THE BEHAVIOURAL INSIGHTS TEAM

Financial Capability Lab – detailed findings

A supplement to 'A behavioural approach to managing money: Ideas and results from the Financial Capability Lab'

A partnership between the Money Advice Service, the Behavioural Insights Team and Ipsos MORI

May 2018

Contents

1. Checkout Savings

Idea: Prompt people to save at the checkout, either online or in a physical store. We explored three types of prompt: (1) offering a `savings token' that people buy and that automatically transfers money to a savings account whilst they are shopping; (2) linking the savings token to a cash prize that is added to their savings (rather than an interest payment); and (3) framing retail discounts and offers as a savings opportunity at the checkout.

Why was it tested? Multiple studies have shown that simple, timely prompts can encourage people to save. The checkout or payment stage of a transaction is a moment when people may already be considering the consequences of regular purchases for their personal finances. If people are already considering budgeting and their financial position, then this may make them more likely to think about their financial needs in the future, making them more likely to discern the future benefits of saving. This idea was considered to be an innovative solution that was backed up by clear existing evidence from other studies.

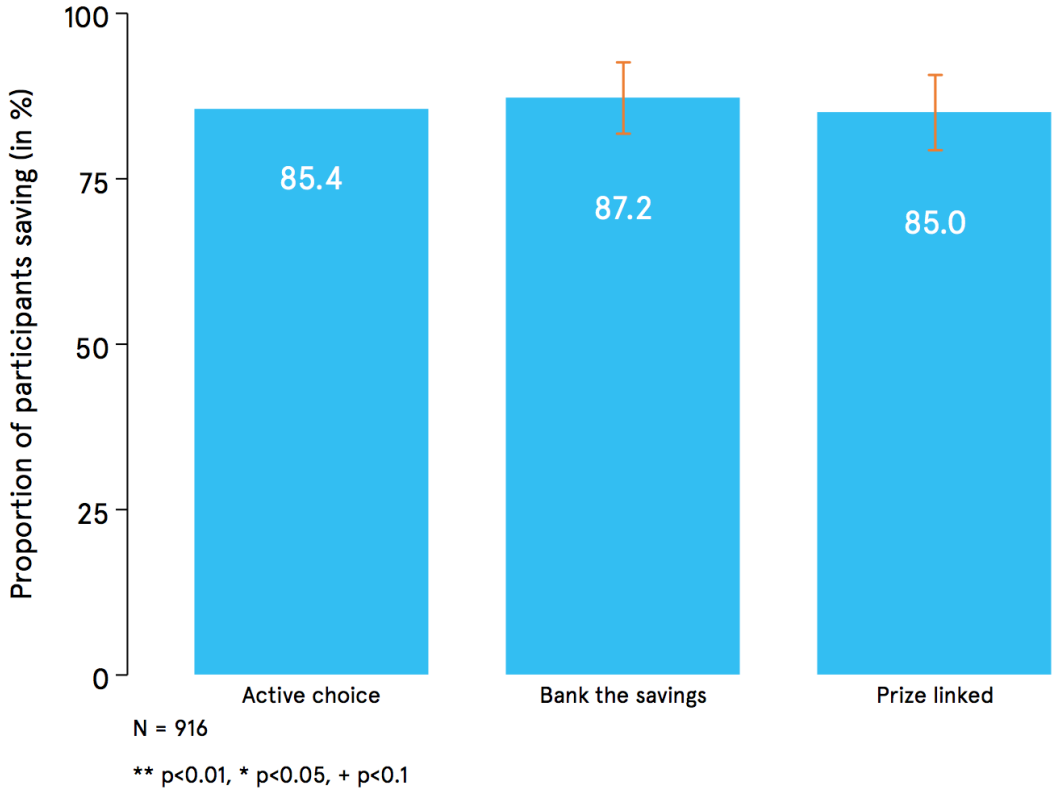
How was it tested? Predictiv was selected as the best option to produce evidence for which type of savings prompt might work best. The prompts were offered to participants in an online shopping simulation built using Predictiv. We asked participants to shop for the ingredients for a beef stew with a budget of £10.

Findings: Across the test we saw very high levels of saving, with around 9 out of 10 participants opting to save during the online task. There was no significant difference in savings rates between the three savings prompts.

In three pre-tests aimed at setting the interest rate for the main test, we found very high levels of saving for each of the interest rates, with more than 75 per cent of all participants opting to save.

In the main test, savings levels were even higher: 9 out of 10 (85–87.34 per cent) of participants saving chose to save some money (see Figure 1).

Figure 1: Percentage of participants saving



We also tested the numeracy of participants using a number of simple mathematics questions. The numeracy scores of participants were negatively and significantly correlated with saving. In other words, more numerate participants were less likely to save (the least numerate participants saved 100 per cent of the time, whilst the most numerate participants saved 80.38 per cent of the time).

Recommendations: Further testing would be a prudent next step to rule out the possibility that the high levels of saving were caused by an aspect of the test design or participant group. This could be carried out in the field or in further lab tests.

Our research suggests that savings products like this are not common; some similar products do exist, but these are not generally behaviourally informed or well promoted to shoppers. A developed product could be pitched to banks, retailers and online platforms. The product could offer a positive marketing opportunity for a retailer to show commitment to making a positive social impact.

Why was it tested?

Multiple studies have shown that simple, timely prompts can encourage people to save. In this test, we explored prompting people to save at the checkout or payment stage of a transaction. Paying for a weekly food shop is a moment when people may already be considering the consequences of regular purchases for their personal finances. If people are already considering budgeting and their financial position, then this may make them more likely to think about their financial needs in the future, making them more likely to discern the future benefits of saving.

Daily life involves making a lot of decisions, but sometimes we group those decisions together. This has been called `choice bracketing', meaning that willingness to pay for things changes depending on the environment in which purchasing decisions are made.[1]

For example, we might try to save money by eating fewer takeaway meals, but whether we're successful at that depends on how we group those decisions together. The financial impact of each individual takeaway might not seem too bad, but the cumulative cost across an entire year might be a very strong deterrent.

Our perspective in this case might depend on how we "bracket" all those decisions throughout the year: do we just focus on each individual decision (and probably keep ordering frequent takeaways), or do we bracket all of the decisions together and look at them as a whole (and probably order fewer takeaways)? As explained in the seminal paper on this choice bracketing, people "fail to integrate the consequences of many similar decisions into their judgments".[2]

This type of thinking about money means that increasing savings rates can seem unrealistic at most times of the year. Increasing savings when you have just saved money through discounts on your weekly shop, however, may seem a more realistic option.

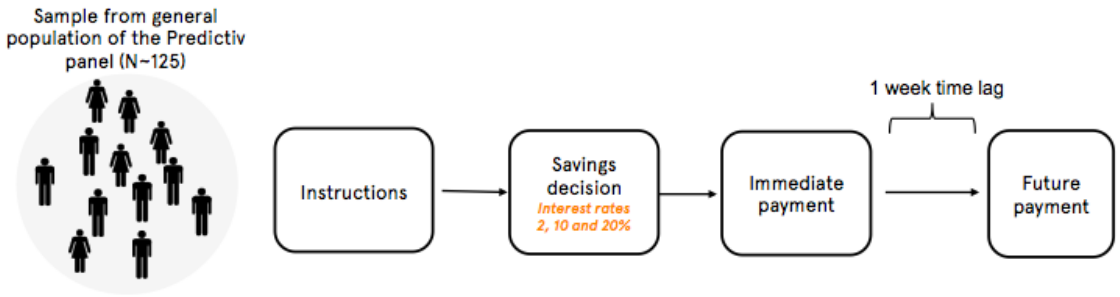
Consumers also shop regularly for groceries, which provides the potential for regular engagement and use of prompts at a time when household finances are front of mind.[3]

Quantitative findings

The pre-test

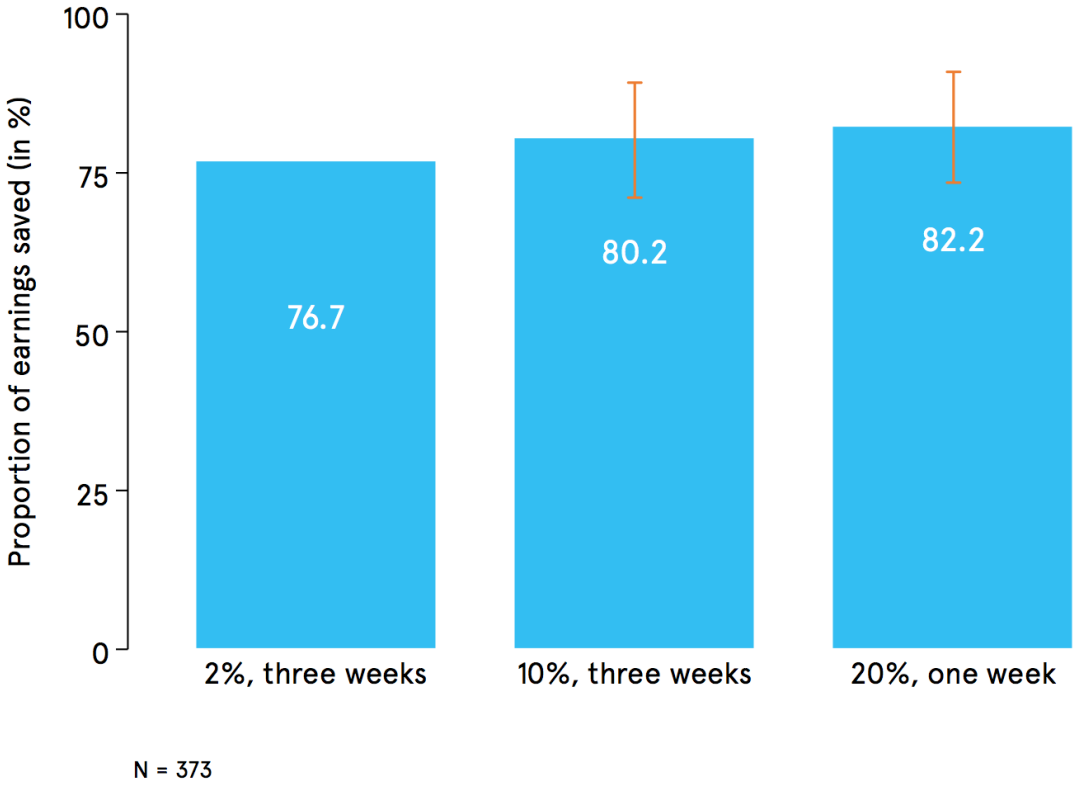
The primary research question for the Predictiv trial was what percentage of participants would be willing to save. Before we began the main Predictiv test, we ran a number of short pre-tests to determine which interest rate might be most effective in encouraging people to save (see Figure 2). These pre-tests offered participants 50p, which could be taken immediately or saved to be paid out, with interest, later. Participants could choose to save all or some of the 50p. We tested interest rates of 20 per cent, 10 per cent and 2 per cent (see Figure 3).

Figure 2: Stages of the Checkout Savings pre-tests



In all three tests we saw similar and very high levels of saving (~80 per cent). This is a much higher savings rate than the behavioural science literature would lead us to expect.[4] Additionally, savings levels appear to be remarkably insensitive to the interest rate (see Figure 3 below).

Figure 3: Percentage of earnings saved – pre-tests



Based on the observation that our participants did not seem to be influenced to save significantly less with a 2 per cent interest rate, we chose 2 per cent as the interest rate for the main test.[5] A possible explanation for the high savings rate is that the amount that participants were able to save in the test was so small that they did not see any value in receiving this amount immediately. If the size of the amount drove the high levels of saving, then it might also have driven some insensitivity to the interest rate, as even large differences in the rate would not result in large differences in the money paid out as interest. We discuss this further in the Recommendations section, where we lay out next steps.

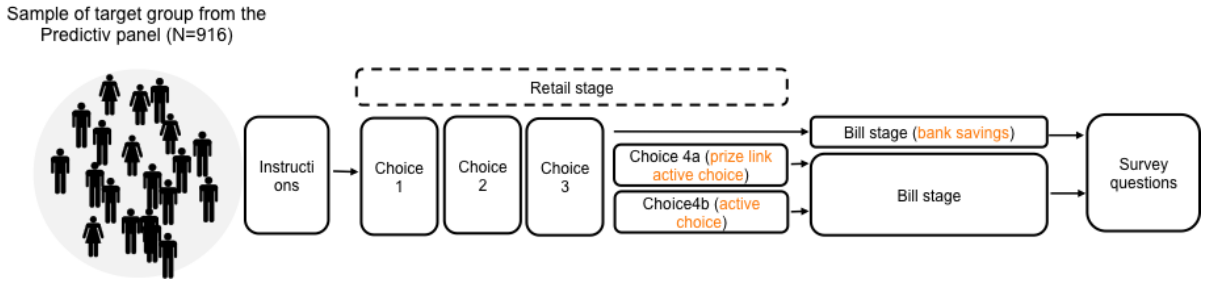
The main test: design

Following the pre-test, we ran an online test that asked participants to carry out a short simulation designed to mimic shopping online or in a physical store (see Figure 4).

Participants were given instructions that asked them to buy the ingredients for a beef stew using a £10 budget. Participants had to choose between different ingredients with different costs – for example, 'British Lean Diced Beef (500g)' or

`Stewing Shin of Beef (500g)'. If any money was left over, the participants could choose to keep it or save it. If they saved money, then the money they saved was paid out, with interest, at a later date.[6]

Figure 4: Stages of the Checkout Savings task



Participants were randomly assigned to three interventions which each used different prompts to save, introduced at various points in the shopping simulation. All of these interventions were based on insights gained from the behavioural science literature. Testing a range of interventions allows us to consider a number of different possible approaches that could feed into the design of a pilot.

The three interventions were as follows (see Table 1 for a summary):

1. **Active choice:** as well as buying the ingredients for beef stew, participants could choose to purchase a savings token for 60p; that is, they had to make an active choice to save by purchasing the savings token. All participants were able to purchase this token regardless of the purchasing decisions they made concerning the beef stew ingredients. If they chose the token, the amount of money was automatically transferred to their savings account. Any money saved was paid directly into the participants' bank accounts, with interest of 2 per cent added, three weeks later. This intervention offers a traditional method of saving where participants must actively consider their choice and then make what is effectively a purchasing decision.

2. **Prize-linked active choice:** Our behaviour is significantly influenced by things that grab our attention, and prize draws can certainly do that.[7] Large prizes are obviously attractive, and publicising the winners of prize draws can increase the perceived likelihood of winning and make entry into the draw more appealing.[8] This intervention was an attempt to strengthen the attractiveness of saving, using the same process as for the active choice intervention but replacing interest on savings with

a jackpot of £3. This was paid to one saver immediately after the test closed. Any savings were paid directly into the bank accounts of the participants after three weeks.

