands up for himself, without being hemmed in by oppressive, entrenched structures. In that ideal world, the responsibility for employability lies increasingly with the individual and less with the organisation.⁹⁰

The emphasis on employability blurs the boundary between training and work.⁷⁷ Employees must invest continuously in their knowledge and skills, even if certain training is only relevant in the longer term. Career coaches note that people have very different ways of dealing with this. Some people resist taking action while those who are highly motivated and believe in their own abilities find it easier to do so.

To change jobs, people need to know where they want to go. That requires them to have a self-image, a subject that coaches often raise by having their trainees ask themselves ‘who am I?’, ‘what am I capable of?’ and ‘what do I want?’ But people also need to know what is happening in the labour market and what this means for their capabilities. The employee must be willing to discuss this with his employer or ask people in his network to brainstorm with him. He can then use the information this generates to identify a goal and draw up a plan to achieve it.

All these activities take time, attention and energy. People may find it confrontational to realise that their current job is not their dream job after all, and then to plunge into the uncertainty of seeking other work. They may easily feel inclined

to postpone all that ‘for now’. Our interviewees also say that people need a certain amount of calm in other areas of their lives before they can work on their employability without feeling constrained. In other words, our ability to focus on employability is undermined not only by the distractions of more interesting activities but also by problems we are experiencing in other areas of life.

Even under favourable conditions, employees still have to deal with the uncertainty and disappointment inherent to the process of a career realignment and professional development. Maybe a training course doesn’t go as planned, or a job application ends in rejection. Despite such setbacks, they will have to persevere.

From Unemployment to Work

People who lose their jobs for whatever reason are also obliged to work on their employability, but then under greater pressure. The pressure comes from outside, for example due to stricter enforcement of the requirement to apply for work, but it can also be self-imposed; after all, work can be an important part of someone’s identity.

Losing one’s job can be a major setback, both financially and personally. Our interviewees say that the unemployed first have to come to terms with this setback before they feel ready to move on to a new job. They refer to the ‘period of mourning’ that follows dismissal. How long that period lasts varies from person to person. Being overly protective of people can hamper the mourning process and discourage them from taking action. Someone has a better chance of finding work if they start applying for new jobs as soon as possible. Experience also shows that interventions are less effective for the long-term unemployed than for those who have only recently lost their jobs.^{91, 92}

In addition, the longer the period of unemployment, the unhappier many unemployed persons become. Their psychological well-being deteriorates, and they are more likely to suffer symptoms of depression, stress and low self-confidence⁹³, making it more difficult for them to get back to work. These mental factors help to explain the self-reinforcing effect of unemployment.⁹⁴

Unemployed persons who have not applied for work for a long time often have weaker job search skills.⁹¹ It also appears that not everyone has a clear understanding of which jobs are available or can assess the extent to which they have the necessary skills.⁹⁵ If they do not have the requisite knowledge and skills to work or apply for a job, they can ask for assistance from Social Services or the Employment Insurance Agency (UWV), for example. The problem is that these agencies have mandatory training courses and job application rules, with participants experiencing very little autonomy.⁹⁶ Both professionals in the field and researchers indicate that job seekers tend to be more successful when they are intrinsically motivated to seek work.⁹⁷ Without autonomy, however, their intrinsic motivation tends to decline.⁹⁸

Job seekers are likely to encounter setbacks throughout the entire process: their dream job requires them to speak a certain foreign language, employers do not respond to their job applications, or they make an enormous effort and are still not chosen for a position. Our interviewees emphasise that it helps to see the job search as a learning process and to continue believing in one’s own abilities. People with a

greater self-esteem who are more optimistic and have fewer financial worries are less susceptible to negative feelings. In addition, people who feel that they are in control of their situation or who have a less negative view of their unemployment are less likely to be unhappy in this period.⁹³

To recap, then, the labour market demands more of people than cognitive abilities alone. Based on our study of the literature and our interviewees’ experiences, we have produced an outline of the capacities that people need to possess to be self-reliant in the job market (see Table 2.8).

Table 2.8 Job market

Labour market challenges	Prevention <i>From job to job</i>	Control <i>From unemployment to work</i>
Gather and process information 	Know what is required in the job market, compare this with your own situation, knowledge and skills	Knowledge of job application processes and their (unwritten) rules of conduct
Have an overview of the situation, set a goal, make a plan 	Make career choices, work to achieve them	Select appropriate occupations and identify the steps in the job application process
Take action, implement plan 	Continue working on personal development, network and apply for jobs	Apply for jobs, network, take training courses, build and maintain trust in your own capacities
Persevere 	Make time for additional training as an investment in your future	Continue looking for a job, and believe in your own capacities even when rejected
Cope with emotions 	Dare to ask for feedback and take it on board, dare to take a new step in your career	Cope with dismissal, and with rejection

2.5 Conclusion: The Bar Is Set High

People want to be self-reliant, but not everyone seems capable of self-reliance at all times. That is partly due to changes in the everyday environment in which they operate. People have assumed and are being given more responsibility. Having less job security, being expected to live healthily in an obesogenic environment, and coping with a shrinking income because of the economic crisis all require considerable flexibility. The demands being made are huge. A self-reliance paradox may arise, whereby the enormous emphasis on personal responsibility in fact diminishes people’s ability to be self-reliant. Freedom of choice is an ideal that almost everyone endorses, but it can also cause mental burden and choice anxiety. That is even more so when individuals suffer health problems or debt, or lose their job, whether or not through their own actions. These situations demand even more of a person’s mental capacities, but that is precisely when people are less able to call on them.

In this chapter, we have seen that not everyone is self-reliant at all times. We know that some people do not have the necessary intellectual capacity or literacy and numeracy skills. According to the Court of Audit⁹⁹, the Netherlands has approximately 2.5 million low-literate people aged 16 and older (that is 18% of the total population). These people may have problems reading safety instructions, filling in forms (for example to apply for a care allowance or rent subsidy), writing a letter of complaint, or reading and understanding health tips, patient leaflets and medicine package leaflets. In addition, 18% of the Dutch aged between 12 and 74 have limited and 9% have very limited computer skills.¹⁰⁰ This is an important factor in their lack of self-reliance and requires close attention from professionals and policymakers.

This is not the whole story however. Self-reliance also requires the capacity to act. We have seen in this chapter that even people with a high level of education are not always financially or health literate or possess the necessary job market skills. Researchers and our interviewees confirm that knowledge alone is not enough to get people off the couch, to be able to assess their own situation and to persevere with their sensible choice even if things do not go their way (Fig. 2.5).

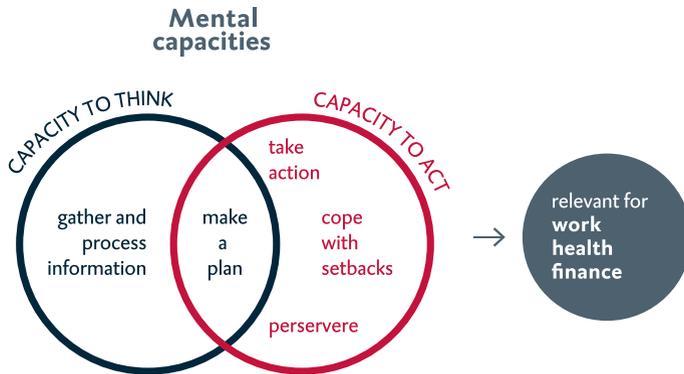


Fig. 2.5 Mental capacities

The second conclusion is that self-reliance issues are not limited to the ‘traditional underclass’. Even highly educated people have trouble taking action, persevering and coping with setbacks. Professionals point out that it can be difficult for them to determine who possesses or lacks certain capacities. They must first understand the role that mental capacities play and then know how to deal with them. We have come across professionals, services or programmes in every domain that make allowance for this. However, attention for non-cognitive mental capacities is still limited.

A brief glimpse into everyday life shows that the capacity to act is critical to the self-reliance that is so vital in present-day society. What does research tell us about the capacity to act? That is the topic of the next three chapters.

Endnotes

1. Kooiker, S. (2011).
2. Mast, J., Wijenberg, E., & Minkman, M. (2014).
3. Tweede Kamer. (2004–2005, see p. 10).
4. Nijman, J., Hendriks, M., Brabers, A., de Jong, J., & Rademakers, J. (2014).
5. Reitsma, M., Brabers, A., Masman, W., & de Jong, J. (2012).
6. Rademakers, J. (2014).
7. de Boer, A., & Kooiker, S. (2012).
8. Ministerie van VWS. (2011, see also p. 6 of english translation).
9. Dagevos, H., & Munnichs, G. (Eds.) (2007).
10. Addiction may play a role here. Heredity is estimated to account for about 50% of the risk of alcohol, nicotine or drug addiction (Ministerie van Financiën 2016a). Genetic factors also play a role in overweight.
11. Health Survey/Lifestyle Monitor, Statistics Netherlands in cooperation with the National Institute for Public Health and the Environment (RIVM), 2014 figures.
12. People who are seriously overweight have a BMI of 30 and higher. BMI is a person's weight in kilograms divided by the square of their height in metres (kg/m^2). Other standards apply for persons under the age of 18. A much smaller share, 2%, are underweight. People who are underweight have a BMI of less than 18.5. Other standards apply for persons under the age of 18 (source: Statistics Netherlands).
13. Victoor, A. (2015).
14. Nijman, J., Hendriks, M., Brabers, A., de Jong, J., & Rademakers, J. (2014).
15. In 2014, life expectancy in the Netherlands at birth was 79.9 for men and 83.3 for women, an increase of 4.1 years for men and 2.6 years for women over 2001. Life expectancy 'in perceived good health' also increased in the same period from 61.8 to 64.9 (men) and from 61.6 to 64.0 (women) (Statistics Netherlands, adapted by WRR).
16. SCP. (2013).
17. The increase is associated with the ageing of the population but also with improved diagnostics and a higher percentage of overweight people in the population (diabetes).
18. van der Heide, I. (2015).
19. This study considers various aspects of a healthy lifestyle, for example healthy nutrition, exercise and sport, and not smoking. We follow the suggestion of the Dutch National Prevention Programme, which identifies four risk factors as priorities: smoking, consumption of alcohol, overweight and exercise and sport (and two disorders: depression and diabetes) (Ministerie van VWS 2013).
20. We confine ourselves here to the risk factors identified by the Dutch National Prevention Programme (Ministerie van VWS 2013), but there are others that can be taken into account, such as stress or playing high-risk sports.

21. Brug, J. (2007).
22. WRR. (2016).
23. Researchers are studying the group therapy approach at the Obesity Clinic CGG. The study is still under way, but initial results agree with other research findings regarding long-term, close guidance of obese patients.
24. Rademakers, J. (2013).
25. Under Dutch law (Medical Treatment Contract Act, WGBO), patients must to the best of their knowledge give care providers the information and cooperation that the latter reasonably requires to deliver proper care (see Article 7: 452 of the Dutch Civil Code).
26. NCPF. (2014).
27. van Egmond, S., Heerings, M., & Munnichs, G. (2014).
28. Makaryus, A., & Friedman, E. (2005).
29. The Dutch health minister has therefore advised patients to record their conversations with doctors and replay the recording at home. This can help them gather their thoughts and take decisions (Minister van VWS 2016).
30. Heijmans, M., Spreeuwenberg, P., & Rijken, M. (2010).
31. Heijmans, M., Zwikker, H., van der Heide, I., & Rademakers, J. (2016).
32. Ursum, J., Rijken, M., Heijmans, M., Cardol, M., Schellevis, F. (2011).
33. That is why many experts are in favour of a ‘universal precautions approach’: “basically, straightforward communication with everyone but using special techniques to check that patients understand and to clarify the need for additional information” (Heijmans et al. 2016: 56).
34. The Dutch Association of Medical Specialists and the Federation of Patients and Consumer Organisations in the Netherlands (NCPF) are collaborating on a broad programme in support of the Shared Decision Making (SDM) agenda (Ministerie van VWS 2015). The relevant activities focus on raising awareness among doctors and patients, providing patient information, and developing support tools.
35. The app was developed by the charitable organisation *Best Beginnings* (<https://www.bestbeginnings.org.uk/baby-buddy>). It has been downloaded more than 90,000 times and won the 2016 BIMA Award for Well-Being and Health.
36. Nutbeam (2000) introduced a now widely used classification of literacy into three levels and emphasised that health literacy should involve more than being able to read and write. Nutbeam’s three levels are: (a) functional literacy: sufficient basic skills in reading and writing to be able to function effectively in everyday situations, broadly compatible with the narrow definition of ‘health literacy’; (b) interactive literacy: more advanced cognitive and literacy skills which, together with social skills, can be used to actively participate in everyday activities, to extract information and derive meaning from different forms of communication, and to apply new information to changing circumstances; (c) critical literacy: more advanced cognitive skills which, together with social skills, can be applied to critically analyse information, and to use this information to exert greater control over life events and situations. The third level (c) is comparable to the WHO’s broader definition of health literacy.

37. Vilans (National Centre of Expertise for Long-term Care in the Netherlands) published a list of 17 tools in October 2013. The authors note that the list is not exhaustive and that most of these tools only measure some aspects (Vilans 2014). In her *Kennissynthese gezondheidsvaardigheden*, Rademakers (2014) included a list of eight tools for measuring health literacy that are available in the Netherlands.
38. Hibbard, J. H., Stockard, J., Mahoney, E. R., & Tusler, M. (2004).
39. PAM was developed by asking a panel of experts “What are the knowledge, beliefs, and skills that a consumer needs to successfully manage when living with a chronic disease?” (Hibbard et al. 2004). PAM scores are only moderately correlated with socio-economic status (Hibbard and Gilbert 2014).
40. Rademakers, J., & Heijmans, M. (2018).
41. Between 25 and 40% of the population of the United Kingdom have low levels of activation (Hibbard and Gilbert 2014: 7).
42. Hibbard, J., & Gilbert, H. (2014).
43. Rademakers, J., Nijman, J., Van der Hoek, L., Heijmans, M., & Rijken, M. (2012).
44. Rademakers, J., Nijman, J., Brabers, A., de Jong, J., & Hendriks, M. (2014).
45. Jones, R., Pykett, J., & Whitehead, M. (2013).
46. February 2018, the Dutch Authority for the Financial Markets (AFM) warned banks that the law does not allow them to advertise for ‘quick mortgages’.
47. WRR. (2016).
48. Actal. (2014).
49. Jungmann, N., & Madern, T. (2016).
50. Wijzer in geldzaken. (2014).
51. Panteia. (2015).
52. We refer in this book to ‘problem debt’ and not simply to ‘debt’ because debt is not necessarily bad or wrong. Many people face major expenses in the first half of their lives—for example, their education or the purchase of a car or house—that they pay for by borrowing against their future earnings. There is also no reason not to borrow money to cover expenses that are perhaps not strictly necessary but that add to the quality of life, such as certain hobbies or nice home furnishings. As long as people can make their payments, there is nothing wrong. In the literature, the term ‘problem debt’ is often operationalised as an arrears that a person cannot reasonably pay within three years, given their debt repayment capacity (Tiemeijer 2016).
53. The most recent survey, which involved a sample of more than 10,000 households, qualifies as extensive.
54. Nibud. (2014).
55. In reality, the increase was not quite as sharp as this graph indicates because a certain amount can be attributed to a gradual rise in NVVK membership.
56. Jungmann, N., Moerman, A., Schruer, E., & van den Berg, I. (2012).
57. Nibud. (2012).
58. Fernandes, D., Lynch, J. G., Jr., & Netemeyer, R. G. (2014).

59. Miller, M., Reichelstein, J. Salas, C., & Zia, B. (2014).
60. Jungmann, N., & Madern, T. (2016).
61. ACM. (2015, see also p. 15).
62. Creditors in the Netherlands have been given much greater authority to collect debts in recent years. In particular, the wide-ranging powers of public authorities make it very difficult for debtors to retain control over their finances and comply with any payment arrangements. In 2013, the National Ombudsman of the Netherlands observed that many branches of government chart their own course when it comes to debt collection, settlement and reclamation. They each apply their own rules. As a result, a debtor's income may fall below the attachment threshold (or protected earnings rate), leading inevitably to new debts (e.g. Jungmann et al. 2012).
63. In the Netherlands, government entities such as the Tax and Customs Administration, the Central Judicial Collection Agency (CJIB), the Employment Insurance Agency (UWV) and the organization that implements the Dutch national insurance schemes such as pensions, and child benefit (SVB) are often the main creditors because of their special status. Public authorities do not need a court-issued attachment of earnings order; a writ of execution is all that they require. In certain situations, they may collect a claim of up to € 1,000 directly from the debtor's bank account and are not obliged to take the attachment threshold (or protected earnings rate) into account. The attachment threshold is the portion of a debtor's wages that other creditors are not permitted to attach. As a rule, this is 90% of the social security norm. The Tax and Customs Administration may also offset benefits received in excess against benefits still to be paid (see also Tiemeijer 2016).
64. Jungmann, N., & Anderson, M. (2011).
65. Jungmann, N., Lems, E., Vogelpoel, F., Van Beek, G., & Wesdorp, P. (2014).
66. See NVVK (2015) and Peters et al. (2015).
67. Madern, T., & Van der, S. A. (2012).
68. CBS. (2015).
69. CBS. (2016).
70. Between 2003 and 2008, the unemployment rate fluctuated between 4.2 and 5.9%.
71. A flexible labour market or flexible employment practices refer to a situation in which workers and employers do not have a permanent contractual relationship. In this study, we also include temporary contracts (including temping and payrolling) and freelance work. We do not include permanent part-time jobs. We use the term 'flexible workers' to refer to self-employed persons and people working on a flexible contract. It should be noted that self-employed persons do not always remain so. Someone can work freelance temporarily, or be self-employed in addition to having a permanent job (hybridisation).
72. Kremer, M., Went, R., & Knottnerus, A. (Eds.) (2017).
73. Bolhaar, J., Brouwers, A., & Scheer, B. (2016).

74. Keune, M. (Ed.) (2016).
75. A flexible contract is an employment contract for a limited term or for an unspecified number of hours. This includes temping, payrolling and being on call. These workers are sometimes referred to as flex workers (*'flexwerker'* is the term used by Statistics Netherlands). The term also includes the relationship between an employer and an employee whereby the employment contract is for a limited term (Statistics Netherlands' definition).
76. CBS and TNO. (2015b).
77. van Echteld, P., Croezen, S., Vlasblom, J., de Voogd-Hamelink, M., & Mattijssen, L. (2016).
78. http://www.monitorarbeid.tno.nl/dynamics/modules/SFIL0100/view.php?fil_Id=129.
79. Went, R., Kremer, M., & Knottnerus, A. (Eds.) (2015).
80. van der Berge, W., & ter Weel, B. (2015).
81. The labour market is divided into segments based on educational level. Completion of secondary school or a VET1 programme is low-skill, a VET2 to VET4 programme is middle-skill, and a higher professional or university programme is high-skill.
82. Guilbert, L., Bernaud, J. L., Gouvernet, B., & Rossier, J. (2015).
83. The extent to which such adaptability is an advantage differs from one company or sector to the next.
84. http://www.monitorarbeid.tno.nl/dynamics/modules/SFIL0100/view.php?fil_Id=150.
85. Vrooman, C. (2016).
86. van Echteldt, P., & Josten, E. (2012).
87. CPB. (2016).
88. Job-search activities can include networking, training, or actually submitting a job application.
89. While the term has been in use for quite a while, since the 1990s the growing emphasis on personal responsibility and self-reliance means that it has increasingly come to refer to individuals (Thijssen 2000).
90. Thijssen, J. (2000).
91. Liu, S., Huang, J. L., & Wang, M. (2014).
92. A comment is in order here. This effect is not necessarily attributable to the length of unemployment. It can also be the case that the 'remaining' long-term unemployed are precisely those who had the most trouble finding a job because they do not have the right work experience, for example. In that case, any intervention focusing on job search skills will be of little use to them.
93. Paul, K. I., & Moser, K. (2009).
94. McKee-Ryan, F., Song, Z., Wanberg, C. R., & Kinicki, A. J. (2005).
95. de Ruig, L., Frouws, B., & Stroeker, N. (2011).
96. Raad voor werk en inkomen. (2010).
97. Gelderblom, A., De Koning, J., & Lachhab, K. (2007).
98. Vansteenkiste, M., Simons, J., Lens, W., Sheldon, K. M., & Deci, E. L. (2004).

99. Algemene Rekenkamer. (2016).
100. Baay, P., Buisman, M., & Houtkoop, W. (2015).

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Chapter 3

Determinants of Capacity to Act



In the previous chapter it was found that it is not only intellect that is relevant for self-reliance, but also capacity for action. In this chapter, we intend to delve more deeply into these findings and in particular into the question of what the non-cognitive determinants are of the mental capacities that we identified in Chap. 2.

The diagram below is the same diagram with which we concluded the previous chapter, but now with two circles added on the left-hand side. These contain the cognitive and non-cognitive characteristics that influence whether people have the five mental capacities that are the key to self-reliance. It hardly needs saying that the cognitive characteristics are relevant. Obviously, anyone who is of low intelligence or is functionally illiterate will have greater difficulty gathering and weighing up information. This report therefore deals with the importance of the non-cognitive characteristics.

The aim of this chapter is to ask what the non-cognitive characteristics are. What replaces the question mark (Fig. 3.1)?

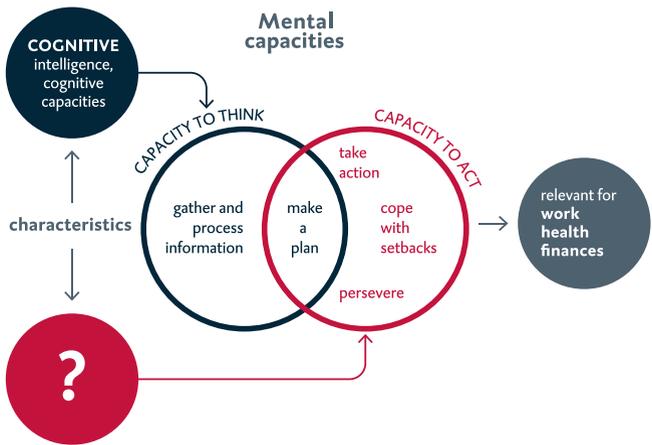


Fig. 3.1 Mental capacities

3.1 Non-cognitive Determinants: Personality Traits

To answer this question, we need to delve more deeply into psychology.

3.1.1 Personality Models

The first source of potential candidates to replace the question mark is personality psychology. In recent decades, various models have been developed within that discipline to illustrate the personality traits that have to be identified. The Table 3.1 shows four models. We will provide a brief explanation of these.

Table 3.1 Personality models

Big Five	Eysenck	Big Three	Rothbart
Extraversion	Extraversion	Positive emotionality	Extraversion/surgency
Neuroticism	Neuroticism	Negative emotionality	Negative affectivity
Conscientiousness	(Psychoticism)	Constraint	Effortful control
Agreeableness			
Openness to experience			

Big Five

The first column contains the five factors of the *Five Factor Model* developed by McCrea and Costa¹, also known as the *Big Five*. This is currently the best known and most commonly used model for classifying personality. This model identifies five general personality dimensions, referred to by McCrea and Costa as *extraversion*, *neuroticism*, *agreeableness*, *conscientiousness* and *openness to experience*.

The key point is that the five factors have *not* been derived from a psychological theory or from empirical observation of human neurobiology, but are the result of a lexical approach, i.e. an analysis of the words people use to describe others. Languages have thousands of words for describing character traits. Various researchers have used factor analysis in an attempt to determine the underlying dimensions. They often ended up with the above five factors (or something very similar).

However, the choice of labels in factor analysis is always somewhat arbitrary. Some researchers have therefore chosen different labels with a different emotional value. For example, the factor *neuroticism* is also referred to as *emotionality* and the factor *openness to experience* as *intellect*.²

In a commonly used measure of the Big Five, known as NEO PI-R, each dimension consists of six facets. These provide a reasonable indication of the aspects usually associated with the five main factors (see Table 3.2).

Table 3.2 Factors and facets of the Big Five

Domains	Facets	
Neuroticism	N1: Anxiety N2: Angry hostility N3: Depression	N4: Self-consciousness N5: Impulsiveness N6: Vulnerability
Extraversion	E1: Warmth E2: Gregariousness E3: Assertiveness	E4: Activity E5: Excitement seeking E6: Positive emotions
Openness to experience	O1: Fantasy O2: Aesthetics O3: Feelings	O4: Actions O5: Ideas O6: Values
Agreeableness	A1: Trust A2: Straightforwardness A3: Altruism	A4: Compliance A5: Modesty A6: Tender-mindedness
Conscientiousness	C1: Competence C2: Order C3: Dutifulness	C4: Achievement striving C5: Self-discipline C6: Deliberation

Taken from Carver and Scheier³

Tripartition

The *Five Factor Model* has now become the standard approach. However, as stated, it originates from the words people use to describe each other and not from theory, which does apply to the three other models mentioned. They are based on human neurobiology and each involves three dimensions instead of five.

The oldest of these three is the model developed by Eysenck.^{4, 5} He posited two ‘supertraits’, namely *neuroticism* (also known as *emotional stability*) and *extraversion*. Both of them are rooted in specific parts of the nervous system and the brain, and are more or less the same as the first two factors of the *Big Five*, not only in terms of name, but also substantively. The third dimension of Eysenck’s model is *psychoticism*, but this has received less attention than the first two. Related to this is the *Big Three* model developed by Tellegen.⁶ This model identifies three factors, namely *negative emotionality*, *positive emotionality* and *constraint*.⁷

Both three-factor models are fully consistent with the findings of developmental psychology, which usually refer to temperament rather than personality. Two main dimensions of temperament form in the first couple of months after birth, namely *surgency/extraversion* and *negative affectivity*.⁸ The first dimension indicates a tendency towards positive emotions, attention-seeking, a high level of activity, impulsiveness, a high intensity of pleasure, much smiling and laughter and little shyness. The second dimension indicates anger and frustration, anxiety, feelings of unease and sadness, and a prolonged period of recovery after stress. After about a year, a third dimension of temperament also goes ‘online’. This is often referred to as *effortful control*⁹ and is described as “the ability to inhibit a dominant response (*inhibitory control*) in

order to perform a subdominant response (*activation control*), to detect errors, and to engage in planning”.⁸ The capacity for *effortful control* mainly develops between the ages of two and five, but only reaches its full potential in adulthood.⁸

Heredity and stability

If personality traits or temperaments have a biological substrate, one would expect a certain degree of heredity. This is indeed the case. As long as fifteen years ago Bouchard and Loehlin concluded that “virtually all human traits are influenced by genetic factors to a significant degree”.¹⁰ The degree of heredity for many personality traits is usually estimated at 40–50%.^{11, 12, 13} This means that the effect of heredity on personality is almost as great as that of environmental factors.

