CFEB Consumer Research Report

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Transforming Financial Behaviour: developing interventions that build financial capability

A Report for the Consumer Financial Education Body

Antony Elliott, Paul Dolan, Ivo Vlaev, Charles Adriaenssens & Robert Metcalfe

July 2010

consumer financial education body

CFEB: Transforming Financial Behaviour

We are committed to encouraging enquiry and debate among academics, practitioners and policy makers in all aspects of financial capability. To help this we commission research and publish papers on financial capability, extending across psychology, sociology, economics and other disciplines.

Our research papers are intended to stimulate interest, to challenge and to develop thinking. They may sometimes contain controversial ideas that reflect the authors' views and not necessarily those of the UK Consumer Financial Education Body (CFEB).

CFEB commissioned this behavioural science research report, *Transforming Financial Behaviour: developing interventions that build financial capability*, to identify the most effective drivers for changing financial behaviour and consider ways in which these could be harnessed to improve financial capability.

It will be of interest to:

- those who design, market and buy financial products;
- independent financial advisers, money advisers and debt counsellors;
- policy makers working on personal finance, wellbeing and financial capability; and
- those who design and deliver financial capability initiatives.

We would welcome your feedback on the report and whether it resonates with your experience. Specifically:

1. What, if any, behavioural strategies do you use in your work, and what evidence do you have to support them?
2. What are the bridges and barriers to using this approach to transform financial behaviour?
3. How can CFEB collaborate with the financial services industry and other stakeholders to understand and harness behavioural strategies to improve financial capability?

You can submit your views in writing to sarah.smith@moneymadeclear.org.uk or to CFEB, 25 The North Colonnade, Canary Wharf, London E14 5HS. We would be grateful to receive your response by 30 September 2010.

Foreword

Right now, across the globe, economies are experiencing the effects of financial shock. Personal financial capability has a role in preventing the conditions that create shocks and in equipping us to cope with them when they happen.

Financially capable citizens are crucial to a country's long-term economic health. A population that keeps track of its money, makes ends meet, and plans ahead creates a strong foundation for economic growth. And consumers who choose financial products well and stay informed about financial matters encourage healthy financial services markets. On a personal level the ability to manage our own financial affairs brings us freedom, increases our life choices and contributes to our psychological wellbeing. By building our own financial resilience, we contribute to that of our families, communities and society as a whole[1].

Through the Delivering Change programme, nine million people have received financial information and advice in the last four years. We have just published the final evaluation of our Money Guidance Pathfinder[2]. It shows that three quarters of users find Money Guidance so useful they would recommend it to their friends, and that 20% take positive action after using the service. Our challenge now is to encourage even more people to act and to change their long-term financial behaviour. I believe that the annual family financial health check the Government has asked us to develop, which will build on our established Moneymadeclear service, provides an outstanding opportunity to do this.

This is why I am excited by the findings of this report, *Transforming Financial Behaviour*[3]. It shows we can use learning from psychology and sociology alongside more traditional policy interventions to foster behaviour change. Through applying and evaluating well-researched interventions we want to build on our expertise. I hope that together with our partners from government, the financial services industry, the third sector and consumer groups we can find practical ways to create an environment that supports enduring financial capability.

I encourage you to read this report. I would welcome your reflections on it and your collaboration, as we take forward this ground-breaking work.

Tony Hobman
July 2010

[1] Taylor, M., Jenkins, S., Sacker, A. (2009) Financial capability and wellbeing: evidence from the British Household Panel Survey, Financial Services Authority, London E14 5HS and Taylor, M. (2009) The impact of life events on financial capability: evidence from the BHPS, Financial Services Authority, London E14 5HS

[2] Kempson, E. and Collard, S. (2010) Money Guidance Pathfinder: a report to the FSA, Financial Services Authority, London E14 5HS

[3] Elliott, A., Dolan, P., Vlaev, I., Adriaenssens, C. & Metcalfe, R. (2010) Transforming Financial Behaviour: developing interventions that build financial capability, Consumer Financial Education Body, London E14 5HS

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The Authors

Antony Elliott FCIB spent over 10 years as Group Risk Director of Abbey National plc having worked for a number of UK and international banks previously. He had overall responsibility for the control of consumer credit risk throughout this period.

After he left in 2003, he researched and produced a report on why people get into too much debt. Entitled, 'Not waving but drowning: over-indebtedness by misjudgement', it was published by the Centre for the Study of Financial Innovation in 2005 and was widely discussed at the time. The research and education based charity, FairBanking, was founded by him in 2008. It has commissioned research into the link between a person's money management and their level of contentment or financial well-being. The research has been developed to consider the implications for banking products and services. Antony wrote the report, which was jointly published with the CSFI in 2009 (Fairbanking: the road to redemption for UK banks) and the research was developed further in the report: 'Fair banking ratings: socially useful banking' (2010).

He received a BSc in Banking and International Finance from City University and an MSc in Operational Research from Imperial College, London.

Paul Dolan is Professor of Economics in the Department of Social Policy at the London School of Economics. He has previously held academic posts at York, Newcastle, Sheffield and Imperial, and has been a visiting scholar at Princeton. There are two main themes to Paul's work. The first focuses on developing measures of subjective well-being that can be used in policy, particularly in the valuation of non-market goods and in 'joining-up' the impact of changes in health, crime, the environment etc. The second considers ways in which the lessons from behavioural economics can be used to understand and change individual behaviour. This work is focussing on the important role that situational factors play in influencing our behaviour.

Paul has published in top economics, psychology, health and social science journals and has won research grants from a range of funding bodies, including the ESRC, AHRC and the British Academy. He was awarded a Philip Leverhulme Prize in Economics in 2002 for his contribution to health economics. Paul has been on many expert panels across government and he has advised various departments, including Defra, DH, DCLG and the Home Office, and he is currently chief academic adviser on economic appraisal for the Government Economic Service.

Ivo Vlaev is a Senior Research Fellow at Imperial College London (with a joint appointment at Imperial College Business School and the Faculty of Medicine). Before coming to Imperial, he worked as a researcher at University College London, Decision Technology Ltd and the University of Warwick (2003-2004). He has a track record of research in cognitive psychology, behavioural economics and behavioural finance, which is published in peer-reviewed academic journals.

His research interests are focused on studying human judgment and decision-making in various domains (social, financial, medical), by exploring various methods from experimental psychology, economics (game theory), and neuroscience. Specific research topics are risk attitudes, behaviour change, consumer psychology, behavioural finance, cooperation, reinforcement learning and well-being.

Ivo's previous consulting work related to consumers' risk perception funded by the Institute of Actuaries, London. He has also worked on consulting projects on consumer price perception, consumer trust, and brand memory funded by large retailers.

He received a DPhil (PhD) in Experimental Psychology from the University of Oxford (and St. John's College) and MSc in Cognitive Science and BSc in Psychology from the New Bulgarian University.

Charles Adriaenssens has spent 17 years in the insight industry, working across the fields of market intelligence, market research, data analytics, marketing and consulting. Charles specialises in the retail financial services, and has worked with most of the major UK banks and building societies. For 5 years, he ran the Financial Research Survey (FRS) at GfK, a continuous monitor of consumer financial behaviour. He also has significant experience of applying qualitative and quantitative research methodologies in the financial services marketplace.

Charles was the project director of both the qualitative and quantitative phases of the research that provided the foundation of the recently published report ‘Fair banking: the road to redemption for UK banks’. He also directed the multivariate analysis that was used to identify the drivers of financial well being, and wrote the technical appendix of the report, which summarises this analysis. He is a regular speak at conferences, and has a range of published papers on market research techniques and their application.

He received a BSc (Hons) in Mathematics / Applied Statistics from Oxford Brookes University.

Robert Metcalfe is Fitzjames Research Fellow at Merton College, Oxford where his main research interest is in applied microeconomics, with particular reference to behavioural, environmental and health economics. Some of the work he is currently conducting is valuing non-market good by differing measures of utility, and examining the role of monetary incentives and contextual factors on energy, environmental, financial and health behaviours. He is also interested in the role of field experiments in regulation and evaluation.

Rob received undergraduate and postgraduate degrees from the University of Wales, Swansea and London School of Economics respectively, and received a PhD in Economics from Imperial College, London. He has worked as an economist in the Government Economic Service.

Introduction

This report is the result of a three-part piece of research conducted for the Consumer Financial Education Body into the topic of behaviour interventions that may act as drivers of improved financial capability. The research was undertaken and the report written in the first half of 2010 by a group of experts in the topic, Antony Elliott (Director, FairBanking), Paul Dolan (Professor of Economics at the London School of Economics), Ivo Vlaev (Senior Research Fellow at Imperial College), Charles Adriaenssens (Director, iris Concise) and Robert Metcalfe (Fitzjames Research Fellow at Merton College, Oxford).

It was essential at an early stage to identify outcomes that would evidence greater levels of financial capability. A framework under the mnemonic MINDSPACE was used to represent nine effects on behaviour operating largely on the 'automatic' system that may either individually or in combination be able to drive these outcomes. At an early stage in the research ten interventions were developed that provided a focus for each phase of the research. The three phases were:

- Literature review – relevant academic developments are drawn together to provide a consolidated understanding of how choice architecture or the environment for decision-making can alter behaviour. The review uses non-financial examples of behaviour change research where none is available in relation to personal financial management.

- Expert interviews – twenty-one experts were interviewed from four groups: FSA/CFEB staff, financial advisors, providers of financial services and consumer help organisations.

- Case studies – six case studies were developed of products being offered by financial services companies that contained interventions that are improving financial capability for customers that are using the features.

The report proposes a methodology for identifying interventions that may improve financial capability. The approach is unusual in that it suggests that it may be more effective to begin by identifying interventions that may be effective. This approach contrasts with one of studying a small population group in depth before determining an appropriate intervention.

At the out-set of the research the team did not appreciate that it would be possible to produce a report that has such multiple layers of confirmation for the behaviour change approaches being considered. We consider that there is a great deal of potential to improve the financial capability of the UK population through properly researched and implemented interventions to change the choice architecture.

Acknowledgements

In addition to the authors, this report has involved a number of dedicated individuals at the charity, FairBanking and the research consultancy, iris Concise. We would like to acknowledge their support.

We would like to acknowledge the co-operation of the many employees of the five companies involved in providing information for the case studies. Many of these individuals were enthusiastic about the financial management benefits that they felt that these products were providing to their customers.

The authors would like to acknowledge the support of their families since this report did involve a significant amount of work for some periods.

Disclaimer

The authors have taken reasonable care in preparing this report and reserve the right to change or update the report from time to time. No warranty or representation is made that the report is accurate, complete or free from error. Information and opinions expressed in this report relating to third party information, products and services are provided without endorsement or any representation, express or implied, including in particular that any product or service is suitable for a particular person. Any person seeking products or services of the kind referred to in this report should obtain the latest information from the relevant product or service provider and make his or her own judgement about the suitability of the same; no person should rely on the content of this report for this purpose. The authors cannot accept any liability arising as a result of the use of this report.

John and Sarah Smith have two young children, Jack and Isobel. The family has many financial demands and, a couple of years ago; they had built up quite a bit of unsecured debt. They were not overly concerned about this but a review of their finances was organised by their bank and was conducted by Andrew. They were not looking forward to the meeting, but to their surprise, they really could relate to him and he seemed knowledgeable. The review showed that John and Sarah spent quite a bit more on clothes and on eating out than families like them. They were taken aback when Andrew told them how many hours John had to work to pay for all those garments and dinners. The Smiths committed to reducing their spending in these areas. They agreed that some of the money saved should be used to pay off their unsecured debt. A year later, the debt was reduced to such an extent that the Smiths opened a new "holiday spending" account, into which some of John's salary was paid directly. This year, they have been able to take a family holiday for the first time since Isobel was born. They continue to receive updates on their finances from the bank and are due to see Andrew again soon. They are looking forward to seeing him.

1. Executive Summary

There are many families that are like the Smiths were a couple of years ago. We hope to get to a stage where more families are like the Smiths are now. This report has been commissioned by the Consumer Financial Education Body in order to determine what actions are effective in driving changes in behaviour that create financial capability.

The first step was to identify the desirable behaviours that would indicate an improvement in financial capability. These are the behaviours that can be encouraged by the types of action or intervention that are the subject of this report. The "Financial Capability Survey" [1] is the primary source of information to determine desirable behaviours. It has been augmented by research on financial well-being undertaken by the charity, FairBanking. The conclusion is that there is a hierarchy of behaviours that are drivers of financial capability. It is unlikely that financial capability can be achieved if an individual does not engage in elements of "keeping track" of their finances. For many people on lower incomes, "making ends meet" will be an important element of financial capability and for those with slightly higher incomes "planning ahead" becomes important. (Section 2)

We draw on the latest academic developments in understanding the robust effects on financial behaviour. We focus attention largely, though not exclusively, on ways in which behaviour is shaped by the context within which decisions are made. Traditionally behaviour change has been seen through the lens of 'changing minds'. If we can change the way people think – their beliefs, attitudes and goals – then we can change the way they behave. Education interventions designed to improve financial literacy are within this paradigm. Whilst education can help, it is not always as effective as we would like it to be and, unsurprisingly, it generally works best on those who are most open to being educated (which tend to be the better educated in the first place). (Section 3)

[1] Levels of Financial Capability in the UK: Results of a Baseline Survey, 2006 (Consumer Research Paper 47, FSA)

More recent developments in behavioural theory show that ‘changing contexts’ can have a powerful effect on behaviour: we can change behaviour by sometimes quite subtle changes to the environment or choice architecture. In a recent report co-authored by two of those on this report, the mnemonic MINDSPACE was used to represent the nine most robust effects on behaviour that operate largely on the ‘automatic’ system (in contrast to the ‘reflective’ system focussed on by traditional interventions).

Messenger	We are heavily influenced by who communicates information
Incentives	Our responses to incentives are shaped by predictable mental shortcuts such as strongly avoiding losses
Norms	We are strongly influenced by what others do
Defaults	We ‘go with the flow’ of pre-set options
Salience	Our attention is drawn to what is novel and seems relevant to us
Priming	Our acts are often influenced by sub-conscious cues
Affect	Our emotional associations can powerfully shape our actions
Commitments	We seek to be consistent with our public promises, and reciprocate acts
Ego	We act in ways that make us feel better about ourselves

The Smiths’ behaviour was changed by applying some of the lessons from MINDSPACE: the messenger (Andrew) was the right one, the information they were given drew on the appropriate norms (families like them) and it was salient (how many hours John had to work). The family made a commitment to paying off their debts and they subsequently used a default to put some of John’s salary into a (holiday) savings account that tapped into positive emotions.

We reviewed the academic literature to highlight behaviour change interventions in the financial domain that drew on elements of MINDSPACE, as well as on more traditional education and information interventions designed to change behaviour through ‘changing minds’. There is a reasonable amount of research on the domains of “making ends meet” and “planning ahead”, but a need for more academic research into using the interventions for some key behaviours such as “keeping track”. However, drawing on the literature review, we identified a ‘top ten’ list of interventions that were to be considered in the twenty-one expert interviews and six case studies that followed. (Section 4)

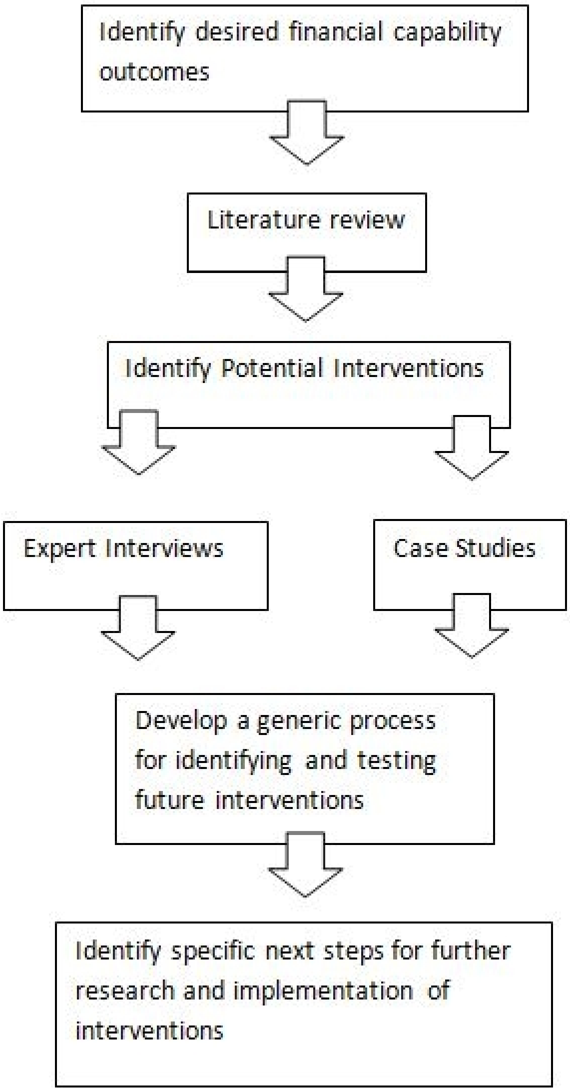
The experts concluded that all the interventions had the potential to be used in the context of creating financial capability but the evidence from research is that many of these interventions are likely to have far more effect on behaviour and be easier to apply than some of the experts suggested. (Section 5)

Six examples of products were identified where a provider was having an effect on financial capability through its services. The providers were impacting key elements of financial capability relating to “keeping track”, “making ends meet” and “planning ahead”. There would appear to be significant scope for further development of products of the type analysed in this report that would contribute to financial capability in the UK. (Section 6)

A process is proposed for identifying and testing interventions. It seeks to use the MINDSPACE framework to focus on the effectiveness of interventions and to adapt them to specific population groups if necessary. (Section 7)

The following diagram gives an overview of the project:

Figure 1: Summary diagram of research project



2. Components of Financial Capability

The Financial Capability Baseline Survey published by the FSA in 2006 covered five components of financial capability:

a. Making ends meet

- Keeping up with bills and other commitments
- Attitude of "more of a saver rather than spender"
- Not running out of money at end of month/week
- Not getting into financial difficulty

b. Keeping track of your finances

- Checks the amount in current account or in-hand frequently
- Checks receipts against bank statement
- Knows current account balance
- Budgets to ensure sufficient funds available to tackle uneven expenditures

c. Planning ahead

- Sufficient provision for unexpected expenditure or drop in income
- Can make ends meet for long period (12 months) if expenditure drops
- Holds some general insurance
- Made provision for retirement
- Attitude of money saved for a rainy day and willing to consider trade-off in current living standard for retirement
- *Adjusts expenditures rapidly for a change in financial circumstances*
- *Think of money in "pots"*

d. Choosing financial products

- Seeking advice from professional advisor
- Not just relying on the information that accompanies the product
- Compares products from multiple sources
- Compares product based on features and price rather than based on brand
- Reads terms and conditions in detail

e. Staying informed about financial matters

- Monitors financial indicators
- Checks them frequently
- Good level of applied financial literacy
- Important to keep up to date with financial matters

Detailed information is available in the Baseline Survey on the behaviours and attitudes that drive each component. The survey does not attempt, however, to quantify the relative importance of these drivers. It highlights where certain population groups are relatively strong or weak in a component.

Before attempting to alter the decision-making environment, frequently referred to as the “choice architecture”, it is important to have an understanding of what would be a desirable outcome for a sizeable proportion of people.