3. **Bank the savings:** this intervention was based on the behavioural insight that the framing of options as losses or gains can influence the attractiveness of those options.[9] Instead of having to choose a savings token, participants were asked whether they wanted to save any of the money left from their £10 budget once they had finished shopping. Participants received a bill for the stew ingredients that highlighted savings from discounts and the total amount left over from the budget. Following this, participants were offered the chance to save this amount, effectively reframing the decision to save from a purchasing decision to allocation of a windfall. If participants chose to save, the amount was transferred into their savings account. Any money saved was paid directly to the participants, with interest of 2 per cent added, three weeks later. If participants chose not to save, then they automatically received any money left over from their shopping budget immediately following the test.

Table 1: Total earnings by intervention

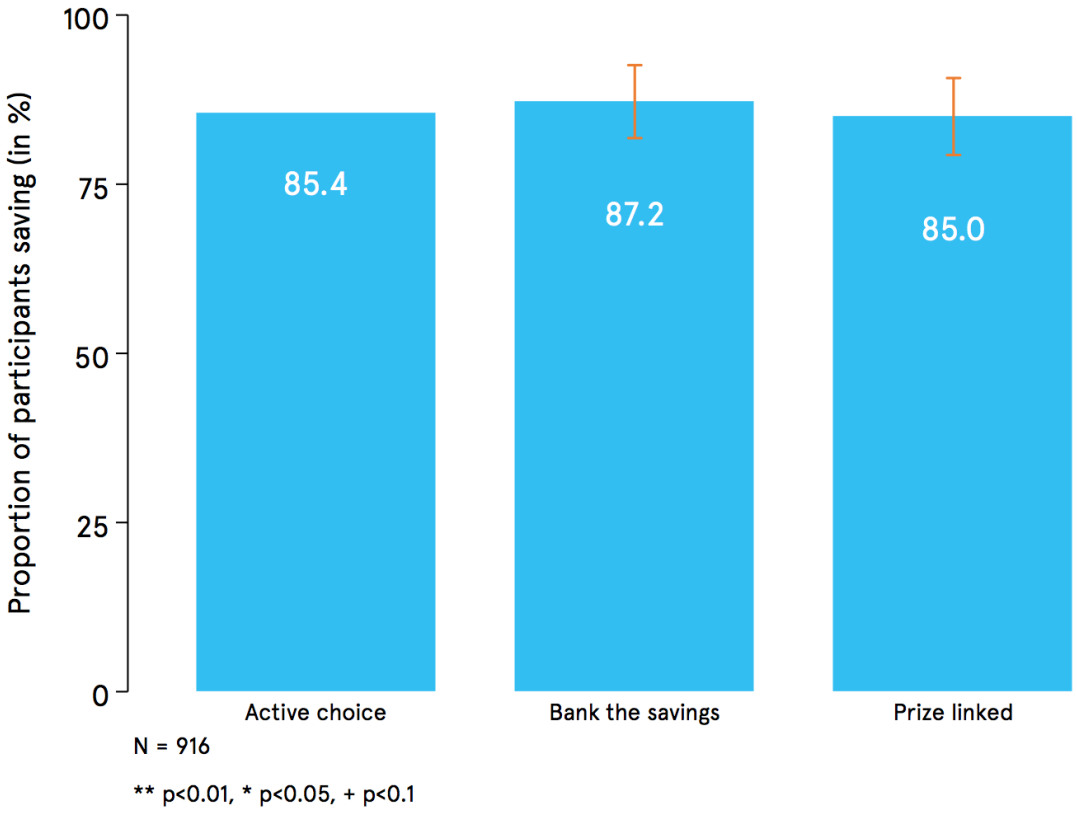
	Active choice		**Prize-linked**		**Bank the savings**	
	Not saved	**Saved**	**Not saved**	**Saved**[10]	**Not saved**	**Saved**
Poor choices	60p	60p + 1p interest	60p	60p (+ £3 if winner)	60p	10p + 0p interest[11] (and 50p now)
Fair choices	85p	85p + 1p interest	85p	85p (+ £3 if winner)	85p	35p + 1p interest (and 50p now)
Best choices	£1.10	£1.10 + 1p interest	£1.10	£1.10 (+ £3 if winner)	£1.10	60p + 1p interest (and 50p now)

At the end of the shopping task, participants were asked four questions to test their numeracy. We also gathered data on how numeracy skills may have influenced performance in the test. We asked participants numeracy questions developed by the Money Advice Service (MAS) and National Numeracy.[12] Finally, participants were asked about their current level of savings, with categories ranging from nothing to £20,000 or more.

The main test: results

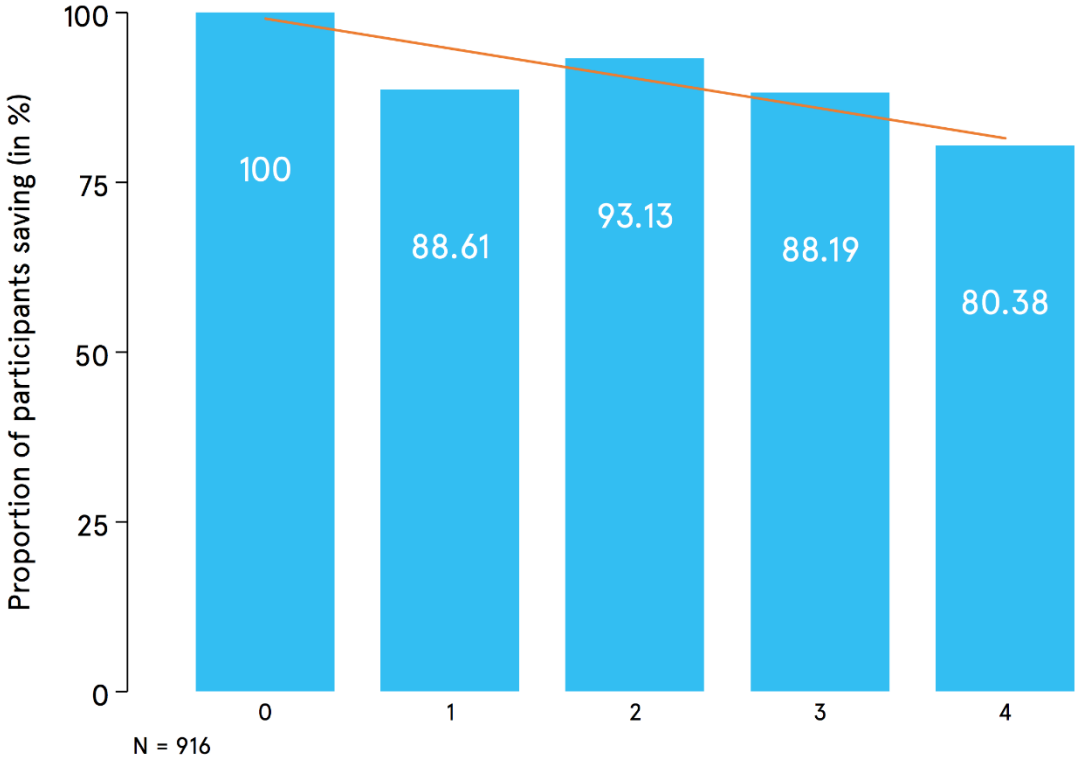
The first research question was what percentage of participants would be willing to save. In the test, around 9 out of 10 participants chose to save, an extremely high level (see Figure 5). There was no significant difference in the percentage of people saving between the interventions. It is worth noting that this is a much higher savings rate than found in previous studies. It should also be noted that previous studies have generally used higher interest rates than the 2 per cent offered in this test.[13] This makes it even more surprising that we saw such high levels of saving.

Figure 5: Percentage of participants who saved across the interventions



More numerate participants were less likely to save (see Figure 6). There was no significant difference in savings rates by other demographics (for example, age and income[14]). It could be that those with higher numeracy scores were more sceptical about whether they would actually receive their money in three weeks' time. This could have been because these participants did not expect to still be part of the Predictiv platform when the savings were paid out (participants can join and leave the platform as they please). Equally, it could also have been because participants did not trust that they would be paid in three weeks. This second concern has been shown to influence savings decisions in other lab tests.[15] Individuals with higher numeracy scores may also have realised that the absolute amount of money paid in interest would be extremely small (an extra penny in most cases) so was not worth waiting for. Without further testing, it is difficult to say which of these explanations, if any, explain the negative correlation between numeracy and saving.

Figure 6: Percentage of participants who saved by numeracy score



Note: Pearson corr coefficient = 0.10; P-value <0.01

The percentage of participants willing to save in this test was very high and was much higher than in previous laboratory tests.[16] There are a number of potential differences between this test and previous laboratory tests, such as that the participant group here was focused on the MAS 'financially squeezed' segment,[17]

whilst academic research is often done on undergraduates. The fact that this test was administered online rather than in a physical laboratory may also have influenced the behaviour observed. Whilst it is possible that something about the design of this test may have encouraged the very high levels of saving observed, it is difficult to isolate what this may be without further testing.

Another possible explanation for the high levels of saving is the relatively small amount of money available. It could be that the participants did not perceive much value in having such small amounts of money immediately, so their willingness to save increased. Further testing could be used to explore these hypotheses.

Recommendations

The results presented here suggest that there may be merit in developing a pilot that introduces prompts to save when people are making purchases. It is encouraging that all of our proposed savings prompts saw similarly high levels of saving amongst participants, which suggests there are a number of ways that the approach could be designed (for example, interest-rate-linked tokens, prize-linked tokens and discounts framed as savings opportunities).

Nevertheless, and as detailed below, further testing would be a prudent next step to rule out the possibility that the high levels of saving were caused by an aspect of the test design or participant group.

Further testing should seek to rule out the possibility that the small amounts of money available in this test, or some other design or sampling factor, may have led to an anomalous result of very high levels of saving. Tests that increased the amount of money that could be saved would begin to unpick these effects. They would also help to evaluate whether the relationship between numeracy level and saving is robust. For example, if further testing found that individuals with lower numeracy levels were more likely to save small amounts compared to individuals with higher numeracy, then this could inform tailored intervention designs for those groups.

If further testing finds that one or more of the proposed prompts to save is indeed effective, then the recommendation would be to contact retailers and banks to gauge interest in developing a pilot. This could also be presented as an opportunity to make a positive social impact by encouraging increased savings amongst customers.

Endnotes

[1] Read, D., Loewenstein. G. & Rabin, M. (1999). Choice Bracketing. Journal of Risk and Uncertainty. 19(1), pp.171-197.
[2] Read, D., Loewenstein. G. & Rabin, M. (1999). Choice Bracketing. Journal of Risk and Uncertainty. 19(1), pp.171-197.
[3] Read, D., Loewenstein, G., & Rabin, M. (1999). Choice bracketing. Journal of Risk and Uncertainty, 19(1), 171–197.
[4] For example, Andreoni and Sprenger found that, at an interest rate of 10 per cent paying out 35 days later, participants decided to take approximately 35 per cent of the available money immediately. This fell to 15 per cent of the available money for an interest rate of 40 per cent. While the time horizon in our test was shorter (21 days compared to 35 days), the interest rate was considerably lower (2 per cent compared to 10 per cent or 40 per cent). Andreoni, J., & Sprenger, C. (2012). Estimating time preferences from convex budgets. American Economic Review, 102(7), 3333–3356.
[5] This rate is also the closest to current commercially available rates that we can use with the small size of pay out from the test. Using an interest rate of lower than 2 per cent would mean paying out interest of less than half of a penny to participants who chose to save very small amounts, which is not possible. Andreoni, J., & Sprenger, C. (2012). Estimating time preferences from convex budgets. American Economic Review, 102(7), 3333–3356.
[6] The money was paid directly into participants' bank accounts so that they automatically received any savings.
[7] Behavioural Insights Team. (2014). EAST – Four simple ways to apply Behavioural Insights, 19-24
[8] Fooken, J., Hemmelgarn, T., & Herrmann, B. (2015). Improving VAT compliance–random awards for tax compliance (No. 51). Directorate General Taxation and Customs Union, European Commission. Loewenstein, G. F., Weber, E. U., Hsee, C. K., & Welch, N. (2001). Risk as feelings. Psychological bulletin, 127(2), 267.
[9] Kahneman, D., & Tversky, A. (1984). Choices, values, and frames. American Psychologist, 39(4), 341–350.
[10] 1 in 255 chance of winning.
[11] A saving of 10p was too low to earn any interest.
[12] The numeracy questions were drawn from Money Advice Service. (2015). Technical report for the 2015 Financial Capability Survey. They were developed with advice from National Numeracy (https://www.nationalnumeracy.org.uk).
[13] For example, Andreoni and Sprenger found that, at an interest rate of 10 per cent paying out 35 days later, participants decided to take approximately 35 per cent of the available money immediately. This fell to 15 per cent of the available money for an interest rate of 40 per cent. While the time horizon in our test was shorter (21 days compared to 35 days), the interest rate was considerably lower (2 per cent compared to 10 per cent or 40 per cent). Andreoni, J., & Sprenger, C. (2012). Estimating time preferences from convex budgets. American Economic Review, 102(7), 3333–3356.
[14] Note that we included covariates in the regression analysis to ensure that intervention differences (if any) were robust. The tests were not designed with the aim of discerning statistical differences between subgroups based on age, gender or other demographics, which would have meant recruiting a sufficient number of participants according to these characteristics. This means it could be that, say, young participants are more responsive to a prize-linked savings intervention than older individuals, but that with the current sample size in the test we were not able to pick up statistical differences at such a granular level. It is also important to note that we were looking at how the demographic characteristics interacted with the intervention effects, rather than absolute savings levels. Finally, we were only looking at how demographic variables influenced response to the intervention. As such, this analysis does not say anything about the relationship between these variables separately, such as the correlation between numeracy and income.

[15] This point was originally raised by Thaler (1981). When considering the possibility of using incentivised monetary payments in intertemporal choice experiments, Thaler noted that `real money experiments would be interesting but seem to present enormous tactical problems. (Would subjects believe they would get paid in five years?)' Recent work validates this suspicion. Thaler, R. (1981). Some empirical evidence on dynamic inconsistency. Economics letters, 8(3), 201-207.
[16] Andreoni, J., Kuhn, M. A., & Sprenger, C. (2015). Measuring time preferences: A comparison of experimental methods. Journal of Economic Behavior & Organization, 116, 451–464.
[17] Money Advice Service. (2016). The squeezed segment. These are working-age consumers with significant financial commitments but relatively little provision for coping with income shocks.

2. Savings Supporter

Idea: Encourage people to set savings goals and stick to them by inviting a trusted person to become their 'Savings Supporter' – a person who engages with the saver and monitors their progress towards a savings goal.