Temperament and personality are also reasonably stable. When children are very young, their personality is still developing and relatively variable, although fundamental characteristics are already materialising fairly quickly. For children aged three it can already be predicted what their personality will be like when they are 26.¹⁴ After the age of three, the rank order stability in characteristics continues to increase¹⁵, and when adulthood is reached the further development of personality does not stop completely, but changes only happen gradually and relationships are well established. So, for example, someone who is an anxious person, displaying social avoidance, at the age of 18 will probably continue to be so for the rest of their life.^{16, 17}

Relationship with life outcomes

What does this have to do with self-reliance? These types of characteristics are only relevant to this report if they also relate to life outcomes and the way people deal with problems and setbacks. Well, this is indeed the case, as countless studies have shown.¹⁸ Below is a small selection of their findings (translated into the terminology of the *Big Five*)¹⁹:

- **Health.** Various personality traits are found to correlate with mental and physical health. A high score in neuroticism is found to be a risk factor, whereas conscientiousness is often actually a protective factor. The results of a meta-analysis by Kern and Freidman “strongly support the importance of conscientiousness-related traits to health across the life span”.²⁰
- **Academic performance.** Conscientiousness also has a strong correlation with academic performance, according to a meta-analysis by Poropat.²¹ Altruism and openness have a weak correlation, and extraversion and neuroticism none at all.
- **Job performance.** Twenty-five years ago²² carried out an extensive meta-analysis of the correlation between the *Big Five* and job performance. They found a correlation for each factor, but only the one for conscientiousness was statistically significant. Ten years later, Barrick et al.²³ repeated the process, this time with an analysis of meta-analyses of the correlation between the *Big Five* factors and job performance. The result was more or less the same.

There is also a relationship between the five factors and the way people deal with difficulties and setbacks (‘stressors’). People who have a high score in extraversion very often tend to adopt a style known as *engagement coping* (or *approach coping*). This style is oriented towards looking at and engaging with the stressor and the resulting emotions, e.g. by actively devising solutions, making plans and actually carrying them out, and by seeking help. By contrast, people who have a high score in neuroticism very often tend to adopt a style known as *disengagement coping* (or *avoidance coping*). This style is oriented towards escaping the stressor and the resulting emotions, e.g. through denial and disengagement, by suppressing feelings and hoping that the problem will go away by itself. Conscientiousness is also relevant. People with a high score in this factor are more inclined to tackle the problem in question.^{24, 25}

3.1.2 Choosing Between Approach and Avoidance Temperament and Self-control

Which of the characteristics from the four models should we now select to replace the question mark? Although the *Big Five* model is currently the most commonly used, science does not provide a definitive answer as to which model is the best and which terms best describe the subject, even though all the models are quite similar. This makes it harder to answer the question of which non-cognitive characteristics to select but also leaves some scope for our own interpretation. Taking all of the foregoing into consideration, we therefore propose to replace the question mark with only the factors that recur in all four models and to label them as ‘approach temperament’, ‘avoidance temperament’ and ‘(capacity for) self-control’ (see diagram). We explain this Table 3.3.

Table 3.3 Personality models

Personality models				
Big Five	Eysenck	Big Three	Rothbart	
Extraversion	Extraversion	Positive emotionality	Extraversion /Surgency	→ Approach temperament
Neuroticism	Neuroticism	Negative emotionality	Negative affectivity	→ Avoidance temperament
Conscientiousness	(Psychoticism)	Constraint	Effortful control	→ Self-control
Agreeableness				
Openness to experience				

Temperament: approach and avoidance

We have borrowed the first two terms from Elliot and Thrash.^{26, 27} They also noted that there is a great similarity between the first two dimensions of the above-mentioned models. Based on factor analysis, they found two latent factors behind the personality traits, which they then called *approach* and *avoidance temperaments*. To be specific:

- *approach temperament* is a sensitivity to and orientation towards positive stimuli (e.g. reward) and forms the basis of extraversion, positive emotionality and surgency;
- *avoidance temperament* is a sensitivity to and orientation towards negative stimuli (e.g. punishment) and forms the basis of neuroticism, negative emotionality and negative affectivity.²⁸

According to Elliot and Thrash, these two temperaments are “the core dispositions on which other dispositions rest”.²⁷ These temperaments also make a real difference. The way someone scores in the dimensions indicated by both temperaments actually affects the way they deal with ‘stressors’. We could therefore expect a relationship with someone’s level of self-reliance. Another reason for choosing these two terms in particular is that they conjure up the right associations for the subject of this book. They make it immediately clear what someone’s basic disposition is towards life’s challenges that come their way: to approach them or avoid them.

Capacity for self-control

There is also overlap, in terms of content, with the third dimension of the four models. In this case, too, we are opting for a single common denominator and our preferred term is ‘(capacity for) self-control’.²⁹ This is “the capacity to alter or override dominant response tendencies and to regulate behaviour, thoughts, and emotions”.³⁰

Not every academic psychologist will be as enthusiastic about this choice, but we think it is better than the somewhat ambiguous term conscientiousness. First, the term self-control is a better fit with the terms restraint and effortful control in the third and fourth models in the diagram. Second, the same argument applies as for the choice of approach and avoidance temperament, namely that the term has the right associations. It refers to the capacity for exerting conscious control over one’s own behaviour, and that fits in well with the idea of self-reliance.

Incidentally, instead of self-control, reference is often made to self-regulation in the literature. The latter term is defined as “the self’s capacity for altering its behaviours”³¹ or “the process of purposefully directing one’s actions, thoughts, and feelings toward a goal”.³² Self-control and self-regulation are often even treated as synonyms. However, this is incorrect and can also easily lead to confusion. While self-control is an important element of self-regulation, self-regulation also encompasses other mental characteristics.

3.2 Non-cognitive Determinants: Beliefs

We have not yet discussed all the candidates for replacing the question mark. In this section we will be discussing two other relevant psychological concepts, namely *optimism* and *perceived control*. What the two have in common is that they refer to certain *beliefs* about oneself, the world and the relationship between the two. They therefore involve perception, experience and signification. Although these beliefs are sometimes deeply rooted, they are still relatively easily affected by a person's experience. A series of negative experiences in a certain area can completely undermine a person's optimism and feeling of being in control. Conversely, a series of positive experiences can cause them to increase.

Self-esteem

Before discussing optimism and perceived control in depth, we have to clear up a misunderstanding. Contrary to what many people think, it has been found that a positive self-image or feeling of self-esteem is not a relevant factor. It had long been thought in the US in particular that if people feel good about themselves this would lead to better academic and job performance and less depression, teenage pregnancies, drug use, crime, etc. It was regarded as the solution to virtually every problem.

A lot of research was therefore conducted into the effects of self-esteem in the 1980s and 1990s. Baumeister et al.³³ published a review of the biggest and best studies available at the time. Unfortunately, the results were extremely disappointing. In many of the studies, only a weak correlation, if any, was found with the desired outcomes. "Self-esteem is thus not a major predictor or cause of almost anything". They also found no evidence to support the idea that people with a positive feeling of self-esteem could cope better with stress and setbacks.

Pessimism and optimism

However, optimism *is* relevant. The literature distinguishes between two types of optimism. First, *explanatory optimism*.³⁴ This relates to the way people explain events in their life. People have a pessimistic explanatory style if they explain the things that happen to them on the basis of general and immutable characteristics of the world over which they have no power. People with an optimistic explanatory style explain events on the basis of specific circumstances which they could theoretically change. The style someone has is measured by presenting people with situations such as 'A friend is hostile towards you' or 'You receive lavish praise for your project', and then asking them what the main reason for this would be if it happened to them.

Second, *dispositional optimism*.³⁵ This is not about possible explanations for specific events, but about general expectations of life. In this view, pessimism and optimism are "broad, generalized versions of confidence and doubt [...] pertaining to life, rather than to just a specific context".²⁵ This type of optimism is usually measured with statements such as 'If something can go wrong in my life, it does' and

'I'm always optimistic about my own future'. An optimistic character is associated with all kinds of desirable outcomes. For example, optimistic people generally enjoy greater subjective well-being and better health, and they appear to have better social relationships.³⁶ Optimists and pessimists also cope with stress differently. Optimistic people tend to tackle their problems head-on whereas pessimistic people tend to avoid problems.³⁷

Perceived control

Then there is an infinite number of psychological concepts covering the idea of control or mastery in one way or another.³⁸ We will not mention all of them here but will confine ourselves to the angle adopted by Thompson and Schlehofer³⁹, who refer interchangeably to personal control and perceived control. This is "the perception that one has the ability, resources, or opportunities to get positive outcomes or avoid negative effects through one's own actions". To be perfectly clear: we are talking about something other than self-control, the term used in the previous section. The capacity for self-control is anchored in neurobiology and partly genetic, whereas perceived control is a belief about yourself, the world and the relationship between the two.

According to Thompson and Schlehofer, perceived control consists of two elements, namely 'locus of control' and 'self-efficacy'. The first element relates to the question as to whether someone believes that people can achieve their goals through their *own actions* and avoid bad outcomes (in this case an internal locus of control), or whether this is determined by external factors (in this case an external locus of control). The second element relates to the question as to whether someone thinks they have the qualities and skills needed to achieve their goals. The first therefore relates to beliefs about external reality and the second to beliefs about oneself. Both elements of perceived control are consistent with what professionals describe as 'belief in your own abilities' in Chap. 2.

Various scales are available for measuring perceived control or aspects of it. They often relate to a specific domain, e.g. 'health efficacy' or 'financial self-efficacy'. In addition, there is one general scale for perceived control, known as the *Pearlin and Schooler Mastery Scale*. This contains statements such as 'I can tackle just about anything if I put my mind to it' and 'I often feel helpless when dealing with life's problems'. Research shows that a feeling of control has a positive impact. It is linked to emotional well-being, coping better with stress and fewer physical effects of stress, better performance, less pain and a greater chance of success in difficult changes in behaviour.⁴⁰

As far as societal outcomes are concerned, it therefore makes little difference whether people are happy with themselves or not. What it is about is that they believe they are capable of improving their situation and believe that things will turn out well. However, more is not always better with these concepts. An overdose of optimism can cause people to underestimate problems and an exaggerated 'can do' attitude can result in irresponsible behaviour ('I can stop drinking whenever I want'). It is about achieving the right level of optimism and perceived control.

3.3 Relationship Between Characteristics and Mental Capacities

We can therefore fill in the diagram presented above as follows (Fig. 3.2).

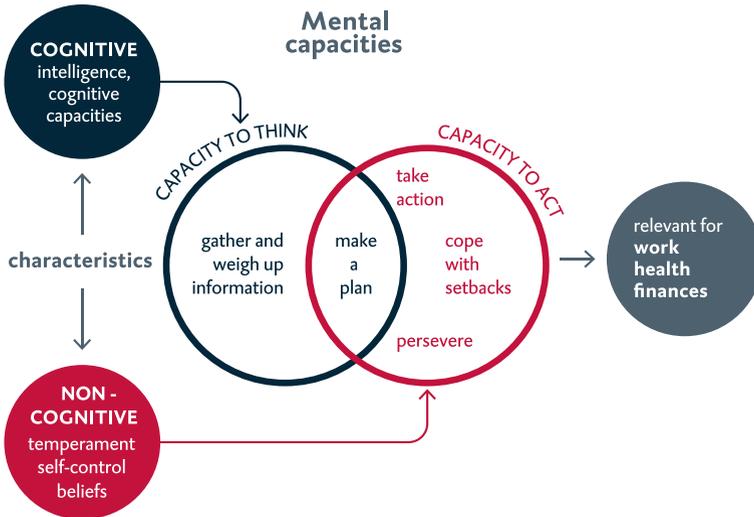


Fig. 3.2 Characteristics, mental capacities and societal domains

The question now is: what exactly is the correlation between the cognitive and non-cognitive characteristics on the one hand and the five mental capacities which are the key to self-reliance on the other? In the previous chapter, we demonstrated that these capacities correlate not only to cognitive characteristics but certainly also to non-cognitive characteristics. It would, however, be nice if we had ‘harder evidence’ for this. After all, if we only find a significant correlation between cognitive characteristics and the five capacities for self-reliance, thinking and talking in terms of mental capacities for self-reliance adds nothing. That would just be another way of saying that people of high intelligence and with good cognitive capacities often do better in many areas of life than people of low intelligence and with poor cognitive capacities. We already knew that.

If, however, a significant correlation could be found between non-cognitive characteristics and the five capacities for self-reliance, there would be much more to it. This would really involve a separate non-cognitive dimension that influences whether a person has these capacities. The hypothesis advanced in this book is that this is indeed the case. We will justify our hypothesis in quantitative terms in this section.

Measuring mental capacities

To this end, we first have to establish whether people have the mental capacities that are the key to self-reliance. In order to measure this, we conducted a survey of

a representative sample of 1,000 Dutch people aged 18 and over in the autumn of 2015.⁴¹ We did not assess all the mental capacities individually but used an existing measuring tool, i.e. the ‘Utrecht Proactive Coping Competence’ scale (UPCC, see Box 3.1). In the UPCC people are asked how good they are at capacities such as ‘estimating future trends’, ‘making realistic plans’, ‘really doing what I planned’, ‘persevering’, ‘devising alternatives if a solution doesn’t work’ and ‘seeking help if things get difficult’. All in all, the items on this scale provide reasonable coverage of the five capacities which are the key issue in this case. The average score on this scale is therefore a good indication of the extent to which people have these mental capacities.

Box 3.1 Utrecht Proactive Coping Competences (UPCC)

How good are you at the following skills [1 not skilled—5 very skilled]

1. Estimating future trends
2. Looking ahead
3. Spotting the first signs if something is about to go wrong
4. Accepting comments made by others
5. Seeing my own possibilities and opportunities
6. Seeing my own limitations
7. Assessing the people around me
8. Clearly formulating what I want to achieve
9. Translating my wishes into plans
10. Making realistic plans
11. Asking other people’s advice
12. Finding solutions
13. Devising alternatives if a solution doesn’t work
14. Really doing what I was planning to do
15. Persevering
16. Seeking help if things get difficult
17. Ascertaining whether I’ve achieved what I wanted to achieve
18. Seeing the positive side of a setback
19. Learning from a setback
20. Reflecting if something goes well
21. Rewarding myself if something is successful.

Source Bode, Thoolen and De Ridder⁴²

The average score of the respondents for the 21 skills is 3.52 on a scale from 1 to 5.⁴³ The diagram below shows the distribution. Although the diagram contains two different peaks, the shape is clearly recognisable as a normal distribution.⁴⁴ There are considerable differences in the extent to which the Dutch have the mental capacities required to achieve self-reliance. Some people achieve a very high score, others manage a very low score and most people are situated around the average (Fig. 3.3).

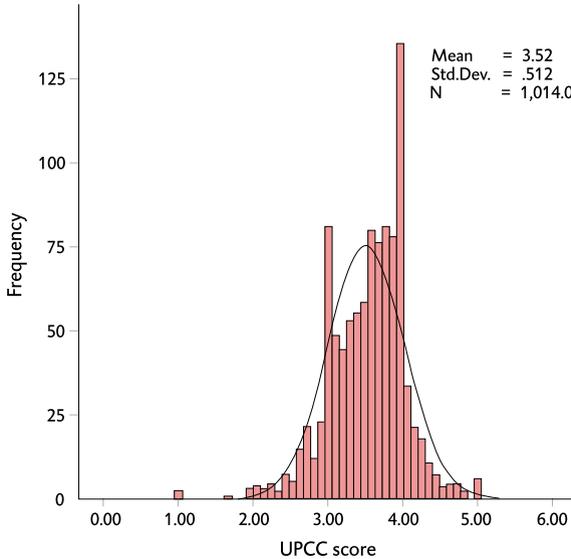


Fig. 3.3 UPCC score

Closer analysis shows that the extent to which someone has the five capacities for self-reliance does to some extent correlate with intelligence and cognitive skills (operationalised as educational level), but it is only a weak correlation.⁴⁵ That’s also evident from the Table 3.4, which identifies three groups, namely a group that scores very low on the UPCC scale (and could therefore be categorised as ‘least self-reliant’), a group that scores very high on the UPCC scale (and can therefore be categorised as ‘most self-reliant’) and a large group in the middle. The Table 3.4 clearly shows that a sizeable group of better-educated people can be found among the ‘least self-reliant’ and a substantial group of less well educated people can be found among the ‘most self-reliant’.

Table 3.4 UPCC score for three groups

	Least self-reliant	Middle group	Most self-reliant
	N = 187	N = 654	N = 173
Average UPCC score	2.76	3.55	4.20
Average age	47	49	48
Sex (%)			
Male	49	48	53
Female	51	52	47
Educational level			
Low	40	22	16
Middle	36	44	38
High	24	34	46
Total	100	100	100

Determinants of the score on the UPCC scale

There are therefore more factors at play. In order to gain a better insight into the correlation between non-cognitive characteristics and the UPCC score, we also included a number of standard scales in the survey to measure how people score on the factors in the block at the bottom left of the diagram. To be specific⁴⁶:

- *Avoidance* and *approach temperament* were measured using the scales developed for the purpose by Elliot and Thrash²⁷;
- Self-control was measured using the *Brief self-control scale* developed by Tangney⁴⁷;
- Optimism was measured using the LOT-R scale of Carver and Scheier (1994);
- Perceived control was measured using the *Mastery scale* developed by Pearlin and Schooler.⁴⁸

In all cases, a scale running from 1 to 5 was used, a higher score indicating that a person had more of the measured characteristic (for details, see Appendix I). As an additional control variable, we also measured the extent to which people were socially embedded.⁴⁹

Regression analyses were then carried out, with the above non-cognitive characteristics as the independent variable and the UPCC score as the dependent variable. The results are shown in the Table 3.5.

Table 3.5 Results regression analysis

N = 1014	Model 1	Model 2	Model 3	Model 4
Sex	0.017	0.020	0.006	0.006
Age	0.031	0.044	0.005	0.003
Education (dummy layer vs middle)	0.168***	0.134***	0.125***	0.112***
Education (dummy layer vs high)	0.236***	0.182***	0.177***	0.151***
Social embedding	0.385***	0.223***	0.179***	0.108**
Avoidance (average)		-0.216***	-0.155***	-0.101**
Approach (average)		0.393***	0.375***	0.337***
Self-control			0.233***	0.212***
Optimism				0.117***
Perceived control				0.076***
R2	0.192	0.355	0.399	0.413

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

The results show the following:

- Educational level correlates significantly with the UPCC score;
- However, *all* non-cognitive characteristics also correlate significantly with the UPCC score. In two cases, their contribution was even greater than educational level;
- By far the most important predictor is *approach temperament*, followed by self-control. Both carry more weight than educational level;

- If the non-cognitive characteristics are added, the explained variance more than doubles;
- There is a certain correlation between social embedding and non-cognitive characteristics, since the contribution of social embedding decreases sharply as more non-cognitive characteristics are added.

In short, these results demonstrate that the non-cognitive characteristics that we have discussed in this chapter do indeed correlate significantly with the five capacities that are the key to self-reliance. Non-cognitive characteristics count.

Two sides of the same coin?

This type of strong correlation is not infrequently a reason for some scepticism. Are the independent and dependent variables really different concepts? Do they really measure different realities? For example, anyone who tries to ascertain whether the capacity for solving Sudoku puzzles correlates with IQ, will certainly find a strong correlation between the two, but does that really explain anything? The two variables are really very close together and may even be merely two manifestations of the same mental reality. Is something similar going on in this case?

It seems so. Obviously, anyone with a high score in approach temperament, and who therefore tends not to avoid new stimuli but to approach them, will also achieve a high score in the UPCC skills ‘looking ahead’ and ‘finding solutions’. It is also obvious that anyone with a high score on the self-control scale will also achieve a high score in the UPCC skills ‘really doing what I was planning to do’ and ‘persevering’. That is the case, almost by definition.

Our conclusion is therefore that there is no clear distinction between, on the one hand, the non-cognitive concepts in the literature that were the focus of this chapter and, on the other hand, the mental capacities for self-reliance in Chap. 2. In a certain sense, it is a question of two different perspectives on the same mental reality and two different vocabularies for describing it. One vocabulary is that of the general psychological theories and research programmes of the past few decades and the other vocabulary is that of the real world in which the question is about what people have to be able to do in order to make their way in life. One describes people in terms of psychological characteristics and the other in terms of capacities.

3.4 Conclusion: Different Prospects of Self-reliance

This chapter has been focusing on the non-cognitive determinants of the mental capacities that are the key to self-reliance. We will go through them again.

Approach and avoidance temperament

First, there is a correlation with avoidance and approach temperament. These two temperaments are sensitivities to and orientations towards approaching positive stim-

uli (e.g. reward) and avoiding negative stimuli (e.g. punishment) respectively. They correlate strongly with the *Big Five* characteristics of extraversion and neuroticism respectively. Based on the available research it is possible to predict that people with an approach temperament will be more inclined to face and tackle ‘stressors’, whereas people with an avoidance temperament will be more inclined to deny and avoid ‘stressors’. In our own survey, we see a correlation between the two temperaments and the UPCC score.

To be perfectly clear: it is not the case that one temperament is by definition good and the other is by definition bad. Every parent knows that you have ‘easy’ and ‘difficult’ children, but what counts as easy and difficult is also determined by their environment. A child who is shy, hesitant and sensitive will fit in better in a peaceful, calm and low-stimulus family than in a busy family with extrovert and assertive family members, a fast pace of life and a lot of stimuli. The determining criterion is the ‘goodness of fit’ of the temperament.⁵⁰ The same applies to adults. Some people have a temperament that fits in well with the expectations and requirements of the current education system, the labour market and society in general, others less so. The more society expects people to be self-reliant and to tackle their problems proactively, thereby exhibiting a certain degree of perseverance and assertiveness, the more difficult it will be for someone with an avoidance temperament.

Self-control

Second, there is a correlation with the capacity for self-control. That is “the capacity to alter or override dominant response tendencies and to regulate behaviour, thoughts, and emotions”.⁵¹ There is a considerable overlap with what is described in the *Big Five* as conscientiousness. Good self-control or conscientiousness is associated with all kinds of positive outcomes, such as better academic and job performance, better health and well-being and problem-focused coping. In our own study, there is a significant correlation with the UPCC.

Is a greater capacity for self-control always better? Opinions differ on this point.⁵² At least one thing is clear. The more society requires people not to give in to any kind of temptation, but to think ahead and take all kinds of measures now to prevent possible problems later, the more important a good capacity for self-control is to achieve self-reliance.

Beliefs

Third, there is a correlation with beliefs. One person is an optimist and thinks that everything will turn out fine, whereas another assumes the worst from the outset. One person has great confidence in their own ability and tackles problems immediately, whereas another feels powerless and lapses into passivity. Once again, we see a significant correlation with the UPCC in our own study.

Here it is clear that more is not always better. An excess of optimism and confidence can be counter-productive, i.e. if it leads to people not facing problems or denying them. A person who smokes, drinks too much or gambles a lot but is convinced he 'can stop any time he wants' may sooner or later be faced with unpleasant surprises. The same applies to people who brush persistent physical complaints or financial problems aside in the belief that 'everything will work out fine'. As far as self-reliance is concerned, it may be best if there is reasonable optimism and perceived control, so that people have the courage to tackle problems, but combined with a firm grip on reality.

Different prospects of desirable outcomes

All of the above leads to an important conclusion, namely that one person is given better prospects for self-reliance than another by predisposition. After all, it is not only intelligence that has a hereditary component, this is also true of personality traits. As stated above, personality traits are estimated to be 40–50% hereditary. Some people therefore come into the world with a relatively strong predisposition to develop the characteristics which are fitting for a society that attaches great importance to self-reliance, whereas others come into the world with a relatively weak predisposition in this direction.

To be perfectly clear, this definitely does not mean that people are entirely predestined by their genes and no influence or adjustment is possible. Genes are the starter pack with which a child starts life but there is no saying how that pack will then be expressed or indeed what the possible effects of practice will be. For example, musical talent is undoubtedly genetically influenced but somebody with little talent and a lot of practice will probably become a better pianist than someone with a lot of talent and little practice. Moreover, it will certainly make a difference if the person's parents are music lovers or even professional musicians or there are music groups or concert halls in the neighbourhood or music lessons are subsidised by the government, or not, etc. However, none of this detracts from the fact that one person will, by nature, find it easier to learn to play the piano than the other.

How can we now translate this into self-reliance? Say there is a threshold value for the minimum level of mental capacities required to be able to make one's way in life without constantly asking for help. Because it is partly determined by heredity whether, at the start of life, one has a good basis for developing the required mental capacities, one person will have a wider gap to bridge than another in order to cross that threshold. Figure 3.4 shows three possible cases.

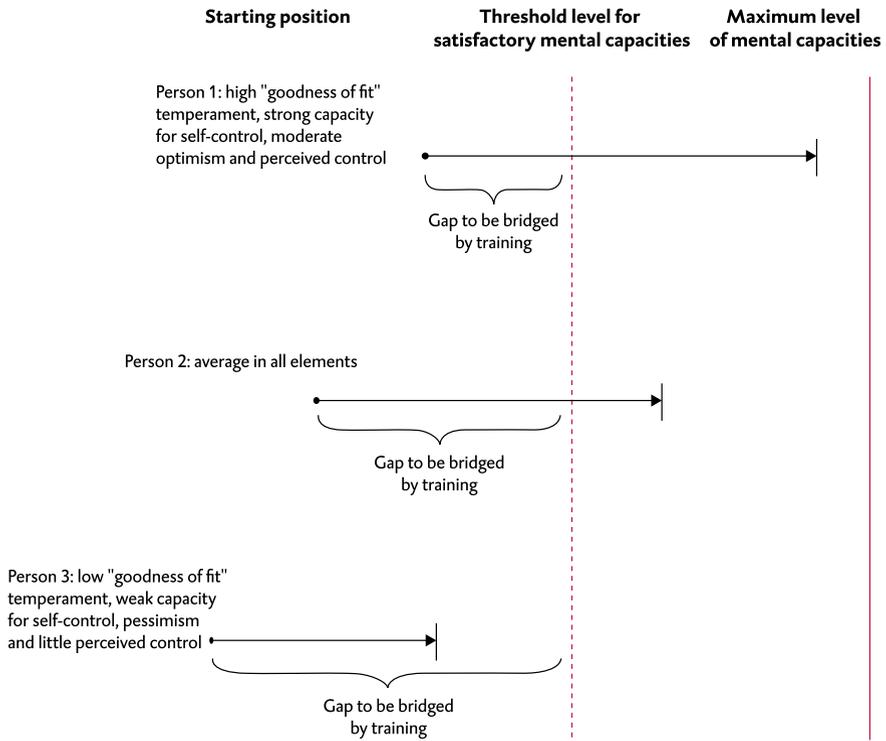


Fig. 3.4 Bridge to cross

The first person has drawn a lucky ticket in nature’s lottery. This person only has a small gap to bridge to cross the threshold and also has the baggage to be able to go well beyond it. The second person is average. This person has to bridge a somewhat wider gap and will also not go so far, but does have sufficient means to cross the threshold of enough capacities. However, the third person is unlucky. In order to cross the threshold, this person will have to bridge a wider gap than is within their abilities.

In conclusion: not one but two parameters are relevant when considering which government policy is suitable. It is not only a question of the extent to which the capacities concerned can be improved through training, it is also the gap that a person has to bridge to achieve the desired level of self-reliance.