The list of behaviours below each component above has been augmented with two additional behaviours (shown in italics) that were found to be statistically significant in a survey of the financial well-being of two UK population groups undertaken by FairBanking, a financial education charity, in 2009.[2]

The FairBanking research showed that the most important driver of financial well-being was “being in control of finances”. This driver was made up of behaviours and attitudes from both the “making ends meet” and “keeping track of your finances” components of financial capability.

Two statistically significant factors of financial well-being were relevant to the “planning ahead” component: firstly, the extent to which a household “adjusts expenditure on non-essentials when life events occur”; and secondly, “thinking of their money in pots for different purposes”.

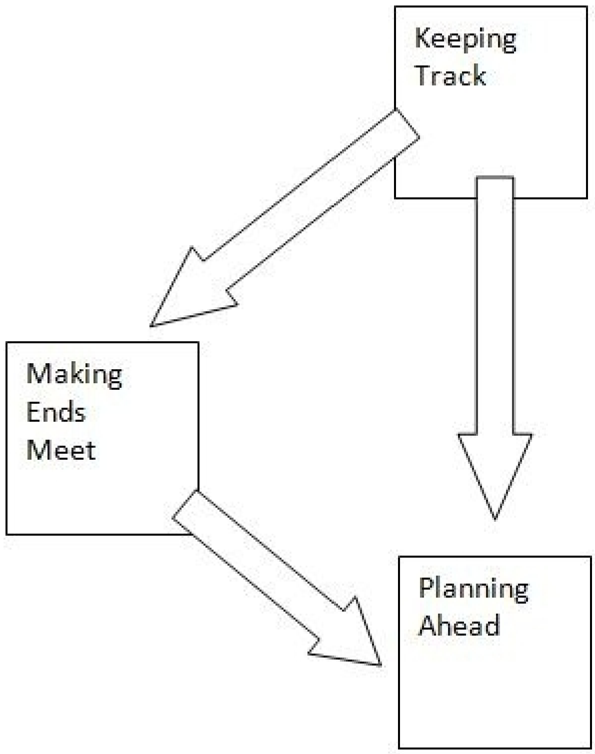
Given the clear importance of these three components of financial capability it was decided that these would represent the focus for this study. These components were also considered to represent the foundation for driving improved financial capability.

That said, elements of “choosing financial products” have been considered in this study. For example, included under the category of incentives in Mindspace are hyperbolic discounting (Section 3.3.2.4) and the overweighting of small probabilities (see Section 3.3.2.5), both of which fall under this component.

One key hypothesis drawn from the research conducted for this report is that there is a conditional hierarchy of financial capability for the three key components considered. This is represented in Figure 2.

[2] Fair banking: the road to redemption for UK banks (Centre for the Study of Financial Innovation, 2009)

Figure 2: Hierarchy of Financial Capability Behaviours



This figure shows that a fundamental component of financial capability is "keeping track". "Keeping track" is desirable for the entire population as, without this capability, the effect of any change in circumstance will be difficult to assess and even more difficult for individuals to take appropriate action.

For many people "keeping track" will also naturally enable them to "make ends meet"; and for these people, it is only when both these objectives have been achieved can they consider "planning ahead".

For many others, "making ends meet" is not a significant problem; and for these people, "keeping track" is a precursor to "planning ahead".

3. Literature review on the behavioural economics of behaviour change in finance

Markets and policymakers impact upon our behaviour. So too do other people, and to a large extent the environment around us. We are often lazy, impatient, averse to losing, we allow our emotions to drive our behaviour and we are also often not very good at forecasting and accounting for the good and bad consequences of our actions. We often behave in automatic and largely unconscious ways, and such effects have been the focus of much of behavioural economics and they are our central (but certainly not sole) focus in this report.

Behavioural economics seeks to combine the lessons from psychology with the laws of economics. It has moved from a peripheral academic activity to one that is increasingly familiar and accepted (Prime Minister's Strategy Unit, 2004; Thaler & Sunstein, 2008). More generally, there is increasing understanding across the behavioural sciences about the factors that change and affect our behaviour. The basic insight of behavioural economics is that our behaviour is guided not by the dictates of rationality embodied in a super-computer that can analyse the cost and benefits of every action. Instead, it is led by our very human, sociable, emotional and sometimes fallible brain. Psychologists have been studying these characteristics for more than a century, and writers and thinkers for much longer (Triplett, 1898). In a nutshell, the mental shortcuts that serve us so well in much of life can also get us into trouble, both as individuals and as societies as a whole.

3.1 Two routes to behaviour change

Two very general paradigms for population-wide behaviour change have emerged in recent years – models and interventions that aim to change cognitions (such as beliefs and attitudes), and models that change the context (environment or situation) within which the person acts. Most traditional interventions, in some way or another, prompt changes in cognitions to bring about behaviour change. Most traditional interventions in public policy take this route, and it is the standard model in economics. This may involve providing new information or changing the incentives. The presumption is that citizens and consumers will analyse the various pieces of information from politicians, governments and markets, the numerous incentives offered to them and act in ways that reflect their best interests. In contrast, the second route relies mostly on contextual changes to bring about behaviour change. The contrasting model of behaviour change focuses on the more automatic processes of judgment and influence. This shifts the focus of attention away from facts and information, and towards altering the context within which people act. The context model recognises that people are sometimes seemingly irrational and inconsistent in their choices, often because they are influenced by surrounding factors. Therefore, it focuses more on 'changing behaviour without changing minds'. Until recently, the second route has received relatively less attention from researchers on behaviour change than the first.

These two approaches are founded on two different ways of thinking and to describe how the two paradigms accomplish behaviour change we first need to explain the underlying psychological mechanisms causing the overt change in behaviour. The two routes accomplish behavioural change relying, to various degrees, on two different types of mental processes. Psychologists have recently converged on the understanding that there are two distinct 'systems' operating in the brain (Thaler & Sunstein, 2008). System 1 is automatic (uncontrolled, effortless, emotional, fast and unconscious) and system 2 is reflective (controlled, effortful, deductive, slow and self-aware).

In practice, this distinction is not so clear-cut: a mix of both reflective and automatic processes governs behaviour. When driving a car, for example, we can focus on the radio and manage to drive on almost autopilot – but if we hear the sound of a horn, we break off and quickly analyse the situation on the road. Our *reflective* system is ignoring everything but the radio, but our *automatic* system is not (Vlaev & Dolan, 2009). Policy-makers attempting to change behaviour need to understand how people use these different systems and how they affect their actions.

This report focuses on the more automatic or context-based drivers of financial behaviour, including the surrounding 'choice environment', or at least on those drivers where the *automatic system* plays a large role. There are several reasons for doing so. The most important is that these automatic processes have been relatively neglected in policy discussions, despite the fact that, as Nobel Laureate in Economics Daniel Kahneman has proclaimed recently, "environmental effects on behaviour are a lot stronger than most people expect" (Kahneman, 2008). In addition, these types of intervention have the potential to offer value for money (see Dolan et al., 2010, for further discussion of these issues). We will however focus initially on some of the mechanisms of changing behaviour through the reflective self.

3.2 Information for rational change

Leaving incentives to one side for the moment, traditional population-wide behaviour change interventions rely on using information, such as arguments and advice, to provoke reflective mental processing, and as a result to change certain cognitions (beliefs) which can have a direct effect on behavioural responses (e.g., choosing a new course of action congruent with new behavioural goals emerging as a result of updated beliefs about health risks). For example, most research on health-related choices involves using information that contain arguments describing either the benefits of adopting a healthy behaviour (e.g., physical wellness) or costs (risks) of unhealthy behaviours (e.g., heart disease) (Gray, 2008). Such 'traditional' interventions attempt to educate agents to adopt a specific behaviour. Thus, information leads to explicit appraisals of costs/risks and benefits related to different behaviours, and ultimately change beliefs about such behaviours.

Giving out information has become a prominent part of the policymakers' tool kit, and its importance is set to increase further (Bridgewater et al., 2007). Almost five decades of research on whether changes in cognitions engender population-wide behaviour change, have been embodied in dozens of psychological theories and documented in hundreds of publications. The domains of application cover most maladaptive and problematic behaviours, which have been the focus of public policy concern. The richest cluster of models and data comprises numerous theories in social and health psychology, which assume that providing information that changes various beliefs produces intentions to change one's behaviour and these in turn affect behaviour. Vlaev and Dolan (2009) analyse the most prominent models in the behaviour change literature and distil the five belief types that interventions usually aim to change (behavioural beliefs, normative beliefs, control beliefs, health beliefs, and self-concept beliefs).

As a result of this expansion of information-based approaches to behaviour change, policymakers are giving citizens more and more information about the performance of schools, hospitals and other public services (see Burgess et al, 2006, for a good review), to be circulated in a myriad of new, innovative and personalised ways. The increased availability of information has significant effects, most of them positive. For example, despite initial controversies, the wider availability of information on surgical survival rates has been shown to drive up outcomes (Bridgewater et al., 2007). The release of public data could lead to a significant increase in economic growth (HM Government, 2010). And information is obviously important in its own right, as it leads to more fully informed (e.g. financial) consumers - even if the information does not always have direct effect on behaviour. We begin, therefore, by discussing some of the more 'traditional' information interventions, which rely broadly on education and changing beliefs.

3.2.1 Education

The impact of education on behaviour would be consistent with the standard economic model, so the greater amount of education we have, the more likely we are to accurately calculate the payoffs for each decision. Lusardi and Mitchell (2006, 2007) argue that investing in the stock market (through shares or pension contributions) is a complex undertaking that requires consumers to gather, process, and project data on compound interest, risk diversification, and inflation, as well as to accumulate knowledge of the asset universe. Their findings suggest that most of the U.S. population is not sufficiently financially literate to cope with the shifting burden of post-retirement planning to the individual. In the UK, Hackethal et al (2009) note however that financial advisors could ameliorate the consequences of differential financial literacy but individuals may be unprepared to make the best decisions for themselves, and may also be more vulnerable to bad advice (Hung et al, 2008). It might be that the people who need the help most are the ones who do not consult financial advice.

Lusardi (2007) finds that financial illiteracy is widespread among the U.S. population. This is especially true for those with a low education, women, African-Americans, and Hispanics. Interestingly, close to half of older workers do not know which type of pensions they have and the large majority of workers know little about the rules governing Social Security benefits. Notwithstanding the low levels of literacy that many individuals display, very few rely on the help of experts or financial advisors to make saving and investment decisions. Lusardi et al (2010) further show that less than one-third of young adults possess basic knowledge of interest rates, inflation, and risk diversification. Financial literacy was strongly related to socio-demographic characteristics and family financial sophistication. Specifically, a college-educated male whose parents had stocks and retirement savings was about 45% more likely to know about risk diversification than a female with less than a high school education whose parents were not wealthy.

The evidence from Meier and Sprenger (2008) argues that a main limit to financial literacy is people's time preferences. They analyse a field experiment, where a short, free credit counselling and information program was offered to more than 870 individuals. About 55% chose to participate. Independently, they elicited time preferences using incentivised choice experiments both for individuals who selected into the program and those who did not. They show that the two groups clearly differ in their measured discount factors, in that individuals who choose to acquire personal financial information through the credit-counselling program discount the future less than individuals who choose not to participate.

The theoretical and empirical economics research literature on investment advice has largely been concerned with the moral hazard problem of the advisor-advisee relationship (e.g. Liu, 2005, Hackethal et al, 2009). Relatively little evidence exists about whether good investment advice really works. Although regulators and legislators are deeply engaged in a significant effort to make financial advice more accessible to the everyday investor in a neutral setting, the practical benefit in terms of behaviour change is not a foregone conclusion. Indeed, there is remarkably little causal empirical evidence about individual responsiveness to financial advice outside an environment with moral hazard.

Although it is difficult to draw conclusions about when individuals seek advice, the research literature strongly suggests that individuals who do solicit advice are more likely to follow that advice than individuals who receive unsolicited advice. Indeed, a robust finding is that individuals who receive advice by default tend to significantly discount it (Bonaccio and Dalal, 2006; Yaniv, 2004a; Yaniv, 2004b; Yaniv and Kleinberger, 2000), which has large implications for public policy on finance, in that defaults might work in the opposite direction. While explicitly solicited advice is perceived as helpful, unsolicited advice or imposed support is perceived as intrusive, which might even lead to the wrong behaviours (Deelstra, 2003; Goldsmith, 2000; Goldsmith and Fitch, 1997). In a similar vein, Gino (2008) shows that individuals are significantly more receptive to advice that they pay for, rather than advice they get for free. This resonates with the infamous Waber et al (2008) study, where patients recover faster with a placebo if they know that the placebo was expensive.

Since individuals actively choose to seek out advice, any correlations between actual behaviour and advice may be the result of self-selection: individuals who are particularly prone to certain types of investing behaviour may also be more likely to seek out advisors. Hackethal et al (2009) find that self-selection largely explains their finding of better outcomes for advisees in the context of German internet brokerage accounts. These online brokerage clients however are likely to represent a population with experience and objectives that are quite different from the average individual. Kramer (2009) also finds that portfolio allocations of Dutch investors vary with advice, but performance does not.

Hung and Yoong (2010) try to unpick causality by providing advice to those who ask for it and those who do not ask, and compare to a standard control group. They find that unsolicited advice has no effect on investment behaviour, i.e. individuals who are simply given advice disregard it almost completely. When advice is optional, individuals with low financial literacy are more likely to seek it out. But in spite of this negative selection on ability, individuals who actively solicit advice indeed perform better. Solicited advice does indeed appear to have more of an effect than unsolicited advice, although the magnitude of self-selection effects can overshadow actual treatment effects.

Bernheim and Garrett (2003) found that saving rates increase significantly with the provision of employer-based education. Employees who are offered retirement education are far more likely to participate in 401(k) programs, and to make larger contributions to their plans. The effects of education are particularly pronounced among those least inclined to save; however, there is some indication that education stimulates 401(k) contributions among high savers by relaxing non-discrimination constraints. Using data from Merrill Lynch, and a telephone survey of 3,500, the authors employ a difference-in-difference approach and assume that timing of the introduction of state-mandated financial education is exogenous. They conclude that the mandates led to a 1.5% higher saving rate.

It turns out however that there is evidence against Bernheim & Garrett's result. Cole and Shastry (2008) use Census data, and thus a larger dataset, allow for the inclusion of state fixed effects to control for unobserved, time-invariant heterogeneity in savings behaviour across states, as well as non-parametric identification of the treatment effect itself (rather than a linear measure of years-since-mandate-began employed by Bernheim & Garrett). Once these three enhancements are implemented, all treatment effects fall to a precisely estimated zero, thus both eliminating the conclusion that financial literacy as implemented under this program had any effect, and demonstrating a key endogeneity issue that plagues this literature (that rollout of programs is responsive to demand and thus extensive work must be done to create convincing counterfactuals).

Overall, one strong implication for policymakers is that a paternalistic approach to advice may not succeed, for example, making advisory services mandatory for every employee may be extremely costly but achieve no real behavioural change. In many situations, policymakers may find compulsory financial counselling an attractive remedy. These results suggest this is not likely to work if the target population are not inherently prepared to take advice, even if they are truly lacking the necessary skills.

3.2.2. Changing beliefs

We can think about beliefs in two ways: (i) beliefs that create behaviours; and (ii) behaviours that create beliefs (i.e. behaviours-as-information that changes beliefs). The former is consistent with the standard economic model and the theory of planned behaviour in psychology that has dominated many interventions, especially those to do with improving people's information set or education. The latter is related to cognitive dissonance (Festinger, 1957), and there are many examples of such dissonance in people's behaviour.

How cognitive dissonance works for financial behaviour is not clear-cut. For the financial system as a whole, it is clear that markets do turn out to be reasonably efficient, but trading volumes and price volatility in real markets are a great deal higher than the standard theory predicts (Shiller 1981), so the view that behaviour shapes beliefs could be justified. Research by Goetzmann and Peles (1997) shows that investors' decisions of mutual funds tend to induce selective perception of information about the efficacy of their choice – they find that even well-informed investors tend to bias their perceptions about past performance.

Beliefs are inextricably linked to other aspects of behaviour change, such as ego, which we will come onto later on in this report. For instance, Aronson (1992) argues that an individual's dissonance is particularly acute when the inconsistency between choice and beliefs reflect on self-image. So it might be that behaving in a particular way in terms of saving will change your beliefs about saving. This suggests that to change behaviour, we would have to make individuals behave in a way for long enough for them to shape their beliefs. Knowing the temporal aspects of this change for financial decision-making is crucial.

Moreover, the standard economic model suggests that beliefs shape behaviour, but one of the major assumptions underlying this is that people can accurately forecast the impact of a future behaviour on their well-being. There is however a great deal of evidence that this is not the case, and that people exhibit affective forecasting (Wilson & Gilbert, 2005). In a nutshell, affective forecasting suggests that people over-rate how good or how bad a future state of the world will impact on them – there is a great deal of evidence from moving locations, getting academic tenure, and national elections (Wilson et al, 2000). For finance, people might not think that being in a large amount of debt will impact on their well-being, but in the experience of debt, it might be very detrimental. So presenting evidence on what other people have gone through might make their beliefs more consistent with what actually happens.

This is also related to optimism bias. De Meza et al (2008) has already argued that optimism bias is a prime cause of financial incapability, in that people overestimate future wealth which leads to inadequate future saving. There has been little causal research that has attempted to change financial behaviour through changing people's optimism (i.e. their beliefs about future states/outcomes) – and some psychologists would undoubtedly argue that optimism is a personality trait that cannot be changed.

Sometimes information through education and seeking to change beliefs can backfire and lead to even more detrimental results (compared to the status quo). For example, local authorities usually battle high rates of teenage pregnancies by having previous teenage parents come and talk to children in schools about why they regretted getting pregnant so young, which was found to have the exact reverse effect on many young people – it helped them imagine themselves in that situation, made it seem more normal, and the young mothers themselves seemed rather impressive and grown-up (see Dolan et al. 2010, p. 81, for more details). In addition, the weaknesses of information and leaflets was that it concentrated on facts and figures about sex rather than the more potent influences on behaviour such as self-image and social pressure. Such examples motivate the search for new insights into how human behaviour is influenced by various subtle situational factors.

The full framework, including the information for rational change section, is summarised in Appendix 1 in terms of academic references. The best behaviour change policies will be those that join up interventions to change minds through education and information alongside those that create contexts and environments that give our automatic system the 'best shot' at behaving in ways that we ultimately consider to be in our best interests. In fact, the best policies of all will be those that additionally join-up legal, regulatory and cultural change. The reduction in driving whilst under the influence of alcohol is seen as one of the classic cases of joining up all of these elements. We fully recognise the need for more 'direct action' on our behaviour in certain circumstances but there is still much more that can be done with soft nudges that go with the grain of human behaviour rather than hard shoves. We hope to set out some of the most robust and promising ways of doing so.

3.3 MINDSPACE – largely automatic processes in changing behaviour

The elements described here are those that we consider to be the most robust effects that operate largely, but not exclusively, on the *automatic system*, which illustrate some of the main 'tools' in influencing behaviour. This approach does not claim to cover all of the possible effects on behaviour, and we do not deal with more traditional interventions that rely on providing information and education. Nevertheless, Dolan et al (2010) outline nine robust influences on human behaviour and change. These principles are underpinned by laboratory and field research from social psychology, cognitive psychology and behavioural economics; they are therefore presented as the most robust. The following section briefly explains these effects, which we have arranged according to the mneumonic: MINDSPACE (see Figure 3).