Why was it tested? This idea harnesses the power of real-world social networks. During initial explorative research, participants described how friends and family can be both a positive and a negative influence when it comes to saving and spending. Harnessing the power of social connections has been shown to be effective in areas such as education attendance and attainment, breastfeeding, and exam revision. The idea was considered to have extensive existing evidence to support it, and it was deemed to have a potentially large impact, if designed and delivered effectively.

How was it tested? In light of the existing evidence on peer support, a qualitative approach was chosen to help us explore in detail how savings peer support may differ from other forms of peer support. A workshop introduced the idea to 21 participants. Follow-up interviews with 12 of the participants then explored how they had felt about asking someone close to them to be their Savings Supporter and whether this had been an effective strategy.

Findings: Participants felt that having the support of a peer would help them get into the habit of saving, as they would not want to let their supporter down once they had made a commitment to them. Indeed, some had done something similar in the past, asking friends and family to help them cut back on spending.

Participants thought that success was likely to be dependent on the supporter chosen: participants mentioned a range of attributes they would look for in a supporter, such as being empathetic, encouraging, firm and challenging.

Many participants had mixed opinions on whether the Savings Supporter should be known to them or not, citing concerns about sharing financial information with family and friends. In follow-up interviews, many of these concerns were reversed. Many participants had had positive experiences of initial discussions with potential Savings Supporters. Supporters were reported to have been pleased to be asked to undertake this role and keen to commit their time.

There were mixed perspectives on how the support should be delivered – some liked the confidentiality and convenience which an app would provide, whereas others preferred the personal nature of a face-to-face conversation.

Recommendations: The Savings Supporter idea draws heavily on successful work the Behavioural Insights Team is doing rolling out 'Study Supporter' schemes to students in UK further education colleges. On the back of this successful fieldwork, and our findings in the Financial Capability Lab (the Lab) on Savings Supporter, we recommend that the idea be taken forward to a pilot in the field.

We are seeking partners to work with us to develop and test Savings Supporter in the field. We envisage three main opportunities:

- Using text messages or an app, offer Savings Supporter to support saving in a local community, potentially focused around a specific unifying body such as a school or sports club.
- Integrate Savings Supporter prompts as part of a banking app, matching similar customers for mutual support.
- Build Savings Supporter as a chatbot that users could interact with without the need to identify a supporter.

There is the potential through Savings Supporter to build long-term supportive relationships and improve existing ones to help people achieve their savings goals

Why was it tested?

The Savings Supporter idea aims to help people to stick to savings goals by inviting a trusted person to become their 'Savings Supporter', providing support and monitoring progress towards a savings goal. Three variations of the idea were developed:

- **Version 1 – text messages:** a person asks a friend or family member to be their Savings Supporter, and they agree to have regular conversations about progress towards a goal. Both give their phone numbers through a simple website. Both are sent standard texts at regular intervals to remind them to have a face-to-face discussion about progress towards the goal.

- **Version 2 – mobile app:** a person who wants help to save can download a mobile app and invite one of their friends or family members to be their

Savings Supporter. The participant can set their savings goal, and the steps they plan to take to get there, on a timeline. The supporter can accept the invitation and is then sent text messages at key milestones to remind them to check in with the saver and ask them how they are progressing. The supporter can also receive regular feedback on the saver's progress and can support them to commit to and work towards their savings goal. This can be done through text messages sent to both the saver and the supporter or through the mobile app.

- **Version 3 – mobile app with banking integration:** the same as version 2 above, with an additional functionality whereby the saver can link the app to their bank account. The supporter then receives text-message updates based on the saver's actual savings levels.

During initial explorative research for the Lab, participants described how friends and family can be both a positive and a negative influence when it comes to saving and spending. Peer pressure to keep up with friends has been identified as a key trigger for spending and reduced saving.[1] However, supportive peers have also been shown to help people to develop new behaviours and habits across multiple settings (from educational attendance and attainment[2] to breastfeeding[3] to exam revision[4]). We therefore suggest that people could be helped to build a savings buffer through inviting a friend or family member to become their Savings Supporter.

The wider behavioural science literature supports the idea that peer monitoring can improve financial behaviour, with evidence that it has previously led to increases in loan repayments[5] and made people less likely to spend cash payments right away.[6] A similar peer support scheme in India trialled the idea of asking those who wanted to save to choose a person in their village to monitor their savings. By having someone else oversee and monitor their savings, the savers were able to save 35 per cent more than those who did not have anyone monitoring their savings.[7] Whilst we recognise that Indian and UK savers may differ, the behaviour change required to save is similar in the two contexts.

A qualitative approach was selected so that the Lab could provide specific detail to support the design of a field pilot – for example, we have extensive field evidence on Study Supporter relationships, but to design an effective field pilot for Savings Supporter relationships we required some extra exploratory material.

Qualitative findings

Ipsos MORI conducted a workshop with 21 participants on 9th March 2017 in central London. After the workshop, 12 of the participants undertook an additional exercise and follow-up interview around a week later. The following sections detail:

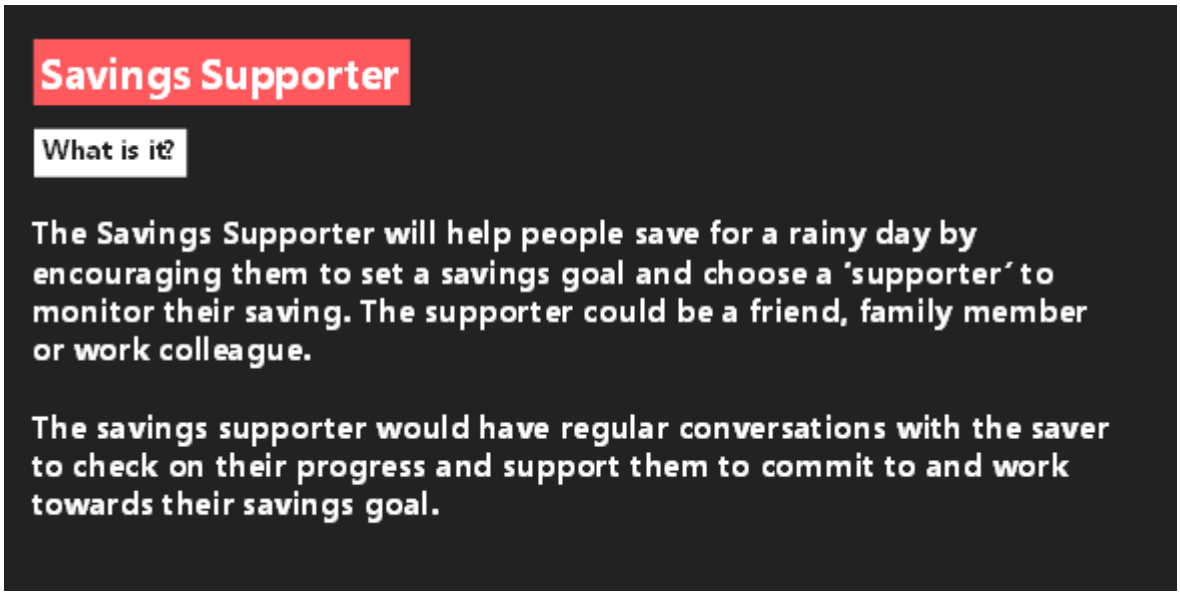
- participants' initial reactions to the Savings Supporter idea, which was introduced following a more general discussion around saving;
- how participants thought the scheme should work in practice; and
- Communications preferences participants had around the scheme.

Qualitative research seeks to understand not only what people do and think but also why this is the case. The findings from our qualitative work are intended to inform the development of field pilots by illuminating why aspects of a design may work well for some people and not others. When interpreting the qualitative research findings, it is important to note that, although all participants were recruited from the MAS 'financially squeezed' segment,[8] the small size of the sample means the findings we present are illustrative and exploratory rather than representative of the segment. It is equally important to be mindful of how, in any group environment, participants' views can be influenced by others present. The follow-up in-depth interviews helped to mitigate this risk. Providing people with the opportunity to give feedback privately, as well as in a group, also helped to ensure that we were able to understand their views in detail. Our qualitative work therefore provides important information on how the idea may play out in any field pilot, but the findings should not be considered as representative or generalisable evidence of what works.

Positive reactions to the Savings Supporter scheme

Ipsos MORI staff described the proposed Savings Supporter scheme to participants, using material to illustrate how the scheme might work (Figure 1).

Figure 1: Research stimulus for the Savings Supporter scheme



Initial reactions to this scheme were very positive. Indeed, some saw parallels with tactics they had tried in the past when they had recruited friends or family members to help them cut back on their spending. Participants considered that, by making a commitment to someone else, they might be more inclined to stick to their savings goal so as not to let their supporter down.

Building on this, a few participants saw the scheme as helping them to get into the habit of saving. They did not consider that they would need someone to be their Savings Supporter indefinitely but thought that it would spur them on initially:

> 'It's a starting point. With savings you just need to start sometimes. You might not need your friend after a couple of months.'
>
> Male, 41, London

Challenges to the success of the Savings Supporter scheme

Many participants judged that the scheme's success would heavily depend on the skillset of their supporter – they would need to be someone credible, with the necessary soft skills to handle sensitive conversations. There were concerns that, if discussions were not handled appropriately, people might feel patronised or judged.

Participants also felt that there could be a stigma attached to being part of this scheme; they did not want to identify as being someone who needed financial help. They thought this could put them, and others, off engaging with it:

> 'You should know what you're doing with money by the time you're in your forties.'
>
> Male, 42, London

Who should be the Savings Supporter?

Participants discussed the kinds of characteristics that they would look for in a Savings Supporter. Some mentioned that it would be important that their Savings Supporter be encouraging. They suspected that, if their supporter criticised their behaviour, they would be likely to disengage from the scheme.

In contrast, others mentioned that, in order for the scheme to be effective, they would want their Savings Supporter to be firm and to challenge them about their actions. They felt that, without this, they would be unlikely to change their behaviour:

> 'Someone authoritative so when they say something I listen. And in a genuine position of authority rather than a false member of authority like a friend or family member.'
>
> Female, 36, London

Many linked this to age; they were concerned that, if their supporter was of a similar age to them but in a significantly better financial position, they would feel intimidated. For others, a credible Savings Supporter was someone who was experienced. Participants wanted to work with someone who had been in a similar financial situation to them in the past but had since got out of it.

Relationship with the Savings Supporter

Participants disagreed on how well they should know the Savings Supporter; they identified both benefits and drawbacks to working with someone they knew well and working with a stranger.

Some suggested that having a supporter they knew could be more effective as they would be more likely to trust this person, which would be essential given the amount of personal information they would need to share. It was equally acknowledged that someone they knew would be more likely to understand the issues they faced and therefore could offer tailored advice.

However, there were concerns about the possible ramifications of working with someone they knew. In particular, participants were worried that it could cause potential disagreements that could negatively impact their relationship.

Participants considered that savers might be more inclined to meet agreed commitments if they were working with a stranger.

Sharing information with the Savings Supporter

Ipsos MORI also asked participants how much information they would need to share with their Savings Supporter in order for the scheme to be effective. Participants' suggestions ranged from high-level information to detailed breakdowns of all their transactions.

Those who preferred to share only high-level information felt uncomfortable sharing any more than their overall goals and spending levels. They felt that providing more information than this would put them off participating and, further, would pose data security risks. However, others felt strongly that the scheme would only work if all of their financial information were provided to the supporter:

> 'I'd want full disclosure. They [should] have access to bank statements. They can see where the money's going. Be able to challenge you. "By the way, you spent *x* amount on takeaways."'
>
> Female, 36, London

After considering the level of information they might need to provide, some participants reconsidered who they would want the supporter to be. This was because they were concerned that friends or family might judge how they spent their money.

Delivering the scheme

Most participants initially conceptualised the Savings Supporter as being someone they could speak to, either face to face or over the telephone. As the discussion progressed, participants began to consider alternative delivery mechanisms, including a mobile app.

This approach was preferred by the more technologically confident participants, who regarded it as a more convenient way to engage with their supporter. Further, most of these participants were already used to managing their finances via online banking apps. That said, even amongst those who favoured this approach, opinion was split as to whether it would need to be backed up by personal contact with their Savings Supporter:

> 'I think you could have it all online. I don't need to meet someone. I haven't got the time.'
>
> Male, 41, London

Those who lacked confidence with technology or were older, however, tended to prefer face-to-face interaction, saying that they would be more comfortable discussing their finances in this way. It was also noted that a face-to-face approach could be more appropriate because the conversations could be sensitive and emotional.

Communicating with the Savings Supporter

Participants felt it was important that the content of any messages sent by the Savings Supporter scheme should encourage them to engage with their supporter and invite a response. Participants tended to interpret information-only messages as being automated. Participants told us that messages that appeared to be automated could more easily be ignored. Participants also felt that positive messages were more helpful and motivating than those stating they had not achieved their target.

Participants also considered the frequency with which they would like to receive these messages. Almost without exception, participants felt that their contact with their Savings Supporter should diminish over time.

Participants considered the word 'buddy' to be more appropriate than 'supporter' as they thought it was friendlier and implied a more balanced relationship.

Follow-up interviews

The positive sentiment that participants expressed about this scheme in the workshop was reinforced in the follow-up in-depth interviews. Participants generally found the scheme easy to explain and stated that their supporters understood what it was trying to do. Additionally, all reported that the people they had asked to be their Savings Supporter had responded positively:

> 'I thought it was going to be embarrassing but it was fine.'
>
> Female, 36, London
>
> 'When I told my friend about it, she was delighted. She said, "Make sure you do it." She thought it was an amazing idea.'
>
> Female, 42, London

Some participants also suggested that they might find the scheme more motivating if it was partnered with either a company or a charity. That way, if they achieved their goal, they could potentially either be rewarded with a voucher that they could spend with that company or make a donation to the charity of their choice. Notably, these rewards did not have to be big for them to be motivating – one participant who spent a lot in coffee shops suggested a free coffee would be enough to provide them with extra motivation.

The follow-up interviews also highlighted other ways in which the scheme could be improved. Those participants who had asked someone to be their Savings Supporter suggested that materials to explain the scheme and links to sources of advice would be useful. Indeed, they reported that their Savings Supporters also felt such materials would be useful. They also said that their supporters had taken their role seriously and would have appreciated having resources that they could use.

Participants explained that the exercise had already encouraged them to think about why they found it so hard to save and about ways in which they could cut back on their everyday spending in order to do so. Some participants stated that if the idea were to be formally piloted then they would welcome being a part of it.