Endnotes

1. McCrae, R. R., & Costa, P. T., Jr. (1999).
2. Carver, C. S., & Scheier, M. F. (2014).
3. Carver, C. S., & Scheier, M. F. (2011).
4. Eysenck, H. J., & Eysenck, S. B. (1967).
5. Eysenck, H. J. (1981).
6. Watson, D., & Tellegen, A. (1985).
7. Watson et al. (1988) build on this, once again using different terms—they refer to the third factor as *disinhibition*.
8. Rothbart, M. K. (2011, see also p. 57).
9. Simonds, J., Kieras, J. E., Rueda, M. R., & Rothbart, M. K. (2007).
10. Bouchard, T. J., Jr., & Loehlin, J. C. (2001, see also p. 243).
11. Bouchard, T. J. (2004).
12. Rebollo, I., & Harris, J. R. (2008).
13. Vukasović, T., & Bratko, D. (2015).
14. Caspi, A., Harrington, H., Milne, B., Amell, J. W., Theodore, R. F., & Moffitt, T. E. (2003).
15. This is someone's position on a personality trait compared with that of their contemporaries on that personality trait.
16. Roberts, B. W., Walton, K. E., & Viechtbauer, W. (2006).
17. Roberts, B. W., & DelVecchio, W. F. (2000).
18. Much of his research is cross-sectional, which means that it only shows correlations and not causality. However, it is highly plausible that in many cases personality traits do have a causal effect on the life outcomes concerned. After all, many of these traits manifest themselves at an early age and change slowly, if at all, afterwards.
19. In meta-analyses, the research results are usually translated into and summarised in the terminology of the *Big Five*. We have not therefore done the translation ourselves, but have taken it from these analyses.
20. Kern, M. L., & Friedman, H. S. (2008, see also p. 505).
21. Poropat, A. E. (2009).
22. Barrick, M. R., & Mount, M. K. (1991).
23. Barrick, M. R., Mount, M. K., & Judge, T. A. (2001).
24. Connor-Smith, J. K., & Flachsbart, C. (2007).
25. Carver, C. S., Scheier, M. F., & Segerstrom, S. C. (2010, see also p. 880).
26. Elliot, A. J., & Thrash, T. M. (2002).
27. Elliot, A. J., & Thrash, T. M. (2010, see also p. 894).
28. They also involve BIS and BAS, which are not discussed in this study.
29. Also referred to as 'trait self-control', see De Ridder et al. (2012).
30. de Ridder, D. T., Lensvelt-Mulders, G., Finkenauer, C., Stok, F. M., & Baumeister, R. F. (2012, see also p. 77).
31. Baumeister, R. F., Vohs, K. D., & Tice, D. M. (2007, see also p. 1).

32. Carver, C. S., & Scheier, M. F. (2011).
33. Baumeister, R. F., Campbell, J. D., Krueger, J. I., & Vohs, K. D. (2003, see also p. 37).
34. Seligman, M. E. (2011).
35. Scheier, M. F., & Carver, C. S. (1985).
36. Carver, C. S., & Scheier, M. F. (2014).
37. Solberg Nes, L., & Segerstrom, S. C. (2006).
38. Skinner, E. A. (1996).
39. Thompson, S. C., & Schlehofer, M. M. (2008, see also p. 1).
40. Thompson, S. C., & Spacapan, S. (1991).
41. After weighting, the sample was representative in terms of sex, age, size of household, education, social class and region (see Appendix I).
42. Bode, C., Thoolen, B., & de Ridder, D. (2008).
43. Cronbach's alpha is 0.93 and the first factor has an eigenvalue of over nine and accounts for almost 43% of the variance. The second and third factor have an eigenvalue of 1.55 and 1.17 respectively and together take the variance to over 50%. This once again confirms the findings of Bode et al. (2008). Strictly speaking, this is not a one-dimensional but a two-dimensional solution, but it is clearly one factor that stands out above all the rest. We therefore regard this factor as 'self-reliance'.
44. According to the Kolmogorov-Smirnov test and the Shapiro-Wilk test, there is no normal distribution. The peaks at the 3 and 4 score appear to be the main explanation for this. They may (partly) be an artefact of the question asked. The 21 skills were presented relatively late in the survey, so it is possible that some of the respondents no longer felt like really thinking about the questions and consequently placed a cross at the middle category. That would at all events account for the peak at the 3 score. It was found that 39 respondents had indeed consistently opted for the middle option. It is less clear why the 4 score also has a peak. This could possibly be explained using the same principle: people were no longer really thinking about all the individual skills and felt that the 4 score 'skilled' was the most attractive option. It was found that 37 respondents had indeed consistently opted for the 'skilled' score. (By way of comparison, the number of respondents who consistently opted for the 1, 2 and 5 category is 2, 4 and 2 respectively.)
45. Pearson correlation = 0.212 ($p < 0.000$). Educational level was measured according to the Statistics Netherlands classification in seven levels.
46. Of course, a Dutch translation was used in all cases.
47. Tangney, J. P., Baumeister, R. F., & Boone, A. L. (2004).
48. Pearlin, L. I., & Schooler, C. (1978).
49. The loneliness scale developed by Van Tilburg and De Jong Giersveld (2007) was used.
50. Chess, S., & Thomas, A. (1999).

51. de Ridder, D. T., Lensvelt-Mulders, G., Finkenauer, C., Stok, F. M., & Baumeister, R. F. (2012, see also p. 77).
52. See, for example, the study by Koole et al. (2014).

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Chapter 4

Self-reliance and Situational Influences



In some situations it is easier to stay alert and do the right thing than in others. Anyone who has to be attentive and make mental exertions for hours on end will have problems concentrating and make mistakes at some point. Anyone who has to continuously control themselves—staying calm, not making a noise, not drinking alcohol, not lighting a cigarette, sticking to a diet—will sooner or later have a moment of weakness and do precisely what they did not intend to do. If someone is experiencing stress, it is often more difficult to keep thinking clearly and not to respond to every stimulus. Even the calmest of souls will start performing badly if the pressure is cranked up enough.

This is very important for this study. It means that the extent to which someone is capable of self-reliance also depends on their current situation and living conditions. First, this affects moral judgement. For example, to what extent is it somebody's 'own fault' if they take bad decisions because their capacity for self-control has been affected by stressful conditions such as with acute and problematic debts^{1, 2}? Second, it opens up—at least in theory—new perspectives for policy. If it is true that living conditions have an influence on self-reliance, the government could try to promote conditions that will help improve self-reliance (or at least will not undermine it).

We therefore discuss these situational influences in more detail in this chapter. We will deal with the following subjects in succession:

- the influence of acute stress. A little stress is usually good for you, but too much stress leads to reduced mental performance. Under stressful conditions it is more difficult to think clearly and act in a thoughtful manner;
- mental fatigue. Anyone who has to undertake demanding mental activity for prolonged periods will eventually become tired and start making mistakes. We also focus on ego depletion, the phenomenon whereby the capacity for self-control can be temporarily drained;
- the psychological effects of poverty. The previous two mechanisms appear to be combined in this one.

Focus on self-control

In this chapter we discuss the capacity for self-control in greater depth. Why are we highlighting this characteristic? As stated in the previous chapter, the capacity for self-control is associated with all kinds of outcomes. First, self-control means that people are better able to resist counter-productive tendencies and impulses. People with a great capacity for self-control will tend to tackle problems that they would instinctively rather avoid, or conversely, will not immediately rush into a new situation if it would be better to stand back.

Second, self-control is probably also linked to life outcomes because it provides protection from a less favourable score in the other non-cognitive characteristics that we identified in Chap. 3. Self-control can potentially provide protection from the risks of pessimistic beliefs or lack of belief in one's own abilities. People with a great capacity for self-control will tend to be able to force themselves to have experiences which, if successful, could result in a greater belief in their own abilities. In short, life is sometimes a swamp but people who have great capacities for self-control will be better able to pull themselves out of that swamp through their own efforts.

Self-regulation, executive control or executive functions are often discussed in the literature, as well as self-control. These are concepts that overlap with self-control, but are a little broader. Self-regulation is defined as "the process of purposefully directing one's actions, thoughts, and feelings toward a goal".³ The term 'executive functions' refers to a family of "top-down mental processes needed when you have to concentrate and pay attention, when going on automatic or relying on instinct or intuition would be ill-advised, insufficient, or impossible".⁴ Three 'core executive functions' are often identified, namely working memory, cognitive flexibility and cognitive inhibition. The third function is very similar to self-control. Various studies have been conducted to ascertain the influence of situational conditions on 'self-regulation', 'executive control' or 'executive functions'. We will discuss a number of these studies below. Because, even though these studies use different terms, they do provide a clear insight into the way situational factors influence the capacity for self-control.

As is already evident from this introduction, the scientific findings in this chapter are less robust than in the previous chapter. That had a very broad empirical basis, often meta-analyses of dozens, if not hundreds of studies. However, quite a few of the insights in this chapter could be described more as 'work in progress'. The research is often recent, the results are not always clear-cut and many questions remain unanswered.

4.1 The Influence of Acute Stress

According to Contrada, a key element of many definitions of stress is "the idea of an imbalance between environmental demands and adaptive capacity".⁵ There is a mismatch between what a person is capable of and what the situation demands. Quite a lot is known about the physical processes of acute stress. The body produces substances to make it ready for immediate action, including cortisol, also known as the stress hormone. An elevated cortisol level is an indicator of stress.⁶

Box 4.1 Affected brain regions (based on Arnsten⁷)

A lot of research into the effects of stress goes into great detail about the brain regions and neurotransmitters affected by the phenomena being studied.

The prefrontal cortex (PFC) is particularly relevant to the subject of this study. “The basic function of the prefrontal cortex is *the representation and execution of new forms or organized goal-directed action*,” according to Fuster⁸ in his standard work on the prefrontal cortex. The PFC is therefore the headquarters for self-regulation. It is closely connected to other cortical and subcortical brain regions, to be specific:

- the dorsolateral PFC (DLPFC) has many connections to the sensory and motor cortices, and plays a key part in regulating attention, thought and action;
- the right inferior PFC (RIPFC) appears to specialise in inhibiting inappropriate responses and behaviour;
- the ventromedial PFC (VMPFC) has many connections with subcortical structures which are responsible for emotions and habitual behaviour (e.g. the amygdala);
- the dorsomedial PFC (DMPFC) is involved in monitoring errors and ‘reality testing’.
- In non-stressful conditions, these prefrontal brain regions regulate thought, emotion and behaviour (see Fig. 4.1).

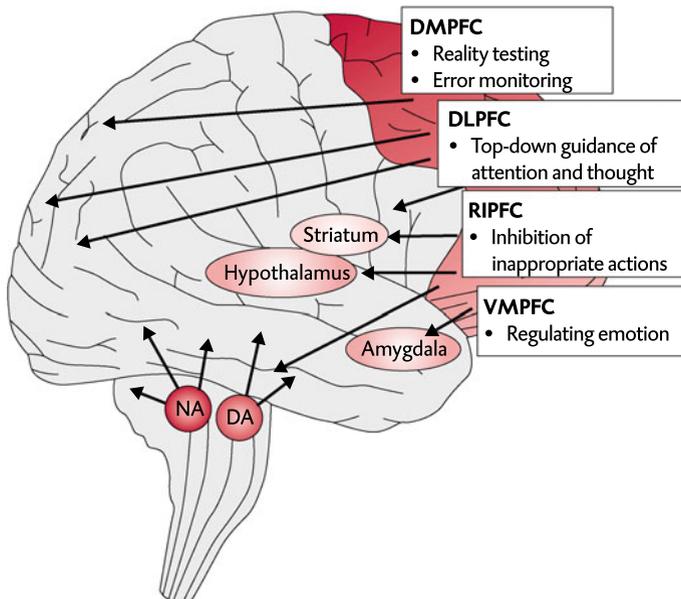


Fig. 4.1 Non-stressful conditions

So what happens when stress arises? A number of changes occur (see Fig. 4.2). The amygdala activates stress responses in the hypothalamus and the brain stem, which in turn triggers the release of noradrenaline (NA) and dopamine (DA). This reduces regulation by the PFC and boosts the influence of the amygdala. The main result is that our attention is guided less by the thoughtful top-down control from the PFC and more by the perceived stimuli in our environment. The behaviour is guided more from the bottom up. “[D]uring stress, orchestration of the brain’s response patterns switches from slow, thoughtful PFC regulation to the reflexive and rapid emotional responses of the amygdala and related subcortical structures”.⁷

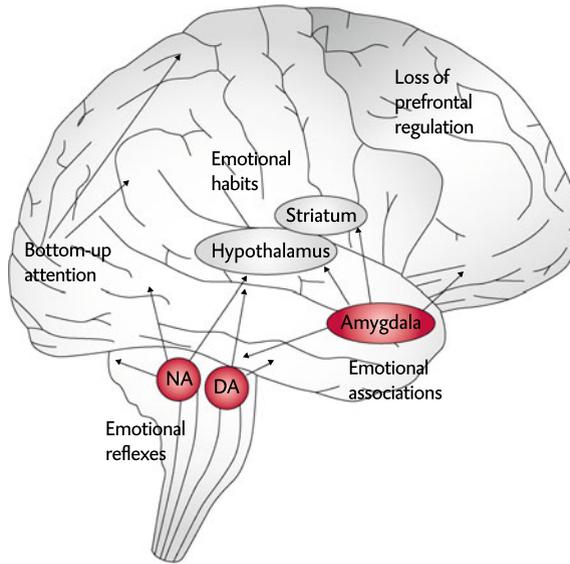


Fig. 4.2 Stressful conditions

The Effect of Acute Stress

Below we discuss studies on the influence of acute stress on executive functions. This type of study is usually organised as follows. First, an experimental group is subjected to acute stress, e.g. by asking them to address a group of critical listeners almost completely unprepared, or by administering cortisol to them. Both the experimental group and the control group are then given a specific task to do, after which they are tested to see whether there is any difference in performance.

What does this type of experiment teach us about the effects of stress on mental performance? Some studies have recently been conducted to ascertain the effects of stress on the working memory, one of the core executive functions.⁹ One example is Schoofs et al.¹⁰ They first subjected the experimental group to stress. They then measured the performance of the subjects in three tasks, two of which made great demands

on their working memory and one of which made significantly fewer demands. In one of the difficult tasks, for example, they had to do sums for 12 min while remembering words at the same time. The results showed that the experimental group performed less well than the control group in the two difficult tasks. There was no difference with the easy task. It was also found that there was a correlation between performance and cortisol level in the two difficult tasks, but not in the easy task. Schoofs et al. concluded that “stress impairs performance in demanding [working memory] tasks requiring maintenance and executive processing of information”.^{10, 11}



Even less research has been done into the effects of stress on the two other core executive functions. Plessow et al.^{12, 13} studied the effect on cognitive flexibility. The subjects were first subjected to stress and then had to perform two different, randomly alternating tasks. The experimental group was found to perform less well than a control group after an alternation. The stress had therefore impaired their cognitive flexibility. Schwabe and Wolf^{14, 15} studied the effect of acute stress on inhibition. Their study focused on the difference between goal-directed behaviour and habitual behaviour. The first type of behaviour is directed by and adapted to the extent to which the desired goal is achieved, but not the second type, which is merely an automatic response to certain stimuli. They found that it took subjects with acute stress longer to unlearn a no longer productive habit than the control group. “Overall, our findings provide strong evidence that stress favours habit performance, at the expense of goal-directed performance”.^{14, 16}

Indirect evidence that stress can have a negative influence on executive functions is provided by Starcke and Brand.¹⁷ They carried out a review of seventeen studies on the impact of acute stress on decision-making. Several experiments showed that people subjected to stress tended to take a decision even before considering all the alternatives properly. Other experiments have shown that stress causes certain groups to prefer the option with the highest immediate reward value (e.g. snacks) when given a choice of food. All in all, Starcke and Brand’s study points in the same direction, namely that stress has an adverse effect on the executive functions. As a result, choices

are guided more strongly by automatic responses and habits and less by “controlled cognitive processes”.¹⁸

Risk Aversion and Immediate Reward

As stated, little research has been conducted into the effects of acute stress on the core executive functions. It is therefore a good idea to cast the net somewhat wider and also include research into the effects of stress or certain other forms of negative affect on two important variables in the economy, namely risk aversion and time discounting.¹⁹ Haushofer and Fehr²⁰ set out in detail what is currently known about this.

First, on the basis of thirteen studies, they concluded that people subjected to anxiety or stress become more risk-averse. One example is an experiment conducted by Cohn et al.²¹ They subjected their subjects to anxiety and stress by connecting their left hand to an electrode and announcing that they could receive a powerful electric shock at random moments throughout the experiment. It was then ascertained how much of a budget allocated to them they invested in a series of risky choices of which it was not certain in advance whether they would make a profit or suffer a loss. They were found to invest a smaller proportion of their budget than the control group.²²

Second, on the basis of eleven studies, Haushofer and Fehr concluded that people under the influence of negative feelings tended to choose an immediate reward.²⁰ One example is Lerner et al.²³ They found that if subjects had watched a sad film clip first, they chose an immediate reward for participating in the experiment rather than a significantly greater reward later. “Sadness makes one myopic,” was the conclusion. Cornelisse et al.²⁴ administered cortisol to subjects and found that if they were presented with time-discounting tasks quarter of an hour afterwards they were more likely to opt for the immediate reward than people who had received a placebo.

All in all, there are sufficient research results to show that stress or elevated cortisol levels have an adverse effect on executive functions. To be specific: they have an adverse effect on the working memory and can reduce cognitive flexibility, increase habitual behaviour and heighten sensitivity towards direct stimuli and short-term reward. The quality of decision-making declines and people’s behaviour becomes regulated less by top-down control and more by bottom-up reactivity.²⁵ Within the scope of the conceptualisation of this study, we can therefore conclude that acute stress can have an adverse effect on the capacity for self-control and therefore on self-reliance.

4.2 Mental Fatigue

Another question is how long people can maintain effective self-control, self-regulation or executive control, leaving aside any stress effects. For an unlimited length of time or do they get tired at a certain point? The latter is true. People who have to make a mental effort or control their impulses for a prolonged period will

notice fatigue taking hold sooner or later. Performance deteriorates and it becomes harder to maintain executive control or self-control. But why? What is the mechanism behind this?

Now we are coming to a complicated subject and current research in this area is generating fierce controversy. It is impossible to avoid discussing it in depth and going into the scientific details. This is because, from the perspective of self-reliance, there is a lot at stake. In essence, the question is: if people cease to maintain effective self-regulation at a certain point, is it because they are no longer able to or because they no longer want to? This potentially matters a lot in terms of moral judgement. It is just like the question of intelligence and academic performance. If students do their very best but are not good learners because they are of limited intelligence, they are hardly to blame. That is a question of inability. Such students deserve help and support. On the other hand, if students are smart but don't make an effort and prefer to hang around in the pub, many people would say that it was their own fault if they didn't get a degree. That is just a question of unwillingness. Such students are more deserving of a kick in the pants.

There is therefore quite a lot at stake. To create some order in all the research, we will distinguish between two types of mental fatigue:

- Objective fatigue. This is where someone's performance *actually declines* as a result of continuous mental labour;
- Subjective fatigue. This is where someone starts to *feel* tired as a result of continuous mental labour.

Both the findings in the area of objective mental fatigue and the explanation for subjective mental fatigue are currently the subject of controversy.

Objective Fatigue and Executive Control

What is known about the effect of mental effort sustained for long periods on performance? The scientific importance of this issue grew with the advent of the industrial revolution.²⁶ After all, it was important that factory workers should be able to keep doing their work for as long as possible without making mistakes. Scientists therefore started to investigate what happened if people had to keep performing a demanding cognitive task, e.g. doing complicated sums, for hours or sometimes even days on end. However, it was soon found that, contrary to prior expectations, there was no clear correlation between 'time on task' and performance. "Under fatiguing conditions, performance sometimes declines, sometimes remains unchanged, or sometimes even increases as time on task increases", is how Ackerman²⁷ summarised it. Moreover, it was often found difficult to replicate the research results.

A couple of things are clear, however. Vigilance and attentiveness already start to decline within half an hour. This is important for certain occupations, such as soldiers and control staff. Declining performance is more likely with rapid, repetitive and uninterrupted work and with tasks requiring continuous executive control. The latter has been found in a handful of studies conducted in the Netherlands. For example, Van der Linden et al.²⁸ found that, after performing a complicated cognitive tasks

for 2 h, subjects performed less well in a test that measures cognitive flexibility, and also less well in a test that measures the extent to which people make a plan before taking action.²⁹ In other studies, it has been found that sustained mental effort causes problems with focusing attention³⁰, that sustained mental effort causes subjects to work in a less systematic way and to change strategy less quickly in the event of adverse outcomes.²⁸ Boksem et al.³¹ also found that subjects who had to keep performing a task requiring a sustained focus for 3 h gradually started to make more mistakes. They were also more likely to be distracted by irrelevant stimuli and less able to confine their attention to the stimuli relevant to the task. In an exercise lasting 2 h, Boksem et al.³² noted that the subjects not only made more mistakes after a period of time, they were also less likely to realise that they had made a mistake and less likely to use the correction option. In short, what all these studies show is that executive control is adversely affected if people have to continue exerting mental effort for a number of hours.

Self-control and Ego Depletion

In recent years, a phenomenon known as ‘ego depletion’ has been the subject of much attention. This term refers to the fact that people cannot maintain self-control indefinitely. Sooner or later, their self-control declines and people start to give into the impulses that they were trying to control. According to Baumeister et al.³³, this decline in willpower occurs because the mental resources required for self-control are gradually depleted. It is like a muscle that becomes steadily weaker the longer it has to bear a load. This is the ‘strength’ or ‘resource’ model of self-control.

Many dozens of experiments have now been conducted in which the ego depletion effect has been found. The standard methodology for this is known as dual task design. In this design, the experimental group has to perform two tasks in succession that require self-control. In the first task, they must, for example, suppress their emotions while watching a heart-rending tear-jerker such as *The fault in our stars*. They next have to perform a second task also requiring self-control, e.g. pressing a handle or keeping away from treats such as chocolate biscuits for as long as possible. Their performance is then compared with that of a control group which has performed the second task but not the first. If it is now found that the experimental group did less well in the second task than the control group, this is indeed ego depletion.

Despite the many studies in which the effect has been found, doubt has arisen in recent years as to whether the ego depletion effect really exists. This doubt is further amplified by the replication crisis in social psychology. We therefore discuss this issue in detail in the box. For those who do not wish to read our conclusion in advance at this moment: the ego depletion effect is probably less pronounced than was originally thought, but it would be going too far to conclude that it does not exist at all.

Box 4.2 Does ego depletion actually exist?

On many a street corner you can now learn that ‘will power is like a muscle that can become exhausted’. In the last few years, this scientific finding has found its way to the general public via various popular science publications.³⁴

Recently, however, serious doubts have arisen among scientists as to whether the ego depletion phenomenon really exists. Initial doubts were prompted following a meta-analysis by Hagger et al.³⁵ This analysis of almost two hundred experiments conducted according to the dual task design found “a significant effect of ego depletion on self-control task performance”. However, according to Carter and McCullough^{36, 37}, the positive results of Hagger et al. were distorted by publication bias. Studies in which the depletion effect was *not* found, are usually not published, and were therefore not included in the review either. Carter and McCullough analysed the data from Hagger et al. again, using three different techniques to correct for possible publication bias. As could be expected, the remaining effect was significantly less pronounced. One of the three techniques did not even leave any significant effect at all.

Then, in 2014, it was decided to undertake a worldwide series of replications of the ego depletion research using a dual-task design, under the direction of Hagger as mentioned above. In order to gain a proper understanding of this replication, it is necessary to consider the design in detail. This was based on Sripada et al.³⁸ and is as follows:

- The first task for the experimental group consists of an ‘effortful regulation’ task lasting 7.5 min. In this task, participants are presented with words on a computer screen and have to press a button if the word contains an ‘e’, unless it is next to or one letter away from another vowel. The control group only has to press a button if they see a word containing the letter ‘e’.
- The second task lasts 10 min. In this task, the participants are shown a row of three figures between zero and three on a computer screen, two of which are always identical and one is unique. They then have to press the button showing the number of the unique figure. This figure sometimes appears in a position in the row that corresponds to the value of the figure (i.e. the figure three in the extreme right-hand position), sometimes in a position that does not correspond to its value (e.g. the figure one in the middle position). The dependent variable is the response time to the figure task.

In early 2016 the results of the series of replications was published, and what was found? Fail! Most of the 23 participating research groups found no significant difference in performance between the experimental group and the control group.

So what now?

Goodbye ego depletion? Are we once again faced with a psychological phenomenon which, as a matter of fact, does not actually exist? That remains to be seen. It is still too early to be certain of all the implications of this series of replications, but we do want to highlight a few points.

Let's start with what this failed series of replications has actually established. What are the facts? It has not been established that people can never have problems with self-control. Neither has it been established that people can maintain self-control indefinitely. So, what has been established? Strictly speaking, all that has been established is that people who have completed the first task to cross out the 'e' do not become so fatigued that they have significantly longer response times afterwards on the second figure task. This means that it is not 'the' ego depletion task that has been replicated, but only one specific experiment from the literature concerned, namely the experiment by Sripada et al.³⁸ The fact that there were 23 participating laboratories is impressive, but as each lab followed exactly the same procedure, there is in fact only one replication experiment, albeit involving a large number of subjects spread over several continents.

Their key question is then the extent to which Sripada's experiment is 'crucial' to the ego depletion phenomenon as a whole. Has the essential element by which the entire effect stands or falls now been measured? We may have our doubts in this regard. Baumeister and Vohs³⁹ call the choice of this specific procedure 'foolish'. Although the 'letter e' task results in cognitive fatigue, it does not require self-control because there is no impulse or habit that has to be inhibited. This would only have been the case if an automatic tendency had been created in the subjects to score out all the letters 'e' in a text. Moreover, it is not clear to Baumeister and Vohs why the dependent variable—namely response time—was supposed to be an indicator of self-control. With hindsight, they clearly regret that they did not object more strongly when they were presented with the proposal for a replication of this design at the time. Now they have little choice but to start their own replication and they have taken the first steps in this direction. Inzlicht (an outspoken opponent of Baumeister and Vohs when it comes to the cause of ego depletion) is also highly critical of this replication. "Was this a perfect study? Not even close. Can we do better? Absolutely".⁴⁰

But say the first task, contrary to what Baumeister and Vohs claim, does require self-control, the methodology can still be criticised. Perhaps 7.5 min is too short a time to bring about a depletion effect. As Hagger et al.⁴¹ also note themselves, it cannot be ruled out that most people can cope for such a short time, but their mental capacities do become weaker if they have to maintain self-control for hours, days or even weeks on end and are not allowed to give into the temptation to smoke, drink alcohol, make impulse buys, etc. For this reason, we also devote quite a lot of attention to the Dutch fatigue studies in

the main text. The periods of mental effort were much longer in these studies, often at least a couple of hours. In many cases, that was found to have a definite effect.

Lab versus real life

A final point: to what extent should we generalise results from laboratory research? Psychologists are sometimes accused of being too quick to extrapolate the results of laboratory research to real life. While this practice is indeed open to dispute, the reverse is also true. We should not generalise the lack of significant results to real life on a one-to-one basis either. It is therefore also important to conduct research into possible ego depletion in real life settings. As far as we know, this has only been done systematically in two studies to date.