Figure 3: MINDSPACE categories

Messenger	We are heavily influenced by who communicates information.
Incentives	Our responses to incentives are shaped by predictable mental shortcuts such as strongly avoiding losses.
Norms	We are strongly influenced by what others do.
Defaults	We 'go with the flow' of pre-set options.
Salience	Our attention is drawn to what is novel and seems relevant to us.
Priming	Our acts are often influenced by sub-conscious cues.
Affect	Our emotional associations can powerfully shape our actions.
Commitments	We seek to be consistent with our public promises, and reciprocate acts.
Ego	We act in ways that make us feel better about ourselves.

3.3.1. Messenger

We are heavily influenced by who communicates information, and this effect is mediated by the reactions we have to the source of that information. We are affected by the perceived authority of the messenger (whether formal or informal). For example, people are more likely to act on information if experts deliver it. Health interventions delivered by research assistants and health educators are more effective in changing behaviour compared with interventions delivered by either trained facilitators or teachers – and health educators are usually more persuasive than research assistants (Webb & Sheeran, 2006). An important aspect of messenger is the demographic and behavioural similarities between the messenger and the recipient, which can improve the effectiveness of the intervention. For example, those from lower socioeconomic groups are more sensitive to the characteristics of the messenger being similar to them (such as age, gender, ethnicity, social class/status, culture, profession, etc.), and this highlights the need to use messengers from diverse social and behavioural backgrounds (Durantini et al., 2006).

In a randomized experiment on enrolment in the Tax Deferred Account (TDA) in the US by Duflo and Saez (2003), a random sample of employees in a subset of departments were encouraged to attend a benefits information fair organized by the university. Enrolment in the TDA eleven months after the fair was significantly higher in departments where some individuals were treated than in departments where nobody was treated. The interpretation of this result can be messenger effects and social norm effects. The messenger effects are that friends and colleagues in the same department are telling their colleagues about the benefits of enrolment, and social norm effects operate by creating the norm of enrolment within a department.

3.3.2. Incentives

One of the basic laws of economics is that we respond to incentives. We can respond in 'standard' ways consistent with economic theory but also by using predictable mental shortcuts that can be categorised in five ways: loss aversion, reference dependence, hyperbolic discounting, overweighting small probabilities and mental accounting.

3.3.2.1 'Standard' incentives

It is undoubtedly true that lowering interest rates makes people save less, spend more, and people are more likely to get into debt – these are rational responses. Gross and Souleles (2002) analyze how people respond to the supply of credit using a unique credit card dataset, and they find that increases in the limit to credit generates an immediate and significant rise in debt.

In a randomized experiment with a community bank in Kenya, Dupas and Robinson (2009) provided monetary incentives of $8.50 to open a savings account to entrepreneurs, for whom the researchers paid the fee to open the account and provide the minimum account balance ($7 + $1.50). The control group received no incentives but were not barred from opening an account, so the only thing that was different between the treatment and control group was the monetary incentive. The three main results were: 1) the savings accounts had substantial positive impacts on investment for women, but no effect for men; 2) women in the treatment group had higher daily average private expenditures than those of women in the comparison group; and 3) the treatment group made women less vulnerable to illness shocks, so that they are more able to smooth their labour supply over own illness.

Minor barriers to saving such as application costs or waiting times, can discourage participation out of proportion to the magnitude of the costs they impose (Bertrand et al, 2006). There is a concern, however, that programme non-participants are then not those who value the saving vehicle the least but instead those who understood the rules the least or faced the biggest procrastination problem.

3.3.2.2. Loss aversion

Losses loom larger than gains because we dislike losses more than we like gains of an equivalent amount (Kahneman & Tversky, 1979). Benartzi and Thaler (1995) use a calibration to show that the equity premium is consistent with what loss-averse investors require to invest in stocks, provided that they evaluate their portfolio performance annually. At horizons as short as a year, the likelihood that stocks under-perform relative to bonds requires a substantial compensation in terms of returns, given loss aversion. At a longer horizon, the likelihood of under-performance decreases, and the implied equity premium decreases. Their model assumes that investors, when evaluating the holdings, make no distinctions between realised gains/losses and "paper" gains/losses. Investors, however, may treat the two utility carriers asymmetrically and derive utility (or disutility) only from realised gains and losses. Investors may even go as far as distancing themselves from the paper losses. For instance, Karlsson et al (2005) show that investors are substantially less likely to look at their holdings on the internet when the stock market is doing poorly.

Tax cuts that reduce withholding might be more effective than lump sum rebates. This was based in part on past experiences that suggest a greater willingness to spend out of reduced withholding, such as shown in Shapiro and Slemrod (1995), which found a propensity to spend out of a reduction in withholding rates even in the absence of a change in the tax rate. And also on a recent laboratory experiment by Chambers and Spencer (2008), which found subjects were more likely to plan to spend a hypothetical tax cut delivered as many small payments rather than one delivered as a lump sum.

Epley et al (2006) provide primary evidence that loss aversion matters to saving and spending. The authors find that tax cuts presented as a “bonus” might be more likely to be spent than tax cuts presented as a “rebate”. The authors interpret this as when individuals perceive the tax cut as a gain (a “bonus”) rather than as a foregone loss (a “rebate”), they are more likely to spend the tax cut, although it can also be due to loss aversion. This clearly suggests that the framing of prospects in terms of losses and gains can actively change behaviour. In a similar loss aversion context from a recent study, participants were asked to deposit money into an account, which was returned to them (with a supplement) if they met weight loss targets (Volpp et al., 2008). This proved to be an effective intervention.

3.3.2.3. Reference dependence

Reference points matter. In a paper that carefully formalises the idea of Benartzi and Thaler (1995) above, Barberis et al (2001) show that reference dependent preferences can indeed match the observed equity premium. They model asset prices where investors derive direct utility from both consumption and from fluctuations in the value of their financial wealth i.e. they are loss averse over these fluctuations, and how loss averse they are depends on their prior investment performance. They find stock returns have a high mean, are excessively volatile, and are significantly predictable in the time series. They are also only weakly correlated with consumption growth. Their results stem from an economy containing a single risky asset, so it unknown whether investors are loss averse over changes in the value of individual securities that they own, or only over portfolio fluctuations.

Two key papers show that reference-dependent preferences are important to decision-making. The first is Camerer et al (1997) who tested the positive relationship between hours supplied and transitory changes in wages for New York City taxi drivers. They find that taxi drivers make labour supply decisions "one day at a time" instead of inter-temporally substituting labour and leisure across multiple days, and set a daily income target and quit working once they reach that target. In effect, their reference point is a daily earnings target and beyond which they are less likely to work. Farber (2008) however suggests that this reference point can shift daily. Crawford and Meng (2009) use Koszegi and Rabin’s (2006) model of targets for hours as well as income and found that stopping probabilities are significantly related to hours. This suggests that reference-dependence is not too unstable to yield a useful model of labour supply.

The second key paper is by Fehr and Goette (2007), who present causal evidence of the importance of reference-dependent preferences in the labour market. They tested the positive elasticity of hours with respect to wages by conducting a randomised field experiment with bicycle messengers. Due to randomisation, they can observe the way in which working hours as well as effort respond to a wage increase and control for the workers’ anticipation of the wage increase. They find that with higher wages, workers increase monthly working time and decrease their daily effort, but overall the working time effect dominates the effort effect.

As an example of reference dependence in a health context, many people tested for HIV/AIDS in Malawi do not pick up their result, but offering very small incentive can get people to pick up their HIV result. Importantly, the biggest jump is between zero and the incentive of one-tenth of a day's wage is enough to increase take up by 50%. Offering more money further affects behaviour but to a much lesser degree. This result is consistent with diminishing marginal utility of income but the rate at which utility declines when income rises would have to be very steep indeed. Instead, the results suggest that the utility of money is judged relative to very locally and narrowly determined reference points (Thornton, 2008).

The really interesting point for changing financial behaviour is whether the reference point can be moved by policy or an intervention. If it can be shown that this is the case, then this has large implications for financial policy. Some preliminary evidence from Abeler et al (forthcoming) suggests that reference points can be changed. Their introductory paragraph sums up what they are showing "Imagine two identical workers. One expected a salary increase of 10% but received an increase of only 5%. The other received the same 5% wage increase but had not expected an increase. The change in income was the same for both workers, but the first worker probably feels less satisfied". They test this using a lab experiment in which subjects had to perform a repetitive and tedious task, and found that those individuals who had their expectations raised were less likely to provide effort to the task. This has implications to financial behaviour, and links with mental accounting. For instance, if a saver is told by her bank that she should be saving x% into her savings account, and is not able to achieve that in the first time period, she might be less likely to save in the next time period.

3.3.2.4. Hyperbolic discounting

We prefer to live for today at the expense of tomorrow. We usually prefer smaller, more immediate payoffs to larger, more distant ones. £10 today may be preferred to £12 tomorrow. But £12 in eight days may be preferred to £10 in a week's time. This implies that we have a very high discount rate for now compared to later, but a lower discount rate for later compared to later still. This is known as 'hyperbolic discounting' and it leads people to discount the future very heavily when sacrifices are required in the present – for example, to ensure improved environmental outcomes in the future (Hardisty & Weber, 2009). There is evidence that the immediacy of reward has an impact on the success of schemes to treat substance misuse disorders (Lussier et al., 2006). Hyperbolic discounting can be used in designing incentive schemes to more effectively use the size and timing of rewards offered.

The standard economic model cannot reconcile high credit card borrowing and substantial illiquid wealth accumulation, since credit card borrowing implies high impatience, and this is inconsistent with wealth accumulation (Laibson, 1997). Ausubel (1999) provides evidence on this impatience with credit card offers using a credit card company that mails out offers to potential customers. The pre-introductory and the post-introductory interest rates were randomised across the sample. Compared to an offer of 6.9% interest rate for six months and 16% thereafter (the control group), the treatment group "Pre" received a lower pre-introductory rate (4.9% followed by 16%); the treatment group "Post," instead, received a lower post-introductory rate (6.9% followed by 14%). Ausubel found that consumers are at least three times as responsive to changes in the introductory interest rate as compared to dollar-equivalent changes in the post-introductory interest rate. So contrary to the standard model, Ausubel found that individuals respond too much to the pre-teaser interest rate, which suggests that individuals are impatient.

Ashraf et al (2006) analyse hyperbolic discounting with the demand for illiquid savings as a commitment device. They offer an account with a commitment device to 842 randomly determined households in the Philippines with a pre-existent bank account. Access to funds in these accounts is constrained to reaching a self-specified savings goal or a self specified time period. A control group of 466 households from the same sample is offered a verbal encouragement to save but no commitment. In the treatment group, 202 of 842 households take up the commitment savings product. In the 842 treatment households, savings in the bank after six months are significantly more likely to increase, compared to the 466 control households that received a pure encouragement. So people that recognise that they are impatient are willing to constrain themselves.

Meier and Sprenger (2010) test whether present-biased time preferences correlate with credit card borrowing. In a field study, they elicit individual time preferences with incentivised choice experiments, and match resulting time preference measures to individual credit reports and annual tax returns. The results indicate that present-biased individuals are more likely to have credit card debt, and to have significantly higher amounts of credit card debt, controlling for disposable income, other socio-demographics, and credit constraints. This shows that hyperbolic discounting can be used to change behaviour but also as a barrier as to why some people are in debt or do not save for the future.

3.3.2.5. Overweighting small probabilities

There is now ample evidence that people overweight low probabilities (Tversky and Kahneman, 1992; Gonzalez and Wu, 1999), and this explains the widespread desire to gamble on low-probability events (e.g., lottery tickets) and to insure against low-probability catastrophes. There is however little field evidence on the ability to change the perception of the probability of events and the impact it has on behaviour, especially financial behaviour. The only related evidence is from Johnson et al (1993), who showed that consumers' decisions about insurance is impacted by distortions in their perceptions of risk and by alternative framing of premiums and benefits. In particular, they made health insurance more attractive by making the cause of hospitalization more specific and available. When subjects were first asked how much they would pay for insurance against any disease and then any accident (thus isolating vivid causes), the price reported was more than twice that reported (how much they would pay for insurance) for protection for any reason.

3.3.2.6. Mental accounting

We mentally allocate money to discrete bundles. We think of money as sitting in different “mental accounts” – salary, savings, expenses, etc. Spending is constrained by the amount sitting in different accounts and we are reluctant to move money between such accounts (Thaler, 1999). This means that policies may encourage people to save or spend money by explicitly ‘labelling’ accounts for them, but still leaving freedom to choose how the money is used. Mental accounting means that identical incentives vary in their impact according to the context: people are willing to take a trip to save £5 off a £15 radio, but not to save £5 off a refrigerator costing £210 (Thaler, 1985).

Such accounts should generate a “good” savings default to replace the “bad” money. In addition, the transfer of cash from, say, checking to savings can trigger the expected propensity to save more. In fact, bank accounts could be designed specifically to conform to people’s “mental accounting” schemes (Thaler, 1999). People may choose to label one account the “fridge account,” another the “education account,” or yet another the “car account.” The labelling of accounts, while nonsensical from the perspective of standard economic assumptions of fungibility, could help with the allocation and safe-keeping of specific funds and may provide a salient reminder of what one is saving towards. Abeler and Marklein (2008) suggest that people with lower mathematical abilities are more likely to violate fungibility.

Barr (2004) describes the Puerto Rican Banco Popular’s Acceso Popular account, which has a $1 monthly fee, no minimum balance, free ATM transactions, and free electronic and telephone bill payment. To encourage savings, Acceso Popular has a savings account into which small sums (initially, $5 per month) are automatically transferred from the Acceso Popular transaction account. The savings account pays modest interest. Funds may only be withdrawn by going to the bank and account holders must pay a fee to see a bank teller more than once a month to discourage withdrawals. Banco Popular opened nearly 60,000 such accounts in 2001, with half of those activating the savings ‘mental’ account in their accounts.

One recent policy innovation to encourage this behaviour has been the advent of split refunds. Since 2007, individuals have been able to split their refunds across multiple accounts, including savings accounts and IRAs (Karlan & Morduch, 2009). Evidence suggests that this policy might work to encourage saving (Beverly et al, 2006) – their pilot study suggests there is demand among low-income people for a refund-splitting program that supports asset building. Karlan and Morduch (2009) argue that eliminating cash-in-hand, direct deposit naturally reinforces the good default situation. On the demand side, this requires a stronger marketing of direct deposit among the lower-income population. On the supply side, employers of the poor should be encouraged to more widely provide this payment method to their employees.

The work by Almenberg and Karapetyan (2009) uses mortgage decisions of Swedish households, where households debt-finance the purchase of a home in two ways. They can take out a large personal loan and buy a share in a co-op with low leverage, or take out a smaller personal loan and buy a share in a co-op with high leverage. The two sources of debt-financing are substitutes. In theory, under the appropriate conditions, it should not be possible to add value to an apartment by changing its capital structure. A consumer who is choosing between different apartments makes a choice between different capital structures. Assessing the value of an apartment conditional on the amount of debt held by the co-op is demanding in terms of financial literacy and numeracy, not least since the relative cost of the two sources of debt has varied over time. Currently, interest payments on individually held debt are tax deductible, whereas interest payments through the co-op are not. This discrepancy makes debt-financing through the co-op almost 50% more expensive than individually held debt. Their survey data indicate that many consumers do not have a clear under-standing of the optimization problem, and they find a pervasive tendency to compartmentalize the two sources of debt-financing, i.e. have a mental account. Changing the interpretation of accounts might be helpful in changing people's behaviour in this instance.

3.3.3. Norms

We tend to do what those around us are already doing. Social and cultural norms are the behavioural expectations, or rules, within a society or group. Norms can be explicitly stated or implicit in observed behaviour. People often take their understanding of social norms from the behaviour of others. Some social norms have a powerful automatic effect on behaviour (e.g. buying on credit, being quiet in a library) and can influence actions in positive and negative ways. Their power may come from the social penalties for non-compliance, or the social benefit that comes from conforming. Behavioural interventions using social norms have been successful in a number of areas, and most are based on telling people what other people do in a similar situation (see Vlaev & Dolan, 2009, and DellaVigna, 2009 for a review). Duflo and Saez (2003) show how norms operate in the context of enrolment into the TDA: the financial behaviour of work colleagues affects the decision about whether to enrol or not. Most of the examples of the powerful effects of norms come from outside of the financial domain.

In seatbelt use, the 'Most of Us Wear Seatbelts Campaign' used a social norms approach to increase the number of people using seatbelts by informing residents of the proportion of people who used seatbelts, which resulted in increasing the self-reported use of a seatbelt (London Assembly, 2005). Alternatively, interventions can relate the norm to the target audience as much as possible. Goldstein et al. (2008) demonstrated this principle in a field experiment in recycling, which showed that a hotel-towel reuse sign conveying information about social norms might be more persuasive than a sign widely adopted throughout the hotel industry. In particular, a message conveyed that most previous occupants of the room had reused towels at some point during their stay, which had even stronger effect on recycling behaviour, producing 33% increase compared with the standard environmental appeal. The lessons from this could easily be taken to savings and choosing financial products, but much more research is warranted.

In energy conservation, a large-scale programme (80,000 homes) sent letters that provided social comparisons between a household's energy use and that of its neighbours (as well as simple energy consumption information). The scheme was seen to reduce energy consumption by 2% relative to the baseline. Sometimes campaigns can increase perceptions of undesirable behaviour (Allcott, 2009). When households were given information about average energy usage, those who were consuming more than the average reduced their consumption – but those who were consuming less than the average increased their consumption. This 'boomerang' effect was eliminated if a happy or sad face was added to the bill, thus conveying social approval or disapproval (Schultz et al., 2007).

3.3.4. Defaults

We 'go with the flow' of pre-set options. Defaults are the options that are pre-selected if an individual does not make an active choice. Many decisions we take every day have a default option, which often goes unrecognised. Defaults exert influence as individuals regularly accept whatever the default setting is, even if it implies very different consequences. Many public policy choices have a no-action default imposed when an individual fails to make a decision. This default setting is often selected through natural ordering, convenience, or even arbitrarily, rather than a desire to maximise benefits for citizens. Structuring the default option based on a desire to maximise benefits for citizens can influence behaviour without restricting individual choice.

The best examples of defaults have come from financial behaviour. Madrian and Shea (2001) consider the effect of a change in a default on the contribution rates in retirement savings in the U.S. Before the change, the default is non-participation in retirement savings; after the change, the default is participation at 3% in a money market fund. In both cases, employees can override the default, so it remains libertarian. Madrian and Shea (2001) find that the change in default has a very large impact: one year after joining the company, the participation rate in 401(k)s (the retirement vehicle) is 86% for the treatment group and 49% for the control group.

Choi et al (2004) extend the Madrian and Shea findings to show that they are generalizable to six companies in different industries with remarkably similar effect sizes. In a further study, Cronqvist and Thaler (2004) examine the choice of retirement funds in Sweden after the privatization of social security. They find that 43% of new participants choose the default plan, despite the fact that the government encouraged individual choice, and despite the availability of 456 plans. Three years later, after the end of the advertisement campaign encouraging individual choice, the proportion choosing the default plan increased to 92%. Overall, the finding of large default effects is one of the most robust results in the applied economics literature over the last ten years (DellaVigna, 2009). This makes a change in defaults as one option open for policymakers to change financial behaviour.