Recommendations

This idea draws on existing successful work rolling out Study Supporter schemes to students in the UK.[9] Both participants and their chosen Savings Supporters were positive about the scheme. On the back of this successful fieldwork, and our findings in the Lab on Savings Supporter, we recommend that the idea be taken forward to a field pilot.

However, our work in the Lab has identified some specific areas of concern for potential participants related to Savings Supporter relationships. These include the sharing of financial information, supporting materials for the Savings Supporter and the expectation that the frequency of discussions would diminish over time. Addressing these concerns would help to adapt the existing peer support evidence to Savings Supporter relationships specifically. This specialisation would be an important part of the design of any field pilot. In particular, it may be useful to commission further qualitative work alongside any field pilot to provide insights into how participants experience aspects of the design.

Depending on the method for delivering any field pilot, reassurance and information could be provided face to face or through digital channels. The field pilot would likely employ a text messaging platform to support the Savings Supporter intervention, using it to provide prompts to both the saver and their supporter. Text messages, and any other communications or interfaces, would need to be designed to address the concerns of participants, for example by clearly disclosing what information had been shared with whom.

To accommodate the differing needs of organisations that may take a field pilot forward, we believe it would be useful to test a number of versions of the Savings Supporter idea:

1) Using text messages or an app, offer Savings Supporter to support saving in a local community, potentially focused around a specific unifying factor such as a school or sports club;

2) Integrate Savings Supporter prompts as part of a banking app, matching similar customers for mutual support;

3) Build Savings Supporter as a chatbot that users could interact with without the need to identify a supporter.

Next steps could include organisations identifying where the Savings Supporter idea could be added to their existing products or built as a new service. We believe that various organisations – including charities, financial institutions, fintech companies and consumer bodies that have direct contact with potential savers – could consider taking forward a field pilot of the Savings Supporter idea.

Endnotes

[1] Money Advice Service. (2016). The squeezed segment. These are working-age consumers with significant financial commitments but relatively little provision for coping with income shocks.
[2] Project College SUCCESS. (2018). What is a study supporter? Retrieved 2 April 2018 from https://www.projectcollegesuccess.co.uk/what-is-a-study-supporter; Sanders, M., & Groot, B. (2007). Introducing Promptable: A BI Venture. Behavioural Insights Team. Retrieved 2 April 2018 from http://www.behaviouralinsights.co.uk/uncategorized/introducing-promptable-a-bi-venture.
[3] Dowling, S., & Evans, D. (2013). Breastfeeding peer support in Wiltshire: An evaluation. University of West England.
[4] Scott, K. (2012). Enhancing student support: Peer support report. Edinburgh University Students' Association.
[5] Karlan, D. S. (2007). Social connections and group banking. Economic Journal, 117(517), F52–F84.
[6] Ashraf, N. (2009). Spousal control and intra-household decision making: An experimental study in the Philippines. American Economic Review, 99(4), 1245–1277.
[7] Breza, E., & Chandrasekhar, A. G. (2015). Social networks, reputation and commitment: Evidence from a savings monitors experiment (Working Paper No. 21169). National Bureau of Economic Research.
[8] Money Advice Service. (2016). The squeezed segment.
[9] Sanders, M., & Groot, B. (2007). Introducing Promptable: A BI Venture. Behavioural Insights Team. Retrieved 2 April 2018 from http://www.behaviouralinsights.co.uk/uncategorized/introducing-promptable-a-bi-venture.

3. Sidecar Account

Idea: Encourage people to save through a product that they can contribute to in the same way as a pension, automatically transferring a percentage of their pay each month. The resulting savings buffer can then be accessible in emergency situations, such as a car breakdown.

Why was it tested? The average savings buffer of people in the Money Advice Service's (MAS) `financially squeezed'[1] segment is £580. One in four of these households have no savings at all. At the same time, automatic enrolment into workplace pensions means that 9 million people in the UK are expected to be newly saving, or saving more, through workplace pensions by 2018.

The Sidecar Account idea suggests that existing contributions processes for workplace pensions could be used to help people save for everyday emergencies as well as for retirement. The idea therefore uses the same behavioural insights that have driven the success of auto-enrolment: defaults are powerful drivers of behaviour, and automation can increase levels of saving.

The Behavioural Insights Team (BIT) partnered with academics from Harvard University and Nest Pensions to develop the idea of a savings product that would piggyback on the UK's existing automatic enrolment programme. Testing in the Financial Capability Lab (the Lab) was considered a useful next step to identify the challenges any field trial might face, particularly on comprehension as an initial trial would need to use an opt-in system for participants.

How was it tested? We first used qualitative methods (a focus group and follow-up interviews) to discuss the idea in detail, explore areas of confusion and gauge overall appeal. This gave us detailed information on the challenges that might exist. We then used quantitative methods (an online randomised controlled trial using Predictiv) to test approaches to increasing understanding of the purpose and main features of the Sidecar Account.

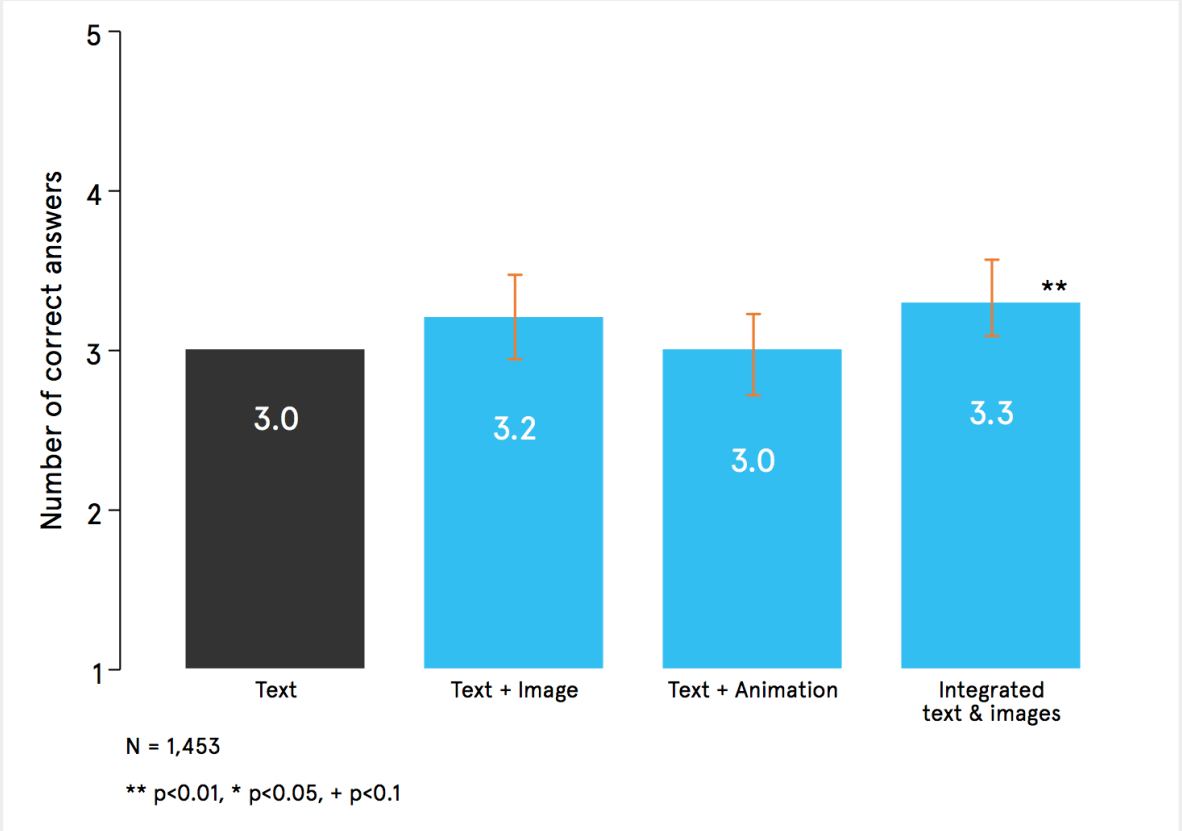
Findings: Participants in the qualitative research found aspects of the idea complicated, such as how the fund interacted with employer contributions to workplace pensions. Once it was confirmed that employers would not contribute to the new savings account, some fundamental questions were raised by participants as to the usefulness of the fund.

Some participants suggested that the target buffer of £1,000 was too low to cover financial shocks, but other participants were concerned about how long it would take them to save this amount.

In the Predictiv test, participants were randomly allocated to view a simple text explanation of the Sidecar Account, this same text with the addition of images, this same text with the addition of an animation, and a version that simplified the text and images and split them across multiple separate screens ('chunked text and images').

We found that comprehension was high across all of the conditions, with averages of around three out of five questions answered correctly for all versions of the information about the Sidecar Account (see Figure 1). Participants who saw the chunked text and images were able to answer more questions correctly on average.

Figure 1: Number of correct answers by type of explanation shown



Whilst almost 60 per cent of participants in the Predictiv test said that they would sign up for the Sidecar Account, in the field this may be tempered when people compare the Sidecar Account to other savings products. We tested the impact of different contribution rates on the levels of participants' interest in

the product, suggesting 1 per cent, 3 per cent or 5 per cent contributions from monthly pay. Participants who were told that the product required a 1 per cent contribution from their pay were more interested in taking up the product than those who were told that a 5 per cent contribution was required.

We also asked participants what the contribution rate should be for the product. We found that participants were influenced by the contribution rate they had been shown in the test (a phenomenon known as 'anchoring'), with those shown a 3 per cent or 5 per cent contribution rate preferring to contribute a higher rate.

Recommendations: The Sidecar Account has the potential to encourage financially squeezed households to save in an automated, low-friction way. However, our research identified some clear challenges and trade-offs, such as between the contribution rate and the time to save a meaningful amount, and these would need to be kept in mind when developing this product. The results of our work in the Lab will inform and feed into the work in the field that Nest Pensions, MAS and Harvard University colleagues will begin this year.

Why was it tested?

The Sidecar Account is a savings product that people can contribute to in the same way as a pension, automatically transferring a percentage of their pay to the pot each month. The resulting savings buffer would then be accessible in emergencies, such as a car breakdown.

To participate, savers would need to sign up and pay an amount, for example 1 per cent of their pay, into the fund every month.[2] This would be additional to and separate from their, and their employer's, contributions to their pension. Savers could make contributions until a certain amount, for example £1,000, was in the Sidecar Account.[3] Once this amount had been reached, contributions that were being paid into the Sidecar Account would go into the saver's pension instead, increasing their total pension contribution. If withdrawals were made from the Sidecar Account, then contributions would flow back into the Sidecar Account until it again reached the £1,000 cap. Savers could opt out at any time.

Many households in the UK have less than one month's income set aside in savings.[4] Many of these households, however, contain employees who have now been automatically enrolled into a workplace pension. In the UK, 9 million people are expected to be newly saving, or saving more, into workplace pensions by 2018

due to automatic enrolment.[5] The auto-enrolment infrastructure presents a potentially low-friction way to help people to build a savings buffer. For this idea, BIT partnered with academic advisers from Harvard University who had originally proposed the Sidecar Account idea, and Nest Pensions, to design the Sidecar Account to piggyback on the UK's existing automatic enrolment programme. *Further qualitative research has also been conducted by Nest Pensions, Harvard University and MAS on the Sidecar Account and is available at moneyadviceservice.org.uk/en/corporate/hybrid-savings-account-research.*

The design builds on the behavioural insight that has made auto-enrolment into workplace pensions so successful: the power of defaults. The evidence suggests that the majority of employees stick to their default workplace pension scheme.[6] If the Sidecar Account was also adopted as a default, then this effect could potentially be effective at encouraging people to build a savings buffer too. In a trial run in Afghanistan, employees initially assigned a default payroll savings contribution rate of 5 per cent were 40 percentage points more likely to contribute to their savings account six months later than individuals who were not defaulted in.[7]

Research has suggested that the way money is labelled often influences how people spend it.[8] Labelling the fund 'For Emergencies' may, therefore, dissuade people from dipping into it for day-to-day expenses. For example, households that receive a Winter Fuel Payment (in cash) spend 47 per cent of the money on fuel, whereas researchers estimate that given the normal share of spending on fuel in household budgets, we would expect about 3 per cent of an unlabelled cash payment to be spent on fuel.[9]

Evidence suggests that a lot of choice does not always lead to better outcomes for consumers.[10] People should therefore not be offered too many different levels of savings cap or contribution rates when they are automatically enrolled into the Sidecar Account. This is intended to prevent employees from opting out because they are not sure which cap or contribution level to choose.

The introduction of a large-scale Sidecar Account based on a default mechanism would be likely to require significant regulatory change.[11] We therefore worked with Nest Pensions to present a version of the idea to our participants that could be taken to a field trial without the need for significant regulatory changes. This amended version requires that employees themselves sign up to put an additional contribution into a Sidecar Account, rather than being auto-enrolled into it. This version is planned for a field trial supported by our partners at MAS, Nest Pensions and Harvard University in 2018.

Qualitative findings

We first used qualitative methods (a focus group and follow-up interviews) to discuss the idea in detail, explore areas of confusion and gauge overall appeal. This gave us detailed information on the challenges that might exist. Ipsos MORI ran a focus group to explore which aspects of a Sidecar Account were easier to understand (and which were harder). The discussion covered participants' financial situation, their experiences of financial shocks and setbacks, their perceptions of the fund, and ways in which they thought it could be improved. During the focus groups, we referred to the idea as an 'Accessible Emergency Fund' which is one option for a consumer-facing name for the account.

Seven participants, each of whom contributed to a workplace pension at the time, took part in a two-hour focus group. Follow-up in-depth interviews were then conducted a week later with four of the participants.[12] Further qualitative research on the idea, including additional options for names, is published at: *moneyadviceservice.org.uk/en/corporate/hybrid-savings-account-research*.

Qualitative research seeks to understand not only what people do and think but also why this is the case. The findings from our qualitative work are intended to inform the development of field pilots by illuminating why aspects of a design may work well for some people and not others. When interpreting the qualitative research findings, it is important to note that, although all participants were recruited from the MAS financially squeezed segment, the small size of the sample means the findings we present are illustrative and exploratory rather than representative of the segment. It is equally important to be mindful of how, in any group environment, participants' views can be influenced by others present. The follow-up in-depth interviews helped to mitigate this risk. Providing people with the opportunity to give feedback privately, as well as in a group, also helped to ensure that we were able to understand their views in detail. Our qualitative work therefore provides important information on how the idea may play out in any field pilot, but the findings should not be considered as representative or generalisable evidence of what works.