The first study is by Hoffman et al.⁴² They asked 205 subjects—most of them students—via their smartphone whether they had felt a desire within the last half hour at seven different times every day for a week, and if so, for what. They were also asked each time whether they had resisted that desire or (partly or completely) given into it. The results showed that “the more frequently and recently participants had resisted any earlier desire, the less successful they were at resisting any other subsequent desire”.

The second study is by Dai et al.⁴³ They studied how faithfully nursing staff in hospitals washed their hands between each patient contact. The rule is that they must always wash their hands before they visit the next patient as this prevents many infectious diseases. However, the problem is that people by no means always obey this rule. What is the reason for this? Dai and her colleagues had access to detailed hand-washing data for over 4,000 nurses in 35 different hospitals for a period of almost three years.⁴⁴ This amounted to as many as 14 million hand-washing opportunities. The analysis completed by Dai et al.⁴³ shows that as the hours of someone’s shift went by, their hand-washing discipline declined, especially among those with increased work intensity. At the end of a 12-h shift, the likelihood of someone always washing their hands between patients declined by an average of one third. On the other hand, rest breaks resulted in restoration of discipline and that restoration was stronger, the longer the rest break lasted. The researchers explained their results on the basis of ego depletion.

Interim conclusion

What should the conclusion be now? It is a good thing if results of psychological research are verified in replication studies, but the question is whether this is such a great example. To really be able to conclude that ego depletion does not exist, this should have been a crucial all-or-nothing experiment, and it certainly was not. The ego depletion effect is probably less pronounced than was believed a short time ago because it has now become clear that publication

bias was a factor. For the time being, however, it would be going too far to conclude that the effect did not exist at all—even the researchers in this replication effort did not go so far as this. Rather, the conclusion must be that more accurate research is needed into the question as to why the effect sometimes does occur and sometimes does not, and what the mediating factors are.

Subjective Fatigue

If people have to keep performing a task requiring their self-regulation for long periods, their performance may gradually decline. However, this does not answer the question as to how long people persist with the task. When do they stop? It is tempting to answer: when their energy has run out. Fatigue means empty batteries. Nevertheless, however plausible this sounds, it can never be the complete answer. Experiments show that if you increase the reward, people are capable of persisting for longer with a cognitively effortful task or with self-control^{32, 45}. Obviously, people have a set of spare batteries when it suits them. This is also evident from everyday experience when people who say they have no more energy to continue with a boring task suddenly appear to find reserves of energy when they are allowed to do something they enjoy, such as a favourite hobby.

Many scientists therefore assume the reason people stop is that they have a *feeling* of fatigue.⁴⁶ The moment when this feeling arises does not merely depend on the length of time they have been working on a task (time on task). Other factors are also at play, such as people's personality traits, how interested they are in the task, how much benefit they derive from it, what kind of mood they are in, when they last ate and—last but not least—the presence of distractions (smartphones!). According to Hockey²⁶, it is not a question of how much 'energy' people have left but how much effort they want to put into the task concerned. In his opinion, the choice people make is determined by a cost-benefit analysis.⁴⁷

But the big question is: what is on the cost side of the analysis? This is the subject of real controversy. On the one side are scientists, especially Baumeister and Vohs, who believe that there is a physical limit somewhere, a specific bodily substance or reserve that becomes depleted when mental effort has to be maintained for too long. In essence, the explanation is energy-related. In their quest for a source of energy, they have up till now pinned their hopes on glucose—but without much success.

On the other side are scientists such as Hockey²⁶, Kurzman et al.⁴⁸ and Inzlicht and Berkman⁴⁹ and Inzlicht et al.⁵⁰ who are firmly opposed to this energy-related explanation. They assume that it is entirely a question of motivation. The reason people find it hard to maintain mental effort and self-control is purely because they reach a point where they no longer want to. First, no evidence has been found thus far of a relationship between glucose levels and self-control. Second, as stated above, people seem perfectly capable of maintaining self-control for longer if they are rewarded for doing so. Moreover, people also continue for longer if they believe that there are no limits on the capacity for self-control.⁵¹ In other words, it's all in the mind. "[S]elf-control wanes over time not because people have no energy but

because people experience a shift in motivation away from “have-to” goals, which are carried out through a sense of obligation and duty, and instead come to prefer “want-to” goals, which are fun, personally enjoyable, and meaningful”.⁴⁹

Is it really necessary to delve so deeply into this debate in this book? Yes, because as stated above, when translated back into the issue dealt with in this book, the question is whether limitations on self-regulation and self-reliance are a matter of inability or unwillingness. If the first school of thought is correct and lack of self-control is the result of a depleted energy source, people will not be able to do much about the fact that sooner or later they will no longer be capable of taking thoughtful decisions and controlling themselves. Blaming them for this would be just as unreasonable as blaming people for having to sleep sooner or later. If, however, the second school of thought is correct, it is their own choice if they make unthoughtful decisions and give way to temptations. Many people will have little compassion for individuals who get into difficulties because they are repeatedly tempted to make all kinds of ‘stupid’ choices, such as impulse buys of things they don’t need or an unhealthy lifestyle. They should just control themselves better.

The truth probably lies somewhere in between. Undoubtedly, the early theories about mental fatigue and ego depletion were too one-dimensional in their exclusive focus on energy (possibly as a metaphor). Motivation is certainly a factor. But it is going to the opposite extreme to explain everything by motivation and deny completely the possible role of energy (or other mental or physical resources of a limited nature). This would make certain facts difficult to explain. If mental effort really does not cause any energy to be expended, why do people regularly make less effort for a mental task than they could? And why does 3 h doing arithmetic feel more tiring to most people than 3 h sleeping?⁵² Moreover, as Baumeister and Vohs³⁹ note, if self-control did not involve the expenditure of any energy, why would it be adaptive from an evolutionary point of view for the body to transmit fatigue signals at a certain point that stimulate people to change over from ‘have-to’ goals to ‘want-to’ goals? That would simply be counter-productive. It is precisely those who can maintain self-control for long periods who have the evolutionary advantage.

In short, the empirical results are a good deal easier to understand if we postulate that mentally demanding work also has intrinsic costs. The fact that these costs actually exist is also the argument of Kool and her colleagues, whose research shows that people have an innate aversion to demanding mental labour.⁵³ “In cognitive/leisure decisions, the utility of leisure derives, in important part, from the relief it offers from costly control”.⁵⁴

A ‘Central Governor’?

A possible way out of the controversy is provided by research into physical fatigue, as the phenomenology of mental and physical fatigue is very similar. Research into endurance sports shows that, contrary to what was initially thought, feelings of physical exhaustion do not correlate directly with the physical condition of the body. People start to feel physical exhaustion well before all their muscle power has been used up. It has also been found that, just as with mental fatigue, an extra effort is possible if the

reward is increased. The sports physiologist Timothy Noakes therefore surmises that human neurobiology has a ‘central governor’ that regulates the effort exerted by the body.⁵⁵ In response to signals from the body, this central governor generates feelings of fatigue long before the body becomes so exhausted that there is actually a risk of physical damage (‘catastrophic breakdown’), such as torn tendons and muscles. In evolutionary terms, this is a particularly sensible physical innovation.

Evans et al.⁵⁶ propose that ‘the central governor theory of physical fatigue’ can help to improve our understanding of mental fatigue, and postulate an integrated model inspired by this theory. The real essence of this theory is that there are ‘multiple inputs’ that determine whether mental fatigue is occurring and the activity concerned is continued or discontinued. The relevant elements are “current conditions (workload, available energy, goal value), expected conditions (future workload and available energy), and opportunity costs of not pursuing some other goal”. Previous experience of how much energy the task in question involves is another factor. In short, both energy and motivation are involved.

All in All...

So what should we conclude now? As stated, this is an ongoing debate. The last word has not yet been said on this subject, as even the central governor concept is not undisputed.⁵⁷ What is clear at any rate is that, contrary to what was assumed in classic fatigue research, there is no direct correlation between available energy or resources on the one hand and performance levels or self-control on the other. It is not purely a matter of metabolism. However, it is unlikely that there are no limits at all to the amount of mental labour a person can endure without rest or interruption or that self-regulation can therefore be continued indefinitely. Even though it is still unclear what exactly the physiological processes are, it is incorrect to conclude from this that these limits therefore do not exist. Neither does it chime with research which shows that, when confronted with a need for sustained self-control, the body behaves *as if* its energy is being depleted. Partly for this reason, many scientists definitely do see a role for limited resources—whatever they may be.

On balance, the findings can probably be best summed up in the term ‘buffer’. If people have to exercise their self-regulation, e.g. to perform effortful mental tasks or to maintain their self-control, they do not immediately deploy all their resources for this purpose. They hold a reserve that can act as a buffer. For this reason, it is possible to make a greater effort, should that be unexpectedly necessary or desirable. Sooner or later, however, we reach the limits of what is possible.

4.3 The Psychological Effects of Poverty

The way stress and mental exertion affect self-regulation is clearly shown in research into poverty.⁵⁸ Haushofer and Fehr²⁰ highlight the role played by stress. They believe that poverty leads to stress and—as we have seen above—stress leads to reduced

mental performance. Haushofer and Fehr²⁰ found a total of 25 studies on the effect of a fall or rise in poverty on indicators of psychological well-being, such as happiness, reported mental health, depression and cortisol levels. The great majority of these studies showed that a rise in poverty leads to negative feelings and stress, whereas a fall in poverty has the opposite effect.

Ego depletion could be another factor. Spears⁵⁹ reports on three studies which show that if people on a low income have to decide how best to spend their meagre budget, this can result in a temporary reduction of self-control. In one of these studies, he investigated the extent of 'secondary eating' while doing the shopping. Secondary eating is eating while doing something else, such as driving or watching TV. It is a form of 'thoughtless eating', which is regarded as a sign of lack of control. The analyses found that people on a low income did more secondary eating while grocery shopping than people on a high income. Obviously, they have to expend mental energy in taking financial decisions, which leaves less for self-control.

But money problems can have yet another psychological effect: a narrowing of perspective. Mani et al.⁶⁰ studied the psychological impact of financial scarcity by presenting passers-by in a US shopping mall with some imaginary financial choices. They had to imagine, for example, that their car suddenly developed a fault. Would they have it repaired and, if so, how would they fund the repair? Two alternative questions were asked, i.e. a cheap alternative and an expensive one. In the cheap alternative, the repair cost 150 dollars, an amount that most people could pay without much difficulty. In the expensive alternative, the repair cost 1,500 dollars. This amount would not be a problem either for people on a good income but would be for people on a low income. It could trigger their feelings relating to monetary concerns. The subjects were then told that they could think about the question and do two short tests in the meantime, namely one measuring fluid intelligence and one measuring cognitive control of impulses.⁶¹ Finally, they were asked what they had decided about the financial dilemma. What was important to the researchers now was not the answer to the dilemmas but the scores for the two tests. They showed that in the cheap alternative (150 dollars) people on low or high incomes performed equally well in the two tests. However, in the expensive alternative (1,500 dollars) people on low incomes performed significantly worse. Their money worries had obviously been triggered, with an adverse effect on intelligence and control. Converted into IQ, the effect was equivalent to a drop in IQ of about 13 points. "These sizeable magnitudes suggest the cognitive impact of poverty could have large real consequences".⁶⁰

4.4 Conclusion: Stress and Mental Exertion Have an Adverse Impact on Self-reliance

What effect does mental exertion and stress have on self-control, i.e. executive control, executive functions or self-regulation? That was the key question in this chapter. What is striking is how little we actually know. "I have no expectation that the laws

of mental fatigue will be formulated in the immediate future”, remarked Dodge a century ago.⁶² Since then, only modest progress has been made. Even ego depletion, a phenomenon that was undisputed until recently is again being questioned.

The following conclusions can, however, be drawn. The capacity for self-regulation can be impaired by:

- *acute stress or elevated cortisol levels.* Acute stress and cortisol have an adverse impact on the working memory. They can also lead to reduced cognitive flexibility, increased habitual behaviour, increased sensitivity to direct stimuli and—if the stress is associated with negative feelings—a short-term orientation. The quality of decision-making declines and behaviour is regulated less by top-down control and more by bottom-up reactivity;
- *mental exertion*, e.g. demanding cognitive tasks or prolonged periods of self-control. The effects do not necessarily occur immediately. Anyone who wants to can tap into their reserves to maintain the desired performance level for longer but this may be at the expense of other physical or mental functions, and the reserves are not unlimited. Sooner or later, their performance will decline. Moreover, it does seem at present that self-control cannot be maintained indefinitely;
- *feelings of scarcity and poverty.* Various psychological mechanisms can be triggered in people with serious financial worries that can impair executive functions. This can involve stress or depletion effects but it could also be ‘attentional capture’, where people are so preoccupied with money worries that they have less attention left for other things.

In short, situational factors can affect the degree to which someone is capable of setting goals for the future, focusing on them and working towards them in a planned way, persisting and not getting distracted. These are capacities which are always useful, but especially when life is difficult, e.g. losing a job, getting divorced or dealing with problematic debts. It is at those times when it is essential to keep one’s head. Unfortunately, these are precisely situations which could be associated with stress and therefore have an adverse effect on self-regulation. Just when self-reliance is most important, people run the greatest risk that the capacities they need will be impaired.

Endnotes

1. Mullainathan, S., & Shafir, E. (2013).
2. Tiemeijer, W. (2016).
3. Carver, C. S., & Scheier, M. F. (2011).
4. Diamond, A. (2013, see also p. 135).
5. Contrada, R. J. (2011, see also p. 1).
6. Besides acute stress, the literature also refers to chronic stress. This pertains when the body does not get enough rest after acute stress to return to the ‘normal’ situation, resulting in a position where there is a constant heightened level of stress hormones.

7. Arnsten, A. F. T. (2013, see also p. 4).
8. Fuster, J. (2015, see also p. 1; italics in original).
9. Quite a lot of research has been done into the effects of stress on the long-term memory and recall (see Schwabe et al. 2010), but significantly less into the effects on working memory.
10. Schoofs, D., Wolf, O. T., & Smeets, T. (2009, see also p. 1073).
11. Comparable results were found by Oei et al. (2006), Schoofs et al. (2008), Qin et al. (2009) and Olver et al. (2015). As stated, it is also possible to raise the cortisol level artificially. A meta-analysis of eighteen studies showed that the administration of cortisol did indeed impair the performance of the working memory in the short term (Shields et al. 2015).
12. Plessow, F., Fischer, R., Kirschbaum, C., & Goschke, T. (2011).
13. Plessow, F., Kiesel, A., & Kirschbaum, C. (2012).
14. Schwabe, L., & Wolf, O. T. (2009, see also p. 7915).
15. Schwabe, L., & Wolf, O. T. (2011).
16. In some ways contrary to the above, however, Shields et al. (2015) appear to have found in a meta-analysis of 24 studies on the effects of administering hydrocortisone that this actually improved inhibition in the short term.
17. Starcke, K., & Brand, M. (2012, see also p. 1241).
18. Yet more results: McCormick et al. (2007) found that women with raised cortisol levels made more mistakes in the Wisconsin Card Sorting Test, which is supposed to measure set-shifting and cognitive flexibility (one of the executive functions), than women with reduced cortisol levels, but the reverse was true for men. Scholz et al. (2009) found in men completing TSST that first resulted in elevated cortisol levels, that they scored less well in a go-no go task a moment later. Maier et al. (2015) found that subjects subjected to SECPT stress had less self-control in a hypothetical choice of food.
19. It is a matter of dispute whether risk aversion does have a negative impact on effective self-regulation. Moderate risk aversion could actually contribute to effective self-regulation but strong risk aversion is probably detrimental because it can help avoid problems that require action.
20. Haushofer, J., & Fehr, E. (2014, see also p. 866).
21. Cohn, A., Engelmann, J., Fehr, E., & Maréchal, M. A. (2015).
22. In another experiment (Kandasamy et al. 2014), cortisol was administered to subjects for a week. On the first, third, fifth and seventh day of the experiment, they also had to perform a computer task in which they had to make a series of choices between different 'lotteries' (i.e. sets of chances of winning a prize). It was found that, although they did not choose less risky lotteries than a control group immediately on day one, they did so later in the week.
23. Lerner, J. S., Li, Y., & Weber, E. U. (2013, see also p. 76).
24. Cornelisse, S., van Ast, V., Haushofer, J., Seinstra, M., & Joels, M. (2013).
25. However, the foregoing concerns only acute stress. Yet more academic literature is devoted to chronic and toxic stress. The latter means stress sufficient to have

lasting consequences. It has now become clear that long-term stress during early childhood can result in lasting mental and physical effects, including permanent elevated stress sensitivity (see, for example, Schonkoff et al. 2012). It is therefore a form of gene-environment interaction which affects the mental capital that people take with them into adulthood. This is an important subject, but lack of space prevents us from discussing it here.

26. Hockey, R. (2013).
27. Ackerman, P. L. (2011, see also p. 3).
28. van der Linden, D., Frese, M., & Sonnentag, S. (2003).
29. The Wisconsin Card Sorting test and the Tower of London test respectively.
30. van der Linden, D., & Eling, P. (2006).
31. Boksem, M. A., Meijman, T. F., & Lorist, M. M. (2005).
32. Boksem, M. A., Meijman, T. F., & Lorist, M. M. (2006).
33. Baumeister, R. F., Vohs, K. D., & Tice, D. M. (2007).
34. The WRR has also written about this, namely in Tiemeijer et al. (2009), Tiemeijer (2010) and WRR (2014a).
35. Hagger, M. S., Wood, C., Stiff, C., & Chatzisarantis, N. L. (2010, see also p. 495).
36. Carter, E. C., & McCullough, M. E. (2013).
37. Carter, E. C., & McCullough, M. E. (2014).
38. Sripada, C., Kessler, D., & Jonides, J. (2014).
39. Baumeister, R. F., & Vohs, K. D. (2016).
40. See http://soccco.uni-koeln.de/sites/sozialpsychologie1/Events/CologneMeetings/CSCM-2016/CSCM-2016_Baumeister_Inzlicht.pdf.
41. Hagger, M. S., Chatzisarantis, N. L., Alberts, H., Anggono, C. O., Batailler, C., Birt, A., et al. (2015).
42. Hofmann, W., Baumeister, R. F., Förster, G., & Vohs, K. D. (2012, see also p. 587).
43. Dai, H., et al. (2015).
44. These were obtained electronically by means of RIFD signals.
45. Muraven, M., & Slessareva, E. (2003).
46. van der Linden, D. (2011).
47. Boksem and Tops argue along the same lines. If the costs of “task performance come to exceed the motivation to obtain reward or avoid punishment, the present activities may be abandoned” (2008: 134–135). Kurzban et al. (2013) are even more specific. They contend that this is a calculation of opportunity costs. People stop performing a task when the perceived utility of alternative activities increases to the point where it is greater than the utility of the task in hand.
48. Kurzban, R., Duckworth, A., Kable, J. W., & Myers, J. (2013).
49. Inzlicht, M., & Berkman, E. (2015, see also p. 520).
50. Inzlicht, M., Schmeichel, B. J., & Macrae, C. N. (2014).
51. Job, V., Dweck, C. S., & Walton, G. M. (2010).

52. After all, the opportunity costs of both, the only relevant criterion according to Kurzban et al. (2013), are the same.
53. Kool, W., McGuire, J. T., Rosen, Z. B., & Botvinick, M. M. (2010).
54. Kool, W., & Botvinick, M. (2014, see also p. 138).
55. Noakes, T. D., Gibson, A. S. C., & Lambert, E. V. (2005).
56. Evans, D. R., Boggero, I. A., & Segerstrom, S. C. (2015, see also p. 9).
57. Inzlicht, M., & Marcora, S. (2016).
58. We are focusing attention on the effects of poverty because this has a direct bearing on the part played by non-cognitive capacities in the self-reliance of the public and more specifically on what they have to be able to do in order to keep their personal finances in order. But poverty is not the only possible factor. Research shows that executive functions are also negatively impacted by grief, loneliness and physical problems (see, for example, Diamond 2013 and Cacioppo and Hawkey 2009).
59. Spears, D. (2011).
60. Mani, A., Mullainathan, S., Shafir, E., & Zhao, J. (2013, see also p. 980).
61. The so-called Raven's test and a spatial compatibility task.
62. Dodge, R. (1917, see also p. 89).

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Chapter 5

Training and Intervention



People who have the necessary capacity to act do better at school and at work, have better health and fewer debts and are better able to deal with the temptations of the market and the responsibilities of the participation society. However, we have also seen that not everyone always has this capacity or to the same extent. So what could be more logical than trying to strengthen the capacity to act through education or training?

This chapter discusses whether training can provide a solution in this case. We are focusing on three questions:

- How far is it possible to improve someone's self-control, executive functions or self-regulation by means of practice or intervention?
- How far is it possible to learn certain domain-specific skills, such as how to deal with money sensibly?
- To what extent is the government normatively permitted to offer or even impose such training?

5.1 Better Self-control

In this section, we will also be focusing on one non-cognitive characteristic, namely the capacity for self-control. Why are we not focusing on temperaments and beliefs? First, self-control correlates closely with desired societal outcomes. Second, self-control is in theory the most 'efficient' reference point for intervention and training. Attempts to change someone's temperament would probably have little effect as their temperament is almost fully formed after the age of three¹. At most, people can be taught to deal with their temperament better and that requires, by definition, self-control.

Attempts to change someone's beliefs could actually have an effect. The problem in this case, however, is that there would be little 'transference', i.e. the effect would probably be confined just to the subject of the training. If someone is convinced that they are bad at dealing with money, a course entitled 'dealing with money' could lead them to have more positive thoughts. But these more positive thoughts would probably be confined to the financial domain. An improved belief in their own financial abilities will not make much difference, if any, to their beliefs in the area of health.² And it is once again the case that training courses in this area must go down the route of self-regulation.

In short, there is a lot to be said for improving self-control. If gains can be achieved in this aspect, that will be helpful for a large number of problems and life challenges—including challenges that, as yet, are unforeseen.

We discuss below two lines of research, namely research into:

- training in *self-control*. Baumeister et al. use the metaphor of a muscle. The question is whether it is possible to make the 'self-control muscle' stronger through intervention and exercise.
- teaching *mental techniques* that contribute to positive goals. If you're not strong, you'd better be smart. If turns out to be possible to teach people tips and tricks to find better ways of achieving their goals despite their weak 'self-control muscle', their self-control will also have improved. Interventions could then be organised accordingly.

5.1.1 Self-control Training

Dozens of studies on the question of whether people can be trained in self-control have been published in recent years. This research is often designed as follows. A baseline measurement is first carried out in the form of a self-control task, followed by a period of a few weeks during which the subjects practise a specific skill that requires self-control and finally a final measurement is taken to ascertain how people performed in the self-control task.

One of the better studies in this area is that by Muraven³ among people who wanted to quit smoking. Before the subjects were actually going to quit, they did daily exercises which they were told would improve their self-control. In the two experimental groups, these were exercises in which either people actually had to control impulses, i.e. they were not to eat sweets for two weeks or they had to keep pressing a handle for as long as possible twice a day for two weeks. In the two control groups, the exercises did not involve impulse control, i.e. they had either to keep a diary for two weeks on how they were dealing with the temptations of the moment or do sums twice a day. Once the training period was over, the actual attempt to quit began. A record of the subjects' progress was kept for four weeks. It was found that members of the experimental group maintained their attempt to quit for significantly longer than the members of the control groups. Also, a significantly smaller number of them had started smoking again by the end of the four weeks.

However, research into training courses for self-control does not always show any effect. The results are very variable. At the time of writing, four small-scale meta-analyses of the results of this type of training have been published. The results are as follows:

- The first analysis was part of a large-scale meta-analysis of ego depletion by Hagger et al⁴. They analysed seven studies looking into the effects of training and found a substantial result, namely $d = 1.07$.
- The second meta-analysis was by Inzlicht and Berkman⁵. They analysed a total of thirteen studies, including the Hagger et al. study, but corrected the latter for publication bias. They then found an effect of $d = 0.60$, which is still an impressive result. However, it was found on closer inspection that this substantial result was due to three studies by Oaten and Cheng which showed extreme effects and about which Inzlicht and Berkman had serious doubts. If these studies are omitted from the analysis, the correlation found drops to a significantly more modest $d = 0.17$ and no longer differ significantly from zero.
- The third meta-analysis is by Beames et al⁶ and covers thirty published and unpublished studies (excluding the Oaten and Cheng study). They found an effect of $g = 0.36$.⁷ When possible publication bias is taken into account, the result is a little lower, but it is still a significant effect.
- The fourth meta-analysis is by Friese et al⁸. They analysed a total of 34—somewhat different—studies (again excluding the Oaten and Cheng study) and have found an average effect of $g = 0.28$. Their result was also a little lower when corrected for publication bias.

All in all, therefore, there does appear to be a modest training effect. Caution is recommended with regard to this conclusion, however. There are only a few studies that ascertained whether the results were also longer-lasting. The results of these studies lead one to suspect that the participants did gradually fall back to their old level of self-control. A substantial number of studies even found no effect at all. Moreover, according to several of the above researchers, it is still unclear what the exact psychological mechanism is that is responsible for the improved results. It has not even been ruled out that they are merely due to the placebo effect.

Box 5.1 Training Involving Children

There are two other lines of research that touch on the subject of this chapter but are different because they mainly focus on children.

Executive function training

The first line is firmly rooted in educational psychology and concerns executive function training. A lot of research has been done into the effects of providing training in executive functions, often in (young) children. This shows that it is indeed possible to provide training in certain executive functions. In a review of this research, Diamond and Lee⁹ concluded that:

[d]iverse activities have been shown to improve children's executive functions: computerized training, noncomputerized games, aerobics, martial arts, yoga, mindfulness, and school curricula. All successful programs involve repeated practice and progressively increase the challenge to executive functions. Children with worse executive functions benefit most from these activities; thus, early executive-function training may avert widening achievement gaps later.

Yet there are some caveats. To achieve these results a lot of practice is required ("Repeated practice is the key" according to Diamond¹⁰). Moreover, the transference of the learning effects is limited. Children do therefore improve in the task they practised and also in very similar tasks, but there is no effect on completely different tasks that also involve the underlying executive function. Meta-analyses of research into working memory training also provide little reason for optimism^{11, 12}.

Preschool and Early Childhood Education (VVE)

Another line of research concerns Preschool and Early Childhood Education interventions. This literature does not focus explicitly or exclusively on self-control, executive functions or self-regulation but more generally on the (supposed) importance of non-cognitive characteristics and capacities for life outcomes and on whether these characteristics and capacities can be addressed by means of VVE programmes. The central figure in this area is the economist, James Heckman. His message is arousing growing interest from economists and policymakers, judging by an OECD report dating from 2014.¹³ This message is that an investment in VVE programmes that partly focus on developing non-cognitive skills will pay for itself through improved outcomes for individuals and society.