There is evidence that the use of opt-out defaults can be effective for organ donation rates (Johnson & Goldstein 2003), choice of car insurance plan (Johnson, Hershey, Meszaros, & Kunreuther, 1993), car option purchases (Park, Yun, & MacInnis, 2000), and consent to receive e-mail marketing (Johnson, Bellman, & Lohse, 2002).

To qualify for food stamps in the U.S., individuals have to complete a cumbersome application process. To qualify for the EITC however is to complete a marginal set of steps on a tax return that many qualifying individuals would file in any event. Estimates suggest that only about 67% of eligible individuals receive food stamps, while the EITC may reach as many as 94% of eligible households (Blumenthal et al, 2005), which may suggest that default application forms matter, although it might also be ego utility – see later.

3.3.5. Salience

Our attention is drawn to what is novel and seems relevant to us. Our behaviour is greatly influenced by what our attention is drawn to (Ariely et al, 2003; Kahneman & Thaler, 2006). In our everyday lives, we are bombarded with stimuli. As a coping strategy, we tend to unconsciously filter out much irrelevant, redundant, and familiar information. Salience could explain why unusual or extreme experiences are more prominent than more constant experiences. Our memory of experiences is governed by the most intense 'peak' moments, as well as the final impressions in a chain of events (Kahneman et al., 1993). Peak-end effects imply that, for example, patients may prefer hours of steady discomfort over the one sharp pang of pain, because that pang is particularly salient (and hence clinicians may be able to predict which medical treatments would be avoided by patients).

People have limited attention span, and financial choice is affected by anything that falls within this focus. In this respect, the popular term ‘paying attention’ properly epitomizes this mental property – we must ‘pay for it’ by not attending to something else. Simplifying the information in choice environments, e.g. by making the most relevant information salient, is therefore necessary, because complexity (e.g. having many options to choose from, having many pieces of information to take into account) and the subsequent confusion may lead people to inaction or wrong choices. Madrian and Shea (2001) provide evidence that people procrastinate when they have to make complex financial decisions, which is related to the phenomenon of ‘choice overload‘ that has been documented by Schwartz (2005) and other researchers. Another illustration of the perils of ‘too much choice‘ and ‘information overload’ is that of the Medicare Prescription Drug Plan in the US that offers various drug discount cards that differ in monthly premiums and deductibles. Enrolment in the plan is low since most senior citizens find the task of choosing a card overwhelming and fear selecting the wrong card (Botti & Iyengar, 2006). In this respect, when there is financial information overload, people are unlikely to seek more information (de Meza et al 2008) and we would not expect them to stay informed about financial matters.

Evidence suggests that salience matters to behaviour related to taxation, both commodity and labour taxes. In the case of commodity taxes, research has shown that some taxes are somewhat ignored by consumers, especially in the short-run. Chetty et al (2009) show how individuals largely ignore taxes that are not ordinarily included in marked prices. A related piece of evidence comes from the work of Finkelstein (2009) who studied the effects of automated toll collection, finding that individuals pay less attention to tolls collected in this less salient manner. In the case of taxes on labour, emerging evidence finds that the behavioural response to income taxes is also muted by their complexity. Saez et al (2009) finds little evidence that tax-payers bunch at kink points in the income tax schedule, a result consistent with imperfectly rational taxpayers failing to accurately perceive a complex and opaque tax code.

The complexity of benefits and the imperfectly rational behaviour can combine to create new opportunities for tax policy to improve social welfare. One situation where complexity can create such an opportunity is when the complexity of a tax leads individuals to respond to a tax in error, but that error leads individuals to respond in a way that fits with policymakers’—and possibly society’s—preferences (Barr et al, 2008). For example, the result that the EITC in the U.S. strongly encourages work may be due in part to the fact that the EITC follows a complicated schedule, to which recipients can bring only limited attention and limited computational resources. What evidence is available does suggest that EITC eligible individuals do possess only imperfect knowledge of how the credit operates (Smeeding et al, 2000; Chetty and Saez, 2009). The evidence of the impact of the EITC on labour force participation and hours worked is consistent with a model in which individuals only understand the work incentives of the EITC in some approximate sense, suggesting the strong impact of salience.

The framing and salience of tax cuts can affect whether and when they are spent. The results of experimental work documented earlier by Epley et al (2006) provide the primary piece of evidence that this is the case. The authors find that tax cuts presented as “bonus” might be more likely to be spent than tax cuts presented as a "rebate". Salience has caused individuals to focus their attention on either the bonus or rebate.

Brown et al (2008a) use framing for annuitisation decisions. They hypothesise that when consumers think in terms of consumption, annuities are viewed as valuable insurance, whereas when consumers think in terms of investment risk and return, the annuity becomes a risky asset because the payoffs depends on an uncertain date of death. Brown et al (2008a) randomised frames to a group of over 50s, and found that the vast majority of individuals prefer an annuity over alternative products when the question is framed in terms of consumption, while the majority of individuals prefer non-annuitized products when the questions are presented in terms of risk and return. Brown et al (2008b) demonstrate that this result is not dependent on the initial purchase price.

Hardisty et al (2010) explored the effect of attribute framing on choice, labelling charges for environmental costs as either an earmarked tax or an offset. Individuals chose between otherwise identical products or services, where one option included a surcharge for emitted carbon dioxide. The cost frame changed choices for self-identified right-wing individuals, but did not affect the choices of left-wing individuals. The effect of attribute labelling is shown to depend on the representations of either taxes or offsets held by people with different political preferences. Aspects of salience linked with the attribute framing could be very important for financial capability.

Giving feedback is one of Thaler and Sunstein's (2008, pp. 81-100) six principles (or nudges) of good choice architecture. Giving feedback involves, for example, salient warning signs in a way that gives information when people are doing well and when they are making errors. For example, white paint that stays pink until it dries out in order to enable the painter to see what areas have already been painted.

3.3.6. Priming

Priming seems to act outside of conscious awareness and research has shown that primes do not always have to be subliminal to work. Priming explains that people's subsequent behaviour may be altered if they are first exposed to (primed by) certain stimuli such as words, sights, or sensations (and these effects are real and robust). Examples abound in the literature. Exposing people to *words* relating to the elderly (e.g. *wrinkles*) meant they subsequently walked more slowly when leaving the room and had a poorer memory of the room. In other words, they had been 'primed' with an elderly stereotype and behaved accordingly (Dijksterhuis & Bargh, 2001). Asking participants to make a sentence out of scrambled words such as *fit*, *lean*, *active*, *athletic* made them significantly more likely to use the stairs, instead of lifts (Wryobeck & Chen, 2003). Drouvelis et al (2010) show the impact of a wordsearch with cooperative words has on cooperative behaviour in a public goods game.

Priming has the potential to change financial behaviour in the field, but we do not know enough about the sustainability for priming to change long-term behaviour. One small-scale experiment is that of Stewart (2009) who uses the same anchoring approach that was made infamous by Ariely et al (2003) and Tversky and Kahneman (1974). Stewart uses the anchoring approach to minimum repayments on hypothetical credit card debt. He finds that the minimum-repayment information anchors the size of hypothetical repayments. There needs to be further work that analyses such anchors and primes in real data over time.

3.3.7. Affect

Affect (the act of experiencing emotion) is a powerful force in decision-making. Emotional responses to words, images and events can be rapid and automatic, so that people can experience a behavioural reaction before they realise what they are reacting to (Zajonc, 1980). Some studies have examined the link between emotions and financial decision-making directly. In Landry et al (2006), in a door-to-door marketing of a fundraising appeal, the authors found that the physical attractiveness of the door-to-door salespeople was far more important than the lottery that was being offered to some. They found that a one-standard deviation increase in physical attractiveness among women solicitors increases the average contributions by 50%-135%**.** Similarly, in a developing country setting, Bertrand et al. (2010) find that adding a photo of a woman to a direct mail solicitation increases the likelihood of borrowing by just as much as dropping the interest rate by about 30%, for both men and women alike.

Provoking emotion can change health behaviours too. Attempts to promote soap use in Ghana were originally based around the benefits of soap – but only 3% of mothers washed hands with soap after toilet use. Researchers noted that Ghanaians used soap when they felt that their hands were dirty (e.g., after cooking or travelling), that hand-washing was provoked by feelings of disgust. As a result, the intervention campaign focused on provoking disgust rather than promoting soap use. Soapy hand washing was shown only for 4 seconds in one 55-second television commercial, but there was a clear message that toilet use prompts worries of contamination and disgust, and requires soap. This led to a 13% increase in the use of soap after the toilet and 41% increase in reported soap use before eating (Curtis et al 2007).

3.3.8. Commitments

We seek to be consistent with our public promises, and reciprocate acts. We tend to procrastinate and delay taking decisions that are likely to be in our long-term interests (O'Donoghue & Rabin, 1999). Many people are aware of their will-power weaknesses (such as a tendency to overspend, overeat or continue drinking) and use commitment devices to achieve long-term goals. It has been shown that commitments tend to become more effective as the costs for failure increase. One common method for increasing such costs is to make commitments public, since breaking the commitment will lead to significant reputational damage. Even the very act of writing a commitment can increase the likelihood of it being fulfilled, and commitment contracts have already been used in some public policy areas (Cialdini, 2007).

In the Ashraf et al (2006) study already documented for hyperbolic discounting, clients could not withdraw funds until a goal was reached (this is a date or a monetary target) – i.e. a commitment to saving. Of those offered, 28% opened one (and most of these had inconsistent time preference). Average balances increased by 80% after twelve months, and this handed a greater power in financial decision-making to women. Thaler and Benartzi's (2004) Save More Tomorrow (SMT) scheme enabled each employee to commit a portion of their future salary increases toward retirement savings. They found that 78% joined from those who were offered SMT; 80% of that 78% remained in program through the fourth raise; and importantly, the average savings rate increased from 3.5% to 13.6% over 40 months. This SMT effect is large and has the potential to change financial decision-making. Why does pre-commitment work so well? It relates to hyperbolic discounting in that it makes future decisions in the present frame, otherwise people procrastinate and go with the status quo.

Lally et al (2008) successfully used goal-setting behavioural intervention, which was delivered as information (advice) on weight control and involved reflective setting of goals, such as try to eat roughly at the same times and/or plan ahead to find ways to incorporate the behaviour into daily routines. Healthy habit formation might also be accelerated by forming implementation intentions (Gollwitzer & Brandstatter, 1997), which are plans that specify when, where and how the behaviour will be performed. People may impose penalties on themselves for failing to act according to their long-term goals. Students, for example, are willing to self-impose costly deadlines to help them overcome procrastination (Ariely and Wertenbroch 2002).

A question remains, however, to what extent such commitments are about binding one's behaviour, or are in fact merely about creating structure (Karlan and Morduch, 2010), and the distinction could be relevant for policy design. Karlan et al (2009) test the effects of simply making savings more salient by sending clients simple reminders to make deposits. They find even with no commitment, the reminders can be successful in increasing savings rates (by 6%) and helping clients meet savings goals (a 3% increase in the likelihood of reaching one's goal). Similar positive impacts on savings were found by a deposit collection services tested in Ashraf et al. (2006a), as well as Dupas and Robinson (2009). Further research would be welcome on whether actually the individual signing to commit would have different effect sizes than having individuals not signing the commitment.

3.3.9. Ego

We act in ways that make us feel better about ourselves. Evidence shows that humans do behave in a way that supports the impression of a positive and consistent self-image. When we are doing well, we attribute it to ourselves; when we do badly, we blame other people or the situation we were in – an effect known as the 'fundamental attribution error' (Miller & Ross, 1975). In other words, we view the world through a set of attributions that tend to make us feel better about ourselves. We think the same way for groups that we identify with. Psychologists have found this group identification to be a very robust effect, and its power is so great that it changes how we see the world (Hewstone, Rubin, & Willis, 2002). The classic illustration of this effect is the retrospective recall of sports fans of their team's performance in a match. Fans systematically misremember, and misinterpret, the behaviour of their own team compared with the opponents. A match in which both teams appear equally culpable of committing fouls to an impartial observer will be seen by a partial fan as one characterised by far more fouls by the opposing team than their own (Hastorf & Cantril, 1954).

Benartzi (2001) provides field evidence of over-inference and/or self-image protection, where the likelihood of employees investing in employer stock depends strongly on the past performance of the stock. In companies in the bottom quintile of performance in the past ten years, 10% of employee savings are allocated to employer stock, compared to 40% for companies in the top quintile. This difference does not reflect information about future returns. Companies with a higher fraction of employees investing in employer stock under-perform over the next year relative to companies with a lower fraction. Barber et al (forthcoming) use data on individual trades to show that individual U.S. investors purchase stocks with high past returns, also consistent with over-inference. The average stock that individual investors purchase outperformed the stock market in the previous three years by over 60%.

Adkins & Ozanne (2005) discuss the impact of a low literacy identity on consumers' behaviour, and argue that when low literacy consumers accept the low literacy stigma, they perceive market interactions as more risky, engage in less extended problem solving, limit their social exposure, and experience greater stress. In one study, low SES students performed worse than high SES students when the test was presented as a measure of intellectual ability, but performance was comparable when the test was not seen as pertaining to intellectual measures (Croizet & Claire, 1998).

Because of our desire for self-esteem (positive self-image), we like to think of ourselves as self-consistent. So what happens when our behaviour and our self-beliefs are in conflict? Interestingly, often it is our beliefs that get adjusted, rather than our behaviour (Festinger 1957). The desire for consistency is used in the foot-in-the-door technique in marketing, which asks people to comply with a small request (e.g. filling in a short questionnaire for free), which then leads to them complying with larger and more costly requests (e.g., buying a related product) (Burger 1999).

4. Suggested Interventions

The summary of academic reference contained in Appendix 1 highlights the focus on three of the five components of financial capability: making ends meet, planning ahead and choosing financial products; the last of which is probably the easiest to investigate. It is noteworthy that keeping track has not been the focus of much attention yet, despite arguably being the key behaviour. Some attention has been paid to education, while loss aversion and mental accounting are recognised as mental shortcuts in the interpretation of incentives. Fewer studies have considered the role of largely automatic responses to priming and affect.

Based on our review of the literature and previous work in developing the MINDSPACE framework, we sought to identify the main interventions that may be effective in improving financial capability. We began with a long list of possible interventions developed through extensive discussions and debate amongst the team. The list of interventions was gradually refined to a list of ten to ensure that each intervention was clear and distinctive. As can be seen from the list below in Figure 4, all the elements of MINDSPACE are represented in the final list of interventions.

This "top ten" was then used in the expert interviews and the case studies. As we shall detail in later sections, the interviews and case studies confirmed that all the interventions resonate in that knowledgeable experts can engage with them and the case studies added another layer of confirmation by identifying examples of successful financial services interventions using many of these elements. The next stage of research should seek to more fully establish the robustness of the interventions in a real world setting, and in specific populations of interest.

Figure 4: Interventions to be tested in the expert interviews and case study research

Intervention	Number	MINDSPACE category
Use the best person or channel to provide education/information	1	Messenger
Provide incentives in order to change behaviour	2	Incentives
Use mental accounting to encourage provision for unexpected outcomes	3	Incentives
Provide relative information on peer group, i.e people like you	4	Norms
Use a default behaviour to encourage action	5	Default
Provide feedback to encourage money management	6	Salience
Present outcomes in such a way that invokes particular feelings or influences behaviour	7	Priming / Affect
Make a commitment to an action or behaviour	8	Commitment
Set realistic targets and goals	9	Commitment
Financial health checks that challenge negative self-beliefs and norms	10	Ego

For each of the following interventions examples are given from the academic literature followed by comment to relate it to the expert interviews and case study analysis.

4.1 Use the best person or channel to provide education/information (messenger)

The appropriate person to deliver the intervention will be important in many circumstances when improving financial capability. The perceived financial expertise of the individual can be a key factor, as can the motivations of the organisation delivering the intervention. The evidence from the academic research suggests that for some interventions, perceived expertise may be more persuasive than communication skills. The perception of expertise may be linked with trust in the organisation that is providing the messenger.

In some circumstances an intervention can have greater impact by word of mouth recommendation. In the case studies there are examples of this occurring with young people and those with financial difficulties. It is possible to encourage these messenger effects, potentially linking with interventions relating to social norms and other interventions.

4.2 Provide incentives in order to change behaviour (incentives)

There is no doubt that standard incentives can have a significant impact on behaviour. There could be incentives for people to save, reduce debts, keep track of their financial situation and plan all or a part of their finances. There is evidence that small financial and non-financial incentives can make a significant difference. Given the costs to individuals and society of poor financial management there would appear to be considerable scope from pursuing this intervention.

There is a healthy caution relating to this intervention evidenced from the expert interviews and the case studies. This appears to be a particular issue in financial services as the use of incentives has been the cause of considerable concern when, for example, a negative incentive is considered to be disproportionate, such as a high penalty charge. Given that modest incentives can have positive outcomes, it is worthy of further experimentation and implementation. Incentive interventions can have a positive effect, for example when they are to maintain saving or debt reduction activity in order to reach a goal or when they encourage a household to keep checking their financial position. The implementation and review of the intervention are critical as with any social policy action.

4.3 Use mental accounting to encourage provision for unexpected outcomes (Incentives)

Incentives (mental accounting) appear to be a successful tool for encouraging savings for unexpected events. If accounts are created with features that act as a disincentive for the money to be used for another purpose, this may safeguard the money to be used for a contingency, the "rainy day". The difficulty for people of identifying the most appropriate level of contingency is similar to the challenge of identifying the appropriate level of insurance. The research shows that it is possible to alter the amount of contingency or insurance a person considers necessary by framing and priming. The literature review has not identified research that shows how the optimal amount should be identified for an individual or household. There will be a minimum amount of savings and insurance that should be maintained if resources allow.

It is likely that interventions relating to provision for the unexpected will contain elements of commitment and priming/affect in addition to the incentive of creating a separate pot/jam jar.

4.4 Provide relative information on peer groups (norms)

There is plenty of research evidence to indicate that the use of social norm information could have a significant effect on behaviour. The challenge from the academic literature, expert interviews and case studies was that this tool has not been used widely in financial services. There is scope for research and experimentation to identify ways in which it could be used to improve financial capability. One of the challenges with personal finance is that people may not be aware of the variety of approaches that people can take to managing their money successfully. Many people may not have a sense of what is a "norm" for any group of the population. This is a reason why this type of intervention could generate behaviour change.

4.5 Use a default behaviour to encourage action (defaults)

The academic evidence is more compelling on this intervention than any other. There is considerable scope to use such a tool for improving financial capability. An example would be the provision of text balance information after every transaction, which had to be stopped by the customer if it was not required; thus encouraging keeping track. A default on a savings account to setting-up a direct debit or standing order will make it more likely that the task is done straight away. There are good examples included in the case studies.

4.6 Provide feedback to encourage money management (salience)

Salient feedback mechanisms that alert customers as to how well they are doing financially will cause behaviour change. When saving for a particular item (e.g. car or education), to give feedback that shows whether a person is on target is likely be sufficient in itself to alter behaviour. More behaviour change could result from people receiving expenditure recorded in terms of the number of hours work required to afford it or savings quantified in the amount of debt cost saved.