Reactions to the Sidecar Account

Participants were initially confused about aspects of the proposal. A number of participants assumed that their employer would also make contributions to a Sidecar Account:

> 'Is your employer still contributing to it then, if half of it is going into your savings?'
>
> Female, 25–45, Birmingham

Once it was clarified that employers would not be making contributions to the savings scheme, participants queried the benefits of using this scheme to save. Building on this, one of the participants argued that making use of this savings scheme may cause people to be worse off in the long run. This participant felt that, in order to be able to afford to save in this way, people would need to divert money from their pension fund to their savings scheme. If this were the case, this could have implications for the amount people might receive in employer contributions. This discussion caused suspicions to be raised amongst other participants that this could be the intention of the scheme. They consequently suggested that it was not designed to help them save money but to enable their employers to do so:

> 'It's just not efficient. You could probably better use that money, because the whole point of the pension scheme is effectively you're adding on to your pay.'
>
> Male, 25–45, Birmingham

Alternative incentives, including a one-off payment from employers or a prize draw, were discussed. However, the idea of a prize draw, in particular, failed to enthuse participants. This was because the odds of winning a large sum of money were considered to be so low that it would not be an incentive. Further, participants initially assumed that their employer would contribute financially (due to the setup of the scheme). Therefore, anything less than a continued employer contribution to the emergency fund was not considered sufficient:

> 'When I first read it, I was very positive, but now looking into it and the length of time it would take to build it up and the loss of employer contribution it's putting me off.'
>
> Female, 25–45, Birmingham

Time to reach the target

It was felt that it would take too long to reach the savings target, which made participants question how practical the scheme was. Experience had shown them that it is hard to anticipate when financial shocks might happen. Further, they knew that, when they do, the money is needed instantly. Therefore, a scheme which is designed to build a savings buffer over a number of years was not considered fit for purpose:

> 'I'd be thinking with 1 per cent going into it, I wouldn't have a lot to dip into for quite a while anyway... It would take a long time to get to £500.'
>
> Female, 25–45, Birmingham

Target buffer amount

Participants felt that the target savings buffer of £1,000 was not enough to cover a financial shock. This prompted scepticism about how well the scheme would work in practice:

> 'If you've got a roof to repair it's about 10 times more than £1,000, isn't it?'
>
> Male, 25–45, Birmingham

Participants suggested that the cap for the fund should be set at a significantly higher level, but this made meeting the target amount seem out of reach:

> 'But both arguments are right, aren't they... it's going to take forever to get to that level, but then when you do need an emergency fund it's going to be a drop in the ocean.'
>
> Male, 25–45, Birmingham

Saving towards a goal

Considering the perceived drawbacks of the scheme, participants nevertheless identified the advantages of saving for an emergency. One participant suggested that they might feel more favourably about the scheme if their money could be saved for a long-term goal. This was largely due to the length of time they thought it would take for them to reach their buffer, which was additionally considered insufficient to deal with a sudden financial shock.

> 'It's not for emergency things... it's going to take ages to get quite a big bulk. If they'd have turned around and said, "Oh, it's towards a holiday fund savings", or something like that, then you can be, oh, at the end of the year, might have so much to put towards my holiday. But, for me, to get a decent amount for an emergency... it's taking too long.'
>
> Female, 25–45, Birmingham

Who is the scheme for?

Although participants, on an initial assessment, did not tend to think that the scheme would be suitable for them, some did think it might be useful for younger people. Retirement would be further away for them and they might therefore be

less concerned about missing out on employer contributions. The participants also thought the scheme might be a useful way for young people to save towards a financial goal, such as a car or holiday:

> `My daughter's 20 and she's on a good wage, so something like that would be ideal because she's driving now. She's got her car insurance due up for renewal and so then £1,000 would be useful. Or for holidays or what have you because she's a long way away from retiring.'
>
> Female, 25–45, Birmingham

Follow-up interviews

Four participants were selected for follow-up interviews conducted around a week after the focus group.[13] The interviewees felt that the scheme was not without its benefits: it was thought to be simple and easy to administer, given that the money would be deducted from their pay. However, overall, they did not think a scheme like this would necessarily help them save for an emergency. Their personal experiences of financial shocks had shown them that they would often need a considerably larger sum than the £1,000 discussed in the group and that the money is needed instantly. Given the length of time they thought it would take for them to save, they felt this scheme would be more useful for helping younger people to save for a long-term goal.

Quantitative findings

Test design

Following the qualitative work by Ipsos MORI, we ran a Predictiv test aimed at finding effective ways to explain the idea, given the focus group participants' concerns. Additionally, we tested various contribution rates to see whether this influenced interest in the fund.

Participants were initially randomly assigned to see three different versions of the explanatory material:

- a short piece of explanatory text;
- the same text with an explanatory image; or
- The same text with an additional explanatory animation.

Following initial analysis of this test, we ran a further (fourth) test where we showed participants simpler text 'chunked' to present single attributes of the fund on different pages, each with an accompanying simpler image. In this report, we have pooled the results of the two tests for ease of interpretation.

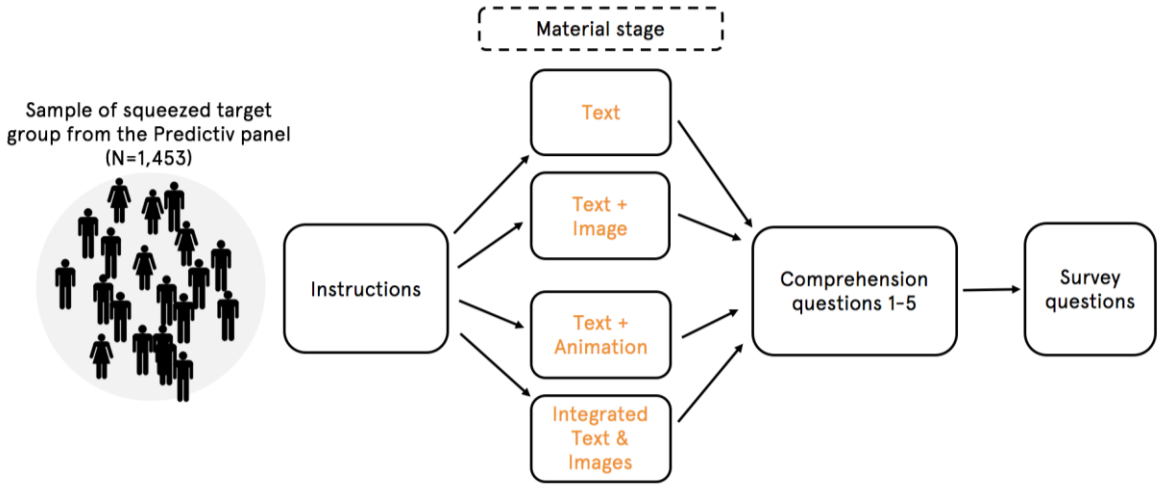
Participants were also randomly assigned to see a description of the Sidecar Account with a 1 per cent contribution, a 3 per cent contribution or a 5 per cent contribution (see Table 1).

Table 1: The Sidecar Account's three-by-four experimental design

		Explanation treatments			
		Text	Text + images	Text + animation	Integrated text + images
Contribution treatments	1%	Text, 1 %	Text + images, 1%	Text +animation, 1%	Integrated text & images, 1%
	3%	Text, 3 %	Text + images, 3%	Text + animation, 3%	Integrated text & images, 3%
	5%	Text, 5 %	Text + images, 5%	Text +animation, 5%	Integrated text & images, 5%

After viewing the explanatory material and contribution rate to which they were assigned, participants were asked five comprehension questions about the Sidecar Account. The comprehension questions were all multiple choice, with only one correct answer per question. Participants were paid 20p to complete the test and given an additional 10p for every correct answer to the comprehension questions. After participants had answered the comprehension questions, they were asked a further seven subjective questions about whether they were interested in the Sidecar Account and how they thought it should be designed. Figure 2 provides a flowchart showing the stages of the test.

Figure 2: Stages of the test

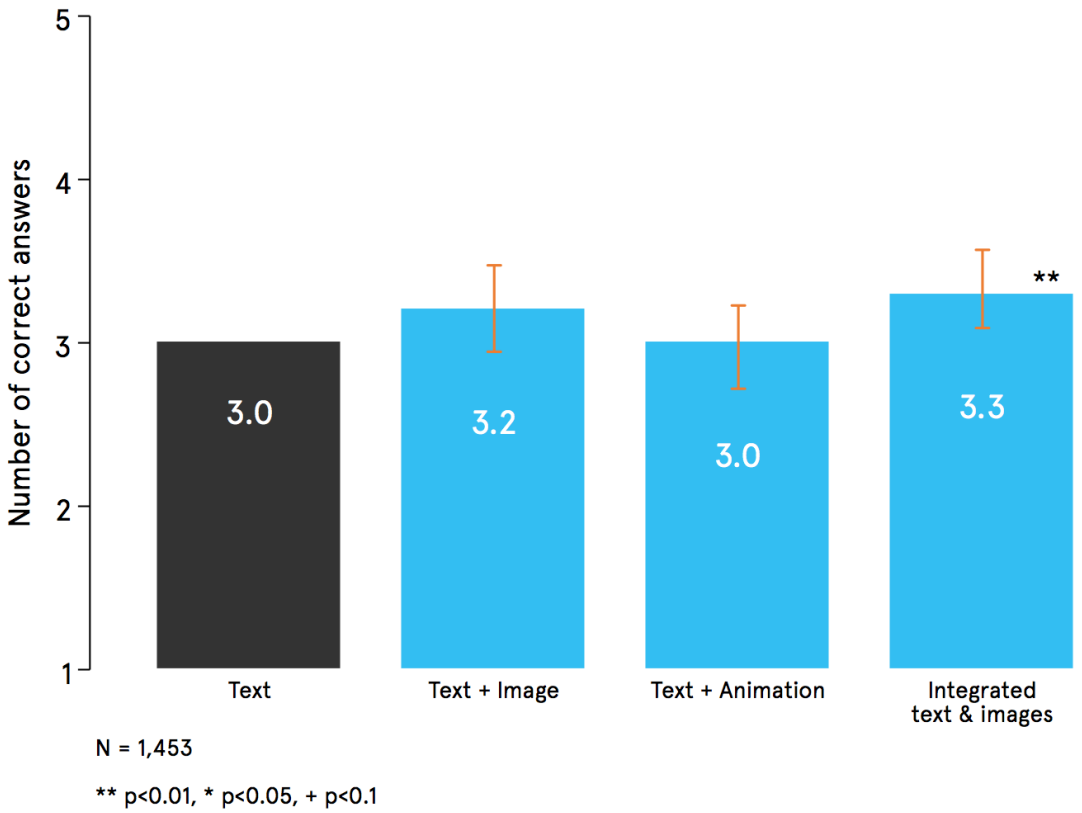


Results

Participants who viewed the short text explanation of the proposal were able to answer, on average, three (2.95) out of the five comprehension questions correctly.

Figure 3 shows the number of correct answers for each intervention arm. Compared with the control text, the series of integrated text and images, which presented smaller 'chunks' of information separately, led to a statistically significant increase in the number of questions participants were able to answer correctly. The other interventions did not improve comprehension compared to the control. All of these results are significantly better than the 1.25 average correct answers we would expect if participants selected their answers at random.

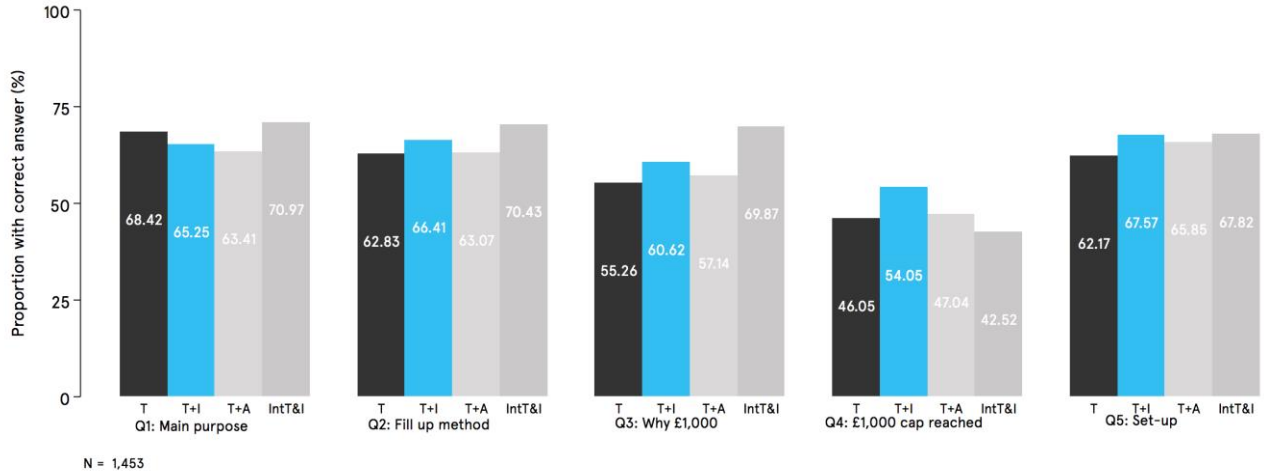
Figure 3: Number of correct answers by intervention shown



Across all intervention arms, the majority of participants were able to correctly identify the main purpose of the product and understand its key features.[14]

Figure 4 shows the comprehension rates for each of the five questions for each of the types of explanatory material used. Participants found it hardest to answer the question about what happened when the emergency fund reached the £1,000 cap (question four).