The showpiece in this literature is the long-running 'Perry Preschool programme'. This programme focuses on black children aged 3 and 4 with an IQ below 85 from families with a low socio-economic status (SES). In this two-year programme, the children are trained in subjects including self-regulation skills such as planning and self-control, and in social skills. Two and a half hours are spent on the programme every school day. The children's mothers are also visited for one and a half hours every week with the aim of involving them in their child's development. Various evaluation studies have now been looking at how the Perry children progressed afterwards, up to their 40th birthday. These show that the programme does not result in a lasting improvement in IQ but does produce other desirable societal outcomes, in particular a reduction in crime.¹⁴ Heckman, Pinto and Savelyev¹⁵ show that these societal outcomes can be predicted on the basis of the effect the programme had on externalizing behaviour of these children from ages 7 to 9.¹⁶ To put it another way, children who exhibited less disruptive behaviour as a result of this programme when aged 7 to 9 also had better societal outcomes in adult life. As Heckman et al¹⁴ concluded: "Persistent changes in personality skills play a substantial role in producing the success of the Perry programme." "[A] few hours per day of

preschool at ages three and four with a curriculum that promotes social competency, planning, and organization can significantly and beneficially affect life outcomes”.

The above-mentioned OECD report also discussed other programmes and found that programmes that focus on young children have the best chance of success. Unfortunately, the results of programmes aimed at adolescents are not so good and fewer subsequent long-term evaluations were carried out in these cases. “The two programmes with the longest follow-ups improve outcomes in the short run, but the benefits fade after a few years. These programmes alter participants’ environments and incentives during the intervention, which could influence their behaviour in the short term without having a lasting effect”.¹³

5.1.2 Using Mental Techniques to Circumvent Self-control

It does not therefore appear to be easy to improve self-control through training. But there may be an alternative. One could also try to teach people those habits that they need to achieve their goals but do not require them to use their self-control. People who get into the habit of always choosing fruit instead of sweet things in the canteen or noting down each item of expenditure in a cash book after a visit to the shop will eventually do so automatically and will no longer need to exert themselves mentally. In fact, in recent years, it is becoming more widely understood that people who appear to be good at self-control do not necessarily have a stronger ‘will power muscle’ than anyone else, but are better able to teach themselves habits that take them closer to their goals.^{17, 18, 19} For this reason, they do not have to use this muscle so much, which therefore becomes less tired and can be used for other things.²⁰ Ergo: training programmes aimed at improving self-control could also focus on changing habits.

This type of training programme has now been the subject of a good deal of research. A first technique that can help to change behaviour is ‘mental contrasting’. It involves someone first imagining a future situation or the goal they wish to achieve and then obstacles in the present that are impeding them and that they therefore have to overcome. This mental exercise increases the motivation and energy for a change of behaviour, links the desired future to conditions in the present real-life situation and emphasises the need for action. Research has shown that mental contrasting does in fact encourage people to change their behaviour in the desired direction.^{21, 22}

A second technique that can help to change behaviour is the creation of ‘implementation intentions’.²³ This involves people formulating small action plans for themselves along the lines of ‘whenever situation x arises, I will initiate response y’. Anyone who wants to lead a healthier life can, for example, agree with themselves that ‘if it’s not raining on a working day, I’ll cycle to work’ or ‘when I’m at that reception tomorrow, I’ll have a glass of water after every alcoholic drink’. By deliberately impressing such rules on themselves, people are creating a mental connection between a specific situation and a specific response. If the situation then does actually arise, they will no longer have to actively think about what to do but

choose the planned response, more or less automatically. They create what could be called ‘instant habits’. Many studies have now been conducted which show that if someone believes a goal to be really important, formulating specific implementation intentions actually helps to change behaviour so as to achieve that goal.²⁴

The combination

Mental contrasting and forming implementation intentions are in a certain sense complementary techniques. “Mental contrasting can create strong goal commitment, whereas implementation intentions facilitate the implementation of strong goal commitments”, wrote Stadler et al²⁵ Combining the two therefore has a greater effect on behaviour than each one separately.^{26, 27} In the study by Stadler et al²⁵, an intervention aimed at getting people to eat more fruit and vegetables, in which the two techniques had been combined, was still having a visible effect even after two years.

It is particularly relevant for this book that these favourable effects are not necessarily confined to the specific goal that was the subject of the mental exercise. This means we would have a cross-domain, generally applicable technique that can help people to achieve their goals more effectively despite the limits on their self-control and will power. Oettingen et al²² describe some experiments in which participants had first been trained to use both techniques for goal attainment in a handful of areas of life, such as improving academic performance and improving interpersonal relationships. They then measured the extent to which the subjects did actually improve their performance in an area not covered in the training, namely time management. They did indeed find a significant effect. Apparently, the participants had used their newly acquired techniques for changing behaviour more widely on their own initiative. Reviewing the study, Oettingen et al. concluded that mental contrasting, whether or not combined with forming implementation intentions, “can be effectively taught as metacognitive strategy that people can use on their own to successfully change their behaviour”.²²

Before we start celebrating, we should however mention two caveats. First, little research has been done as yet into whether such training programmes really have a cross-domain effect. Research into mental contrasting and implementation intentions usually relates to specific domains, such as a healthier lifestyle or improving academic performance. The above study by Oettingen et al²² is an exception in this regard. Second, using mental contrasting or implementation intentions to change behaviour does, by definition, require a deliberate mental effort. After all, new habits don’t come by themselves. They only come about when the new behaviour is repeated so often that it becomes automatic and it can take weeks or even months before that actually happens.^{28, 29} Until that time, a great deal of will power is required to inhibit undesirable habits and trigger desirable behaviour options.³⁰ This means that, all things being equal, people who start out with a greater capacity for self-control will succeed in building on a change in behaviour, once in place, to create a new habit sooner than people who have less capacity in this regard.

5.1.3 No Unrealistic Expectations

What does the above teach us about the task of taking everyone to an acceptable level of self-reliance? That we should not have unrealistic expectations with regard to the possibility of strengthening the capacity for self-control at a stroke. The research into self-control training only produces modest results and it is questionable whether these results will last long.

A possible alternative is to employ cognitive strategies (in this case implementation intentions and mental contrasting) to circumvent limits in self-control. These techniques have been found to be quite effective. However, research in this area to date mainly relates to specific behaviours and domains, e.g. a healthy lifestyle. Hardly any research has yet been conducted into whether it helps to offer these techniques as cross-domain ‘meta-cognitive strategies’ which are used to improve the way goals are achieved across a series of life domains. It would certainly be worthwhile to conduct more research in this area.

But, here too, we have to guard against unrealistic expectations. After all, both cognitive techniques, by definition, require mental effort. The essence of both techniques involves holding an interior monologue. People activate their ‘inner helper’ in order to motivate their ‘automatic self’ to change behaviour and will have to keep disciplining themselves until such time as the new behaviour is automatic. This again requires them to use their capacity for self-control, however.

5.2 Training in Domain-Specific Skills

What about providing training in the specific skills needed for the various domains? Examples of these types of interventions include courses on improving the way people deal with low incomes, courses on healthier living and training programmes on effective job applications. The necessary evaluation study is now available.

One major difference between the above and the training programmes in the previous section is that they focus specifically on what you have to be able to do in the domain in question. For example, it is essential for people who want to be able to handle money properly to be able to prepare a monthly budget. However, this skill does not help much in other life domains. Although it is not impossible for people to become better at general capabilities that are also useful elsewhere, such as working in a planned way, as they go along, this is not the main point. However, from the perspective of general self-reliance, these potential additional findings are also interesting.

Below, we will briefly discuss what is known about the results of interventions and training programmes in various subdomains and present some examples of potentially promising initiatives.

5.2.1 Training in Health Skills

What are the options for strengthening people's health skills? Research in this area is becoming popular. In the United States, various meta-studies have been conducted that bring together knowledge of interventions and evaluations of interventions. In Europe, a systematic analysis of existing knowledge of interventions focusing on health skills was carried out in EU member states in 2015.³¹

These studies do not allow us to draw any firm conclusions on the effectiveness of policy programmes aimed at increasing health skills.³² The number of interventions and evaluation studies is too limited, especially in Europe. Moreover, the studies differ in terms of quality and demarcation. Although the meta-studies used a broad definition of health skills, the majority of the interventions were solely focused on cognitive skills, on the processing of information by patients and problems with reading, writing and arithmetic. There are still relatively few interventions focusing on motivation, self-control or self-efficacy. The meta-studies generally provide little evidence of the effectiveness of interventions.³³ But, according to the authors, they do provide cautious motivation for further extending knowledge of health skills and organising and evaluating new interventions. For example, the European study concluded that the most promising interventions do not focus on knowledge alone, but also on other skills.³¹

Lifestyle change

Another line of research focuses on the prevention of unhealthy behaviour. Although knowledge of effective intervention has increased, almost everyone concludes that the effect of a lot of short-term behavioural interventions aimed at the general population has not yet been properly studied.^{34, 35, 36} Even less is known about the duration of the effects. Moreover, the available research does not provide a clear picture of effectiveness. Some authors report positive results, sometimes cautiously^{34, 36, 37} other, actually disappointing results.^{38, 39}

What do we actually know? First and foremost, that providing information is not enough to achieve lifestyle change. This has been established in many studies in recent years. Campaigns in the mass media promoting a healthier lifestyle do usually have some effect on knowledge and attitude, but not on behaviour.^{35, 36} An integrated and sustained approach would seem to be the best way of reducing the prevalence of risk factors (ibid.). This approach involves not only the individual in question, but also their social and physical environment. It consists of interventions that influence the environment within which the individual makes a choice, such as tightening up the smoking ban, a fat tax or encouraging physical exercise by introducing a cycle-to-work scheme.

Pricing measures and legislation are found to be the most effective way of influencing behaviour.^{35, 36} Increasing mental capacities is not therefore the only route towards a healthy lifestyle. It is easier for individuals to adapt their environment in order to maintain a healthy lifestyle as there are fewer demands on their mental capacities. We will return to this topic in the next chapter.

Self-management by patients

We are also seeing an increase in research into training programmes that enable patients to cope better with their illness and manage their own treatment. They are usually linked to a specific condition and involve a combination of transferring knowledge of the illness and focusing on the way patients cope with the illness. The Utrecht Medical Centre (UMCU) provides training courses for young people and adults with rheumatism in conjunction with Reumafonds (the patient organisation for people with rheumatism in the Netherlands) (see Box 5.2). The applications and training programmes have been developed as part of a consultation process, so that they match the needs and preferences of the patients. The project is the subject of scientific research. Initial publications show positive results for user accessibility and satisfaction, but no data are available as yet on the effects of the training in the long term.^{40, 41, 42}

Box 5.2 Rheumatism Challenged

Rheumatism Challenged [Reuma Uitgedaagd] is a self-management training programme for people with rheumatism developed by the UMCU and Reumafonds because the existing information did not adequately meet the needs of patients.⁴³ The training is provided both online and in the form of meetings. The online version of the training uses chat sessions, discussion boards and individual exercises and makes it possible to base the interventions on individual needs and preferences. The trainers themselves have rheumatism and have been trained to provide this training. “So they are well aware of what it means to try to live with rheumatism in their everyday lives”.⁴⁴

The training is partly concerned with teaching knowledge about the illness but also devotes attention to the non-cognitive aspects such as communicating with friends and carers, setting boundaries, managing emotions and pain and making choices that will impact on subsequent health, such as whether to play sports or have a night out. The priority is not to transfer factual knowledge but to train patients in self-management. For example, young people are helped to develop skills to deal with the issues that preoccupy them, such as: ‘I find it hard to explain to family and friends what I can and can’t do. How do I go about this?’

5.2.2 Training Focusing on Healthy Financial Behaviour

In the Netherlands municipalities, voluntary organisations and other organisations offer all kinds of courses for people who are unable to deal with money properly. Some of them focus on prevention and others on increasing the skills of people who already have or are likely to have financial problems. A variety of tools are used, depending on the aims and target group of the interventions. The main tools are budget coaching, budgeting courses, information and education modules. But how effective is financial training?

Jungmann and Madern⁴⁵ were commissioned by the WRR to conduct desk research to ascertain what is known about this.⁴⁶ Their short answer is that we don't actually know. Some years ago, two meta-analyses were published. The first was by Hoffman et al. Fernandes et al.⁴⁷ and covered a total of 201 studies, of which 90 concerned educational interventions aimed at changing people's financial behaviour. The results were very disappointing. In total, these interventions accounted for only 0.1% of the variation in financial behaviour. The second meta-analysis was by Miller et al⁴⁸ and covered 188 studies, some of them the same as in Fernandes et al. They made a greater distinction between different types of effects and, on this basis, came to a somewhat less gloomy conclusion. Educational interventions may have some positive effect in some areas (saving, keeping track of finances), but not in others (credit default).

These results were nothing to write home about. So should our conclusion be that financial courses or training programmes are pointless? No, that would be premature. Jungman and Madern⁴⁵ give two reasons for this. First, these interventions focus on knowledge transfer. They are based on the assumption that people will make better decisions if they are better informed. However, financial behaviour involves more than just cognitive factors. Financial behaviour also correlates with the non-cognitive factors that are the key issue in this book and nothing was done about them in the interventions studied. Looked at in this way, the lack of result is therefore hardly surprising. Second, the strong aggregation that is unique to meta-analysis to some extent conceals the fact that some effect was definitely measured in certain types of intervention. Jungman and Madern call for the active mechanisms in these successful studies to be examined in more detail and further developed.

The insight that an increase in financial literacy does not automatically mean that people will start to exhibit better financial behaviour is reflected in the design of some interventions in the Netherlands. Jungmann and Madern⁴⁵ found that whereas for a long time the emphasis was on the transfer of technical knowledge in budgeting courses, ever greater attention is being focused on the behavioural aspect of debt in recent years. Courses focus on questions such as: 'How do I deal with temptation?' or 'What makes me break my own good intentions time and again?' Participants in a training programme organised by the Amsterdam food bank and the Nibud budgeting course reported effects such as a willingness to open letters, growth of confidence in their own abilities, knowing what to do if they don't know something and being more confident in dealing with money.⁴⁵ However, there is no sound research into the effects at the present time.

5.2.3 Labour Market Skills Training

Within the labour market domain, employees, employers and the government all focus on training and attention is increasingly being devoted to the non-cognitive skills. Yet research into the options for providing labour market skills training is still limited. Moreover, the available research focuses more on the effectiveness of reintegration policy and much less on employability.

Owing to a number of methodological limitations, this research provides only a modest amount of information. For example, a lot of research is short-term, which means it is not clear whether the training also has long-term effects. Furthermore, many studies only use a small sample, e.g. of thirty people per group, as a result of which the group may be too small to find significant results.⁴⁹ In addition, labour market skills are regarded as a means and not an end, which means that it is not always ascertained during interventions whether skills have been increased but only whether the individual has a chance of getting a job. Bearing in mind these limitations, we are discussing here research into training in employability and other labour market skills.

From unemployment to work

Most research into the effectiveness of training focuses on the help given to people who are unemployed. Unemployed people are motivated and helped to find work with the aid of different schemes under the banner of ‘active labour market policy’.⁵⁰ In this case, we focus solely on the interventions that also try to improve non-cognitive capacities, such as supervision by client managers and the related training in applying for jobs.⁵¹

Box 5.3 JOBS Training

An example of this kind of intervention is *Job Opportunity and Basic Skills training* (JOBS). This focuses both on improving participants’ job-seeking skills and confidence and on preparing them for any rejection and setbacks they may encounter. Over a few half-day sessions, the unemployed participants showcase their own competencies in a series of increasingly difficult tasks and use them to match themselves to the labour market. Compared with the control group, participants are more likely to find a job and less likely to suffer from depression or psychological conditions and will still be participating in the labour market two years later.^{52, 53}

The JOBS training scheme combines training in practical skills with aspects relating to motivation. A meta-analysis of 47 (quasi-) experimental studies shows that training schemes that combine these two components are the most effective.⁵⁴ If the training focuses attention on motivation and mental skills, such as proactivity, as well as the practical aspects of job-seeking, the likelihood of participants finding a job increases by up to 2.7 times.

Based on the JOBS training scheme, Akkermans et al⁵⁵ designed a training course in career competencies. They used it both on students and on a group that was in the process of reintegrating into the labour market. The training focused on six different career competencies. Just as in the case of adaptability, reflective and control-related aspects can also be found in this instance. The training consisted of four half-day sessions, covering six competencies: reflecting on motivation, reflecting on qualities,

networking, self-presentation, work exploration and career control. In this study, all six competencies were found to improve after training.

It is the case for both employability and reintegration that the effectiveness of the training depends on it matching the individual's capacities and situation. Training is less useful and less necessary for a 'likely' individual than for someone who is far removed from the labour market. Screening participants could therefore contribute to cost-effectiveness and effectiveness in general.

Studies looking at whether people can be trained in labour market skills painted a moderately positive picture. Although the underlying characteristics cannot always be changed, people can learn new ways of dealing with problems. Our interviewees stated that people were successful more often if they were familiar with several strategies of this kind. Because they can see different routes to achieving success, their job-seeking motivation remains higher and they are better able to cope with setbacks. Because a large number of studies focused solely on unemployed people, it is not certain whether all the training courses would also be useful for people in employment. But the CareerSKILLS training scheme shows that it is in principle possible for training to improve the competencies of both unemployed and non-unemployed people.⁵⁵

From job to job

Although the greater part of the research concentrates on training unemployed people, there are also a few studies available focusing on capacities that are relevant to general employability. For example, Koen et al⁵⁶ studied the way different employability factors can improve the chance of finding a suitable job. The factor of adaptability helps people to adapt effectively to changing circumstances. In a study, 46 students were given one day's training focused on the four aspects of adaptability: preparation, curiosity (exploring career options), confidence (in one's ability to cope with difficult career situations) and control (taking responsibility for one's career).^{57, 58} These students were found to experience more control, curiosity and concern than the students in the control group, both immediately after the training and six months later. When they had found a job, they were found to perceive it to be more suitable.

The above-mentioned CareerSKILLS training by Akkermans et al⁵⁵ has also been tested on students. Although the effects in the long term or on job prospects are not known, the students also did better in all six competencies at the end of the training.

Both studies are an indication that people can be trained in mental capacities important for employability, even though the long-term effects are as yet uncertain.

5.2.4 More Than just Knowledge Transfer

All three domains show an increasing focus on non-cognitive capacities, such as motivation and belief in one's own abilities. The situation for the domains of health and finance is that people have long had a strong tendency to latch on to cognition and knowledge transfer, and the meta-analyses published in these areas mainly concern interventions in which the focus is on providing knowledge. The results they produce

are not very encouraging. Insofar as it is possible to draw conclusions based on the available research, the results are disappointing.

Within the domains, therefore, an increasing amount of work is being done with training that does not focus exclusively on cognitive, but also on non-cognitive capacities. The most promising interventions focus on skills that require a combination of the two. In addition, they are consistent with individuals' options and their specific situation. The previous chapters have already made it clear that there are theoretically good reasons for expecting a better result. This does not detract from the fact that there is still much research to be done before this training can be widely offered or imposed.

In addition, more research is also required to ascertain whether the strengthened capacities are transferable to other domains. This will obviously vary according to the different capacities. The capacity to make a plan is probably less context-bound than belief in one's own abilities.

5.3 Is Training in Non-cognitive Capacities Desirable?

We have seen in the previous section that programmes are being developed in all domains to increase specific skills. But is it actually desirable for the government to interfere with its citizens' non-cognitive characteristics and capacities? Should the government actually be allowed to try to increase these capacities? We discuss a number of potential objections below.

These objections mainly concern citizens' generic mental capacities and not so much their training in domain-specific skills. After all, there is not so much difference between learning cognitive skills, such as reading and arithmetic, and learning planning or budgeting skills. Moreover, these objections mainly apply to compulsory interventions, e.g. compulsory training as part of a reintegration or debt-restructuring process. When people want to tinker with their non-cognitive characteristics or capacities voluntarily—e.g. as in the case of psychotherapy—these objections do not apply.

Paternalism and infantilisation?

The first objection concerns the accusation of *paternalism*. Why should the government concern itself with whether people have certain mental capacities in general and a good self-regulation capacity in particular? Provided that citizens don't harm other people, surely it's their own business what they do or don't do? This is the *Harm Principle*, the classic argument against government interference that goes back to John Stuart Mill. It is based on the contention that the government is only justified in limiting the freedom of individuals if they do harm to others, not if they harm themselves.

Does this objection hold water? We have to put a couple of points into perspective. First, the objection of paternalism can be raised against almost any government intervention that tries to protect citizens from themselves. It likewise applies to

compulsory education, the ban on drugs, policy aimed at discouraging smoking and drinking and a series of measures that try to make driving safe, such as compulsory airbags and seat belts in cars. In all these cases, the government is discouraging behaviour in citizens that is harmful to them in the long term or is even requiring citizens to take protective measures. The reasons for this arise from the limitations we discussed in the preceding chapters. Not everyone is always capable of resisting the temptations of alcohol, tobacco or speeding. Or capable, especially at a young age, of looking after their long-term interest in having a good education themselves. On this point, there is in principle no difference between increasing mental capacities and other measures intended to keep people from harm.

Second, it is not so easy to make a clear distinction between behaviour that only harms the person concerned and behaviour that also harms others. Things are not as simple as Mill suggested. Compulsory education, compulsory health insurance and the ban on speeding are intended not only to protect the person concerned, but also—sometimes primarily—to safeguard the interests of others. People who decline to educate or insure themselves may initially harm only themselves but may eventually harm society as well. After all, it is society that will sooner or later be picking up the bill for this irresponsible behaviour, for example in the form of social security payments or healthcare costs. That is actually one of the arguments for focusing on self-reliance. A lack of self-reliance ultimately costs everyone money. In the final analysis, there are only very few behaviours that cannot harm others, either directly or indirectly.

A related objection is that of *infantilisation*. A government that believes that its citizens have to be trained in self-regulation capacity obviously regards them as children who are practically incapable of taking care of themselves. And is teaching citizens self-regulation capacity actually effective? Do these lessons not make a much longer lasting impression if you learn them the hard way in the real world? The same applies to this objection as to compulsory education—you learn a lot of skills more easily under gentle coercion that you would only learn with difficulty or not at all by yourself. It is often those with weak self-control who benefit from the ‘big stick’ approach. Moreover, there is the risk that practical lessons learned at the university of life will come too late. A man who finds out on his 55th birthday that he has failed to build up a good pension will no doubt experience that as ‘learning the hard way’, which will motivate him to plan his financial future more sensibly from now on. Only, what has he actually gained from this life lesson. He will almost certainly be unable to save enough to achieve the desired pension at this stage. That is indeed a very hard lesson to learn.

Both of these objections call for *proportionality* between limiting and strengthening autonomy. Policies aimed at increasing citizens’ mental capacities must have as little effect as possible on their autonomy and, on balance, increase their self-reliance. The government can certainly encourage organisations to offer these programmes but it would be paradoxical if it made them compulsory. It is impossible to compel

people to be autonomous. Any government that tried to do so would be suspected of imposing a sort of ‘second-order paternalism’.

Respect for mental integrity

A second set of objections comes under the heading of *psycho-engineering*. Does a focus on mental self-reliance lead to a new version of the ‘greedy’ government that moulds, models and disciplines its citizens?⁵⁹ Does this mean that the government not only comes into your home⁶⁰, but also gets into your brain? Will healthcare providers also interfere with our thoughts?⁶¹ These are important questions. Just as the government should respect physical integrity, so it should also respect mental integrity.

A reasonable guideline is therefore that the government should exercise greater restraint the closer it gets to the core of citizens’ personal identity and the greater the risk of infringing their authenticity. Some mental characteristics, such as temperament and capacity for self-control, are deeply rooted in an individual’s personality. They constitute, almost entirely, what a person is. Attempts to exert influence are a very serious intervention into individual identity and autonomy. In principle, that could only be done on a voluntary basis, e.g. through therapy. At least, it cannot be made compulsory.⁶² There is greater scope for programmes aimed at improving self-control. This mental aspect is further removed from the core of someone’s personal identity and closer to skills. This leaves more scope for providing training, e.g. at nursery, at school or through the social work system. The scope for influencing behaviour by changing knowledge and beliefs is even greater. Take, for example, campaigns to discourage smoking and drug and alcohol use and encourage healthy eating.

It can do no harm to once again draw the parallel with forms of influence that are generally accepted. Any form of education is a form of moulding, modelling and disciplining people to become independent citizens. In this regard, there is no difference in principle between improving cognitive skills and other mental skills. However, this set of objections does highlight the importance of public accountability. It is precisely in these kinds of interventions that the government has to be open about the nature and scope of the interventions, and about the likelihood of their effectiveness.

Labelling and stigmatisation

A third possible objection concerns the risk of *negative labelling* and *stigmatisation*. More attention to self-reliance and mental capacities could result in yet more new additions to the existing profusion of labels in education and the social services. Is that really desirable? Would the government be going further along path to ‘normalising’ its citizens? We have already had people with dyslexia and dyscalculia. Will we now also have people with ‘dysregulation’? Having acquired that stigma, people may no longer be regarded as self-reliant or may feel relieved of the duty to exert self-control (‘I can’t do anything about it, I’ve got dysregulation’).

This danger is not entirely inconceivable. After all, the tendency to distinguish between ‘normal’ and ‘different’ is deep-rooted both among people and in institutions. In this book, our aim is to raise the crucial question of what is actually normal. To date, government policy has appeared to assume a uniform and high level of self-reliance and mental capacities. Implicitly, therefore, the government regards this high level as normal. However, the essence of this book is that there is no hard and fast dividing line between ‘normal’ and ‘different’. There is actually a wide variation among people in this respect and many people do not meet the high level that the government seems to regard as ‘normal’. Insofar as it is possible to talk about normal and different, it is precisely the people with a very high or very low level of mental capacities who are ‘abnormal’ and not the large group in the middle.

The risk of negative labelling and stigmatisation can never be completely ruled out but can be mitigated by acknowledging this wide variation and also acknowledging that the normal level by definition equates to the average level and not that of the top ten or twenty percent. It is just the same as intelligence. The average IQ is by definition 100. However, no-one would consider the mere fact that some people have an IQ of 80 or 120 as a valid reason for categorising them as inferior or relieving them of the duty to do their best. The most we can conclude is that one has been lucky in the lottery of life and the other has not.

5.4 What Should Be Done?

There is still a lot we don’t know about the possibility of strengthening self-regulation capacity through training. More and better research is required.⁶³ However, based on the available research, the possibilities for strengthening the capacity for self-regulation by means of training do not seem particularly good.

At this juncture, it should be noted that the bar for proven effective interventions has been set high—perhaps even too high. It is particularly difficult and often very expensive to conduct research so as to really establish with 95% certainty that an intervention has a causal and lasting effect on specific societal outcomes. Anyone who wants to do this properly has to wait for many years before it is possible to draw conclusions with any certainty as to the long-term effects of an intervention. In reviews and meta-analyses, it is almost always remarked that many of the studies reviewed do not unfortunately conform fully to the highest methodological standards, that moreover a lot of uncertainty exists as to the long-term effects and that as a result more research is required.

The question is whether it is always desirable to delay interventions until the last uncertainty has been cleared up. In a previous publication, we noted that a certain conservatism is a typical feature of evidence-based policy thinking.⁶⁴ There is an implicit assumption that the status quo is the best possible situation unless it can be stated with 95% certainty that the alternative is even better. It is a matter of debate whether that scientific conservatism is also always justified in the world of politics, policy and society. As the status quo has more disadvantages and problems, more should be said in favour of trying out new approaches, even though not all the evidence

is available as yet. This certainly applies to training which is aimed at people who currently have serious shortcomings in the capacities needed for self-reliance and in which participation is voluntary. Of course, a credible case will have to be made for the effect eventually, but excessive restraint also gives rise to the risk of missed opportunities.