4.7 Present outcomes in such a way that invokes particular feelings (priming/affect)

It is clear that both priming and affect can be important. An emotional response encouraged by the intervention can make a significant change to behaviour. There are a small number of good examples in the academic literature. It is possible to conduct experiments in order to identify affect-based interventions. Following the creation of a list of emotions to be provoked, members of the target group are asked to generate images when given an emotion word. The most frequently occurring images are then tested for validity by asking different members of the target audience to rate the images in a binary comparison task. The final set of images could be given spatial proximity at the time the financial action is taking place.

4.8 Make a commitment to an action or behaviour (commitment)

There is extensive evidence that making a commitment will alter behaviour. There are many ways in which this can be applied in financial capability. Examples in financial capability include a commitment to regularly check account statements, to have an annual financial check up or to make a regular payment for debt reduction or increased savings. The commitment will need to involve making a form of public agreement and/or a sanction.

4.9 Set realistic targets and goals (commitment)

There is ample evidence that setting a goal has a significant effect on behaviour. The goal-based savings examples in the case studies are further examples that this appears to work. If interventions can be promoted as a form of self-commitment they may be effective. Whether it is through binding behaviour or creating structure for individuals, this intervention tool can have significant results.

4.10 Financial health checks that challenge negative self-beliefs and norms (ego)

Interventions that change our self-belief could be important for financial capability. There may not be a strong link between intellectual ability and financial capability, but if individuals believe themselves to be of low literacy they may need to be encouraged to exercise greater financial capability. This intervention could be used as a way of emphasising the importance of a financial health check. We may not be acting in accordance with our self-beliefs or have beliefs based on incorrect information on norms. This can be used to identify specific areas to alter behaviour and a change in beliefs is likely to follow.

5. Feedback from experts

To gauge expert reaction to the ten interventions identified following the literature review, a programme of in-depth interviews was conducted. In total, 21 interviews were undertaken between 1st and 17th March 2010, with experts having experience of working closely with consumers.

Experts were recruited from four groups:

- **FSA/CFEB staff** working in the area of financial capability (five interviews)
- Individuals who give **financial advice** to consumers (five interviews)
- Staff working at product/services **providers** in a consumer facing capacity (six interviews)
- Individuals working with a financial capability remit at **consumer help** organisations (five interviews)

Interviews were conducted either face-to-face whenever possible, although for logistical reasons some were conducted by telephone. Each interview lasted between 45 minutes and one hour. The list of interventions together with the associated 'MINDSPACE' category (shown in Figure 3) was used as stimulus for the interview.

5.1 Overall reaction to the interventions tested

Our experts provided feedback on each intervention, based on how they felt it could be applied to drive behaviour change among consumers. As we interviewed experts from a diverse range of backgrounds, this gave us well-rounded feedback on potential applications for each intervention in advance of consumer testing (the planned second phase of this work). It is worth noting at this point that any feedback from experts was given in relation to the specific interventions and wording that was shown on the stimulus materials. The wording used in the stimulus material included the descriptions of the interventions used below.

The view of experts are primarily based on personal experiences, but by understanding differences in their reaction we have been able to start to form hypotheses about where an intervention, or set of interventions, would be more easily accepted for implementation in a particular circumstance, or for a particular group of individuals. In many instances, although the comments are logical, they do not correspond to the academic evidence. For example, it may surprise the experts that significant behaviour change can result from salient feedback even when it has not been tailored. It is possible that labelling a savings account to give it an emotional link (affect) is more important in driving increased savings over time, than having established a goal. There appears to be a bias towards thinking of the interventions as components of a tailored education programme. This is not surprising given that much of the academic literature and development of experience in this area is recent.

Interestingly, there was no consensus from the experts about which one intervention would have the greatest positive effect. Each expert had a specific area of interest, so the interventions they rated as likely to have the greatest impact varied according to their focus and the type of consumer that they work with. While this is not conclusive in terms of isolating a small number of interventions most likely to have an impact, it highlighted that the value associated with using a framework such as MINDSPACE as a tool for identifying the most appropriate intervention(s) for any individual circumstance. How the MINDSPACE framework can be applied is covered in more detail in 5.6.2 Selecting the most appropriate intervention.

5.2 Detailed reaction to each intervention

Analysing the feedback on each intervention individually enables us to understand the circumstances in which it could be applied most successfully. We will come on to discuss the importance of multiple interventions specifically in section 5.3 of this report, although we will also touch upon it in this section.

We now provide an overview of the feedback on each intervention individually. This section gives our interpretation of the experts' reaction, and includes verbatim comments from experts on key issues (shown in italics). Each verbatim comment is annotated with the group of the expert who gave it, to provide additional context.

Intervention 1: Identifying the right person or channel to provide education/information (messenger)

In the expert interviews, the ability to establish an appropriate person or channel to intervene was felt to be a consideration when implementing *any intervention*. It was suggested that a level of trust is required before the change advocated by the messenger will occur. For this reason, many of the interviewees suggested that the correct messenger would be a necessary component for all interventions to change behaviour.

"I think its critical…if you are being provided with information from an individual/organization that you trust, you've overcome many of the barriers already." FSA/CFEB

Some suggested that a key characteristic of a successful human messenger is the rapport that they generate with the target consumers.

"People buy people, and I think they've got to feel comfortable with the person who is delivering the education. You could have someone very knowledgeable, but if they can't communicate with the end user it's a waste of time." Consumer Help

In practice, it was often felt that the role of the messenger is fraught with problems and, in particular, that of locating individuals who would benefit from an intervention. From the provider perspective, in practice this intervention is more about signposting the appropriate channel for consumers to engage with them, as contact is typically initiated by a transactional or behavioural need – and frequently initiated without human involvement.

Providing the technical infrastructure that enables any consumer to isolate appropriate information or individual(s) to talk with across multiple channels, at the right time, can be a very difficult logistical challenge indeed. It is possible to segment consumer needs so that communication is tailored based on channel preference, and this type of approach can help ensure that consumers can access the right information. The interviewees thought that this is a very reactive approach however, and is less successful in pro-actively driving change.

Intervention 2: Provide financial or non-financial incentives in order to change behaviour (incentives)

The issue of whether financial incentives could be used to drive long-term behaviour change was perhaps the most difficult for our experts to feed back on. Providers were able to cite examples of how they had incentivised product take up successfully using financial rewards (typically for a planned purchase, where they were trying to influence choice of supplier), but outside of this area there were few examples of how financial incentives could be used to drive *long term* behaviour change.

"We offer incentives to switch current account and it does work…but I'm sceptical about using incentives to change long term behaviour." Provider

Longer-term behaviour change was felt to be much more likely to be influenced by non-financial incentives. This was felt to be a much better outcome for the consumer.

For example, with consumers struggling with their day-to-day finances, the benefit of a non-financial incentive that enabled them to take control of their finances would be greater than a financial incentive that made them better off in the short term, but had limited long term impact.

"If you can give people a frame within which they can feel control, their sense of well being and financial capability will improve." FSA/CFEB

Looking more widely at incentives, there are a number of examples of using loyalty schemes to reward longer term positive behaviour change. These schemes focus on providing positive rewards (be it points based, or activity based) for long-term behaviour. Perhaps the best example of an incentive that has produced long-term behaviour change in financial services, however, is the pension, which rewards long term saving with a significant tax incentive.

"Most people I know of that put money in pensions would not do so unless there was tax relief – they would use savings." Advisor

Many experts were concerned about the danger associated with using financial incentives they could as easily have a negative effect rather than a positive one. While some consumers are rational enough to be able to judge the value of a monetary incentive themselves, many would not be capable enough to establish whether or not an incentive will provide them with long-term benefit.

"Ultimately people need to be able to see that there is something in it for them." Consumer help

Intervention 3: Encourage provision for unexpected outcomes (incentives)

From the interviews it seems that there is a significant segment of the population who are earning a relatively high income, but are *"only a couple of pay checks away from disaster" (FSA/CFEB)*. While the recent economic difficulties have made it easier to convince these people to save, many of this group has the funds to make provision for unexpected outcomes, but they are attitudinally distant from doing so. For such individuals, it is frequently very difficult to encourage them to make any speculative provision at all. Given the level of unexpected life events experienced by consumers, however – and the shock this causes - many more people should be making this type of provision.

*"You are asking them to be receptive about something that hasn't happened. They become receptive when it **has** happened." FSA/CFEB*

It was believed that most consumers do not see the benefit until they have experienced an unexpected event themselves. At this point, they become much more receptive to the idea of saving for the possibility of an unexpected event happening. Despite the reluctance of many, it was felt that making provision for unexpected outcomes was an important step in consumer education, as it starts to develop a regular saving discipline. This is an area where the young might benefit more from an intervention, as those older and more experienced are more likely to have already adopted good savings habits; but it was recognized to be very difficult to impact the behaviour of the young, as their focus is extremely short term.

"Young people are pretty short term, and if they are doing any future planning it's about securing a better job…" Consumer help

The issue remains, of course, that when experiencing an unexpected life event, having a fund of money that can de drawn on in case of emergency would make the difference between survival and financial meltdown for a large proportion of the population.

Intervention 4: Provide relative information on peer group, i.e people like you (norms)

This was almost universally felt to be a positive intervention, but one for which it would be very difficult to deliver accurate information. The key to this intervention appears to be making the information relevant and tangible, while at the same time remaining sensitive to the situation of the individual. It was felt that this intervention would have the greatest positive impact when used in combination with goal setting to encourage an increased level of long term saving or debt reduction (see also Intervention 9: set realistic targets and goals).

"It would be ok as part of a strategy…for example, if you are on the margins, you can look at people who have managed to save for something (specific)." Consumer help

This intervention could also be successfully used within peer groups more informally to provide information and examples of how individuals could improve their situation. In this situation, the messenger (see also Intervention 1: messenger) is important, because this type of potentially sensitive information would need to be delivered by someone who could be trusted.

It was believed that norms could be useful for framing ideas or strategies, by enabling communication that reassures the individual that their situation is not untypical. Broad norms that reflect desirable behaviour were regarded as particularly effective – and many experts cited the '5 a day' message as the best example of an intervention that has had an impact on a large group of consumers (in this case, the majority of the population).

"If you present an option that people interpret as a norm, they will go for it and think that it's rational." FSA/CFEB

Some interviewees were hesitant in using norms; they believed that showing relative performance could act as a disincentive, if an individual's performance is poor. One suggested way to overcome this is to control for all other variables other than the one compared, and with improvements in data analysis capabilities, creating outputs using this approach is certainly possible.

"Say you set some goals for yourself to lose weight, you could compare your goal to people who have the same goal (say 5kg) and a similar timeframe – then you could view your performance relative to the best and worse performer, and that would help you keep on track. For financial services, you could just look at people who are looking at people who are looking to save £5k over 12 months. Banks already have the perfect infrastructure to do this." Provider

Intervention 5: Use a default behaviour to encourage action (Defaults)

Defaults were felt to be a very useful way of encouraging consumers to undertake a behaviour that is in their interest, assuming it is perceived by the individual to have a positive impact – this is not something that the academic literature has found to be important. This intervention was perceived to be a means of instilling discipline into consumer behaviour - assuming that the default could be set up in such a way that it does not encourage those who would benefit to opt out.

There were a range of other activities that were felt to be appropriate for a default; these being areas where positive outcomes are available but have not worked as well as anticipated (tax credits, child trust fund). Defaults are felt to be particularly useful in driving behaviour change among consumers who are less in control of their lives, and who otherwise would have taken no action.

"Compulsion is the next step down the line, but defaults are (more) helpful to establish regularity in people's lives." Advisors

Using defaults as a way of communicating information was felt to be a particularly important application for further investigation, particularly the use of regular text messaging as a means of providing information on balances, expenditure etc. Once it is introduced, pensions auto enrolment is seen as the catalyst for further default behaviours to be implemented, once consumers will start to become comfortable with this idea. An issue with a policy underlined by defaults, as suggested by the interviewees was that many consumers will undertake the behaviour that is advocated, as this will be seen as the norm. This could mean that they end up doing (contributing) less than they are able to (can afford to) – this is not a problem with defaults, but does go to show how powerful they can be.

"Potentially it will have a huge attitudinal shift among the population…they will think ' oh actually I can see why this is happening, does this have transferability to other parts of my life'…you choose to do nothing, but it won't be passive." FSA/CFEB

The financial health check was one default that was universally perceived as being positive for the consumer. But it can also be extremely positive for providers; especially when implemented among consumers who are at risk - either in terms of taking on too much credit or letting their finances get out of control. In such an instance, the default behaviour is mutually beneficial as it makes it more likely that both parties will have a positive outcome – the consumer regains control of their finances, and the provider minimizes the risk of loan default.

"The relationship with individuals at banks revolves around a financial health check, and if you can maintain a relationship with a consumer and get them coming back, it's an incredibly helpful thing for both sides." Provider

Intervention 6: Provide feedback to help monitor performance and stay on track (salience)

Providing feedback on performance is a key way of maintaining consumers' interest in a behaviour they are looking to change, and it is therefore an important means of ensuring that any changes/commitments made are adhered to in the long term. Feedback was felt to have the greatest impact of maintaining interest when it is targeted at a very specific area or goal.

"You present a particular issue, and then deal with that (in isolation)." Consumer help

Frequency of providing feedback was suggested as being an important consideration, particularly just after any intervention, when new habits could still be being formed. There is a recognition that the frequency of feedback should be tailored to the individual or their circumstances, and that regular progress checks work well.

It was suggested that simplicity is key. Text alerts were mentioned earlier, as a means of providing information to individuals, and this is another area that they could be applied successfully to have an impact – thereby omitting the need for expensive / difficult to administer regular face-to-face contact.

"It would be useful if you could set boundaries on it – if my credit card bill hits £100 text me … a trigger so you don't spend any more….it enables you to make an informed decision." Adviser

Having said this, putting the infrastructure in place to send event-triggered alerts to individuals might be difficult (and expensive) for providers to administer. In addition, there is the issue of whether or not consumers would trust financial providers to help set up and administer them.

Fundamental to being able to intervene successfully on any single dimension is the ability of the consumer to visualise a longer term objective or goal. As a result, this intervention could frequently benefit from being combined with Intervention 9: set realistic targets and goals. And the ideal implementation is likely to include components of regular succinct feedback, as well as less frequent, broader reviews.

Intervention 7: Present outcomes in such a way that invokes particular feelings or influences behaviour (priming/affect)

The way an idea is presented can significantly affect the way it is perceived by consumers. Presentation in this context can range from images that are used on advertising, through the tone of copy used in marketing collateral, to the way an intervention is described by a messenger. The objective remains consistent, however and that is to present an outcome in such a way that the intervention is seen as a positive choice. Being able to invoke feelings in a relatively sterile category such as financial services would be a good way of helping to impact the choices that consumers make.

There are many ways of doing this and, as with Intervention 6 - providing feedback, this intervention is frequently linked with Intervention 9: set realistic targets and goals. This is because the entire communication process is linked to achieving a preset goal, thereby linking current behaviour to a future (attainable) event. Examples include naming savings accounts with a specific purpose in mind, such as car, holiday, home improvements etc, each of which is its own attainable, realistic target. Once each goal has been set, a plan for achieving that goal can then be set.

As with Intervention 2 incentives, concerns were expressed about this intervention in relation to its potential for misuse; specifically, encouraging consumers to make changes that are not ultimately in their best interests. Tied into this is the understanding that consumers do not always behave as they are expected to. For this reason, significant testing of any interventions that have the potential to be misinterpreted was commonly advocated. As part of this testing, co-creation was advocated in order to help minimise the potential for misinterpretation by consumers.

"Having people determine (shape) the way messages should be presented…they have a huge contribution to how we understand what they want to hear." Provider

Intervention 8: Make a commitment to an action or behaviour (commitment) and Intervention 9: Set realistic targets and goals (commitment)

When we presented the list of interventions to experts, many felt that Intervention 8 (making a commitment) and Intervention 9 (setting realistic targets and goals) were naturally linked. For this reason, these interventions have been grouped together in this analysis. Fundamental in any goal setting exercise is the ability to be realistic. If goals can be set that are realistic and achievable, this increases the likelihood of individuals making any changes required to achieve it.

As part of goal setting, understanding discretionary spending is frequently cited as a critical component of setting realistic targets and goals - as it could force the consumer to be realistic about how they can optimize their expenditure. Consequently, a key tool for setting realistic targets is the budget planner. For providers, budget planning is reserved for those who have already encountered financial difficulties, but there is a clear opportunity to use it more pro-actively – with those who are approaching (but have not yet reached) financial difficulty, or as a means of identifying further efficiencies among those who have finances that are on track but want to achieve more challenging goals.

"Its all about small steps, moving in the right direction and changing behaviour in a way that is evolution rather than revolution." Consumer help

"If you told a young person that they could save £144 a year, they may think its impossible, but if you translate this to cutting out one or two cans of fizzy drink a day, it becomes achievable." FSA/CFEB

Any goals that are set should stretch the individual. They should not be so easy that they could be achieved without any behaviour change, but at the same time not so challenging that they are unattainable.

The commitment aspect of goal setting is fundamental in ensuring that consumers actually achieve any goals they set. By sharing their commitment with one or more individuals, the consumer effectively 'goes public' with their intention to make a behaviour change. Once they have done this, it becomes more likely that they will achieve their goal.

"You are being very public in what you do, so there are consequences of not doing it." Provider

The choice of individual or network to which a commitment is made is very important, as these individuals are not only people that can be trusted, but also they are people who are emotionally committed to ensuring the goal is ultimately achieved. As part of this, they will automatically be the people who will need to be answered to if the commitment is broken, so they also have an important role to play in Intervention 6: provide feedback and stay on track. The level of their ongoing support will significantly influence whether or not a person achieves the goals they set.

"Having somebody talk to me about whether I've actually followed it through, and supports me to (make sure I) follow it through." Consumer help

Intervention 10: Review appropriateness of products based on circumstances/requirements (ego)

The final intervention is perceived to be perhaps the most intuitive of all interventions, albeit a very worthwhile one. Reviews were categorized into two levels:

Level 1 (products held): ensure only appropriate products are held, and that only one of each type is held e.g. if you own a freehold property you need buildings insurance;

Level 2 (type of product held): ensure that for each product held, the product variant is optimal e.g. if you have savings but no cash ISA, there will normally be a benefit to taking one out.

There was a realisation that most people, who already have products in place, will in the majority of cases have the right ones. With this in mind, this intervention really looks to fulfill two main purposes; to identify any:

- obvious 'gaps' in products held

- instances where a product held is not appropriate for the individual's circumstances.

The main difficulty associated with this intervention is the ability to be pro-active – moving from only realizing that a product is not appropriate at the time of need or maturity, to identifying any instances of unsuitability much earlier. Often the resolution is actually very simple, and does not need to be reviewed regularly once implemented; apart from the points at which life events are experienced (see also Section 5.4 When to intervene – the impact of life events).

"Most people who cannot afford financial advice don't need much more than an ISA, a pension, some insurance and maybe some other savings." Advisors

The other time at which product appropriateness can be reviewed is at point of sale. This is a role of providers and advisors, and here a positive decision can ensure that the level of intervention that is required later in life is minimised. Regulation has its own role to play, via the rules associated with many product sales as well as advice provision.

While the need for face-to-face contact is acknowledged, one of the barriers to providing this is being able to locate appropriate individuals. The type of consumer that will benefit from a product review is most likely to have low financially capability, so self-help tools are unlikely to have much of an impact.