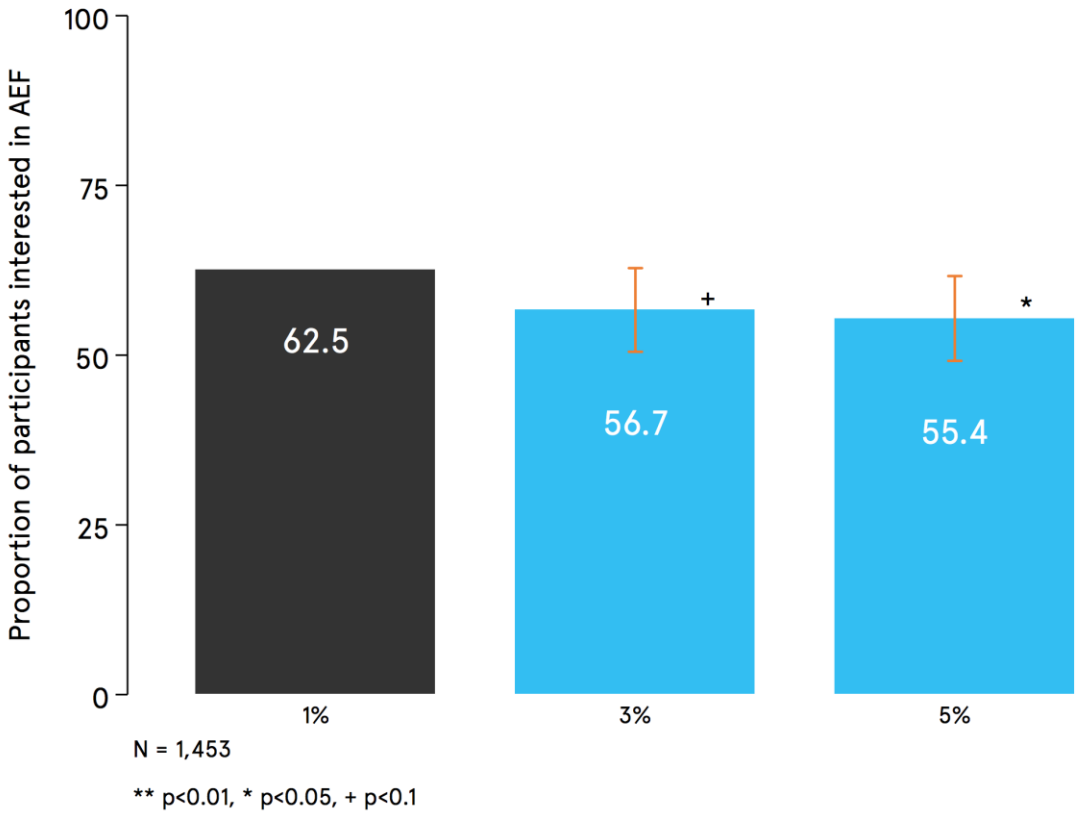
Figure 4: Percentage of correct answers by question



All participants were asked whether they would be interested in signing up for the Sidecar Account (see Figure 5).

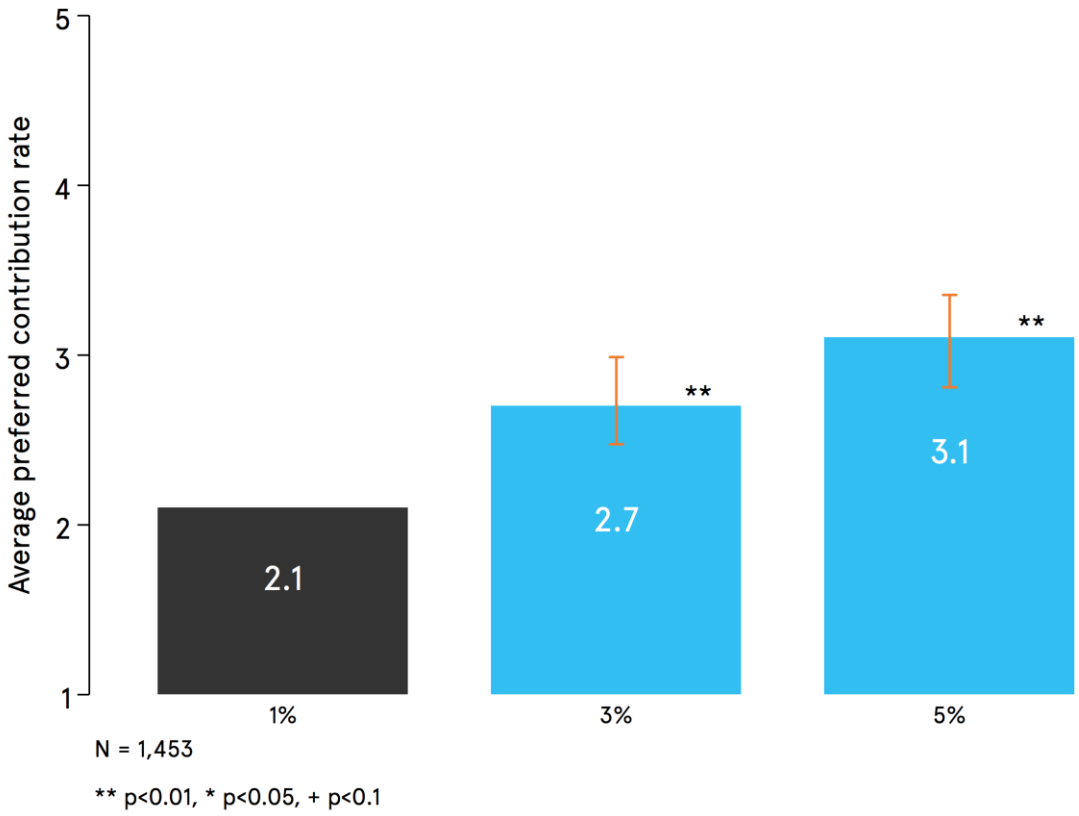
Of the participants, 62 per cent who saw the 1 per cent contribution rate said they would be interested in enrolling in the Sidecar Account. This stated interest in enrolling was lower amongst participants who saw higher contribution rates as part of their explanatory material: 57 per cent of participants who saw the 3 per cent contribution rate said they would be interested in enrolling, whereas 55 per cent of participants who saw the 5 per cent contribution rate said they would be interested in enrolling. The reduction in interest between participants who saw the 1 per cent contribution rate and those who saw the 3 per cent contribution rate was statistically significant (as was the reduction between those who saw the 1 per cent contribution rate compared to those who saw the 5 per cent contribution rate).

Figure 5: Stated interest in enrolling in the product by contribution rate shown



Participants were asked to choose what percentage of their pay they thought should be put into the emergency fund each month (Figure 6). The results show that participants were likely to be anchored towards the contribution rate they were shown, with those who saw higher contribution rates giving higher answers, on average, than those who saw lower contribution rates.[15] It should also be noted that those shown a 1 per cent contribution rate gave answers that were on average higher than this suggested contribution rate.[16]

Figure 6: Preferred contribution rate by intervention shown



Recommendations

With 9 million people newly saving, or saving more into their pensions due to auto-enrolment, a full-scale implementation of the Sidecar Account has the potential to provide a savings buffer for millions of UK citizens.

Our work in the Lab has allowed us to identify a strategy for explaining the Sidecar Account (chunked text and images) and a trade-off that will need to be understood further to make the Sidecar Account attractive (contribution rate versus time to save a meaningful amount).

Our work highlights areas for further development, such as portability between employers, flexibility on contribution rates, and concern about the interest rate and tax benefits of the Sidecar Pension Pot in comparison with other savings products. Additionally, misunderstandings about employer contributions and motivations for signing up to the scheme will need to be addressed. Our Predictiv work suggests a potential format for providing further information, but a field trial would need to explore how much information it is realistic to ask people to read alongside how these issues and concerns manifest themselves in the field.

We recommend that the field trial planned by MAS, Nest Pensions and Harvard University go ahead and that this trial be used to explore how some of the questions our Lab work has raised could be addressed. Further field trials with partners from different sectors or participants with different income levels could also contribute to the development of the design of the Sidecar Account.

The Sidecar Account could also be offered as part of any development of the Department for Work and Pensions' auto-enrolment pension policy in the UK. Incorporating a Sidecar Account alongside auto-enrolled pensions may help people to build a savings buffer proportionate to their income (in which contributions increase as their income increases).

Endnotes

[1] Money Advice Service. (2016).The squeezed segment. These are working-age consumers with significant financial commitments but relatively little provision for coping with income shocks.
[2] This could be either before or after tax deduction, depending on the final design. A before-tax deduction could have tax benefits.
[3] This cap was chosen by BIT based on MAS survey data about the costs of common unexpected events. Money Advice Service. (2016) Closing the savings gap. Retrieved 2 April 2018 from https://masassets.blob.core.windows.net/cms/files/000/000/548/original/MAS_Savings_Report_Sept_2016_FINAL.pdf.
[4] Finch, D. (2016). Hanging on: The stresses and strains of Britain's 'just managing' families. Resolution Foundation.
[5] Department for Work and Pensions. (2015). Millions more saving thanks to automatic enrolment [Press release]. Retrieved 2 April 2018 from https://www.gov.uk/government/news/millions-more-saving-thanks-to-automatic-enrolment.
[6] Madrian, B.C., & Shea, D. (2001). The power of suggestion: Inertia in 401(k) participation and savings behavior. Quarterly Journal of Economics, 66(4), 1149–1186.
[7] Blumenstock, J., Callen, M., & Ghani, T. (2016, July). Mobile-izing savings with automatic contributions: Experimental evidence on dynamic inconsistency and the default effect in Afghanistan (Working Paper). Jameel Poverty Action Lab.
[8] Thaler, R. H. (1990). Anomalies: Saving, fungibility, and mental accounts. Journal of Economic Perspectives, 4(1), 193–205.
[9] Beatty, T., Blow, L., Crossley, T., & O'Dea, C. (2014). Cash by any other name? Evidence on labelling from the UK Winter Fuel Payment. Journal of Public Economics, 18, 86–96.
[10] Iyengar, S. S., & Lepper, M. R. (2000). When choice is demotivating: Can one desire too much of a good thing? Journal of Personality and Social Psychology, 79(6), 995–1006.
[11] Likely to require amendment of the Pensions Act 2008.
[12] Participants were primarily selected on the basis of availability. Ipsos' interviewers also attempted to recruit participants with a range of views towards the idea so these differing views could be explored in further depth.
[13] Participants were primarily selected on the basis of availability. Ipsos' interviewers also attempted to recruit participants with a range of views towards the idea so these differing views could be explored in further depth.
[14] These were that the savings fund filled up through contributions from payroll and had a £1,000 cap.
[15] For a discussion of anchoring in financial decisions, see Stewart, N. (2009). The cost of anchoring on credit-card minimum repayments. Psychological Science, 20(1), 39–41.
[16] We should be cautious in interpreting the absolute contribution rate that participants said they wanted, as they were shown a range of specific contribution rates to choose from (0.5, 1.0, 1.5, 3.0, 5.0, and 10.0) and this may have influenced the answers given. See Sharpe, K. M., Staelin, R., & Huber, J. (2008). Using extremeness aversion to fight obesity: Policy implications of context dependent demand. Journal of Consumer Research, 35, 406–421.

4. Communicating the benefits of complex financial products

Idea: Introduce a way to enable people to automatically transfer an affordable, flexible amount from their current account to their savings account each month.

Whilst people commonly intend to save money each month, there is often a gap between intention and action. Setting up a regular standing order to move money from a current account to a savings account may help people to close the gap between good intentions and actual savings. Once money is in a savings account, people tend to be less likely to spend it.

Some people have volatile income and/or expenses and thus may be reluctant to commit to a regular fixed standing order. To ensure that standing order savings can be relevant for those with volatile incomes and/or expenses, we considered two flexible automatic savings designs. The first was a percentage of monthly income, meaning savers automatically save more as they earn more. The second design was to transfer a percentage of the current account balance on a particular day. This approach would mean that people save more when their account balance is higher and save less when their balance is lower, whilst avoiding any unplanned overdrafts.

Why was it tested? A quarter of people in the UK report using a standing order to regularly move a fixed amount of money from their current account to a savings account. For those with volatile income and expenses, a traditional fixed-amount standing order each month may not be appropriate and may worsen their financial position if they incur additional fees from unplanned overdrafts. Testing more flexible versions of a standing order was considered to be a potentially useful addition to an existing product (the standing order), and if these options increase savings behaviour it can have clear consumer benefits.

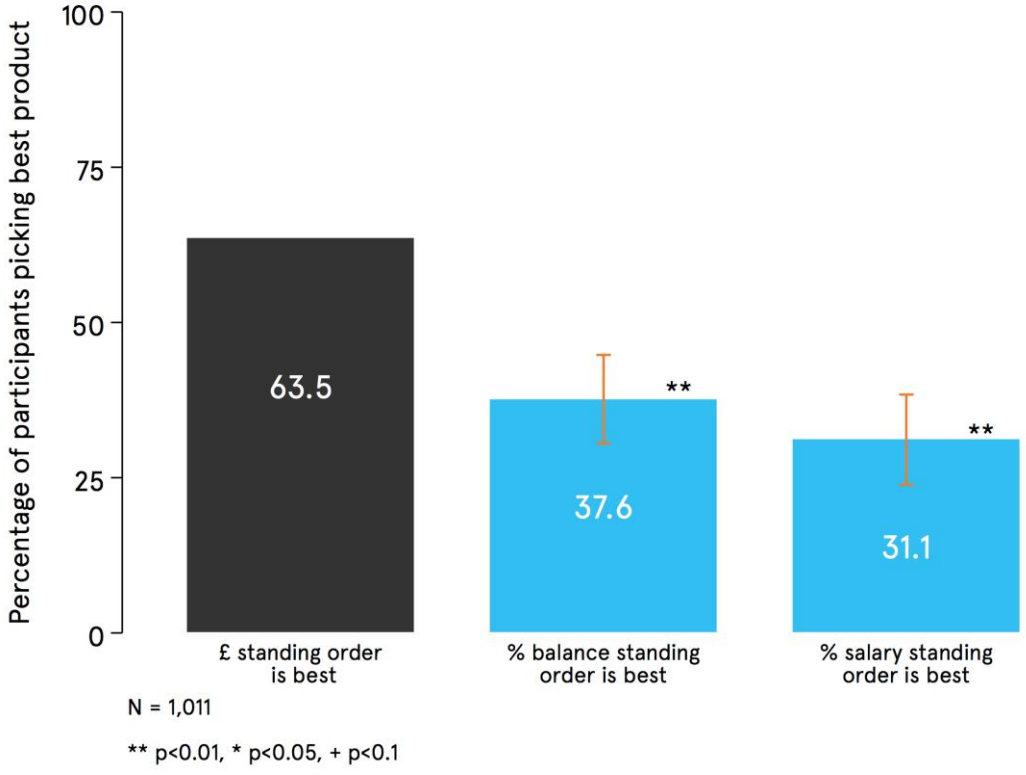
How was it tested? A Predictiv test was selected to provide evidence for whether participants were able to work out when which of three options would be the best choice: (1) a fixed-amount standing order, (2) a flexible standing order (based on percentage of salary) and (3) a flexible standing order (based on percentage of balance). Participants were given a description of a person who wanted to save as much as possible (including details of their salary, expenses,

and current and savings account balances) and asked to choose which one of the three options would be best in helping the customer in question to save as much as possible without going into their overdraft. A number of survey questions then asked participants to state their level of interest in the three potential products, and assessed their numeracy levels.

Findings: Participants found it significantly more difficult to work out when flexible standing orders were the best option. These results are in line with existing research that shows many people find it difficult to understand percentages. We also offered participants the option of accessing extra information as part of the test to help them understand the standing orders. Roughly 90 per cent of participants did not access any additional information.

Significantly lower proportions of participants chose the flexible standing orders when they were the best options. Figure 1 shows the results.

Figure 1: Percentage of participants who picked the best option



Note: Significance testing was based on the change in the number of correct answers compared to the fixed-amount standing order intervention.