How ‘firm’ the evidence should be also depends on how mandatory an intervention is. Programmes which are offered without obligation may be able to afford a little more uncertainty than programmes in which participation is mandatory. In the latter case, moreover, there are normative considerations and limits that have to be taken into account. If the government explicitly requires certain groups to attend a training course in non-cognitive capabilities deemed relevant, it may harm people’s mental integrity. There is also the danger of stigmatisation. The risk is that people with limited self-control—or other non-cognitive ‘shortcomings’—will no longer be taken seriously.

Finally, when it comes to such important capacities, it is of course logical to turn our attention to education. In recent years, there have been increasing calls for children to be equipped with non-cognitive skills. On the one hand, an approach targeting young children is more likely to succeed than an approach targeting adults, as young children are more malleable. The earlier an intervention starts, the greater the chance of success. On the other hand, however, there are also major practical objections. A large-scale offensive targeting many or all children would cost a lot of money and put a great strain on pupils and teachers. Before proceeding, harder evidence is required for the effectiveness and cost efficiency of interventions aimed at increasing self-regulation or other non-cognitive characteristics than is currently available.

Endnotes

1. Rothbart, M. K. (2011).
2. In fact, it is a regular occurrence for people to be very convinced of their own abilities in one domain but extremely unsure of their abilities in another domain.
3. Muraven, M. (2010).
4. Hagger, M. S., Wood, C., Stiff, C., & Chatzisarantis, N. L. (2010).
5. Inzlicht, M., & Berkman, E. (2015).
6. Beames, J., Schofield, T. P., & Denson, T. F. (2017).
7. The *g* stands for Hedge’s *g*, which is a standardised measure of the difference between the experimental group and the control group and is therefore similar to Cohen’s *d*, but corrected for small samples.
8. Friese, M., Frankenbach, J., Job, V., & Loschelder, D. D. (2017).
9. Diamond, A., & Lee, K. (2011, see also p. 959).
10. Diamond, A. (2013).
11. Melby-Lervåg, M., & Hulme, C. (2013).
12. Shipstead, Z., Redick, T. S., & Engle, R. W. (2012).

13. Kautz, T., Heckman, J. J., Diris, R., Ter Weel, B., & Borghans, L. (2014, see also p. 34).
14. Heckman, J. J., Moon, S. H., Pinto, R., Savelyev, P. A., & Yavitz, A. (2010, see also p. 28, 29).
15. Heckman, J., Pinto, R., & Savelyev, P. (2013).
16. 'Externalizing behaviour' could be regarded as an indication of a lack of non-cognitive skills. It was measured in this study on the basis of the assessments by teachers of characteristics such as disrupts classroom procedures, swears or uses obscene words, lying or cheating or aggressive towards peers.
17. de Ridder, D. T., Lensvelt-Mulders, G., Finkenauer, C., Stok, F. M., & Baumeister, R. F. (2012).
18. Galla, B. M., & Duckworth, A. L. (2015).
19. Gillebaart, M., & Ridder, D. T. (2015).
20. Moreover, if ego depletion does eventually occur, this does not provide ample scope just for bad habits but for good habits as well (Neal et al. 2013).
21. Oettingen, G. (2000).
22. Oettingen, G., Kappes, H. B., Guttenberg, K. B., & Gollwitzer, P. M. (2015, see also p. 564).
23. Gollwitzer, P. M. (1999).
24. Gollwitzer, P. M., & Sheeran, P. (2006).
25. Stadler, G., Oettingen, G., & Gollwitzer, P. M. (2010, see also p. 275).
26. Adriaanse, M. A., Oettingen, G., Gollwitzer, P. M., Hennes, E. P., de Ridder, D. T., & de Wit, J. B. (2010).
27. Duckworth, A. L., Grant, H., Loew, B., Oettingen, G., & Gollwitzer, P. M. (2011).
28. Lally, P., van Jaarsveld, C. H., Potts, H. W., & Wardle, J. (2010).
29. Kaushal, N., & Rhodes, R. E. (2015).
30. This also applies to another technique which is sometimes used and appears to have a favourable effect, namely 'self-monitoring of behaviour' (Michie et al. 2009).
31. Heijmans, M., Waverijn, G., Rademakers, J., van der Vaart, R., & Rijken, M. (2015).
32. We base our comments on an analysis of four meta-studies of 'health literacy': Heijmans et al. (2015), HEALIT4EU; Berkman et al. (2011) Health literacy interventions; Dennis et al. (2012) Which provider can bridge the health literacy gap in lifestyle risk factor modification education; Sheridan et al. (2011) Interventions for individuals with low health literacy: a systematic review.
33. According to the researchers, this has to do with the heterogeneity of outcomes, populations, research designs and measured outcomes.
34. Teixeira, P. J., Carraça, E. V., Marques, M. M., Rutter, H., Oppert, J.M, de Bourdeaudhuij, I., et al. (2015).
35. Ministerie van Financiën. (2016a, April).
36. van den Berg, M., & Schoemaker, C. G. (Eds.) (2010).
37. Ackermann, R. T., Finch, E. A., Brizendine, E., Zhou, H., & Marrero, D. G. (2008).

38. van Sluijs, E. M., van Poppel, M. N., & van Mechelen, W. (2004).
39. Lakerveld, J., Bot, S. D., Chinapaw, M. J., van Tulder, M. W., Kostense, P. J., Dekker, J. M., et al. (2013).
40. Ammerlaan, J. W., Scholtus, L. W., Bijlsma, J. W. J., & Prakken, B. J. (2013).
41. Ammerlaan, J. W., Scholtus, L. W., Drossaert, C. H. C., van Os-Medendorp, H., Prakken, B., Kruize, A., & Bijlsma, J. J. W. (2014).
42. Ammerlaan, J., Mulder, O. K., de Boer-Nijhof, N. C., Maat, B., Kruize, A. A., van Laar, J., et al. (2016).
43. The training is derived from the Arthritis Self-Management Program (ASMP) of Stanford University in the United States, and is based on Bandura's self-efficacy theory (Ammerlaan et al. 2016).
44. Website www.reuma-uitgedaagd.nl/volwassenen/trainingen Consulted on 06-06-2016.
45. Jungmann, N., & Madern, T. (2016).
46. In this study, they also looked at the sparse research into the effects of financial education in the Netherlands as well as the international literature.
47. Fernandes, D., Lynch, J. G., Jr., & Netemeyer, R. G. (2014).
48. Miller, M., Reichelstein, J. Salas, C., & Zia, B. (2014).
49. It appears to be generally difficult to conduct research into the effectiveness of interventions to combat unemployment. For example, the group of participants in a municipality may be too small to achieve significant results, there may be financial risks involved in not introducing a functioning policy immediately and there are ethical and social objections to placing people in a control group (De Koning et al. 2014).
50. The CPB (2016) states that these tools affect the job-seeking process in five different ways: by making the social security option less attractive, by threatening people, e.g. with training or other processes, through the inclusion effect of these processes, by making people more attractive to employers and by increasing knowledge and skills. Research has shown that measures such as temporary wage subsidies, supervision by client managers and sanctions achieve the best effects (Card et al. 2010; Kluve 2010; Card et al. 2015 in CPB 2016).
51. This includes the entire process of supervision and intermediary services, such as training in applying for jobs and teaching people to use social media (CPB 2016: 180).
52. Vinokur, A. D., Schul, Y., Vuori, J., & Price, R. H. (2000).
53. Vuori, J., Silvonen, J., Vinokur, A. D., & Price, R. H. (2002).
54. Practical aspects include job-seeking skills and self-presentation. 'Motivation-related aspects' means belief in one's own abilities, proactivity, goal-setting, coping with stress and seeking social support.
55. Akkermans, J., Brenninkmeijer, V., Schaufeli, W. B., & Blonk, R. W. (2015).
56. Koen, J., van Vianen, A. E. M., & Klehe, U. C. (2014).
57. Koen, J., Klehe, U. C., & van Vianen, A. E. (2012).
58. By 'career adaptability', Koen et al. mean "the readiness to cope with the predictable task of preparing for and participating in the work role and with the

unpredictable adjustments prompted by the changes in work and work conditions” (Koen et al. 2012).

59. Trommel, W. A. (2009).
60. Frissen, P. (2013).
61. Furedi, F. (2009).
62. Perhaps with the exception of some specific, clearly defined groups, such as forensic psychiatric patients.
63. It is interesting to look at research with regard to military personnel as well. Modern military operations involve a wide diversity of stressors that make heavy demands on mental capacities. For this reason, research has been conducted into the ‘mental resilience’ needed to continue to perform at optimum level and stay healthy during and also after missions (see, for example, Kamphuis et al. 2012; Delahaij et al. 2016).
64. WRR. (2009).

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Chapter 6

Mental Capacities, Self-reliance and Policy



6.1 Mental Capacities and Self-reliance: More Than Just the Capacity to Think

Society today makes heavy demands on people's self-reliance and that is only expected to increase in the years ahead.¹ In this book, we have studied which mental capacities are needed to be self-reliant in our society. It is generally acknowledged that intelligence and the ability to read, write and understand maths are critical to self-reliance. A minimum capacity to think is a prerequisite for being able to function in modern-day society. To be self-reliant, people must be capable of gathering and understanding information and assessing its worth. Figure 6.1 illustrates this.



Fig. 6.1 Capacity to think

The limits of the human capacity to think and judge have generated considerable interest in recent years.² Research in the behavioural sciences shows that there are limits to people's capacity to assess information and make rational decisions. Such insights are also increasingly being incorporated into policy. The United Kingdom established a Behavioural Insights Team in 2010; inspired by its example, the Netherlands has set up a Behavioural Insights Network (BIN-NL).

This book takes the next step in this fascinating line of research and policymaking. The capacity to think is only part of the story; after all, knowledge does not automatically lead to action. The capacity to act is at least as important for self-reliance in health, personal finance and the job market. People must be able to set goals, make a plan, take action, persevere and believe in their own abilities. We illustrate these capacities in Fig. 6.2.

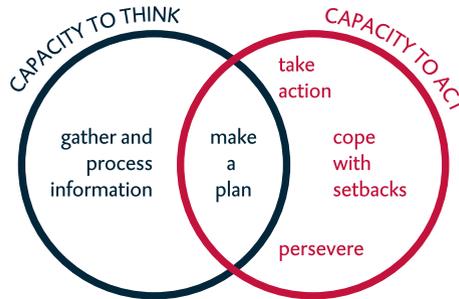


Fig. 6.2 Mental capacities

As the figure shows, the two capacities overlap. After all, making a plan also requires information and understanding. In this book, however, we have focused primarily on the non-cognitive capacities, the right-hand circle in Fig. 6.2. Recent research shows how important such capacities are to surviving in modern society, but they receive very little attention in everyday life.

Traits and Mental Capacities

In Chap. 3, we explored the determinants of the capacity to act. Both the literature and our own research indicate that there is a close relationship between life outcomes and certain traits. People with an ‘approach’ temperament get relatively high scores on life outcomes and on coping with problems, whereas people with an ‘avoidance’ temperament have relatively low scores. People who have a large measure of self-control get high scores, while people who have little self-control have low scores. Belief also plays an important role. The more a person believes in his or her ability to achieve desirable or avoid undesirable outcomes, the more likely he or she is to actually undertake the required actions. However, it is not always better to get very high scores on these beliefs. For example, a person who has too much faith in his or her own ability may grow overconfident and become reckless. It comes down to having the right combination of environment and traits (Fig. 6.3).

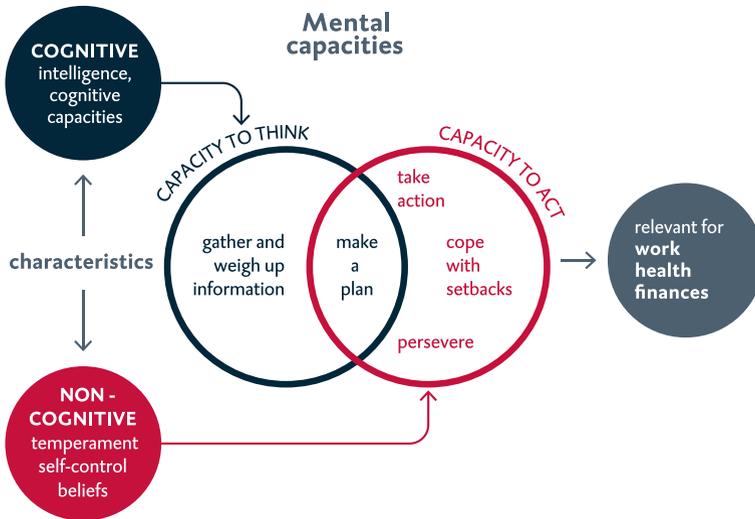


Fig. 6.3 Characteristics, mental capacities and societal domains

We have shown that these non-cognitive characteristics are in fact related to the mental capacities that we identified in Chap. 2. Knowledge alone is not enough. People furthermore differ in the extent to which they possess non-cognitive capacities. To some extent, those differences can be traced back to their educational background—but not entirely. A substantial per centage of low-educated individuals get high scores on non-cognitive capacities, and a substantial per centage of high-educated individuals get low scores. The distribution of non-cognitive capacities is roughly in line with normal distribution. Some people get high scores, others very low scores, but most people score around average.

That observation leads to an important conclusion. Not all people have the same aptitude for self-reliance. After all, non-cognitive traits have a hereditary component, just like intelligence. Some people are therefore born with a relatively strong predisposition to develop traits useful in a society that emphasises self-reliance, whereas others come into the world with a relatively weak predisposition in that respect.

Chapter 4 showed us that life circumstances influence people’s ability to apply their non-cognitive capacities. We know little about the underlying mechanisms, but what we do know is that self-control and executive functions can be put under pressure by acute stress and mental burden, for example having to carry out demanding cognitive tasks or being exposed to temptations for a long time. The effects are not necessarily immediate. People can, if they wish, draw on their reserves to extend their targeted level of performance, but they may be doing so at the expense of other physical or mental functions—and their reserves are not inexhaustive.

Mental capacities are always useful, but they are especially so when life is difficult, for example when people lose their job, get divorced or have problem debt. These are situations in which it crucial for them to spring into action, take the right decisions,

and persevere. Unfortunately, these are precisely situations that are associated with stress, something that may have a negative effect on non-cognitive capacities. Various studies have shown that poverty and debt cause stress. Debtors are so distracted by their financial worries that they are less attentive to other matters. Just when self-reliance is most important, people run the greatest risk that the capacities they need will be temporarily impaired.

Don't Expect Too Much of Trainability

If non-cognitive capacities are so important for self-reliance, can we not train them? Chapter 5 revealed that we still know very little about this subject. Existing research is not very promising in that regard, however. It is difficult, if not impossible, to change a person's temperament. Beliefs are easier to change, but research has not yet shown whether training has a knock-on effect in other areas. If someone is convinced that he can find a job on his own, that does not automatically mean that he also believes he can quit smoking. In theory, self-control is the most efficient starting point for intervention and training, because it can compensate for an unfavourable temperament or attitude. Once again, however, research shows that training self-control produces only modest results, and it is doubtful whether even those results are lasting.

One alternative is to employ cognitive strategies to compensate for limitations in self-control. For example, people can try to imagine the situation or goal that they are aiming to achieve and the obstacles that are preventing them from doing so. 'Mental contrasting' in this manner motivates people to undertake behavioural change and stresses the need for action. Another option is to set 'implementation intentions' for oneself. These are mini 'if-then' action plans ('if I come across situation x, then I will do y'). Such intentions can help a person deal with situations that cannot be avoided in everyday life, such as a colleague who treats the staff to cake when he is trying to lose weight. These techniques have been found to be quite effective. However, research in this area focuses primarily on specific challenges, such as maintaining a healthy lifestyle. There has been almost no research on whether these techniques are effective as cross-domain 'meta-cognitive strategies'. Although this is certainly a worthwhile area of research, here too, we must not have unrealistic expectations, since both techniques, mental contrasting and implementation intentions, call on the individual's capacity for self-control.

More favourable results have been achieved with skills training in specific domains. In health and personal finance, the emphasis so far has been on providing knowledge. The results have not been very encouraging. That is why training now increasingly emphasises not only on the capacity to think but also on the capacity to act, by addressing motivation or belief in one's own abilities. The most promising interventions focus on skills that require a combination of cognitive and non-cognitive characteristics. They also seek to leverage what the individual is capable of and the options available in his or her specific situation, for example learning to cope with a particular disease. Chapters 2 and 5 discuss some examples of this, such as the self-management training for patients with rheumatoid arthritis, or the JOBS training for the unemployed. Based on current knowledge, governments should at least see to it

that a wide and accessible range of training programmes of this kind is available. Even so, more research is needed, for example into whether enhanced skills are also transferable to situations in other domains.

Realistic Expectations About Trainability

We advise not having unrealistic expectations about the overall trainability of non-cognitive capacities. There are, in any event, no fast, easy, inexpensive solutions. The reality is that differences in mental capacities will always remain.

Until there is sufficient empirical evidence that general interventions focusing on traits actually work, it would be better to exercise caution when it comes to introducing such interventions in education, given the risk of children being negatively labelled, the costs involved and the additional burden on teachers and pupils. We advise experimenting more and doing more thorough research into the possibility of training non-cognitive capacities.

It is much easier to train skills in specific domains. What is important is to offer a broad and accessible range of training courses and programmes whose effectiveness has been demonstrated empirically. The courses and programmes should combine knowledge transfer with information on non-cognitive capacities. They can be provided by private parties, such as employers, banks, insurers and private institutions. Governments can play a role in promoting the accessibility and quality of such evidence-based training programmes.

In short, until it becomes possible to optimise each person's mental capacities through targeted intervention, differences in self-reliance are simply a fact of life. Governments should be aware that many people do not have the capacity to act that is essential for self-reliance, whether temporarily or permanently. What does this fact of life imply for government policy? That is the topic of the remainder of this chapter.

6.2 Implications for Policy: Knowing What to Do Is Not Enough

We sketch the implications for government policy by comparing two policy perspectives (see Fig. 6.4). The first perspective is the traditional one, which assumes that more knowledge automatically leads to more effective action. This idea, drawn from the rationalistic perspective, underpins many legal and economic approaches to policymaking. The second perspective is a reinterpretation of the findings of behavioural science that we described in previous chapters. This realistic perspective assumes that people do not always take action, despite their good intentions. Knowing does not always lead to action. On top of that, a decision which may be 'rash' in the longer term may well be 'sensible' in the shorter term, in the situation in which an individual finds himself. We compare these two perspectives because they are inspired by the

1. Rationalistic perspective	2. Realistic perspective
<p>Assumptions about mental capacities:</p> <ul style="list-style-type: none"> – everyone has the mental capacities for self-reliance – exception: small group of vulnerable people – focus on capacity to think 	<p>Assumptions about mental capacities:</p> <ul style="list-style-type: none"> – normal distribution: some high scores, some low scores, large number of average scores – tail of (highly) vulnerable people – focus also on capacity to act
<p>Assumptions about behaviour:</p> <ul style="list-style-type: none"> – knowing leads to action – self-control is unlimited 	<p>Assumptions about behaviour:</p> <ul style="list-style-type: none"> – knowing what to do is not enough – self-control is limited
<p>Policy design</p> <ul style="list-style-type: none"> – more choice is always better – influence behaviour by offering information and financial incentives – people must know the law 	<p>Policy design</p> <ul style="list-style-type: none"> – reduce temptations and stress – influence behaviour through choice architecture – people must be able to ‘act’ on the law
<p>Policy implementation</p> <ul style="list-style-type: none"> – distant, impersonal – no contact prior to sanctions – help only when circumstances are clearly beyond a person’s control 	<p>Policy implementation</p> <ul style="list-style-type: none"> – personal, proportional – contact prior to sanctions – more differentiation between the unwilling and the unable

Fig. 6.4 Different perspectives

same underlying aim: to boost people’s autonomy. However, they differ in what they assume about mental capacities and the laws of psychology. They also differ in the way that they design policy with a view to achieving this underlying aim. We explain the differences below, one by one.

Both perspectives are idealised constructs, of course. In many respects, the second is an enhanced version of the first. By contrasting them, however, we are better able to see how different assumptions about people’s mental capacities can influence policymaking.

- Assumptions about mental capacities. The first perspective implicitly assumes that the mental capacity of almost all adults is adequate enough for them to be self-reliant. To the extent that people do differ in their mental capacities, the differences are minor and irrelevant to the structure of society. Only a small group of vulnerable people, for example people with intellectual disabilities or people with low literacy levels, permanently lack the mental capacities required for self-reliance. They are an exception to the rule, however.

The second perspective assumes that adults vary in the extent to which they have the capacity to think and act required for self-reliance. Some are gifted in that regard, others have too little, and most fall in between and are ‘average’. The small number of vulnerable persons who formed an exception to the rule in the first paradigm are more likely to be at the far end of the normal spectrum here. The group that has difficulty being self-reliant is much larger and more diverse.

- Assumptions about behaviour. The first perspective ignores the capacity to act. Intelligence, knowledge and judgement are key, because the assumption is that knowing leads to action. Once people have identified their goal, they will do what is necessary to achieve it, and persevere and complete the necessary actions. If they

do not, then the reason lies in a lack of knowledge or another rational calculation of opportunity costs, in other words that other actions are more appealing and rewarding. The effects of stress and strain are ignored in this perspective.

The capacity to act does play a critical role in mental self-reliance in the second perspective. People differ in the extent to which they are predisposed towards 'approach' or 'avoidance', in their belief in their own abilities and in their capacity for self-control. Knowing therefore does not always lead to action. Once people have identified their goal, they put things off or lack mental energy or willpower, preventing them from taking or persevering with their action. Circumstances and life events also have an impact. Stress and strain affect the quality of decision-making and self-control.

- Policy design. In the first perspective, the role of government is limited and unequivocal. To facilitate autonomy, it must offer as much freedom of choice as possible. It need only influence behaviour by manipulating the determinants of assessments and choices, that is by providing information and offering financial incentives. Further public support is limited to facilities (often temporary ones) for people who have got into difficulties through no fault of their own (e.g. due to involuntary redundancy), or to permanent support for very vulnerable groups.

In the second perspective, the role of government is broader and less unequivocal. While the basic premise is still freedom of choice, there may be circumstances in which the government instead acts to reduce temptation. It may also be advisable to help people make choices, for example by offering one-on-one help, through education and training, by using well-chosen nudges, and by redesigning the environment. Public policy also takes into account people who (temporarily) lack the capacity to act.

- Policy implementation. In the first perspective, administrative bodies will act at arm's length and impersonally because they assume that people are capable of taking informed decisions and then acting on them. Personal contact is thus unnecessary. People who do not respond to information and warnings have made a deliberate choice not to do so, and any sanctions are therefore justified. Those who fail to take advice must bear the consequences.

In the second perspective, the authorities are more aware of differences in people's capacity to act. They acknowledge that the potential risk groups are broader than the known group of vulnerable people. Where necessary, they make active and personal contact with these groups. Processes are designed to limit the mental burden that they impose on persons. Far-reaching sanctions are only imposed after verification of culpable misbehaviour. In addition, the sanctions must be proportionate and must not add to problems.

What This Means for Policymaking

People are not always able to make sensible choices and act accordingly. They put off decisions, fail to make healthy lifestyle choices, leave late payment warnings unopened and do not always pay fines on time. They are only human, after all. Besides, at some point we all deal with life events that temporarily impair our capacity to act. The question is how tolerant the government and its institutions should be towards human behaviour of this kind.

From a pragmatic point of view, the question is: what works? How can we organise rules and institutions in such a way that people are as self-reliant as they can possibly be? That would be easy if everyone always understood and processed all the information they were given, acted on that information in good time, persevered for as long as necessary, and did not allow a setback to catch them off guard. Unfortunately, very few people fit that description. Most people make mistakes now and again—and sometimes more often. That calls for the smart design of rules and institutions. Ideally, they should be designed in such a way that people who do not exhibit the desired behaviour straight away, for whatever reason, are not immediately penalised. Modern cars have a growing number of technical gadgets meant to prevent drivers whose attention is waning from immediately veering off the road. Rules and institutions should also possess a certain degree of ‘robustness’ or ‘corrective capacity’ in the face of human error.

The first principle of good design is to choose implicit or explicit defaults wisely. Policymakers and system developers should ask themselves what happens to people who do not immediately open and understand their correspondence, who do not immediately take action when necessary or raise the alarm when things go wrong. There is, of course, no need to protect people endlessly from repeated mistakes. However, rules and systems are not well designed if they are so complex that only specialists can find their way around them, and if the procedures are so strict and inflexible that any mistake is punished at once, making autonomy and self-reliance all the more difficult to achieve. That is the sort of system depicted in the film *I, Daniel Blake*, in which the main character is denied an unemployment benefit for not seeking a job, even though his doctor has forbidden him to work.³

The second principle of good design is that there should always be scope for customisation. One way to promote this is to include hardship clauses and to de-automate the assessment of difficult cases so that special circumstances can be given due attention. When people fail to pay fines or to respond at all, a government agency should, as far as possible, first contact them personally and consider whether a payment arrangement is possible or whether it makes sense to refer them to debt assistance. Only when this fails should coercive measures be taken.⁴

But why should government be so understanding of people’s ‘mistakes’? Why should we have to create costly institutional safety nets and stopgaps for citizens who simply do not pay attention and neglect to do the right thing at the right time? That brings us to the moral side of the matter. How much clemency should government and society show towards people who have run into problems because they have made irresponsible decisions, or because they have been inattentive or lax? Masses of people stubbornly persist in their unhealthy habits of overeating, smoking and drinking, even though everyone knows this is unwise. Many people spend more money than they earn, and use it to pay for phone subscriptions or holidays instead of saving for next month’s rent or setting aside money for their retirement. If people act so irresponsibly, are they still morally entitled to support from society if things go wrong? Isn’t it simply their own fault?

The first perspective does indeed quickly lead to this conclusion. One could argue that the people in question have acted irresponsibly and will therefore have to bear the consequences themselves. Of course, there are situations beyond anyone’s control—a sudden debilitating illness, redundancy due to an economic downturn—but according

to this line of reasoning, such circumstances are rare and could have and should have been anticipated to some extent. Everyone knows that life has setbacks in store for us, so sensible people save for a rainy day, try to live healthy lives, work on their employability, and so on. If people fail to do the right thing despite their knowing all this, then they have evidently consciously decided to do so. That is their prerogative, of course, but they will have to accept the consequences as well.

The second perspective may well lead to a different assessment. Wrong choices or passiveness do not necessarily indicate unwillingness, but can also be a sign of powerlessness or strain. Admittedly, there are people who lack the motivation to do the right thing and behave irresponsibly but still expect public support if things go wrong. It would be naïve to deny this. On the other hand, there are also people who are sincerely motivated to do the right thing but fail simply because they lack the mental capacities to do so (temporarily), even when they do their best. It would be cynical to deny this. Some people face more serious challenges than others when it comes to mental self-reliance, not only owing to differences in cognitive capacity but also because they have certain innate traits that are difficult to change and that make them relatively more vulnerable to problems, such as a predisposition towards avoidance and a low level of self-control. There are also people who are so overwhelmed by setbacks that they lose faith in their own abilities. Moreover, stress and strain can lead to a temporary decline in mental performance and self-control, which in turn results in poorer decisions, etc. This means that a small mistake can quickly lead to problems that are almost impossible for people to solve on their own.