"We need to find more engaging ways of doing this, but people who you want to give a review to do not come into our branches." Provider

5.3 The importance of multiple interventions

One thing that became clear while we were conducting the expert interviews is that interventions might not work in isolation. The most powerful drivers of behaviour change cited involve two, or more, interventions working in combination.

Going back to the MINDSPACE framework, it is logical that this would be the case; as employing multiple interventions will enable us to tap into more than one component of it. This increases the probability of an intervention being successful. In the same way that the decisions we make are not made based on one variable - our brains process data across two dimensions (reflective and the automatic) simultaneously - it is logical that the interventions that drive behaviour change should be thought about in a similar way.

Certain interventions (and MINDSPACE categories) will have a significant impact when applied in combination. When presented in the form of a simple equation, there is an intuitive logic to each of the instances in which combined interventions were felt to work well by experts:

- Providing non-financial incentives (incentives) + presenting outcomes to invoke particular feelings or invoke behaviour (priming)
- Provide relative information on peer group i.e people like you (norms) + identifying the right person (messenger)
- Setting realistic targets and goals (commitment) + presenting outcomes to invoke particular feelings or invoke behaviour (priming) + make a commitment to an action

The learning here is that there is a tendency to consider combining interventions without knowing which of the interventions is having a material effect. This could be a major issue if implementation problems mean that no action is taken of this kind. Some interventions that affect behaviour can be fairly simple to implement and the main issue is whether the effect is long-lasting. The methodology described in Section 7 would lead to a consideration of identifying interventions or combinations that were most effective.

The combined interventions identified by experts highlight an opinion as to the importance of goal -setting in driving behaviour change. Of the nine other interventions identified, the experts linked four of them to goal setting. This view is endorsed by the experiences of financial providers in our interviews, which appear to confirm the importance of setting goals (and sticking to) a commitment to achieve them.

5.4 When to intervene – the impact of life events

It is clear that a range of factors influence whether or not an intervention will be successful; it is also evident that implementing a successful intervention will require significant thought and planning. But there is another dimension of complexity that needs to be taken into account - and that is the circumstances surrounding the individual's personal situation.

There are three main situations in which a consumer would benefit from an intervention to drive behaviour change, and each will require a different approach. These are:

1. If their day-to-day management of financial matters could be improved
2. When they are planning a major life event e.g marriage, having a child
3. After they have experienced an unexpected life event e.g ill health, unemployment

In each of these situations, the mindset of the consumer will be very different, and this will impact on the way an intervention will need to be implemented. Life events constitute a 'natural point' at which it may be appropriate to engage with consumers.

The quote below provides a useful summary of what constitutes a life event:

"Life events trigger the need to do something…(a life event) can be defined as anything that changes the amount of money that you have." Provider

Figure 5 provides a framework for applying interventions during an individual's financial lifetime. It contrasts the continuity of everyday life during which behaviour change can be effected against a relatively calm backdrop, with the points at which key life events are experienced – when significant changes are likely to be taking place. Figure 6 contains a categorisation of key life events confirmed during the interviews.

Figure 5 – A framework for applying interventions

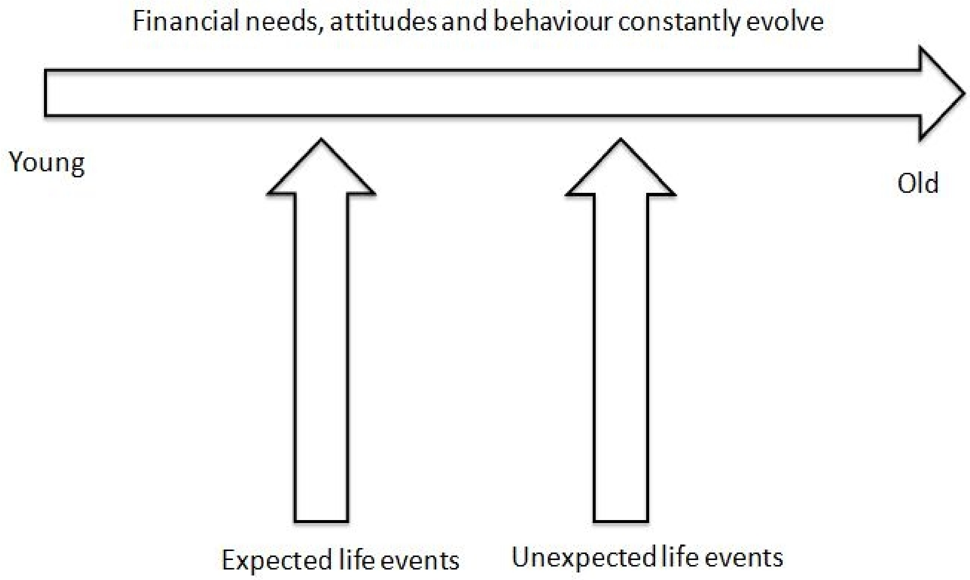


Figure 6 – A categorisation of life events

Planned life events	**Unplanned life events**
Leaving home	Illness
Starting work/changing job	Redundancy/loss of job
Buying a property/moving	Inheritance/other windfall
Getting married	Divorce/separation
Having a first/subsequent child	Significant increase/decrease in income
Child's education	Becoming a carer
Retirement	Death of partner/significant other
	Economic crisis/external event

When life events are expected, there is a greater likelihood of a consumer being receptive to an intervention because they are mentally prepared for that event happening at some fixed point in the future. Expected life events are therefore natural points in consumers' lives to undertake a holistic evaluation of their financial affairs.

"You have a period in advance of it happening that you can use for preparation." Provider

Unexpected life events are different because the immediacy of the trigger activity. For this reason they were referred to as 'catastrophe' events by one advisor. With unexpected life events, there is often a significant need to respond soon after the event is experienced – although, in practice, a phase of mental adjustment may be required before any change in financial behaviour is effected. This is because there are frequently bigger and more important things happening in consumers' lives that require immediate attention.

The length of any phase of adjustment is critical, however, because it is during this period that the potential for finances to get out of control is at its highest. A successful pro-active intervention at this point is likely to have a significant positive long-term impact on an individual's financial life if timed correctly. It is also very likely to be successful because it is a time when consumers are particularly receptive.

"The real challenge here is to convert a need into a demand…often people don't recognize that they have a need. And if they do recognize that they have a need, they don't think that there is any support out there to help them." FSA/CFEB

Being able to spot the opportunity for a pro-active intervention based on a planned life event can be difficult. Through extensive customer data, providers have the infrastructure required to make pro-active interventions, but they are often focused on 'core' activities rather than identifying customers who would benefit from this type of assistance.

Having said that, there is a recognition among providers that pro-active contact would be of benefit to their customers. Given that we have highlighted in this report that the ability to identify individuals who would benefit from an intervention is one of the biggest barriers to success, the information held by providers constitutes a key source for identifying target consumers. Providers, however, may not always be the most appropriate messenger to administer an intervention.

While it will not be possible to encourage consumers to make provision for every unexpected eventuality, intervening with the aim of making them aware of the likelihood of unexpected life events occurring is the first stage in this process. This approach is most likely to be successful after an unexpected life event has been experienced.

"The design of information should be around making people aware i.e warning people of the possibility of an event occurring in the first place. Life assurance is a great example – so you are actually saying listen Mr X, you've got a large mortgage, 2 young children, your wife is not working, what would happen if you got run over?" Advisor

5.5 Applying interventions to drive improved financial capability.

We asked our experts to identify the barriers and drivers to increasing financial capability across three of the domains identified in the base line survey:

1. Living within your means
2. Keeping track of finances
3. Planning ahead

The aim of this was to start to understand how the identified interventions could be applied. The experts were also asked to identify any strategies or interventions they were aware of that have been applied successfully.

5.5.1 Education

The feedback was revealing. There was a lot of discussion around education, and it was felt that there were significant benefits from trying to educate consumers as early as possible – with the aim of being pro-active about the financial decisions that everyone will need to make throughout their financial lifetime. However, there was also the realization that teenagers and young adults are not always receptive to this type of educational message.

The reluctance of consumers to engage with financial services at an early age was a source of frustration for many of the experts, as it is well argued that the earlier an individual thinks about their finances, the better their financial situation is likely to be in the long term. This attitude is a particular barrier for planning ahead.

"When you're 16, you don't really think about tomorrow. You're pretty hedonistic, you live for the here and now…people don't start to think about it (planning ahead) until its too late…to prevent this happening, financial capability and knowledge needs to be a cornerstone of education at a young age." Consumer help

The responsibility for encouraging behaviour change early in an individual's financial life is not restricted to schools. Community and other youth organisations, as well as parents and other influencers have a role to play within this infrastructure. With this group in particular, given their relative inexperience, the messenger is absolutely critical. An increasingly important channel for young consumers is the range of social networking sites - in particular Facebook, Bebo, Twitter – on which a large proportion of their time is being spent. These channels are seen by experts to provide a gateway to a range of potential interventions.

5.5.2 Grouping three domains into two broad categories

While experts were able to difficult to differentiate between 'living within your means' and "keeping track of finances" when they fed back on their experiences, they typically linked the two areas when talking about strategies to improve financial capability. Reflecting the close relationship of these two domains of financial capability in the baseline survey, experts typically segmented consumers into two main categories – those who would benefit from help with money management (which includes both living within your means and keeping track), and those who were in a comfortable day-to-day situation, but would benefit from more help with 'planning ahead'.

For this reason, we have used these two broad categories for the opinions on how we can start to influence financial capability.

5.5.3 Money management: living within your means and keeping track of finances

One of the key outcomes of helping consumers of money management is providing them with the confidence to start to take responsibility for their finances themselves. Some of the interventions outlined in the MINDSPACE framework were cited as key influences here - even before they were introduced formally as interventions to experts later in the interview. In particular, the role of budgeting and budget planning was felt by experts to be important, as this provides consumers not only with a true understanding of their financial situation, but also a better understanding of how they could benefit from making changes. Key to this is being able to visualise their individual situation, rather than viewing each product/expenditure as an individual component. The overall aim being to optimise any income received, and thereby maximise discretionary expenditure. In the context of driving increased financial capability 'keeping track' was felt to be a key area for focus, as it provides a platform to a wide range of interventions.

"Often consumers do not know what they spend their money on…they underestimate what they spend…trigger figures can help the consumer be realistic…enabling them to realise that they spend £150 on petrol rather than £50." Provider

Technology, and in particular the internet, now has a significant role to play in providing access to information and help with 'keeping track'. Experts cited a number of organisations that host information aimed at driving improved financial behaviour. Alongside this, internet access to financial products and services was acknowledged as playing an increasingly significant impact in helping consumers to obtain information on their current financial situation – and is likely to play an even greater role in the future, via the range of online tools aimed at helping people take control of their finances.

The barrier to consumers accessing this range of online tools is, once again, how to trigger being aware that it is available and knowing where to look. Alongside this, issues around internet access mean that those most likely to benefit are least likely to have access. Further, there are issues associated with the interpretation of any information gleaned without any human intervention. Nevertheless, if it can be harnessed in an appropriate way, technology is felt to be a significant enabler for a range of interventions aimed at improving financial capability.

Another key barrier to all aspects of money management is inertia. Consumers who would benefit from improved financial capability typically do not prioritise financial matters. Instead, they tend to focus their time and energy on other aspects of their life, without realising the implication of putting their financial issues to one side. Meanwhile, their financial situation gets worse.

Inertia can also be born out of the fear of making the wrong decision, at which point it appears preferable not to take a decision at all and retain the status quo. In these circumstances, making a pro-active intervention is seen as imperative, as it will ensure that consumers have the confidence to act and make a change. In order to overcome inertia, simplification of choice is a key strategy.

"Getting people to take their head out of the sand for a very difficult, complex issue…before you talk about financial planning, there are a number of people who do not even read the prices in the supermarket…it's a really difficult thing to get people to engage with." Advisor

"If you can boil it down to straightforward decisions, it (change) will happen…products are becoming more complex and as a result consumers just turn off." FSA/CFEB

A lack of understanding can also affect product choices. Frequently, products have to be sold to less capable consumers, and this can lead to issues in relation to product suitability if they are not fully understood. This in turn can result in (often limited) income being spent unwisely by consumers, which will have a significant knock on effect to the rest of their financial lives, and in particular discretionary spending. A key influence could be the ability to present an achievable goal; an example of someone in a similar situation who has achieved a positive outcome is very motivating.

5.5.4 Planning ahead

One of the primary barriers to planning ahead is that for many people 'the future' is often a very intangible and unpredictable entity. The impact of events such as 9/11 and the recent recession has highlighted this. While some experts argued that these events can be used to challenge people's current attitudes to risk and encourage them to save for unexpected eventualities, others felt that this lack of certainty has only served to engender an attitude of hedonism.

"Something that's crept into our culture, almost like the 9/11 effect, is that 'well actually I don't think there is a long term future, so I'm going to eat drink and be merry because tomorrow who knows'." Advisor

Several of our experts alluded to a society that is driven by instant gratification (or hyperbolic discounting), whereby people want to see the fruits of their efforts almost immediately. The prospect of having to put a proportion of one's salary into a 'pot' that cannot be accessed until fifty years down the line is a difficult concept to grasp in this light.

"Clients … don't want to know that they need to be putting 3-4-500 quid of their salaries into pensions, savings and insurance, they don't want to know that. Because when you're young you'd rather buy beer, wine, when you're older you've got less money, you've got to pay for the kids, you want the family holiday. When you're nearly at retirement it's like 'well sod it, there's really no point now. It's not a pleasant thing to think about." Advisor

A further perceived barrier to planning ahead is that many people could be overwhelmed by the concept of having to take a decision fairly early on in their lives that will then impact on and shape the remainder of their lives. To compound this, the products and literature that are currently available to individuals' are felt by many experts to be so oblique that consumers are unable to feel confident that the decisions they are making are the correct ones. This leads many people to put such decisions off until they *have* to take them but as one of our consumer advisors pointed out, this is often too late.

"If you're trying to plan for people you want to see them much earlier in life than [when they are approaching retirement]…often we're seeing people and we can make sense of their money but we have no great ability to shape things." Advisor

As we mentioned at the beginning of this section, the first step to becoming proficient at planning ahead is by being in control of your everyday financial situation. Once an individual has achieved this they are then able to appreciate where they are. A platform is created from which the consumer can look ahead and formulate a plan.

"People without a plan will just wander from financial crisis to financial crisis but once you've established a plan for people and say 'if you want to do this, this is how you do it, they usually do…those are the people who are more in control." Advisor

The first step in forming a plan is to understand what you want. It was noted by our experts that in a lot of cases, people do not *know* where they want to be (or where they do not want to be) even twenty years' down the line. This presents a problem in that if people do not set any aspirations for themselves then they are unlikely to have anything to look forward to. The importance of setting positive goals and aspirations in place is therefore felt to be crucial.

"All of the research says we plan better, save better when there is a motivation and something that we actually know that we want that we cannot buy now" Provider

One technique used to help people consider their future options was by encouraging them to visualise their future. This could be in a negative as well as positive way; for example asking someone to imagine what their spouses' life might be like if they were to die suddenly. Another technique used was to share case studies with consumers about people who have saved successfully and have achieved something because of this as a way of inspiring them to form similar objectives.

Several of our experts were keen to point out that the setting of objectives is not always an easy process. For many people it involves coming to terms with the fact that their aspirations do not always align with their potential reality. If not handled carefully this realisation can lead to apathy. It is important therefore to encourage consumers to be as realistic as possible about their goals, both long and short term. This relates to expectations and reference-dependent preferences from the academic review, as well as ego.

"Saving £200 out of a £20k salary is more realistic than saving £1000. If it's unrealistic and the bar is set too high then it will go from £1000 to zero, they don't do it at all. If it's set at £200, it's meaningful and sustainable, so it gets done." Advisor

This brings up an important point, that beside the goal itself, a key element of planning ahead is the method by which this goal is achieved. Consumers need to be able to find a way of achieving their goals that are sustainable in the short and long term. A key strategy mentioned by several experts was breaking it down into stages. This not only lessens the intangibility of the future objective but also makes it accessible to the consumer, e.g. asking young people to think just five years into the future and then to help them put in place steps to achieve these short-term goals.

The capacity for feedback was also felt to be a core component that should be built into any financial plan. Particularly for longer-term savings plans, it was felt that if people could see that their money was doing something (in relation to their overall objective), then they would be more likely to feel positive about 'locking away' a certain proportion of their discretionary income.

"Brilliant, all of a sudden, all of that money that goes out of my account at the start of every month that I don't get to spend is doing something" Advisor

Products and initiatives that enhanced this process, for example tax relief on pensions were viewed positively by a good number of our experts. By making the money work harder in dedicated 'pots' that are more difficult to access, this reduces the temptation for consumers to put their money in a non-dedicated savings account that are prone to discretionary spending.

As part of the feedback process, several experts also brought up the importance of implementing some form of review process to take into account the transitions and events encountered throughout an individual's life. This could be in the sense of making sure that individual financial goals have remained the same but also making sure that the strategies they have in place are still sufficient to achieve these goals.

5.6 Making the right intervention

5.6.1 Co-ordinating activity

We have already alluded to the fact that understanding the mindset of target consumers is an important consideration when implementing the interventions that we tested. While it is true that each intervention can be applied pro-actively (without the need for the consumer to be receptive) the messenger is seen by experts to play a critical role in the ability to successfully drive behaviour change. The choice of messenger, and the way ideas are communicated by them, can have a profound impact on the ability of an intervention to succeed. For this reason, an appropriate choice of messenger was viewed as *a necessary condition for a successful intervention to take place*, rather than as an intervention itself.

A range of individuals and organisations that are well placed to offer support and guidance to the messenger were mentioned by experts - including partners, the local infrastructure, the Government, regulatory authorities, providers, employers, as well as influential friends and relatives. To have the greatest impact, these organisations would work together in partnership in order to create the most appropriate conditions to drive improved financial capability. This, in turn, will enable the messenger to play their role.

"In order to hit the right person, its got to be led from the centre in order to actually be able to channel it to the people who are targeted." Advisor

This type of co-ordinated activity has been successfully implemented in the healthcare sector, where practical examples of making interventions during 'the patient journey' in order to drive behaviour change are established. Integral to this is the acknowledgement that when an individual is diagnosed with an illness it takes a period of time, and input from a number of sources, before they accept that they have this condition. Only then will they have a mindset that is ready for a positive intervention to be made by a messenger.

"Empathy is not enough. True understanding of the individual is critical, otherwise the messaging will be wrong." Provider

It is not always the case that it will be possible for interventions to be targeted at a small group of individuals who are already receptive to the intervention. This heavily targeted approach is difficult and costly to implement. It is more likely that interventions will be developed with a positive outcome and a large target market in mind, and then distributed in such a way that those who are most likely to benefit will locate it.

It is noteworthy that the academic evidence does not fully agree with the expert views. If a "good" messenger is used, the positive outcome can be achieved. A negative effect can be the result of the wrong messenger.

5.6.2 Selecting the most appropriate intervention

When discussing what constituted the effective strategy for making an intervention, there was no clear consensus among experts. Many alluded to a framework where one, two or three of the following components were used (as appropriate) to develop each intervention:

- Understanding the situation / need of the individual or group
- Identify the appropriate intervention(s)
- Deliver a relevant message

However, it was clear that there was no consistent approach to making an intervention being used.

Using a consistent framework as a basis for making decisions about which intervention(s) to use will help ensure that *any* intervention will have the maximum impact. Using the MINDSPACE framework as an evaluation checklist to develop interventions will add structure to the process, and will help ensure that the most appropriate intervention is implemented (Section 7).