For the flexible standing order, the percentage of participants choosing the correct option was surprisingly low. If participants were choosing at random, we would expect them to choose the best option 33 per cent of the time.

Participants said they would be more interested in using a fixed-amount standing order than percentage standing orders, but interest was relatively low across all three options. This may present a challenge, as actual take-up of products is often lower than stated interest. The standing order that participants chose during the test (for example, fixed amount) positively influenced their interest in that standing order. This means that if participants thought a standing order was the best option in the test, they were also more likely to be interested in it for themselves.

Recommendations: These results suggest that there are clear barriers to wide adoption of flexible standing orders. Although we are not proposing taking this idea forward within the Lab there is potential to explore whether there are more effective ways to explain the percentage standing order concept. These could build on findings in other Behavioural Insights Team (BIT) work and existing academic literature on expressing percentages as whole figures. We may also be able to use bank or building society data to identify those customers who are not saving and who have high volatility in their income or expenses. This product could then be developed and offered in a targeted manner to those it is most likely to help.

Why was it tested?

A quarter of people in the UK report using a standing order to regularly move a fixed amount of money from their current account to their savings account.[1] This form of saving works well for those who always have money available to save. It is also more likely to be suitable for those with lower fluctuations in their income and expenses because the amount of money available for saving is likely to stay about the same from month to month. This approach is likely to be less suitable for those with low- to medium-level incomes who may have little to nothing left over each month. The incomes and expenses of families can fluctuate from month to month. In these circumstances, a traditional fixed-amount standing order each month may not be appropriate and may worsen their financial position if they incur additional fees from unplanned overdrafts.

Many people intend to save money each month, but there is often a gap between intention and action.[2] Setting up a regular standing order to move money from a current account to a savings account can help people to overcome their inertia and close the intention–action gap. Once money is in a savings account, 'mental accounting' means they tend to be more averse to spending it.[3] Setting up a standing order also effectively creates a default to save every month.

Our proposed flexible standing order has two options. The first option saves a percentage of a person's monthly salary each month, meaning savers will automatically save more as they earn more. The second saves a percentage of their account balance on a particular day. By linking their savings to their account balance, people can save more when their account balance is high and less when their balance is low. This can help to prevent people going into their overdraft.

The flexibility of saving a percentage rather than a fixed amount potentially makes this product particularly aligned to the needs of people who have volatile incomes or expenses.

Quantitative findings

Test design

In Predictiv, participants were presented with a profile of a fictional customer, Jennie. Jennie's monthly income, expenses, and current and savings account balances were described, and participants were told the goal of the test: identifying the savings product that would help Jennie save the highest amount without going into her overdraft. After they had read the profile, participants were asked to choose which one of three products (a fixed-amount standing order, a percentage of account balance standing order or a percentage of salary standing order) was the best option for Jennie. A fictional profile allowed the test to be built in Predictiv and provide initial proof of concept for the idea. Field testing may wish to focus on individuals who themselves have volatile incomes and/or expenses.

Participants were randomly allocated to one of three interventions. In one intervention Jennie had a high starting balance in her current account, in another she got a raise and in the final intervention her monthly expenses changed. Each participant was then asked to identify which standing order was the best option. The different scenarios meant that for each intervention only one of the standing orders was the best option. All participants were paid 10p to complete the

survey. Participants could gain an additional 50p if they correctly chose the product that would result in the most savings accruing for Jennie.

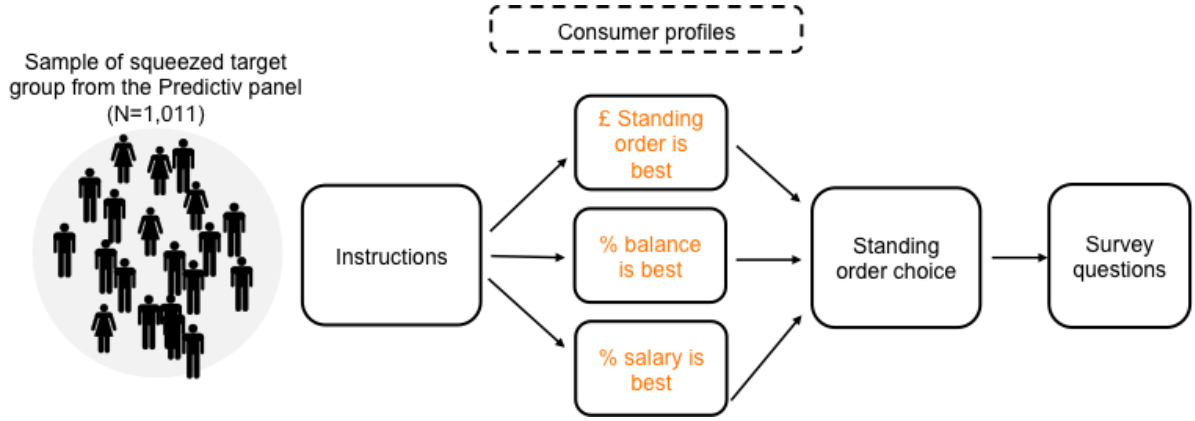
Participants were then asked two survey questions. The first question asked participants to indicate how likely they would be to sign up for each of the three standing orders, if they were available. The second question asked whether participants currently used a standing order.

We also gathered data on how numeracy skills may have interacted with performance in the test. We asked participants numeracy questions developed by MAS and National Numeracy.[4]

Following the survey questions, an additional four questions testing the numeracy of participants were presented. Finally, participants were asked to indicate their current level of savings, across categories ranging from nothing to £20,000 or more.

See Figure 2 for a summary of the test design.

Figure 2: Stages of Flexible Standing Order test



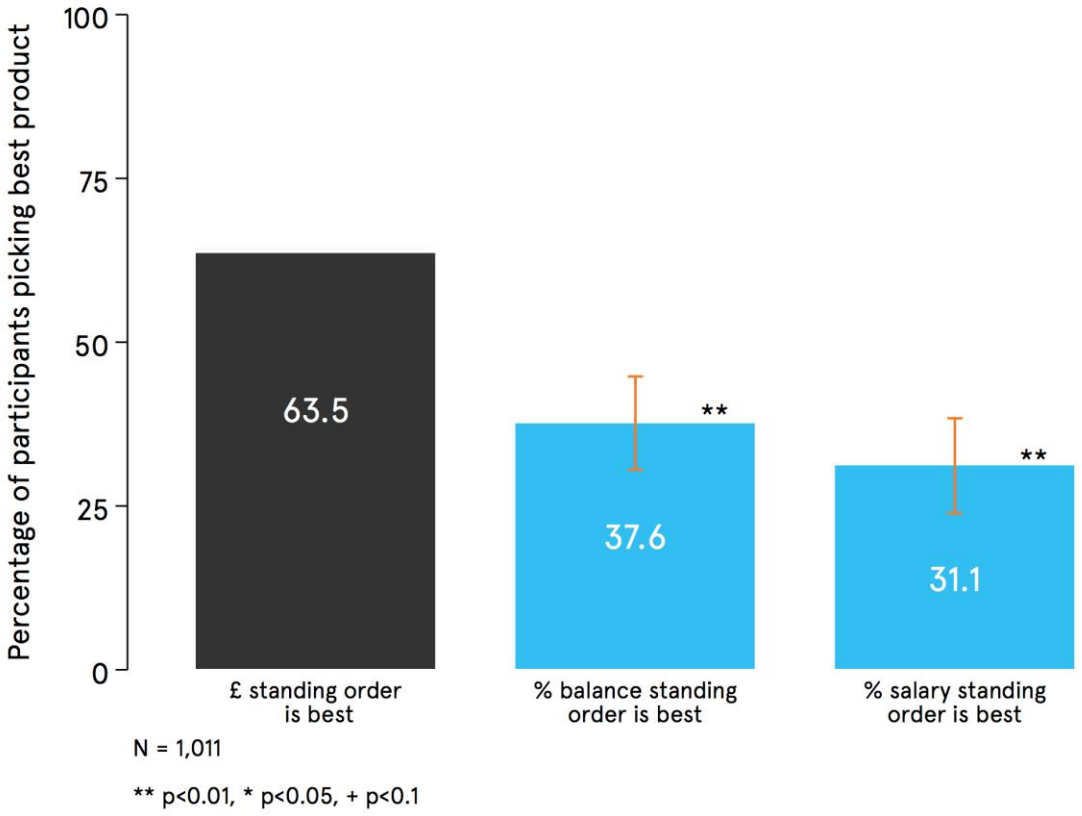
Results

The main research question was: 'Are participants able to identify which standing order allows them to save the most money?' Of the participants, 63.5 per cent were able to correctly identify the fixed-amount standing order as the best option. Significantly fewer people chose the correct option for both of the flexible standing orders. There was no significant difference between the results for either percentage-based standing order. For these scenarios, the likelihood of participants choosing correctly was no better than chance. In other words, for

percentage standing orders, participants could have been choosing which option was best at random and the results would have looked the same.

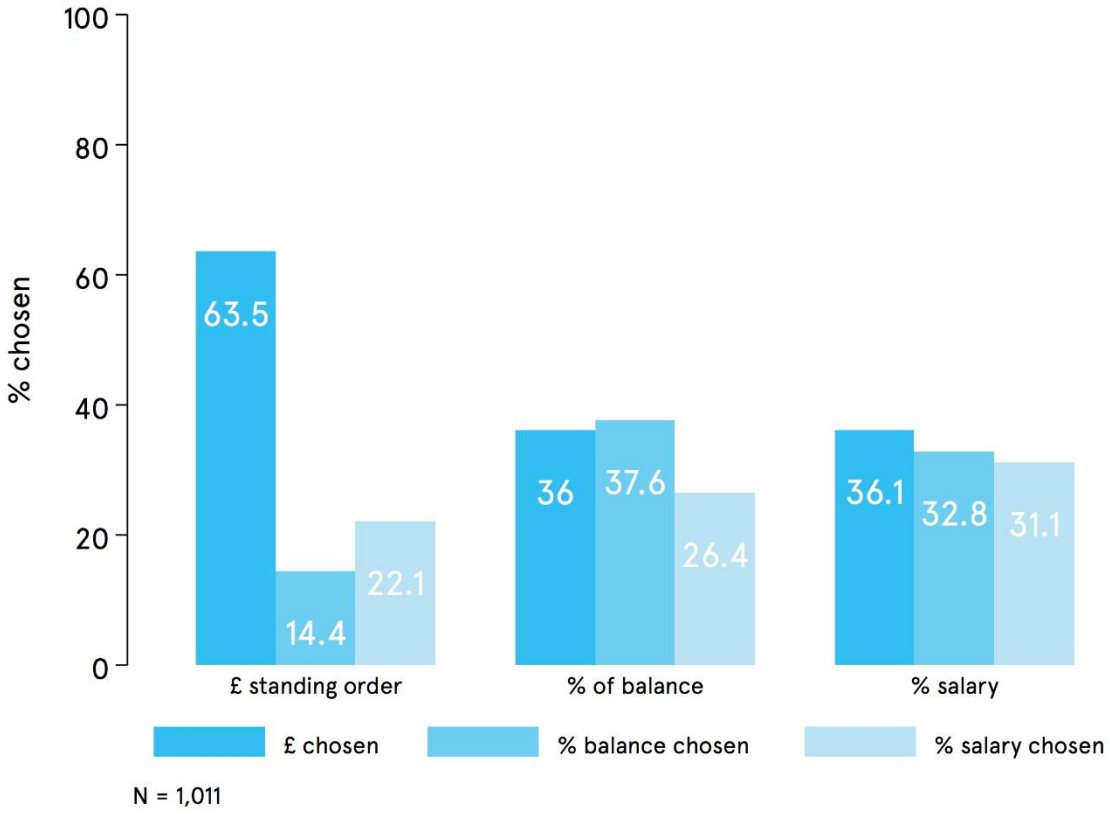
Figures 3 and 4 show the proportions of participants who picked the best option in the different intervention groups.

Figure 3: Percentage of participants who picked the best option



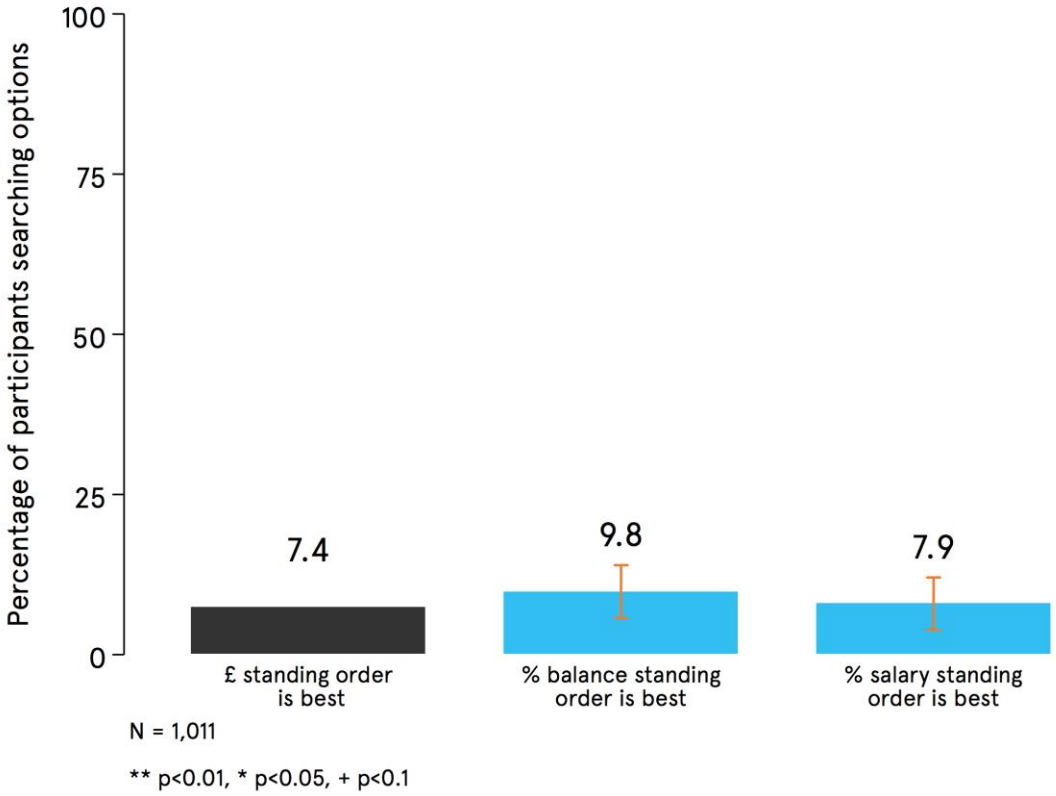
Note: Significance testing was based on the change in the number of correct answers compared to the fixed-amount standing order intervention.