Be Realistic About Mental Capacities

There are both pragmatic reasons and reasons of principle to design policy for the ‘average’ citizen and not in line with the rationalistic principle of utility maximisation that underpins economic models and many legal premises. Policymakers should take a realistic approach when appraising ordinary people’s capacity to think and act.

A telling example of the importance of the realistic perspective on self-reliance can be found in the domain of problem debt. At the moment, there is a huge discrepancy between what society expects in terms of financial self-reliance and what many people can actually cope with in that regard. As a result, substantial numbers of people run the risk of problem debt and their problems tend to escalate rapidly.⁵ When it comes to health, we recognise that our health system needs people to be able to make informed choices and find their way around the healthcare system⁶, but having a third of the population unable to function as active patients puts that outcome at risk.^{7, 8}

Self-reliance Paradoxes

The starting point for both perspectives is the same: taking responsibility for oneself. The goal is also the same: autonomy and self-reliance for every person. We must conclude that the first perspective will not always move society closer to achieving this goal. It expects too much of people's capacity to act and makes incorrect assumptions about behavioural mechanisms. In some cases, the result is actually the opposite of what is intended. Earlier, we referred to the self-reliance paradox: too much emphasis on self-reliance in the short term can diminish people's self-reliance in the long term.

The self-reliance paradox is a factor in the question of pension accrual, for example. In the Netherlands, the system makes it compulsory for employees to participate in a group pension scheme. If the system were to offer people more choice and freedom, it would be more likely to create problems than to offer solutions for the vast majority of the Dutch.⁹ Greater freedom of choice can increase autonomy in the short term but impair it in the long term, notably if people make the wrong choices and do not accrue enough pension. By the time they are aware that they have made the wrong choices, it is too late to rectify them. Of course, it makes good sense to tell entry-level employees that they need to save for their retirement and how they can do so, but it is naive to think that doing so solves the problem. It is also naive to think that people do not care about their pension if they make choices that are bound to turn out badly in the long term.¹⁰

The second perspective is more realistic. It corresponds more closely to de facto variation in mental capacities, including the individual limits of those capacities, and thus affords more opportunity to achieve autonomy and self-reliance in the longer term as well. Freedom of choice is still the starting point, but it takes into account that that freedom can also lead to choice anxiety, either because there is so much to choose from or because of the circumstances in which people are forced to choose. That is why guidance and support should be provided to people facing difficult choices—help that goes beyond merely furnishing information.

There is, incidentally, also a latent danger in this second perspective, i.e. that the authorities have low expectations of people's self-reliance and are too quick to solve their problems for them. This may be the sensible thing to do when people are making the sort of choices that come up only once or twice in life (for example, picking a mortgage or a pension), but not for everyday choices (managing their household budget, for example). Ultimately, people must be able to do this themselves as best they can. After all, there is a second paradox of self-reliance: underemphasising self-reliance prevents people from becoming more self-reliant in the longer term.

6.3 Policy Preparation: More Focus on Mental Burden

What does all this mean for policymaking? Let us first look at how the authorities create policies and legislation governing natural persons.¹¹

Monitoring Mental Burden

There are clearly limits to the mental burden that people can manage. Not only are there only 24 hours in a day, but there are also limits to how much mental exertion is possible in that 24-hour period. At some point, fatigue sets in, the quality of mental performance declines and it becomes more difficult to maintain self-control. Stress, sorrow and loneliness exacerbate these effects. We could therefore argue that people have only a limited daily ‘budget’ to make informed choices and act on them. This budget will be depleted further when people are forced to remain vigilant in case they need to spring into action regarding regulations or benefits that are complex or subject to change, for example. Even minor changes in legislation or regulatory measures place additional demands on mental capacities because they disrupt routine and require more concentration—and our powers of concentration are limited.

The government does not appear to take this into account, however. Implicitly, it assumes that people have an inexhaustible mental budget; no one, at any rate, is monitoring the total number of choices, temptations and assumed actions bombarding people, and whether they can manage it all. To some extent, this blind spot is inherent in the way in which departments are organised. One of its distinguishing features is the considerable autonomy with which policy domains and ministries operate. That autonomy can easily lead to a fragmented understanding of reality. Each policy compartment tends to see only that aspect of reality pertinent to its mission, and so it applies rules that are logical and manageable within the boundaries of its own policy domain. That is different for citizens, of course: to them, it is the sum total that matters.

We referred in an earlier publication to the sum total of choices and temptations that force themselves upon a person per unit of time as ‘choice overload’.¹² Identifying choice overload and the mental burden that it entails can help us to predict the mental burden that new policy proposals will cause people and foster debate about the desirability and design of such policies. Mental burden consists of a variety of different components: the cognitive burden, the necessary vigilance, the number of choices, and the self-control needed to make the ‘sensible’ choice and persevere with it. If this strain consistently exceeds people’s available ‘mental budget’, the government must take this into account. At the moment, it does not do enough to monitor this. New policy proposals do often identify the consequences for income, prosperity or the regulatory burden.¹³ We propose that policymakers should also analyse and monitor the mental strain that new policies place on the public. Our proposal is inspired by the ‘cognitive load stress test’ suggested by the Behavioural Insights Team (BIT), but goes one step further.¹⁴

‘Capacity to Act Test’: People Must Be Able to ‘Act’ on It

Many policy economists and legislative lawyers apply the rationalistic perspective, often implicitly. Policymaking is about creating the right mix of information provision and financial incentives. People are expected to know the law and be able to ‘act’ on it. Within the context of the second, realistic perspective, the judicial-economic approach is inadequate. Insights gained in the behavioural sciences should also make their way into policy and legislation. Not only insights concerning the limits of the human capacity to think (that is already increasingly the case), but also insights regarding the human capacity to act. The question is not only whether

people know the law, but also whether they can ‘act’ on it—is it based on realistic assumptions about human behaviour? This question should be part of a broader test of proposed policy and legislation that addresses behavioural science aspects. When preparing legislation and policy proposals, in other words, legislators and policy-makers should specifically question whether their designs acknowledge differences in people’s capacity to act.

Box 6.1: Make the Public’s Perspective Part of Implementation Tests

In preparing legislation, legislators should examine more closely whether it is ‘doable’ for the public. Implementation tests should assess legislation not only from the perspective of the implementing organisations but also from the perspective of ordinary people. The key question is whether the legislation is based on realistic assumptions about people’s mental resilience.

Process: The following process-related questions can help in assessing the proposed legislation during its preparation:

- Have preliminary tests been carried out among the public, for example using test panels, simulations or experiments?
- Did the preliminary tests involve all the relevant target groups and user profiles?
- Have other sources been consulted that could help to analyse the viability of the proposed legislation, such as research or experience with similar legislation?

Content. The following content-related questions can help in assessing the quality of the proposed legislation:

- *Mental burdens:* What mental burdens—such as processing information, assessing one’s own situation, taking action, checking deadlines, objecting to wrong decisions—does the scheme impose on people? Can those burdens be lightened? Is it possible for people to develop a routine or is constant vigilance required because parts of the scheme change regularly? Does the scheme require people to take action themselves much of the time, or does it work with a default option?
- *Cumulative burdens:* What is the relationship between the scheme and associated schemes? What is the total mental burden on people who are covered by the scheme? Could the scheme plausibly coincide with life events that are known to have a negative impact on people’s mental resilience?
- *Consequences of inertia or mistakes:* What happens if someone does not immediately take action, for example does not open an envelope or forgets to complete or send in a form? Do small mistakes immediately have major consequences, or can they be rectified? Can people change their minds and how much capacity to act does this require? Is there a hardship clause and how much does it demand of people’s capacity to act?

- *Help and early warning*: Is an easy-to-access front office available for those who cannot manage? Is an early warning system in place, and a regime of actively approaching problem cases?

Reducing the Mental Burden Accompanying Life Events

It is especially important to reduce mental burden in situations that occur only occasionally in life but that can have a major impact, such as having a child, going through a divorce, losing a close relative, being made redundant or going bankrupt. There is often much to be arranged at such times but the accompanying stress or sadness undermines people's ability to cope. Life events often mean a drop in income, requiring them to take immediate action at a time when they are agitated and lack a proper overview, for example when divorce leaves a woman solely responsible for her children's care. Western societies have relatively comprehensive systems of social support for these situations. Even so, a single mother on a low income must be on constant alert to keep up with all the administrative red tape. The National Ombudsman¹⁵ of the Netherlands calculated that a single parent with two school-age children, a part-time job, a supplementary social assistance benefit and rented housing receives at least twelve different income components from eight different authorities. He or she must complete eighteen different forms and the family receives eighty different payments a year. Managing all the necessary forms, documents and correspondence requires enormous self-organising capacity, on top of the mental burden of raising two school-age children on one's own.

It is precisely in such circumstances that people who are normally self-reliant run into problems; they lose the overview and motivation to carry on, and consequently postpone decisions or make the wrong choices. Reducing the mental burden by simplifying the rules or by offering targeted support can improve self-reliance. We propose that governments launch projects on 'reducing mental stress' for some common life events, such as job loss, divorce and loss of partner. They should involve a nationwide inventory of what policy and legislation require of the mental capacities of individuals facing these stressful situations. A distinction should be made between the stress factors of the life event itself and the stress and mental burden that the relevant legislation generates in such situations. The projects can then look at how to reduce this mental burden.

6.4 Policy Content: More Than Information Alone

Adjusting the Choice Architecture

There are limits to people's ability to always choose and implement the option that best suits their enlightened self-interest. In the long run, these limits can have major consequences for their financial or physical self-reliance. Policies that aim to improve people's self-reliance must therefore take into account differences in their mental capacities. In the first perspective, based on the notion of the rational individual, this

primarily means providing information. Give people all the knowledge and information they need to make an informed decision and everything will be fine. We now know that it doesn't always work that way. In fact, an overabundance of information can put further pressure on an individual's mental capacities and lead to choice anxiety.¹⁶

That is why the second perspective offers a much broader spectrum of guidance mechanisms. It is much more effective to make allowance for human limitations than to repeat an explanation. This also explains the enormous interest in 'nudging'. Nudging is a form of influence that goes beyond information transfer; it also involves designing the choice architecture in such a way that people are automatically guided towards making 'a sensible choice'.^{17, 12} Nudging leaves freedom of choice intact. Although people may be steered towards a certain option, everyone is free to choose something else. Nudging differs in this respect from harsher instruments, such as statutory injunctions, prohibitions or financial sanctions. Nudging can work well as an appropriate but gentle means of helping people with less capacity to act towards making choices consistent with their long-term goals and aspirations.

Adjust the Choice Architecture

Governments can anticipate variety in people's non-cognitive capacities by adjusting the choice architecture. They can do so in various ways.

- Simple labels
- Ticking standard options (defaults)
- Opt-out systems
- Limited availability of undesirable options
- Scalable freedoms

The power of nudges can vary. A very mild form of nudging is a simple label that shows at a glance whether a product is consistent with a healthy diet, such as traffic light food labelling. There are already many different quality marks and logos on product packaging that provide consumer information.^{18, 19} That is not really illuminating, and having too much information to absorb or details that are difficult to compare can make it even harder for people to choose.²⁰ Instead of labels that are sometimes hard to decipher, it would be better to work with (red or green) colours that more or less automatically influence shoppers' choices owing to their deeply ingrained association with 'stop', 'proceed with caution' and 'go'¹⁸. The authorities can regulate this by providing comprehensible and practical information that does not in any event complicate people's ability to make the right choice.

Another option is to arrange the physical environment in such a way that it encourages the right choices. One example is the 'healthy' cafeteria that is being introduced in a growing number of schools. Healthy products are prominently displayed and easy to grab, while unhealthy snacks are relegated to the back shelves, requiring children to make a more conscious effort to notice and acquire them.

A relatively strong nudge is to change the default option, in other words to tick standard options on multiple-choice forms in advance. If the government pre-selects the option that is likely to be best for most people, it can be assigned to those unwilling or unable to choose. They still have freedom of choice because they can choose to deviate from the pre-selected option (opting out). The precise moment when people make choices is also of relevance. There are times when people are better able or feel more motivated to make sensible choices. The annual pension statement, for example, could be accompanied by a low-threshold offer to join a supplementary pension scheme, with the default option being appropriate to the individual's personal circumstances.

Box 6.2: Nudging for Self-reliance

The government agency that administers student grants, DUO, offers a successful Dutch example of nudging in the financial domain. Initially, students who had lost their right to a grant after four years but continued with their studies, were automatically paid the maximum loan amount. Students who did not want the loan had to go to the DUO website to enter the necessary change. Many students failed to do so and automatically borrowed the maximum amount. In 2009, DUO changed the standard option to the amount (in many cases much lower) that the student had so far received as a performance grant. As a result, the number of students who borrowed the maximum amount after their basic grant ceased fell from 68% in 2009 to 11% in 2011. DUO made a further change in 2014. It eliminated the 'maximum loan' option from the student financial aid application screen on its website and instead asked students to enter how much they wanted to borrow. The number of students who opted to borrow the maximum amount subsequently declined by 50%.²¹

Much has already been written about the normative implications of nudging.^{22, 12} Many of the objections raised apply equally to other mechanisms meant to influence behaviour. They question whether it is desirable for government to intervene in certain behaviour, regardless of the form the intervention takes. There is, however, one objection specifically associated with nudging, and that is the risk of non-transparency. In previous publications, we have therefore argued that governments (or other parties) should always be candid about the way in which they use nudging.¹²

Reducing Temptations

The most rigorous way to protect people from their mental weaknesses is to avoid tempting them in the first place, of course. Examples of such policies are those prohibiting smoking and alcohol consumption. They impose strict limitations on the freedom to smoke in certain places or on alcohol purchases by minors. Questions of self-regulation obviously inform the underlying rationale. By now, everyone knows

that drinking too much, smoking, and eating the wrong food are unhealthy, and many people would like to stop drinking to excess, quit smoking or eat healthily. These are, however, precisely the sorts of behaviours where knowing does not automatically lead to people taking action. The decisive factor here is the ability to resist temptation, something mainly determined by self-control. Because many people have limited self-control, policymakers also need to focus on reducing temptation. Making it more difficult for young people to smoke or buy alcohol reduces temptation significantly and lowers the need for self-control. The same applies to combatting obesity. It is particularly difficult to maintain a healthy dietary pattern when public spaces become obesogenic environments in which people are constantly being tempted to eat a lot of unhealthy food. We therefore propose to restrict the sale of unhealthy products in specific places, such as schools and care institutions.

A similar strategy can also be applied in other areas. By making it more difficult for people to incur debt, we can improve society's financial resilience. Debts incurred through gambling, a mortgage or consumer credit play a significant role in the onset of financial problems. To combat this, we recommend limiting opportunities for gambling and consumer borrowing. A further measure would be to lower the maximum mortgage that borrowers can take out.

Reducing Temptations

One element of a realistic approach to self-reliance is to curb temptations so that people are not constantly being called upon to exercise self-control. This is particularly true in situations and environments where people are prone to temptation due to stress, poverty or youthful inexperience. Examples include candy-free cash registers,²³ banning gambling halls from socially and economically disadvantaged neighbourhoods, and stricter supervision of payday loans by regulatory bodies or financial markets.²⁴ The private sector, parties in civil society and governments have a joint responsibility in this regard.

A realistic approach also means that government limits freedom of choice in the case of crucial safety nets such as pension schemes, occupational disability insurance and health insurance. Many people have the necessary self-awareness in this respect; witness the fact that only a small minority of the Dutch population favours having greater freedom of choice in pension schemes.²⁵ If, however, government decides to offer more freedom of choice, then the preference is for an opt-out system that automatically provides pension coverage unless people explicitly choose otherwise.

Another option is to offer a scalable freedom of choice. The basic provision is compulsory, but people may choose whether or not to insure themselves above a certain amount. One example of this is the Dutch system of compulsory basic medical insurance with optional supplementary policies. The same system is conceivable for occupational disability and pension schemes, for example a system in which everyone is obliged to join a pension savings and take out occupational disability insurance, even groups that are unable or unwilling to do so, such as self-employed persons.

The obligation, however, would be limited to an insured minimum income; above and beyond that amount, people would be at liberty to make their own choices. Such a system would prevent people who have little capacity to act from slipping into poverty after an occupational disablement or retirement and having to rely on social benefits. At the same time, those who are willing and able to arrange matters themselves will have the freedom to do so.²⁶

Limit Freedom of Choice in the Case of Crucial Safety Nets

Just how far the government wants to go in reducing temptations and choices is a political matter. It is up to politicians to strike the right balance. In various sectors, however, it is not always the case that permitting a large measure of individual choice contributes most to individual autonomy and self-reliance in the long term. We recommend being extremely cautious about giving people unlimited freedom of choice in essential financial matters, for example medical and occupational disability insurance and pension plans. If government does decide to allow greater freedom of choice, then opt-out systems with scalable freedoms are to be preferred.

6.5 Policy Implementation: Verification and Differentiation

How does the transition from rationalistic to realistic policy pan out in everyday life?

The Proportional Government: Minor Mistakes, Minor Consequences

Over-confidence in the rationalistic perspective can have very unpleasant consequences when combined with automated policy implementation. Combining unrealistic assumptions about people's capacities and motives with automated implementation can lead to disastrous situations in which well-intentioned people are penalised disproportionately. Someone whose attention lapses momentarily or neglects to pay on time will be facing the rapid accumulation of automatic fines.

Box 6.3: System of Cumulative Fines

If you get rid of your old moped in the Netherlands and forget to cancel your insurance, you will have to pay a fine of 330 euros. After eight weeks, the fine will increase automatically by 50% to 495 euros. If you do not pay up, the fine will increase again to double this amount. Within just a few months, you will owe 990 euros.²⁷ The debt collection organisation is then authorised to deduct this amount directly from your bank account and to levy attachment of wages. If that fails, you may be imprisoned for debt. This is what has happened to thousands of people every year. After imprisonment, the fine is still outstanding and people sometimes lose their jobs or homes as a result. On balance, imprisonment for debt solves nothing and only exacerbates problems.

The Dutch Employment Insurance Agency (UWV) imposed a strict regime in recent years on benefits recipients who did not comply with their reporting duty and pass on the requisite benefit-related information properly and on time. Its regime also got many well-intentioned people into trouble because, for example, they had made an unintentional mistake when filling in a form or had to rely on others who did not deliver information on time.

Strictly speaking, we could argue that all these people had only themselves to blame: they should have been more vigilant. For many, however, vigilance is sometimes too much to ask. In the meantime, things appear to be changing. The application of the Fraud Act has now been considerably relaxed and the Central Judicial Collection Agency (CJIB) has permitted payment arrangements since July 2015. It also makes allowance for voluntary debt recovery arrangements or debt restructuring processes. Many judges no longer allow imprisonment for debt unless the Office of the Public Prosecutor can provide evidence that the debtor is able but unwilling to pay. Authorities no longer automatically assume that an individual has intentionally been negligent in such cases, but acknowledge that he or she may have made an inadvertent error and that the consequences should be proportionate to the gravity of that error.

Taking the realistic approach to mental capacities, government should begin its enforcement policy by *verifying* the extent to which someone is unwilling or unable to pay. It should then *differentiate* and tailor its response to the nature of the situation. Conversely, people should also conduct themselves as responsible citizens. Reciprocity must therefore be ensured: people who are trying to cheat the system should be treated differently from those who are endeavouring to pay their debts. In July 2014, the Dutch government began using a guidance model for collecting financial penalties that distinguishes between different types of persons (Table 6.1).

Table 6.1 Model for collecting financial penalties (See also *Handreiking behoorlijke en effectieve invordering van geldschulden*²⁸)

Quadrants model	Person willing to pay	Person unwilling to pay
Person able to pay	Encouragement: Make payment easier	Enforcement: Apply enforcement measures
Person unable to pay	Allow time and space: Offer assistance	Track down and persuade: Apply enforcement measures

Source Ministerie van VenJ²⁹

It is not enough, however, to recognise that some people are willing but unable to pay; the realistic perspective on mental capacities requires government to act proportionally in such cases. Serious fraud merits severe penalties, but minor errors should have only minor consequences. It is better to assist those who are willing to pay but have difficulty filling in forms or making plans than to levy automatic fines. For those who are willing but unable to pay, a payment arrangement is much more effective than attachment of wages. In the case of problem debt, the government should not use special powers such as imprisonment before establishing that the debtor is capable of repayment. Only if the debtor is indeed unwilling to pay should severe sanctions be imposed.

From a realistic perspective, it is often also pointless to punish people who have an unhealthy lifestyle by excluding them from treatment or having them pay a higher

personal contribution.³⁰ The problem is usually not one of unwillingness, but mainly of being unable to persevere with a healthy lifestyle. A proportional government does not, for example, automatically deduct a portion of a benefit if a jobseeker fails to submit the required number of job applications but is clearly working to improve his labour market position, for example by doing voluntary work. The City of Amsterdam takes a customised approach by offering groups who face barriers to employment an activation programme or voluntary work.³¹

The realistic perspective on mental capacities also means giving people the chance to backtrack and correct previous ‘mistakes’. That is especially true if they did not understand the consequences of their decisions. It seems that people in the Netherlands who claim care services are not always adequately informed about the personal contribution they are required to pay.³² As a result, they are unprepared for the financial consequences or unable to opt out at that point. They should be allowed to reverse their earlier decision. That is another way to reduce stress and choice overload.

Box 6.4: Unexpectedly High Personal Contribution³³

The ‘kitchen table conversation’ has become a fixture in the Netherlands since the introduction of a new law governing home care. During this conversation, representatives of the local authority and those in need of care discuss the latter’s wishes and what sort of care is available. The local authority must also inform the care recipient that he or she may be required to pay a personal contribution and should take this into account. It is not, however, the local authority that determines the amount of the personal contribution, but a separate national public organisation, the CAK. That is also what the local authority tells people who contact it to find out how high their personal contribution will be. Some local authorities refer care recipients to the calculator on the CAK’s website. In theory, people can use the calculator to get an idea of what they will need to pay, based on the type of care received, their household situation, their (aggregate) income, their assets and their age. But to do so, they also have to know what rates the local authority charges for care and which product code they have to enter. If people want to make an informed decision, in other words, they have to take action themselves, track down the right information, and persevere until they have all the data necessary to do the calculation. This is simply too much for many people, and they run the risk of receiving a bill that is too much for them to pay. An additional problem is that after receiving the CAK’s bill, it is often too late to object to the local authority’s decision to award care. It is incomprehensible to people in such situations that they cannot object to the CAK’s decision but only to a decision by the local authority whose financial consequences were impossible for them to foresee.

Early and Personal Contact

A proportional government should also seek early and personal contact with people in the event of irregularities. Government can only verify and differentiate if it

familiarises itself with someone's personal situation. Behavioural science teaches us that early and personal contact is important. Once people are in serious trouble, for example because they are heavily in debt, they often experience such high levels of stress that they lack the mental resources to think clearly, plan and persevere. By that time, they no longer have an overview, they lack faith in their own abilities, and their self-reliance has taken a serious beating. Contacting people early on and approaching them with an open mind helps to reduce stress levels and improves their ability to stay out of trouble on their own.³⁴ This not only helps them to be self-reliant but also benefits the public purse, since they are not obliged to rely on debt assistance or other social services.

Box 6.5: Early and Personal Contact by Health Insurers

In 2013, Dutch health insurer CZ implemented an accounts receivable policy that accommodates the personal circumstances of its customers. As soon as people fall slightly behind in paying their premiums, a CZ representative calls them. The representative does not start the call by asking 'when are you going to pay?' but rather 'how can we help you?'. Whereas in the past the amount due had to be paid off in six months, with a minimum payment of 50 euros a month, CZ now asks the customer how much he or she can afford and arranges a more personalised payment regime. CZ is pushing the limits of Dutch law in this respect because officially, it is supposed to report clients who are several months behind schedule to the Netherlands Health Care Institute.³⁵ The Institute then imposes a heavy administrative fine on these clients, which they are obliged to pay on top of their insurance premium. They must continue paying the fine until their health insurer removes them from the list of defaulters.

CZ's personal, proportional approach is successful. It makes five times as many payment arrangements as it used to and customers are much more likely to comply with them. Depreciation on bad debt has been cut in half, from €20 million in 2010 to around €10 million in 2015, and more than 90% of arrears are now being cleared instead of 70%.³⁶

CZ is also one of the initiators of the creditor coalition 'From debts to opportunities', which has drafted an ethics manifesto setting out rules of conduct for dealing with defaulters. The coalition also includes mail order companies, housing associations, telecom providers and energy companies that want to take a more responsible approach to problem debt. The manifesto clearly differentiates between those who are unwilling and those who are unable: 'Some customers simply cannot pay. We work with them to find a solution. Customers who are unwilling to pay can expect to be treated fairly but strictly.'³⁷

These initiatives not only involve (physical) proximity but also communication, starting with the terminology. For example, many local authorities refer in their information documents to 'debt assistance' or 'help with debt'. People who are not

yet in serious debt or who are not happy regarding themselves as the sort of person who needs ‘help’ can easily assume that the assistance is not meant for them. They believe such assistance is only available if you’ve hit rock bottom. Some of the relevant web pages also have a stern, bureaucratic look and refer immediately to ‘conditions’ that must met, ‘documents’ that must be turned in, and so on. They are not always very inviting and could do with some improvement (see the Box 6.6).

Box 6.6: The Money Helpdesk

A good example of how things can be done differently is the Money Helpdesk established by the City of Amersfoort. The helpdesk is housed in a separate office, at a central location in the city. There are posters displayed in the windows saying ‘Bring your money questions to us’, ‘Getting divorced? Lost your job? Having a baby? Find out what it means for your finances’ and ‘Call or walk in for an appointment’. In terms of texts and design, the Money Helpdesk website also more closely resembles a non-profit advisory organisation than a government unit. The slogan on the home page is ‘Amersfoort’s Money Helpdesk shows you the way in money matters’. The word ‘debt’ is nowhere to be found, and the staff say that people contact the helpdesk not so much for help as to use it as a ‘financial sparring partner’. According to the annual report by the Amersfoort institution responsible for the Money Helpdesk, it reaches precisely those people who are in financial distress but have so far avoided problem debt.³⁸

Personal Contact

We recommend that implementing bodies seek early and personal contact with people when irregularities occur so that finer distinctions can be made between those who are unwilling and those who are unable, and so that guidance can be provided at a point when people still have enough mental ‘reserves’ to think clearly and take action.

The Professional Setting: From Improving Knowledge to Reducing Stress

Even if government bases its policy design and implementation on realistic expectations about what people are willing and able to do, not everyone will be self-reliant at all times. How should professionals deal with this? First and foremost, they must be able to assess the mental capacities of those in question. This means that care providers, benefit agency staff and debt relief workers must be aware of the importance of the capacity to act, so that they can provide more effective support where necessary. Such awareness should be a priority during their training. Government

can further support the development of methods for assessing individual mental capacities and how to deal with them.