6. Case Studies of Behaviour Interventions in the Financial Services Industry

The analysis of products that assist with financial capability considers each of them in the context of MINDSPACE and the interventions that are taking place. The products are clearly influencing behaviour through a combination of interventions, but it is not known exactly which aspects are the primary interventions, although some of the interventions are likely to be critical to the behaviour change that is occurring.

The following comments are developed as a hypothesis with regard to the primary behavioural interventions that are being brought together to generate the positive outcome being experienced by the customers that choose to engage with these products. The interventions are highlighted that are contributing most significantly to encouraging the customer to have greater financial capability, whether this is living within means, keeping track or planning ahead.

Six products are analysed from five financial services providers and each is analysed as a pair of products below. A detailed analysis of each product group is provided in Appendix 2.

6.1 "Money in pots" Accounts (‘Making ends meet’ interventions)

These two products can be helpful for those with financial problems. The financial problems may be critical in that the customer has approached a debt management company or be a deteriorating situation that without action may require debt counselling. There are a lot of similarities between the accounts, although people use them at different stages of financial problems. The Secure Trust Bank (‘STB’) Prepaid Current Account product is designed for people that have been in sufficient trouble to approach a company offering debt management plans and the RBS/NatWest Money Manager is for customers that appear to be approaching serious financial problems (i.e. it is pre-emptive).

6.1.1 Products

Both products are types of bank account(s) that encourage a customer to think of their money in "pots" or "jam jars". The STB product encourages customer to think of their money in two "pots". Regular income is paid into one pot called "Account" from which bills are paid. There is a separate pot called "Card", which can easily be loaded. It is the "Card" that is used by the customer for all other expenditure. The card can be loaded monthly, weekly or on a one-off basis as required. Money can be transferred between accounts entirely at the discretion of the customer. It is not possible to go overdrawn on either the Account or the Card. Note that customers appreciate that it is better to stop a direct debit rather than allow it and incur overdraft charges. It is the responsibility of the customer to re-instate the direct debit and there is no charge for bouncing the payment.

The RBS/NatWest proposition has three separate accounts or "pots" (Bill, Spend and Save). The "Bills" pot is established at set-up with regular income being received (potentially with an overdraft) and an amount allocated for payment of bills. Further "Spend" and "Save" accounts are set up if needed. A mandatory standing order is set to the "Spend" pot and an optional standing order goes to the "Save" pot. There is a "Safety Net" transfer from the "Spend" pot if there is a shortfall in the "Bills" pot when a payment needs to be made. An optional "Regular Sweep" is also available so that money remaining in the "Spend" pot at the end of the month is transferred to the "Save" pot.

6.1.2 Who should the intervention help?

The products are helping a broad range of customers and it is not helpful to categorise the customers either by demographic group or by life event.

Secure Trust Bank (Prepaid Current Account) – this product is new and is narrowly focused at present on those that have had serious financial problems and approached debt management companies. It appears complicated when first explained, but all detail is now handled at a welcome interview (phone call) and this has resolved all matters of customer confusion. A surprisingly wide range of customers with A, B and C groups included, as well as D and E, evidence for this was provided. The population using the product is only marginally skewed towards groups C and D. Existing customers spend all the income going into the account given their financial situation, so it is not a route to acquire savings.

RBS/NatWest (Money Manager) – helps customers that are approaching serious financial difficulty. The evidence was that in a six month period, it reduced overdrafts by almost fifty percent and the average savings balance increased from nothing to more than fifteen percent of the average overdraft at the out-set, with a large variation in the outcome. A wide range of income and demographic groups are users of the product. The common factor is the attitudinal approaches or situation of the customers that needed to be offered the account. This can be summarised as groups such as "spend all" and "spend without understanding".

6.1.3 Relevant Aspects of Financial Capability

Making ends meet – described as a "tool for the job" (STB). These products are designed to help people mange their money in such a way that they can live within their means.

Keeping Track – both products encourage active monitoring of the account balances.

Planning Ahead – this is really short term planning (month to month), but some customers with Money Manager have managed to save up for items, such as holidays rather than incur more debt.

6.1.4 Interventions

Although the accounts analysed here are designed for customers that have had serious financial problems or appear to be moving towards them, there is reason to believe that many customers would benefit from interventions that encourage them to think of their money in this way. The evidence for this is that overdrafts/debts are reduced, savings increased and that there is a lower probability of incurring unexpected bank charges (no unexpected charges with STB). The hypothesis is that the interventions are increasing the financial capability of the customers that use these products by helping them live within their means. It will also be increasing the likelihood of being able to keep track and there is likely to be an improvement in planning ahead in the short term. Each intervention described below is likely to be having an impact by encouraging the customer to live within their means.

Messenger: for one of the accounts analysed the messenger who recommends the account is a debt management company. The customer trusts this entity with helping them out of a financial crisis.

In the other case, the customer is being contacted by the bank and offered the account, as there are signs of financial distress. An approach to the customer is made by specifically trained staff encouraging the customer to take up this proposition. Given the evidence of the importance of messengers it is highly likely that this is having an impact in terms of encouraging customers to open this type of account.

Defaults: these products are designed to work in a certain way by dividing money into at least two pots, one for regular bills and one for other expenditure. In one case, there is also a savings pot. There are various methods used by the banks to encourage the customer to use the account in this way. For one of the accounts, the customer will be contacted to receive support if there is evidence that they are struggling with the accounts, for example cancelling the standing order from the Bill pot to the Spend pot. The result of the default approach is highly effective in terms of helping many customers that would otherwise struggle both to make ends meet and to keep track of their finances.

Incentive (Mental accounting): the default has assisted the customer in creating the pots, but having done so the approach acts as an incentive to keep money allocated for different purposes. Most customers will not go to the Bills pot to fund other expenditure. The evidence for this lies in the fact that customers find it a useful way of making ends meet and even to begin to build savings.

Salience: The customer is encouraged to make frequent usage of the internet and other access methods in order to monitor the balance of the pots. The information being broken down into pots means that it is much easier to understand the current financial position of the household. The feedback being given makes it easy to understand and identify whether the objective of living within means is being achieved. The salience of the feedback is likely to be influencing the on-going ability of the household to live within its means.

Priming: the initial interaction with the bank teams seems to be important. The message is that this approach will help the customer manage his or her day-to-day finances. There is a theme of growing financially whether this is by reducing debt or growing savings. Putting the customer in control is a strong message that has direct appeal and is likely to be influencing the customer in terms of adopting the proposition and using it as intended.

Commitment: In the set-up process the customer commits to identify and then set aside a certain amount to pay for regular bills. This process not only establishes the commitment, but also ensures that it is realistic. One component is that in creating the “Bills” pot it establishes a goal for debt reduction with regular payments to meet that goal.

6.2 Expense Management Tools (“Keeping Track” interventions)

The two products considered here are different, but both include the development of pots for managing expenses. There is really a set of three-products from O2 used by different groups of customers to enable a single pot to be established with near-instant feedback on utilisation. Barclaycard is enabling expenditure categorisation on both a broad and detailed range of categories.

6.2.1 Products

The O2 products are a range of prepayment cards that are loaded either with cash or from a current account of the customer. Each time a card is used a text is sent to the mobile phone of the user. The text will be received almost immediately, providing near-instant feedback. For example, the text will arrive before the till receipt for transactions in a shop.

"Cash Manager" comes in two forms. The "verified" card has a higher annual load limit and can be loaded from an account and by way of a regular weekly or monthly load, not by cash. The "unverified" card can only be loaded from a current account with single amounts.

"Load & Go" has the same load limits as the unverified prepayment card and can be loaded by cash at a variety of locations as well as from a current account. The account loading allows relatives and friends to load the card.

Barclaycard has developed a feature as part of its on-line "mybarclaycard" service that allows customers to analyse expenditures by category (e.g. groceries, automotive) and create their own categories. Comparison over time shows which week in the month the expenditure has occurred. The service allows customers to search and display their transactions by retailer, category and over time (week by week in a month) for up to 13 months. At present, month on month or any other period of comparison is not available.

6.2.2 Who should the intervention help?

O2 has three customer groups that are using its product to control their money. However, these groups are very high level and given the large number of customers there is likely to be a significant mix, particularly in the first two categories:

"Content" users – these people have income, but believe they have a tendency to spend. They are comfortable with their current situation and tend to save regularly. Prior to launch the anticipated age range was 25 to 35, but it has attracted a much wider age range.

"Troubled" users – only qualify for the lower level of load limit. They are unhappy with their current financial situation, they tend not to save and do not have a credit record. Difficult to generalise about the demographic of this group other than that they are money-challenged. There is a tendency to be younger than the "content" group and it includes students.

"Vigilant" users – this category includes the young people using the cash load version of the card. They are aware of their limited financial means and try not to overspend. Will pay all bills first and spend from what is left. There is a tendency for these users to be looking for bargains and value for money.

General observations from O2 were as follows:

The product is enabling "self-regulating behaviour, like a diet club. By signing up to it you make yourself mentally aware. In the same way as a diet club, you start counting calories. It doesn't make you thinner, but you have mentally moved to a different space. One guy is not good with cash, keeps raiding the cash point, so actually what he does now is load up the money for the month and then raids the cash point from this stack of money. Another guy just uses for travel, even if he goes spending, he knows he can still get to work."

The site for O2 contains a budgeting tool, which is fairly basic and cannot be saved. On the whole it is not being used. The customers appear to have worked out some form of budget elsewhere and are going to spend x amount this month on the card. They do not appear to do a detailed budget, but decide to use the card to control a specific category or group of expenditures. The keeping track is a "mental leap that it is more for a purpose", so budget defined in that area, so used as "habit card". Some people refer to it as this or a "guilty pleasures card".

There is no identified relationship with life events for this product set.

Barclaycard does not have any demographic breakdown of the users of its expense management tool. However, it is one of the most popular parts of its on-line services. The customers are using the expense management feature to see how they are spending their money by category of spend (e.g. groceries) and then looking at the individual retailers in each category (e.g. specific supermarket)), using the 'filter & search' tool to find specific transactions, creating their own personal categories and then associating particular transactions to these categories.

6.2.3 Relevant Aspects of Financial Capability

Making ends meet

This is a use of the Load & Go version, particularly for young people. They may put a lot of total expenditure through the card and are using it to ensure they do not spend too much. This is a similar type of usage to mobile phone top-up.

Keeping Track

O2 - This is the primary purpose of the card and the following comments give a sense of how their customers are using it. "Every user could write a label as to why they use the card; a purpose. Twitter shows what using for. Range of spend is so wide."

Customers expect to spend the money and have a clear intention to use full balance. "Happy to spend it because made decision at higher level to spend that money. It is a pot. Spend is pretty much constant with slight decline at end of month. In January we see a lot less spend, similar with mobile phones. January is just hell for customer's disposable money."

"Nobody completely out of control otherwise would not have signed up. Diet club mentality, made conscious decision."

Barclaycard - this is the purpose of this feature as it is providing information on expenses with considerable detail and the ability for the customer to tailor the tool to reflect an individual spending profile.

Planning Ahead

O2 – the planning has already taken place, although limited use for a "Christmas club" form of saving. The provider did not see the use of the budget tool that had been expected. However, the budget tool is in line with the tone of the product and may be helping customers think about budgeting aside from the product. Teenagers using the cash loadable version do save up, but the expenditure will not represent a life event.

6.2.4 Interventions

The O2 products analysed in this section are of great interest as they have two messages behind them, "flexibility" and "never overspend". It is a tool that the customer can use to help keep track of his or her money.

The interventions that may be working as part of the Barclaycard tool are unclear at present. It is a relatively new feature and the provider has not conducted research into how customers are using it and indeed whether it will become a source of greater financial capability. It has the potential to be a rich source of understanding as to how groups of customers want to manage their money when given a new way to do so.

The hypothesis is that the following interventions are or are likely to be key in enabling users of the products to keep track of their finances better and thereby improve financial capability. Each intervention described below is likely to be having a major impact by encouraging the customer to keep track of their finances.

Messenger – The products offered by a mobile phone company are an example of a non-financial services brand offering a financial service. For two-thirds of the customers the importance of the messenger is that they are existing customers.

For the teenage/young customers it is that the messenger is not their parents and not a financial institution. For this group of customers the messenger may be high impact in terms of the likelihood of taking the product and using it as a control tool to keep on track.

Incentives (standard) – The O2 products are free. This means that the control benefits can be obtained at no cost. Even a small monthly charge may have had a significant effect on take-up.

Salience – All the products are providing extensive feedback to customers. O2 gives the instantaneous text message just after a purchase has been made. The customer knows immediately how much is left on the card and can access the information at any time. For the pot that the customer is using the feedback could hardly be improved.

The Barclaycard tool has enormous scope provided customers do not find it too difficult to set-up the information. They could focus on just one expenditure category or a combination. Simply providing the information may not be sufficient to have affected behaviour, however, for some customers they may choose to concentrate expenditure through the card in order to be able to track them more easily. It is hoped that further insights will be obtained once data has been analysed on customer behaviour.

Priming: the messages surrounding the launch of the O2 products are "never overspend" and "help you manage your money". It is clearly saying that it is more than a cheap way to be able to make purchases (e.g. over the internet). It is difficult to know the effect of the priming, but it is very likely to have an effect on customer attitudes to the product and provides differentiation with other prepayment cards.

Commitment: customers use the O2 products as a tool to control spending. Money is loaded onto the card and is spent over a period of time. Most customers have a clear goal not to spend more than the amount loaded onto the card either over a period of time or on a certain type of expenditure. The load could be intended for use over a month or week; alternatively it may only be used on petrol or coffee. One group of customers is permitted to have a weekly or monthly load from a current account. This regular commitment is popular and normally started shortly after the account has been set up. The large take-up of customers using the card in this way indicates the demand for control-type tools exists.

6.3 Goal-based Savings ('Planning ahead' interventions)

There are two similar products provided by Saffron Building Society ("Goal Saver") and RBS/NatWest ("Your Saving Goals") that are designed to encourage customers to plan ahead by saving up for different purposes. Both products are the result of research by the providers concerned and contain examples of behavioural interventions.

6.3.1 Products

Both products enable the customer to set a goal for a specific purpose. Over a certain timeframe through a combination of existing savings and accumulating further savings the goal can be reached. Both products encourage the customer to make payments by standing order and/or direct debit into a savings account. The goal can be personalised with an image and/or a name. Assistance is provided in calculating the amount required to be saved. Feedback is provided on progress and customers are warned if they are not going to meet their goal with a possible solution in terms of an increased amount of saving.

6.3.2 Who should the intervention help?

Saffron Building Society ('Saffron') – people getting married and others who are saving for many purposes, including a rainy day or emergency. Many of the purposes are life events such as wedding, house deposit, education, major purchases (e.g. car) and gap year. For the specifically designed wedding version of the product, it turns out to be the groom and family/parents that are more interested in finances than the bride.

A comment from the provider was that "we found this to be a behavioural category almost separate from any of the other main ways of categorising customer groups." There are a very wide range of amounts and types of savings goal. The wide variety of customers appears to have "a behavioural desire in common".

It was identified that a lot of people act impulsively, but need to plan when buying a sizeable purchase. The provider is a building society that tends to have customers from the ABC group who are more conservative and are more likely to make informed choices and plan.

The average amount of saving in this account-type is very significantly higher than that contained in comparable savings accounts. This applies to both internet and branch-based accounts. The provider concerned has seen significant growth in the branch based accounts, so the average balance being higher is likely to reflect the interventions contained in the product that encourage saving for a specific purpose. Some of the increase would be explained by a slightly more competitive interest rate, but the differential is not great and is not enough to be a best-buy.

RBS/NatWest – there has been very large take-up of the product since it was launched. Such younger working groups with the attitudes of "finding their way", "moving on up" and "spending today" are particular segments that find the product/tool an attractive way of committing to a savings plan. It is particularly noteworthy that the "spending today" group have a far higher take-up of this product than of savings products in general. The product is appealing to customers that were previously regarded as disengaged in savings.

6.3.3 Relevant Aspects of Financial Capability

Making ends meet – no evidence on this component.

Keeping Track

Saffron comments that it is "surprised how few people use the budget planning tools that are available. Lots more people are prepared to say 'I think I know what I can afford to do and therefore I am going to do it,' and that may be because they have done that exercise somewhere else, but I would have expected the percentage of people using budget planning software to be more than 50% and it is not, nearer 20%. I think the ability to use that kind of thing should be motivational and it does not appear that it is."

Planning Ahead

The products are very similar and the following comments from Saffron indicate the research that led to creating them in order to help customers plan ahead. "All of the research said we plan better, save better when there is motivation and something that we actually know that we want that we cannot buy now. I have got to do some planning for it. The motivation was the thing that said that is what I am going to do, I am going to set up a direct debit for it, I want to see a picture of it, because it is the thing you want is the strong motivation. Most of the motivation for people to manage their finances is so that something does not happen. We are much more motivated when it is about something happening."

"Plan, save, get is the mental process people go through, but it needs to be motivating. A lot of financial services are about the 'stick', but we also respond well to the carrot. If you look at terms and conditions of a credit card, a massive tome of stuff, it is all about if you do not pay what will happen to you. Very little about if you do pay it back every month or the minimum payment plus 200%, this is the reduction in the interest you will be paying us that means you will be this much better off. Should focus on what want people to do rather than on what people should not do. This would have a positive effect on behaviour." (Saffron)

RBS/NatWest is consciously trying to help customers consider their short, medium and long-term goals rather than saving for the sake of it or not saving at all.

6.3.4 Interventions

Goal-based savings is a new innovation in the UK market, which is positively received by many types of customer and appears to encourage greater amounts of saving. The hypothesis is that the following interventions are or are likely to be key to an increase in the financial capability of planning ahead.

Messenger: in the case of existing customers of the institution the messenger is the bank/building society itself. For many people, the bank is a trusted source and this will be an encouragement to take action. In the example of the account for a specific goal (wedding), the magazine that acts as the messenger is a trusted source and is likely to have a higher level of impact. When the messenger is linked to the goal, this adds a degree of salience that may change the outcome in terms of the likelihood of action being taken.

Incentives (hyperbolic discounting): the creation of the separate account for a specified purpose creates a negative incentive to touch the money. Many people are impatient and undervalue the economic benefit of being able to save; having this kind of negative incentive could be really helpful to them. It is too early to know whether the persistence of these accounts will be higher.

Incentives (mental accounting): the allocating of money to a "pot" i.e. giving it a label, creates a disincentive to use it for some other purpose. In the specific context it may give a greater sense of ownership of the money i.e. the customer has determined how the money is divided rather than the bank.

This negative incentive appears to also work in relation to making provision for the unexpected. Many customers create a pot such as "rainy day fund", which does not have a specified use. It could be valuable to do further research on how the customer establishes the appropriate size of such a pot.

Defaults: the account is designed to be a smooth process that leads from setting a goal to creating a standing order/direct debit for a regular payment. The default is that a regular payment is set-up at the time of opening the account and the evidence is that this is effective in significantly increasing the number of customers that do this.

Salience: these accounts provide feedback on progress toward meeting the goal. Importantly, they make it easy for a customer to identify the corrective action required if they are falling behind. The feedback does not allow for considering the overall appropriateness of the savings goal in the context of the customers financial position. For example, it is important that the mental accounting incentive provided by the pot does not mean that the salient feedback results in savings increasing congruent with an increase in debt.

Affect: the emotional appeal of being able to include a photograph of the object of the savings plan and to label the savings goal specifically is likely to be improving commitment. Further research would be required to identify how significant this was in increasing the likelihood of the savings target being achieved compared with an account that does not have these features.

Commitment: two key forms of commitment are the setting of a goal and the commitment to a regular payment. This may be by standing order/direct debit or by making a regular transfer to the account. The evidence is very strong that this will affect behaviour and make it more likely that a person manages to save. In particular, it will assist with overcoming procrastination.

It is of interest that customers establish goals for pots such as rainy day and emergency fund that do not have a specified use. In order to set a goal the customer must have a number in mind. There appears to be an item of potential expenditure that is salient to the person and the goal setting triggers a consideration of it. For example, customers refer to the need to have sufficient to cover the cost of the central heating breaking down.

6.4 Conclusions on Case Studies

Figure 7 demonstrates that most of the interventions contained in MINDSPACE are being used in the financial services case studies.

Figure 7: A summary of the key intervention "tools" being used within the six case study products

	"Living within means" Products		"Keeping Track" Products		"Planning Ahead" Products	
	Secure Trust Bank	RBS/ NatWest	O2	Barclay-card	Saffron Building Society	RBS/ NatWest
Messenger	X	X	X		X	X
Incentives			X		X	X
Norms						
Defaults	X	X	X		X	X
Salience	X	X	X	X	X	X
Priming /Affect	X	X	X		X	X
Commitments	X	X	X		X	X
Ego						

The conclusion is that in almost all cases more than one intervention was being used, making it difficult to identify the most significant cause of the behaviour change that was occurring. In these examples the hypothesis is that a combination of economic behaviour tools is being used as the intervention. Messenger, Defaults, Salience and Commitments are evident from the analysis. It would be necessary to carry out further experiments to identify precisely which tool or combination is having the strongest effect. It would appear that

Defaults and Commitments are being used particularly successfully in five of the six products in order to achieve the desired outcome.

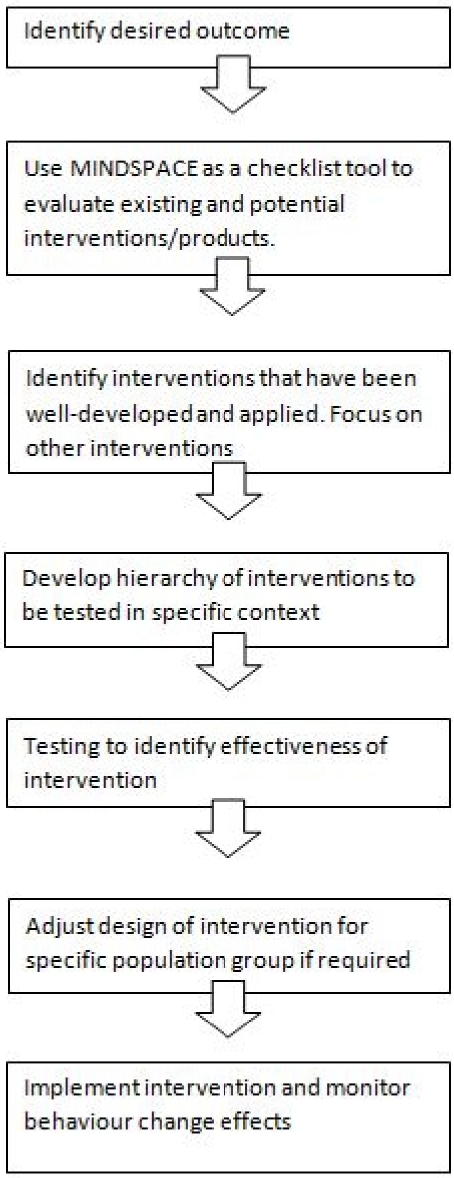
Priming and Affect may be important components, but it is difficult to know how significant the results of these interventions may be without them being separated from the others. The academic literature demonstrates that these interventions can cause material change in behaviour.

Financial services providers have some products that are successfully using these intervention tools to alter customer behaviour in the most important areas of financial capability. Given that financial capability can be improved with various behaviour interventions, the main obstacles to a significant expansion of availability to people in the UK are practical rather than theoretical.

7. Proposed Methodology for Intervention Analysis and Implementation

If this methodology proves to be successful in the next phase of testing specific interventions, it may be a robust way of identifying initiatives that influence behaviour. Although the potential interventions are becoming understood, it is currently unclear as to the optimal way of identifying the most appropriate intervention to implement in a specific situation. Figure 8 illustrates that each component of the Mindspace framework is considered in order to identify interventions that are most likely to be effective for the specific outcome, or those that should be the subject of specific experimentation. In some situations a particular intervention may already be widely used e.g. a financial incentive through the tax system, in which case this intervention is unlikely be the one that would generate significant further change towards the desired outcome.

Figure 8: Methodology for Intervention Analysis and Implementation



This approach contrasts with the view from the expert interviews (Section 5.6), which begins by understanding the situation/needs of the individual group with a focus on delivering a message (education intervention thinking). The approach proposed here is to focus on interventions that work in terms of behaviour change and adapt them to specific population groups if necessary. The approach should identify whether certain changes to the choice architecture will alter the behaviour of a diverse/broad range of the population. The case studies are further confirmation in that the customers of the institutions concerned will not always have common demographic characteristics, but they will have a common need to change behaviour in an important area of financial management.

The methodology involves:

1. *Desirable behaviours identification:* in the specific context to identify the outcomes that would indicate an improvement in financial capability.
2. *Mindspace checklist:* to develop interventions that either individually or in combination may encourage the behaviour outcome desired.
3. *Identify interventions that have been applied:* if some interventions are already being used successfully, then other interventions may have the largest incremental effect. The approach to this stage will depend on whether existing interventions can be evaluated without new studies and experimental designs.
4. *Develop hierarchy of interventions for testing:* This report indicates that there are likely to be many instances where interventions with high potential impact on behaviour have not been researched.
5. *Testing to identify effectiveness of the intervention:* these would essentially be financial services trial studies to test whether a significant improvement in financial capability can be generated in, say, a three month period.
6. *Adjust design of intervention:* the trial studies may lead to differences being necessary for different population groups and the implementation being altered accordingly.
7. *Implement intervention and monitor the effects on behaviour:* occasional reviews would be advisable to check that there were no unexpected results and the desired behaviour change was occurring.

8. Conclusion

This report combines evidence from academic research, expert interviews and case studies to demonstrate that it is possible to change the environment in which decisions are taken in such a way as to create financial capability. For some interventions, such as priming, the interventions identified could have a significant effect on behaviour. Indeed, the academic evidence indicates that some interventions may be easier to implement and more successful than experts anticipate. The interventions are not giving advice to customers, but they make it more likely that an individual reaches a higher level of financial capability.

The case studies demonstrate that it is possible for financial institutions to play a key role in developing financial capability. They are not intended to be a comprehensive view of product development in UK financial services, however, it would be positive if there were many more examples where the benefit to customers could be identified.

Relative to the UK population as a whole, it is reasonable to conclude that there is enormous scope to alter the environment in a way that encourages greater levels of financial capability. This process is at a relatively early stage, but there is significant opportunity for well-structured research leading to interventions being implemented and evaluated to ensure that the desired creation of financial capability is taking place.

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Appendix 1: Studies on changing behaviour

Studies that have attempted to change behaviour rather than just describe it. In so doing, it views the barriers to behaviour change as allowing us to design interventions that act as drivers of behaviour. Papers are listed for all the effects they consider, and so some may appear more than once.

	INFORMATION			**MINDSPACE**													
	Education	Restrict choice	Beliefs		**Incentives**												
KEY BEHAVIOUR				**Messenger**	**standard**	**loss aversion**	**reference dependence**	**hyperbolic discounting**	**overweight low probability**	**mental accounting**	**Norms**	**Defaults**	**Salience**	**Priming**	**Affect**	**Commitment**	**Ego**
Making ends meet	Bernheim & Garrett (2003); Deelstra (2003); Bonacio & Dalal, (2006); Lusardi & Mitchell (2006, 2007); Hung & Yoong (2010); Lusardi (2007); Cole and Shastry (2008)	Bertrand et al (2009); Choi et al (2006)		Duflo & Saez (2003)	Gross and Souleles (2002); Barr (2004); Beverly et al (2005) Bertrand et al (2006); Dupas & Robinson (2009); Karlan & Zinman (2009)	Shapiro & Slemrod (1995)		Ausubel (1999); Ashraf et al (2006);		Thaler (1999); Barr (2004); Beverley et al (2005); Almenberg & Karapetyan (2009)	Duflo & Saez (2003)	Beverly et al (2007); Madrian & Shea (2001); Choi et al (2004); Cronquist & Thaler (2004);	Duflo et al (2006); Brown et al (2008a;b)			Thaler & Benartzi (2004); Ashraf et al (2006)	
Keeping track of your finances										Barr (2004)							
Planning ahead	Bernheim & Garrett (2003); Deelstra (2003); Yaniv (2004a;b); Bonacio & Dalal, (2006); Lusardi & Mitchell (2006, 2007); Hung & Yoong (2010); Lusardi (2007); Cole and Shastry (2008); Lusardi et al (2010)		Goetzmann and Peles (1997)			Chambers & Spencer (2008)	Camerer et al (1997); Fehr & Goette (2007)			Thaler (1999); Barr (2004); Beverley et al (2005); Almenberg & Karapetyan (2009)				Stewart (2009)		Thaler & Benartzi (2004); Ashraf et al (2006)	
Choosing financial products	Smeeding et al (2000); Chetty & Saez (2009).					Benartzi & thaler (1995); Epley et al (2006); Karlsson et al (2005)	Benartzi & Thaler (1995); Barberis et al (2001)		Johnson et al (1993)	Abeler & Marklein (2008)		Blumenthal et al (2005); Levav et al (2010)	Chetty et al (2009); Finkelstein (2009); Chetty & Saez (2009); Cahmbers & Spencer (2008); Hardisty et al (2010)		Landry et al (2006); Bertrand et al (2010).		Forehand et al (2002); Reed (2004); LeBoeuf & Shafir (2006); Reed (2004); Barber et al (forthcoming)
Staying informed about financial matters																	

Appendix 2: Case studies analysis

The following three tables contain information obtained on the six products being analysed as case studies. Where it appears that an intervention may be having a major effect in terms of altering behaviour towards greater financial capability it has been highlighted in bold. The comments reflect the terminology used by the providers of the products as in many instances it indicated that the provider was hoping for a behaviour effect.

'Living within means' interventions – accounts for customers with financial problems (critical and non-critical)

Intervention	**Secure Trust Bank – Prepaid Current Account**	**RBS/NatWest Money Manager** (available on invitation, described as a pilot)
1. **Identifying the right person or channel to provide education/information.**	**1. A debt management company introduces the product to customer. It is based on a relationship of trust. DMC's are selected by provider of product that want to help customer. Education/awareness important part of what DMC is offering.** 2. **Existing users recommend the product to others.**	**Existing customers identified who are likely to benefit. Specialist staff approach the customer with a clear message based on expertise.**
2. Provide financial or non-financial incentives in order to change behaviour.	Predictable charging. Not charging for a bounced payment. The provider would like to show what it would have cost if had not bounced. This would be an example of salience.	None
3. Encourage provision for unexpected outcomes.	1. Not charging for a bounced payment (direct debit), so reducing need for contingency. 2. Ring-fencing of spending money, but could return to Bills pot if the unexpected happened and gas bill higher or washing machine breaks down. Working on a budget calculator to help.	Unexpected bills can be dealt with through an optional "safety net" feature, which will check to see if there are funds in other accounts (Spend or Save "pots"), which would cover the expenditure. If this is the case then funds will be transferred automatically to prevent charges from being incurred and allow the bill to be paid.
4. Provide relative information on peer group, i.e. people like you.	None, but like to have benchmark e.g. people earning this living here spend this much.	None

5. **Use a default behaviour to encourage action e.g. automatically set a regular financial check-up.**	**Prescriptive in having two pots and encourages people to think a certain way in terms of regular bills and other spending.** **Originally the "pot" approach explained when account first introduced, but now explanation moved to a welcome call when the "budgetary ethos" is detailed. Significant improvement to do at this point as trained staff provide the explanation and customers accept the approach. An Infomercial has been produced to emphasise the approach.**	**Default is to set up a Bill ("pot") to Spend ("pot") standing order and move all overdraft facilities to the Bill account. Salary/regular income is mandated to the bills account. A new on-line banking view is provided identifying the 3 separate pots.**
6. **Provide feedback to help monitor performance and stay on track.**	**Paper statements, on-line statement, IVR statements are all provided to maximise the potential for the customer to know where they stand.**	**Encouraged during account set-up to view account several times a week. These customers would not be doing this automatically before.** **If a customer closes their arrangement or cancels the mandatory Bill to Spend standing order, a phone call from the Credit Review team often persuades the customer to reactivate the proposition.**
7. **Present outcomes in such a way that it invokes particular feelings or influences behaviour.**	**Professionalism of approach combined with a message of being able to trust this provider. A control theme with a message that the customer could do what they want to do when they want to do it. A message of growth is the theme (daffodils), which may be important for customers recovering from the results of a poor financial situation.**	**The Credit Review team are highly trained in having budgeting conversations with customers who find managing their money difficult. They talk about the benefits:** • **Helps manage finances day to day** • **Stops overspending** • **Helps prevent going overdrawn** • **Helps clear overdraft** • **Helps to save money** • **Puts customer in control of finances** • **Helps reduce debts**
8. **Make a commitment to an action or behaviour.**	Conscience effort to sort out finances, this account is early step in this process. Committing to "pot" approach is a key component.	Customer commits to having all their income paid into their Bill account and having a regular standing order from this account to their Spend account.
9. **Set realistic targets and goals.**	Budget calculator in future would be useful.	**The proposition is often offered alongside a reducing overdraft or debit repayment plan. It is portrayed as a tool to help customers manage their money and achieve their goal e.g. reduce overdraft to zero within 12 months, pay off arrears within 6 months.**
10. Review appropriateness of products based on circumstances/requirements.	Debt management plan has a review, but not part of the product.	If a customer cancels their arrangement and on contacting them it is found that they are in a better position with their finances and no longer need the proposition then the account would not be re-offered.

"Keeping Track" interventions – expense management

Intervention	O2 Cash Manager and Load & Go	Barclaycard
1. **Identifying the right person or channel to provide education/information.**	**Cash Manager - mostly existing customers. Trusted service brand which customer takes and uses. Satisfaction of the customers using this product is higher than a general customer. The customer is taking a secondary product i.e. not the first contact with the provider.** **Load & Go – young people like that the provider is not a financial institution, not being told what to do. Not told by parents. Made own decision. Could have card account at 13, but now it was their decision. Influence of parents small.**	Barclaycard is the messenger. The provider's viewpoint is "we are not saying looking at my expenses is a good idea. We have a range of tools to help you understand how much you are paying every month, where you are spending your money. The message is this is easy, it is information".
2**. Provide financial or non-financial incentives in order to change behaviour.**	**Free is incentive.** Incentives to be launched to encourage usage.	A lot of effort has gone into attracting customers to the on-line services being provided, including the expense management tool. There is no specific incentive intervention.
3. Encourage provision for unexpected outcomes.	No, all expected.	No
4. Provide relative information on peer group, i.e. people like you.	No, although it is under consideration.	No
5. **Use a default behaviour to encourage action e.g. automatically set a regular financial check-up.**	**Cash Manager (verified) - Monthly or weekly cycles of reload to the card. Encouraging a default to a set amount to speed in a given period.** Cash Manager (unverified) and Load & Go – have no default, as cannot do automatic load. There is blocking on Load & Go as cannot use for purchases such as alcohol or pornography.	No
6. **Provide feedback to help monitor performance and stay on track.**	**Just what spent, but provided all the time. No value added, but this is what is wanted by customers. Definitely impacts on behaviour in terms of pot etc.**	**Expense management is providing monthly and on-going feedback. Customers can design their own form of feedback and are doing so.**
7. **Present outcomes in such a way that it invokes particular feelings or influences behaviour.**	**"Never overspend" positioning is likely to have been appealing to the various customer groups taking the product in its various versions.**	No
8**. Make a commitment to an action or behaviour.**	**Regular load done either at point of activation or confidence is built and then set up follows.**	No
9. **Set realistic targets and goals.**	**Control spending, customer does it. It is a tool for this purpose. "Selling a tool".**	No
10. Review appropriateness of products based on circumstances/requirements.	Try to help people position which version of the product is helpful to them. Difficult with a small number of questions.	No

“Planning ahead” interventions – Goal-based Savings

Intervention	**Saffron**	**RBS/NatWest**
1. Identifying the right person or channel to provide education/information.	**Existing on-line customers can obtain the product. Described by provider as not designed for new customers.** **Wedding version - customers believe that the wedding magazine is a trusted source of information. It is bought early in wedding planning process. The most utilised page is the tear-out wedding planner. Could envisage different messengers for different goals e.g. gap year, car etc.**	**Existing on-line customers can obtain the product.**
2. Provide financial or non-financial incentives in order to change behaviour.	Being able to put a photo of the goal may provide a non-financial incentive.	No
3. **Encourage provision for unexpected outcomes.**	**Emergency fund (e.g. central heating breaking down) is a key pot. “Rainy day fund” is another form of this. Trying to help by keep “boxes” separate.**	Many customers self-select the “other” category for a rainy day or similar fund. Surprised provider that so many customers set a goal for this purpose.
4. Provide relative information on peer group, i.e. people like you.	No, but aware that this intervention is working elsewhere.	No
5. **Use a default behaviour to encourage action e.g. automatically set a regular financial check-up.**	**Default to a direct debit being set-up for payment into a savings account at end of process. Cutting down procrastination. Once planning to save has concluded can get on with it very quickly in terms of setting up account. If not done at this point, customers do not get around to setting up direct debit.**	**Standing order penetration is currently double that for the savings base as a whole, but looking to improve this further. The percentage seemed low, but many customers find it very easy to do a monthly transfer to a savings account on-line. Fraud issues have made the process complicated for setting up the standing order between accounts, but it is possible this can be overcome.**
6. **Provide feedback to help monitor performance and stay on track.**	**Link back to account and can see how doing and use “thermometer” to show what need to do.**	**A” tracker bar” which shows progress made towards savings goal and actual balance. If they are off-track, customers are informed and shown how to correct.**
7. **Present outcomes in such a way that it invokes particular feelings or influences behaviour.**	**Visual representation seen as important. Being able to customise the goal by naming it and use of photographs may be influential.**	**Visuals and labels to help customer engage.**
8. **Make a commitment to an action or behaviour.**	**Linear process via calculator tool to set up direct debit and then give feedback.**	**Calculator works towards regular savings amount. Standing order provides the commitment.**
9. **Set realistic targets and goals.**	**Rainy day if no goal, but generally will have a goal. The “slider” tool helps ensure that the correct amount is being saved. If a customer does the budget that will help ensure it is realistic.**	**Calculator helps customers work out how much they need to save each month if they are to meet goal by a certain date, or when they will meet it if they save a certain amount each month. If the amount or target date is unrealistic, the calculator will tell the customer what they need to do in order to meet the targets they have set.**
10. Review appropriateness of products based on circumstances/requirements.	No	No