In addition, authorities should acknowledge that some people require more time and attention than others. A more flexible system of reimbursements for medical expenses would give some patients more time to grow into their role as active patients, with the help of their physician. As professionals, benefit agency staff should be given leeway to adapt their approach to a job seeker's specific situation, for example, by understanding the 'mourning process' of the recently unemployed, and by proposing a pathway in which job seekers gradually accumulate positive experiences so that they feel more confident about their own abilities and improve their employment prospects.

Finally, professionals should be mindful of problems in other areas of life and of positive and negative feedback loops. Problems tend to accumulate precisely because stress and mental burden have such a huge impact. This also means that the best way to improve people's self-reliance may sometimes lie in a different domain. Care providers are becoming more aware of this. For example, the juvenile psychiatry unit at Utrecht University Medical Centre has extended its treatment team to include social workers. They accompany patients during therapy to ensure that, once they have recovered from psychosis, they do not lose their jobs, homes and incomes and therefore run the risk of relapse.

6.6 Epilogue: A Realistic Government Is a Legitimate Government

The examples of health insurer CZ and the Amersfoort Money Helpdesk demonstrate that a realistic perspective on mental capacities can help combat problem debt. Avoiding problem debt is good for people's self-reliance and for the public purse. Perhaps even more importantly, the realistic perspective can also enhance the legitimacy of governments and policy. Over the past few decades, the behavioural sciences have shown that when people feel that administrative bodies are treating them fairly, they have more confidence and are more willing to accept those bodies' decisions, even the unfavourable ones.³⁹ This book has attempted to take this line of research and policy a step further. A realistic approach to the public and policymaking, based on the insights of modern behavioural science summarised in this book, can help to redefine the social contract between government and the public. A government that does not acknowledge the limits of our human capacity to think and act will ultimately be regarded as unreliable. Behavioural science shows that not everyone is capable of understanding the law and acting rationally under all circumstances. People must be able to trust government not to push them over the edge, and should also feel confident that momentary inattentiveness and mental weakness do not have immediate and severe consequences. That calls for a government with a human face that respects individual differences.

A realistic government is tough on cheaters, but lenient towards those who are willing but unable. A realistic government understands that ‘normal’ people are not always vigilant and well organised due to choice overload, stress, sorrow, poverty or old age. A realistic government facilitates by making sensible choices easier. A realistic government is mindful of human failings and sees to it that minor mistakes do not have major consequences. A realistic government seeks early and personal contact when things go wrong. As a result, a realistic government is a reliable and legitimate government.

Endnotes

1. van den Broek, A., van Campen, C., de Haan, J., Roeters, A., Turkenburg, M., & Vermeij, L. (Eds.) (2016).
2. WRR (2015), Thaler and Sunstein (2008), Kahneman (2011).
3. Until 2016, the Netherlands had a reporting duty for unemployment benefits recipients that was accompanied by a strict regime of sanctions. A momentary lapse in attention could lead to heavy fines, which generally only went to undermine their self-reliance. The Dutch government has since amended this policy so that when the relevant authorities are determining the fine, they can take the seriousness of the offence, the degree of culpability and the circumstances of the parties involved into account. The implementing bodies and municipalities will give the party concerned the opportunity to provide information about his or her circumstances (Ministerie van SZW 2016a).
4. In 2013, the National Ombudsman of the Netherlands argued that the government has a duty of care to identify cases of impaired self-reliance.
5. WRR. (2016).
6. van der Heide, I. (2015).
7. Hibbard, J., & Gilbert, H. (2014).
8. Rademakers, J., Nijman, J., Brabers, A., de Jong, J., & Hendriks, M. (2014).
9. Delsen, L. (2015).
10. Krijnen, J. M., Zeelenberg, M., & Breugelmans, S. M. (2015).
11. Thanks to the division of labour and specialisation, larger legal entities are more likely to behave in a manner consistent with *homo economicus* or *homo juridicus*. However, our story is very relevant for self-employed people and small companies.
12. WRR. (2015).
13. In the Netherlands, income and prosperity are measured by the Bureau for Economic Policy Analysis (CPB). Actal was the organisation responsible for assessing the regulatory burden.
14. Gandy, K., King, K., Streeter Hurle, P., Bustin, C., & Glazebrook, K. (2016).
15. Nationale ombudsman (2013, see also p. 13)
16. Schwartz, B. (2005).
17. Thaler, R., & Sunstein, C. R. (2008).
18. van Herpen, E., Hieke, S., & van Trijpm, H. (2013).

19. WRR. (2016b).
20. van Putten, M., van der Schors, A., van Dijk, E., & Van Dijk, W. (2016).
21. van der Steeg, M., & Waterreus, I. (2015, see also p. 220, 221).
22. Sunstein, C. R. (2014).
23. Some Dutch grocery chains are experimenting with selling healthier snacks at the cash register. However, the Netherlands Nutrition Centre concluded in August 2015 that many shops are still not prioritising measures that encourage healthy behaviour among their customers (<http://www.voedingscentrum.nl/kassa>).
24. Payday loans are loans that must be repaid in less than three months. Since 1 June 2011, payday loan lenders must have been issued a permit by the Dutch Authority of the Financial Markets and may charge no more than 14% interest on the loan (<https://www.nibud.nl/consumenten/soorten-leningen/>). Nevertheless, the National Institute for Family Finance Information NIBUD still issues a warning about the risks that accompany such loans. Payday loan lenders now charge extra cash for certain services, such as a guarantee, advice about insurance, or an immediate money transfer. Theoretically, these are not mandatory services but in reality they are probably necessary. They make payday loans very expensive. In addition, the lenders charge heavy penalties if borrowers do not repay on time.
25. van Dalen, H., & Henkens, K. (2016).
26. de Vries, C., & Van Woerkom, G. (2016, November 1).
27. Nationale Ombudsman. (2015).
28. Ministerie van Binnenlandse Zaken. (2016).
29. Ministerie van Veiligheid en Justitie. (2015b, June 5).
30. In late 2016, the NHS in Yorkshire announced that people who smoked or were seriously overweight would be excluded from surgery for six months or a year. These patients could shorten their waiting time for surgery by quitting smoking for two months or losing a minimum of ten per cent of their weight (<https://www.theguardian.com/society/2016/nov/29/nhs-patients-told-to-lose-weight-and-quit-smoking-or-face-operation-delays>). There are occasional discussions in the Netherlands as well about treating people who live an unhealthy lifestyle. For example, in 2015 broadcaster KRO-NCRV and the Dutch Association of Medical Specialists conducted a survey showing that more than 40% of the doctors involved—a cross-section of hospital physicians—would like to have the authority to refuse treatment to people who lived unhealthily (*Trouw* 2015).
31. Gemeente Amsterdam. (2016).
32. Nationale Ombudsman. (2016).
33. Based on Nationale Ombudsman 2016.
34. Research also shows that personal contact improves the perceived legitimacy of the decision, even if it is unfavourable to the individual (Van den Bos et al. 2014). The Dutch Ministry of the Interior's 'Pleasant Contact with the Government' project found that taking an informal approach to objection

procedures led to an increase in public satisfaction of 40% and an average cost saving of 20% (ROB 2014).

35. Reijn, G. (2016).
36. Source: <https://www.skipt.nl/actueel/id27291-cz-succesvol-met-soepeler-beleid-wanbetalers.html>.
37. See: <http://www.schuldeiserscoalitie.nl/manifest/>.
38. That is 89% of the respondents who stop by with a preventive question (Geldloket Amersfoort 2015).
39. For an overview, see Lind and Arndt (2015) and Van den Bos et al. (1998).

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Appendix I: Background Information About the Survey

The fieldwork for the survey was carried out by Veldkamp, which used the sample source TNS NIPObase for this purpose. TNS NIPObase is a database of Dutch households willing to participate regularly in surveys conducted by Veldkamp and TNS NIPO. This sample source contains approximately 140,000 persons. Approximately 120,000 of them are 18 years of age or older. The respondents complete the survey online. The fieldwork took place between Friday 2 October and Monday 12 October 2015.

Response and Weighting

The aim was to have as representative a sample as possible of Dutch people aged 18 and older, but with an oversample of respondents who were likely to have debt problems. To attain the desired sample composition, we therefore:

- compiled an initial sample of $N = 1,100$ persons of 18 years and older, the aim being to obtain a sample representative for the Dutch population in terms of gender, age, household size, education, social class, and region. This sample was based on reference data taken from the 2014 Golden Standard (*Gouden Standaard*).
- compiled two additional samples, namely 100 persons known to be on social assistance benefit and 210 persons who can be categorised in the C/D class.

The total number of persons in the sample was 1,410. Of these, 1,011 people completed the questionnaire, giving us a response rate of 72%. The composition of the group of respondents was as follows (Table A.1):

Table A.1 Composition of group of respondents

Variables	Reference %	Unweighted %	Weighted %
<i>Gender</i>			
Man	49	46	49
Woman	51	54	51
<i>Age</i>			
18–24	11	8	11
25–34	15	12	15
35–49	27	26	27
50–64	26	29	26
65 and older	21	25	21
<i>Household size</i>			
1 person	21	26	21
2 persons	37	39	37
3 persons	16	16	16
4 or more persons	18	12	18
5 or more persons	9	7	8
<i>Education</i>			
Low (lower secondary general education)	25	26	25
Medium (VET to pre-university)	41	40	42
High (higher professional and above)	34	35	35
<i>Social class</i>			
A (upper)	20	16	20
B1	32	25	33
B2	17	12	14
C	27	42	28
D (lower)	4	5	4
<i>Region</i>			
3 largest Dutch municipalities	16	14	12
Rest of western NL/peripheral municipalities	30	34	33
North	10	11	10
East	21	21	21
South	24	20	24

Differences between the weighted sample and the reference data are small, with only small weighting factors being necessary:

- 15% of respondents have a weighting factor of less than 0.59
- 77% of respondents have a weighting factor of between 0.60 and 1.59
- 8% of respondents have a weighting factor of more than 1.59.

Persons with no internet access are not represented in the sample. In 2013, however, 95% of the Dutch population had access to the internet, and in 2014, 90% of the Dutch population went online every day (Statistics Netherlands).

Description of Variables

The survey covers several topics and questions. Below, we describe only the variables that are important for this study.

1. **Age.** This is the age in years.
2. **Educational level.** We used Statistics Netherlands' classification system to score the highest educational qualification obtained by each respondent. For our analysis, we then identified three educational levels:
 - low: Statistics Netherlands levels 1, 2 and 3;
 - middle: Statistics Netherlands levels 4 and 5;
 - high: Statistics Netherlands levels 6 and 7.
3. **Social embedding.** We measured this using the loneliness scale by Van Tilburg and De Jong Gierveld (2007).
 - *I experience a general sense of emptiness*
 - *There are plenty of people I can lean on when I have problems*
 - *There are many people I can trust completely*
 - *There are enough people I feel close to*
 - *I miss having people around me*
 - *I often feel rejected.*

The statements were presented in random order. Respondents scored each statement on a five-point scale (1 = Strongly disagree, 5 = Strongly agree).

4. **Utrecht Proactive Coping Competences (UPCC).** To indicate the extent to which a respondent has the five capacities of self-reliance, we used the Utrecht Proactive Coping Competence scale (Bode et al. 2008). Respondents were asked to what extent they had the following competences.
 - *Assessing future developments*
 - *Looking ahead*
 - *Recognising signals that something might go wrong*
 - *Being open to other people's comments*
 - *Envisioning my personal opportunities and chances*
 - *Recognising my personal limitations*

- *Assessing my environment*
- *Clearly indicating the things I want to accomplish*
- *Translating my desires into plans*
- *Making realistic plans*
- *Asking other people for advice*
- *Finding solutions*
- *Thinking of alternatives when a solution proves ineffective*
- *Actually seeing my plans through*
- *Persevering*
- *Seeking support when things get tough*
- *Evaluating whether I accomplished the goal I wanted to reach*
- *Considering the positive aspects of a setback*
- *Learning from setbacks*
- *Appreciating when something goes right*
- *Rewarding myself when I have made progress in achieving my goal.*

The 21 competences were presented in random order. Respondents scored each statement on a five-point scale (1 = Not competent, 5 = Very competent). Cronbach's alpha was 0.93.

5. **Approach-avoidance temperament.** This was measured on the Avoidance and Approach Temperament Scale by Elliot and Thrash (2010). We used a (slightly adapted) Dutch translation by Bipp et al. (2015). The first six statements measure Avoidance temperament, and the next six Approach temperament.

- *By nature I am a very nervous person*
- *It doesn't take much to make me worry*
- *I feel anxiety and fear very deeply*
- *I react very strongly to bad experiences*
- *When it looks like something bad could happen, I have a strong urge to escape*
- *It is easy for me to imagine bad things that might happen to me*
- *Thinking about the things I want really energises me*
- *When I see an opportunity for something I like, I immediately get excited*
- *It doesn't take a lot to get me excited and motivated*
- *I'm always on the lookout for positive opportunities and experiences*
- *When I want something, I feel a strong desire to go after it*
- *When good things happen to me, it affects me very strongly.*

Respondents scored each statement on a five-point scale (1 = Strongly disagree, 5 = Strongly agree). The two sets of statements were presented in random order as a single set of twelve statements.

The average score on both sets of six statements was taken as an indicator for an Avoidance or an Approach *temperament* respectively (Cronbach's alphas were 0.85 and 0.78 respectively).

6. **Self-control scale.** Self-control was measured using a Dutch translation of the Brief Self Control Scale by Tangney et al. (2004). This consists of thirteen statements presented in random order.

- *I am good at resisting temptation*
- *I have a hard time breaking bad habits (rev)*
- *I am lazy (rev)*
- *I say inappropriate things (rev)*
- *I do certain things that are bad for me, if they are fun (rev)*
- *I refuse things that are bad for me*
- *I wish I had more self-discipline (rev)*
- *People would say that I have iron self-discipline*
- *Pleasure and fun sometimes keep me from getting work done (rev)*
- *I have trouble concentrating (rev)*
- *I am able to work effectively toward long-term goals*
- *Sometimes I can't stop myself from doing something, even if I know it's wrong (rev)*
- *I often act without thinking through all the alternatives (rev).*

Respondents scored each statement on a five-point scale (1 = Strongly disagree, 5 = Strongly agree).

For analysis purposes, the statements followed by '(rev)' were reverse-coded. The average of all thirteen statements was then taken as the self-control score (Cronbach's alpha = 0.80).

7. **Optimism and Perceived control.** We used Dutch translations of the Life Orientation Test (LOT-R) scale (Scheier et al. 1994) and the Mastery scale (Pearlin and Schooler 1978). The LOT-R consists of the following six items (excluding the four filler items):

- *In uncertain times, I usually expect the best*
- *If something can go wrong for me, it will (rev)*
- *I'm always optimistic about my future*
- *I hardly ever expect things to go my way (rev)*
- *I rarely count on good things happening to me (rev)*
- *Overall, I expect more good things to happen to me than bad.*

The Mastery scale consists of the following seven items:

- *There is really no way I can solve some of the problems I have (rev)*
- *Sometimes I feel that I'm being pushed around in life (rev)*
- *I have little control over the things that happen to me (rev)*
- *I can do just about anything I really set my mind to*
- *I often feel helpless in dealing with the problems of life (rev)*
- *What happens to me in the future mostly depends on me (rev)*
- *There is little I can do to change many of the important things in my life.*

We combined the two scales into a series of thirteen items presented in random order, excluding the four filler items of the LOT-R scale. In our analysis, however, we treated the two scales separately.

Respondents scored each statement on a five-point scale (1 = Strongly disagree, 5 = Strongly agree). For analysis purposes, the statements followed by '(rev)' were reverse-coded.

Appendix II: List of Persons Consulted

Positions as Held at the Time of the Meeting

P. van de Aa, policy researcher, Municipality of Rotterdam.

M. Aarts, financial coach and trainer, Saldosupport Financiële Coaching, Delft.

G. Adriaansen, policy officer, Ministry of Public Health, Welfare and Sport.

N. Andringa, team leader, district team, ZuidWest Leeuwarden.

J. Ammerlaan, research nurse, Utrecht University Medical Centre.

M. Apers, medical social worker, Utrecht University Medical Centre.

J. Boelhouwer, scientific assistant, information services, Netherlands Institute for Social Research.

K. van den Bos, professor in social psychology, Utrecht University.

R. Blonk, professor of labour participation and psychological conditions, Utrecht University/TNO.

N. de Boer-Nijhof, patient participation working group, Utrecht University Medical Centre.

G. Bos, career coach, Menea Zoetermeer.

R. Bos, medical social worker, Utrecht University Medical Centre.

J.W. Bosman, team manager, debt assistance, Municipality of Tilburg.

Y. van den Bosch, support worker at a general practice, Schiedam GP practice.

C. Brocatus, case manager, social services, Hoeckse Waard region.

- J. Broer**, financial consultant, Geldloket Amersfoort.
- M. Buisman**, researcher, Expertise Centre for Vocational Education (ECBO).
- L. Burdof**, professor in determinants of public health, Erasmus Medical Centre, Rotterdam.
- M.J. Cramer**, cardiologist, Utrecht University Medical Centre.
- C. Crum**, policy officer, Ministry of Public Health, Welfare and Sport.
- M. van Dam**, Office of the National Ombudsman.
- A. Demiray**, advisor, intensive services, UWV Amsterdam.
- F. Dekker**, labour sociologist, Erasmus University, Rotterdam.
- J. Denissen**, professor of developmental psychology, Tilburg University.
- A. van Diepen**, senior advisor, Council for Social Development, The Hague.
- W. van Dijk**, professor in psychological determinants of economic choice behaviour, Leiden University.
- R. Dillingh**, labour market research department, Ministry of Social Affairs and Employment.
- F. Van der Doelen**, policy officer, Ministry of Public Safety and Justice.
- E. Erdogrul**, client manager, Zoetermeer social services.
- I. den Exter-Schuurman**, GP, Schiedam GP practice.
- T. Fokkema**, researcher, Netherlands Interdisciplinary Demographic Institute.
- K. Fiege**, volunteer, Samen Meedoen, Amsterdam.
- E. Gerritsen**, Secretary General, Ministry of Health, Welfare and Sport.
- Y. el Ghali**, volunteer, Samen Meedoen, Amsterdam.
- C. van der Hoop**, client manager, Zoetermeer social services.
- A. Den Haan**, client manager, income, social services, Hoeckse Waard region.
- M. Harbers**, researcher, National Institute for Public Health and the Environment.
- M. ten Have**, assistant, non-performing accounts department, ING.
- W.J. van Helden**, project manager, Office of the National Ombudsman.
- C. Hermans**, head, central strategy unit, Ministry of Public Safety and Justice.
- N. Hoeymans**, researcher, National Institute for Public Health and the Environment.

W. Houtkoop, senior researcher, Expertise Centre for Vocational Education (ECBO).

G. Jiskoot, researcher, Erasmus Medical Centre, Rotterdam.

N. Jungmann, lecturer in rights, debts and collection, University of Applied Sciences, Utrecht.

M. de Klerk, senior scientific assistant, Netherlands Institute for Social Research.

E. van der Klis, former social adviser, Combiwel Amsterdam.

J. de Kock, chair, NVVK.

J. Koen, assistant professor, Amsterdam University.

B. Koning, operations specialist, non-performing accounts department, ING.

A. Knops, policy officer, Netherlands Federation of Patient Organisations.

A. de Kruijf, consultant, Geldloket Amersfoort.

A. Kruize, rheumatologist, Utrecht University Medical Centre.

L. Kuijpers, policy officer, Ministry of Public Health, Welfare and Sport.

K. Kuipers, advisor, Ministry of General Affairs.

D. Lagerwerf, dietician, Centre for Healthy Weight, Erasmus Medical Centre.

M. van Leeuwen, staff member, district team, ZuidWest Leeuwarden.

J. Lee Sack Fong, client manager/chair, professional association for client managers.

C. Liberton, project manager, professionalisation & adult education, Ministry of Education, Culture and Science.

T. Madern, senior researcher, Poverty and Participation research group, Amsterdam University of Applied Sciences.

G. Mentink, policy officer, Ministry of Public Health, Welfare and Sport.

A. Moerman, department manager, social counsellors and debt assistance, Rijnstad, LOSR/MOgroep.

J. van Os, programme secretary, ZonMW.

M. Polman, policy officer, Ministry of Public Health, Welfare and Sport.

N. Popma, financial coach and trainer, Stach Breda.

J. Rademakers, head of research department, Nivel.

- R. Risselada**, knowledge directorate, Ministry of Social Affairs and Employment.
- D. de Ridder**, professor of health psychology, Utrecht University.
- T. Roos**, national project manager, 50plus Werkt, UWV Amsterdam.
- L.F.C. van Rossum**, head, Centre for Healthy Weight, Erasmus Medical Centre, Rotterdam.
- E. Rutten**, senior policy officer, Ministry of Social Affairs and Employment.
- M. Scheltema**, government commissioner for the general rules of administrative law.
- H. Schipper**, director, legal system, Ministry of Public Safety and Justice.
- H. Schippers**, account holder, foreign affairs, Actal.
- W. Schooneboom**, staff member, district team, ZuidWest Leeuwarden.
- M. Schmaal**, social worker/system supervisor, Utrecht University Medical Centre.
- O. Schneider**, career coach, Menea.
- M. Schuring**, post-doctoral researcher, Erasmus Medical Centre, Rotterdam.
- A. Speijer**, coordinator, quality of care, VSOP.
- M. Stal**, advisor, Ministry of General Affairs.
- C. van Stijn**, coordinator, home administration, Humanitas Zoetermeer.
- K. Stronks**, professor, Amsterdam Medical Centre.
- A. Tuzgöl**, project manager, Office of the National Ombudsman.
- S. Tjeerds**, policy officer, Ministry of Social Affairs and Employment.
- M. Trappenburg**, professor of social work, University of Humanistic Studies.
- L. van der Velden**, directorate of democracy and citizenship, Ministry of the Interior and Kingdom Relations.
- S. Vermeulen**, advisor on regulation policy, Ministry of Public Safety and Justice.
- A. Victoor**, policy officer, Netherlands Federation of Patient Organisations.
- Y. van der Vlugt**, project manager, Office of the National Ombudsman.
- E. Vogels**, policy officer, Ministry of Social Affairs and Employment.
- M. de Vries**, client manager, social services, Municipality of Leiden.
- K. Werkhorst**, sector head, legal affairs and regulation policy, Ministry of Public Safety and Justice.

B. van Wijck, anaesthetist/pain specialist, Utrecht University Medical Centre.

M. de Wit, senior researcher, GGD Amsterdam.

A. Zarinkhameh, Council for Public Health and Care.

R. van Zijp, Secretary, Actal.

R. van Zutphen, National Ombudsman.

Appendix III: List of Acronyms and Abbreviations

A

ACM	Netherlands Authority for Consumers and Markets (Autoriteit Consument & Markt)
AFM	The Dutch Authority of the Financial Markets (Autoriteit Financiële Markten)
ASMP	Arthritis Self-Management Program
ATM	Automated Teller Machine

B

BIN-NL	Behavioural Insights Network Netherlands (Behavioural Insights Network Nederland)
BIT	Behavioural Insights Team
BKR	Financial Registration Office (Bureau Krediet Registratie)
BMI	Body Mass Index
BZK	Ministry of the Interior and Kingdom Relations (Ministerie van Binnenlandse Zaken en Koninkrijksrelaties)

C

CAK	Central Administration Office (Centraal Administratie Kantoor)
CBS	Statistics Netherlands (Centraal Bureau voor de Statistiek)
CJIB	Central Judicial Collection Agency (Centraal Justitieel Incassobureau)
CPB	Netherlands Bureau for Economic Policy Analysis (Centraal Planbureau)
CVZ	Health Insurance Board (College voor Zorgverzekeringen)
CZ	Dutch health insurance company

D

DA	Dopamine
DLPFC	Dorsolateral Prefrontal Cortex
DMPFC	Dorsomedial Prefrontal Cortex
DUO	Government agency that administers student grants (Dienst Uitvoering Onderwijs)

G

GP	General Practitioner
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H

Havo	General secondary education (Hoger Algemeen Voortgezet Onderwijs)
HBO	Higher professional education (Hoger Beroepsonderwijs)

I

IQ	Intelligence Quotient
IT	Information Technology

J

JOBS	Job Opportunity and Basic Skills training
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K

KRO-NCRV	Dutch broadcasting company (Katholieke Radio Omroep en Nederlandse Christelijke Radio Vereniging)
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L

LOT-R	Life Orientation Test-Revised
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M

MBO	Senior secondary vocational education (Middelbaar Beroepsonderwijs)
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N

NA	Noradrenaline
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NCPF	Federation of Patients and Consumer Organisations in the Netherlands (Patiëntenfederatie Nederland)
NEO PI-R	Revised NEO Personality Inventory
NHS	National Health Service
Nibud	National Institute for Family Finance Information (Nationaal Instituut voor Budgetvoorlichting)
NVVK	Sector organisation for debt assistance services (Branchevereniging voor schuldhulpverlening en sociaal bankieren)

O

OECD	Organisation for Economic Co-operation and Development
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P

PAM	Patient Activation Measure
PFC	Prefrontal Cortex
PhD	Doctor of Philosophy

R

RIFD	Radio Frequency Identification
RIPFC	Right Inferior Prefrontal Cortex
RIVM	National Institute for Public Health and the Environment (Rijksinstituut voor Volksgezondheid en Milieu)

S

SCP	The Netherlands Institute for Social Research (Sociaal Cultureel Planbureau)
SDM	Shared Decision Making
SECPT	Socially Evaluated Cold Pressor Test
SVB	Dutch organisation for national insurance scheme implementation of pensions and child benefit (Sociale Verzekeringsbank)
SZW	Ministry of Social Affairs and Employment (Ministerie van Sociale Zaken en Werkgelegenheid)

T

TNO	The Netherlands Organisation for applied scientific research (Nederlandse Organisatie voor toegepast-natuurwetenschappelijk onderzoek)
TSST	Trier Social Stress Test

U

UPCC	Utrecht Proactive Coping Competence
UK	United Kingdom
UMCU	Utrecht Medical Centre
US	United States
UWV	Dutch Employment Insurance Agency (Uitvoeringsinstituut Werknemersverzekeringen)

V

VET	Vocational Education and Training
VJ	Ministry of Security and Justice (Ministerie van Veiligheid en Justitie)
VMBO	Prevocational secondary education (Vorbereidend Middelbaar Beroepsonderwijs)
VMPFC	Ventromedial Prefrontal Cortex
VVE	Preschool and Early Childhood Education (Voor-en Vroegschoolse Educatie)
VWO	Pre-university education (vorbereidend wetenschappelijk onderwijs)

W

WBGO	Medical Treatment Contract Act (Wet op de geneeskundige behandelingsovereenkomst)
WHO	World Health Organisation
WO	University education (Wetenschappelijk Onderwijs)
WRR	The Netherlands Scientific Council for Government Policy (Wetenschappelijke Raad voor het Regeringsbeleid)
WW	Unemployment Act and (Werkloosheidsuitkering)

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