Figure 4: Percentage of participants who picked the best option within each intervention



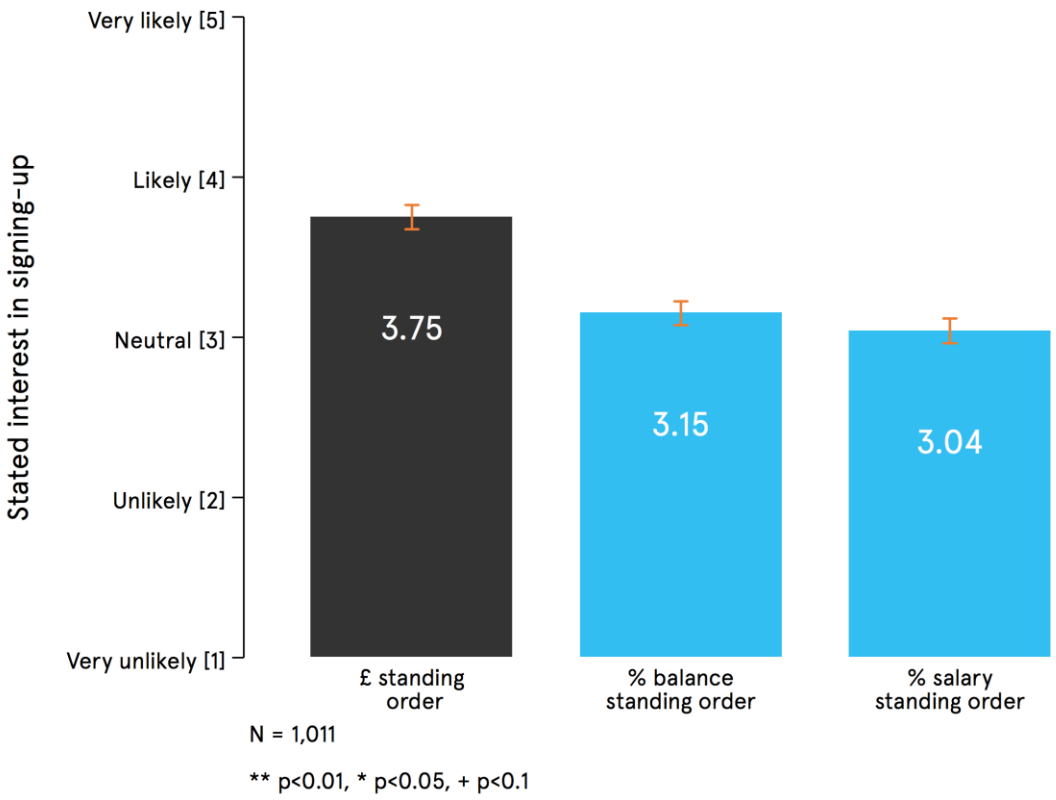
The second research question was: 'Do participants seek further information about products before making their choice?' To answer this question, we recorded whether participants had clicked on small information ('i') icons that were displayed next to the descriptions of the standing orders. If people clicked on the icon, they saw additional details about the standing orders. Overall, search levels were low: roughly 90 per cent of participants did not access any additional information (see Figure 5). Search level did not differ significantly across the interventions. It should be noted that participants were given all the information they needed to make their decision on the main screen they saw. We also framed the extra information as 'additional'. Finally, participants may have felt that the level of incentive offered (50p) was insufficient to encourage them to read the extra information. One or more of these factors may have influenced the lack of searching behaviour we observed.

Figure 5: Percentage of participants who accessed additional information by intervention[5]



The third research question was: 'To what extent would participants consider taking up the product in real life?'. This was measured using a five-point scale going from 'very unlikely' to 'very likely'. We should interpret these results with caution when seeking to link these choices to real-world decisions. Overall, interest in the fixed-amount standing order was higher than for both of the percentage standing orders (see Figure 6). This potentially provides further evidence that participants find percentage standing orders difficult to understand and therefore rate them as less attractive. However, it should be noted that, overall, interest in the flexible standing orders was close to neutral.

Figure 6: Stated interest in signing up for a standing order



It should be noted that the standing order that participants chose during the online test strongly influenced subsequent interest in that product (adding 0.52–0.69 points within a five-point scale). This anchoring effect suggests caution is needed in extrapolating these results about stated interest to the field. Actual interest in the field in a percentage-based standing order could not be based on previous exposure to this type of standing order if it had not previously been available.

There were no differences by gender, age, income, education or savings relating to the results for any of the research questions.

There was a significant and positive correlation between numeracy score and selecting the best standing order in the fixed-amount and percentage of salary standing orders. This was not the case for the percentage of balance standing order. This suggests that, relative to the percentage of salary standing order, the percentage of balance standing order may be more difficult to understand.

Participants who currently used a standing order product made better choices than those who did not currently use a standing order.

A particularly interesting result is that numeracy score and whether participants currently used a standing order separately affected the likelihood that a participant would be able to select the best option. This means that if a participant already used a standing order, regardless of whether their numeracy was high or low, they were more likely to be able to identify the correct answer in the test.

Recommendations

The results suggest that people find it difficult to understand the benefits of flexible standing orders. Although we are not proposing taking this idea forward with the Lab, further research could focus on presentation of the material in order to increase comprehension: for example, `5 per cent of balance means £5 of every £100 that is in your account when the standing order is paid.' Our research does not provide clear answers as to which components of the flexible standing orders were difficult to understand, but this could be isolated in subsequent tests.

It is important to stress that the results suggest that only a small proportion of participants correctly understood the flexible standing order products. Follow-up tests that look at increasing understanding of the percentage standing order products could shed more light on whether increased comprehension correlates with higher levels of interest in the product.

The test results suggest that there are clear barriers to the wide adoption of flexible standing orders. There is potential, however, to explore whether there are more effective ways to explain the percentage standing order concept, building on findings in other BIT work and existing academic literature on expressing percentages as whole figures.[6]

We might also be able to use bank or building society data to identify those customers who are not saving and have high volatility in their income or expenses. This product could then be developed and offered in a targeted manner to those it is most likely to help.

Endnotes

[1] Stanier, J. (2012, May 21). Set up a standing order to 'get ahead of the savings game'. Thinkmoney. Retrieved 2 April 2018 from https://www.thinkmoney.co.uk/news-advice/set-up-a-standing-order-to-get-ahead-of-the-savings-game-0-3882-0.htm.
[2] Van Hooft, E. A. J., Born, M. Ph., Taris, T. W., Van der Flier, H., & Blonk, R. W. B. (2005). Bridging the gap between intentions and behavior: Implementation intentions, action control, and procrastination. Journal of Vocational Behavior, 66(2), 238–256.
[3] Thaler, R. H. (2008). Mental accounting and consumer choice. Marketing Science, 27(1), 15–25.
[4] The numeracy questions were drawn from Money Advice Service. (2015). Technical report for the 2015 Financial Capability Survey. They were developed with advice from National Numeracy (https://www.nationalnumeracy.org.uk).
[5] The scale ranges from 0 (no additional information accessed) to 3 (accessed additional information for all of the options).
[6] Frydman, C., & Camerer, C. F. (2016). The psychology and neuroscience of financial decision making. Trends in Cognitive Sciences, 20(9), 661–675.

5. Cook and Save

Idea: Encourage people to save through committing to other specific goals – in this case, using an app to support the cooking of low-cost family meals.

Why was it tested? Research by the Money Advice Service (MAS) has consistently found that many of those who are 'financially squeezed'[1] do not consider themselves to have money management issues, even if they display behaviours that indicate they do. In light of this, MAS has identified that many in this group may not be open to help which focuses specifically on money management.

This idea builds on evidence that setting goals in behaviourally informed ways can help people to achieve more. For example, deadlines set by others can be more likely to lead to success than setting goals for ourselves. Walking people through the steps they would need to take to achieve their goal (for example, deciding to look for cheaper alternatives in the supermarket) can also increase the likelihood of people achieving their goals. It was therefore considered that the Cook and Save idea might present a useful application of MAS research using existing behavioural insights.

The idea was developed as a mobile app that could inspire people to use family-friendly, low-cost recipes. Users of the app would be asked to pre-commit to cooking specific meals on certain days. The app would then estimate the savings made by the family each week. Users would link the app to their savings account to transfer the savings automatically each week.

How was it tested? We selected a qualitative approach to explore over a period of weeks how three participants experienced cooking to save. Participants kept a food expenditure diary over five days. This was followed by a one-to-one interview and then a further interview around a week later.

Findings: The app idea was received positively. Participants felt that meal planning would be easy to build into their lives. In the follow-up interviews, all participants reported sticking to their commitments and were keen to continue planning their meals and saving money through cooking. Participants already cooked at home and had previously tried, and struggled, to find cheaper recipes. Although the savings from cooking cheaper food at home were relatively small for our participants, the changes the participants made to their habits were described as achievable.

The participants stated that they would value weekly progress updates. Congratulatory messages were preferred over those that focused on commitments not being met, as participants felt that these would motivate them to stick to their plan.

Participants noted that they might not continue to swap branded for non-branded items in the future, as they found some of the meals using the non-branded items less enjoyable. They had concerns around continuously sticking to the commitments week after week as unexpected events could get in the way.

Recommendations: The qualitative test for this idea was exploratory and used a very small sample. We recommend generating further qualitative and quantitative evidence to explore the idea further, including assessing any similar apps or functionality that is already on offer. To extend the qualitative research, a small-scale prototype of the app could be developed and tested with the target audience. This would help to identify whether the app is likely to be used on a regular basis, how long users would continue to engage with it and whether it could lead to sustained savings behaviour.

Why was it tested?

Research by MAS has consistently found that many of those who are financially squeezed do not consider themselves to have money management issues, even if they display behaviours which indicate lower levels of financial capability.[2] In light of this, MAS has identified that many in this group may not be open to help which focuses specifically on money management. This idea explores the potential for helping people to build savings as an additional benefit to achieving other life goals that themselves tend to lead to money saving (for example, cooking meals for their family or walking instead of taking the bus).

To help people achieve their personal goals whilst also building a savings buffer, the Cook and Save mobile app would provide inspiration for family-friendly recipes that are low cost per portion and inspire people to cook cheap and healthy meals at home. The app would incorporate behaviourally informed functionality, such as asking users to pre-commit to cooking specific meals on certain days – an implementation intention.[3] The app would then estimate the savings made by the family each week in comparison to a baseline of their current weekly food bill (provided when they sign up). Users could be asked to

link their savings account to the app so that weekly savings could be transferred automatically.

The app would help people to achieve their goals by using the following evidence-based behaviourally informed techniques.

First, the app would help people to define an ambitious target and set a deadline. Evidence suggests that people are more likely to hit a target if it is challenging[4] and has a clear deadline.[5] A North American study found that students who had a submission deadline (regardless of whether it was self-imposed or had been set for them) tended to perform better on their essays than those students who had no formal deadline before the end of term.[6]

Second, the app would help people to make a plan to achieve their goal and pre-commit to following through with that plan. The Behavioural Insights Team has already run a series of trials in job centres across the UK where claimants were encouraged to make specific commitments to future activities and plan when they would undertake them. This helped more people to find work.[7] Timely reminders to follow through with planned activities also help people to remember and act on their intentions. Numerous studies have found that timely text message notifications can prompt people to take action – for example, to attend hospital appointments[8] or save.[9]

Finally, the proposal is that the app would automatically transfer the money saved into a savings account each month, which may help people to resist spending the money.[10]

Qualitative findings

Three one-to-one, face-to-face, in-depth interviews were conducted on 9th March 2017 with participants from families that cooked at least three meals a week from scratch but relied on ready-meals or takeaways for the others. Due to the limited number of interviews, participants were recruited who were very similar demographically and attitudinally. For this reason, all the participants recruited were based in London. Follow-up interviews with each participant took place between one and three weeks after the original interview.

Qualitative research seeks to understand not only what people do and think but also why this is the case. The findings from our qualitative work are intended to inform the development of field pilots by illuminating why aspects of a design may work well for some people and not others. When interpreting the qualitative research findings, it is important to note that, although all participants were

recruited from the MAS financially squeezed segment, the small size of the sample means the findings we present are illustrative and exploratory rather than representative of the segment. It is equally important to be mindful of how, in any group environment, participants' views can be influenced by others present. The follow-up in-depth interviews helped to mitigate this risk. Providing people with the opportunity to give feedback privately, as well as in a group, also helped to ensure that we were able to understand their views in detail. Our qualitative work therefore provides important information on how the idea may play out in any field pilot, but the findings should not be considered as representative or generalisable evidence of what works.

The following sections set out the financial position of the families, their initial reactions to the Cook and Save mobile app, and the commitments that the participants agreed to make between the initial interview and the follow-up interview, along with their progress.

Participants' financial context

All participants had either formal (in an account) or informal (just kept in their home) savings. They did not regularly add to their savings, and they occasionally used this money to cover day-to-day living expenses.

Regular saving was something that participants identified that they would like to do. This was partly due to the fact that saving made them feel good but also because they had a range of goals that they wanted to achieve in the next few years, such as paying off debts, home improvements or moving house. In a couple of cases, participants had already started to make some progress towards achieving these goals and were putting away small amounts or changing their behaviour in other ways. For instance, one participant had a money box for loose change, whilst another regularly checked their bank account so they could manage their spending more effectively. Participants acknowledged, however, that they would need to do a lot more to achieve their goals.

Reactions to the Cook and Save mobile app

The app was received positively. Participants already cooked at least three meals a week at home and often more than this. Therefore, new recipe ideas, particularly cheaper ones, were welcomed. Participants discussed having previously looked for new meal ideas for their families but said that the recipes they found included either too many or too expensive ingredients. This app, therefore, met a need that they had already identified themselves.

They saw the app as something that could be used by the whole family. Indeed, in one of the households, the family members already chose and cooked meals together so were keen that the app continued to facilitate this. In terms of usability, one participant suggested that they would like the app to be designed in such a way that users could scroll through pictures of the recipes and then click on images. This would then bring up further information on the ingredients and cooking instructions. They felt this would make it easy to identify recipes they wanted to cook.

Level of saving

The app was not seen as a way for families to make substantial savings: participants estimated that they might save between £10 and £20 per week. They felt that saving a small amount seemed achievable, which would encourage them to stick with using the app. To help them do this, though, participants were keen for the app to indicate a cost per serving. They felt that this would help them manage their food budget better and enable them to calculate what they could save.

As they would be saving small amounts, they thought that the money they put aside in this way could be better used as a rainy-day fund rather than helping them to pay for the goals they had outlined:

> 'Yeah, I think I would be incentivised by the money and I think a lot of people probably in my situation, who are at a loss each month and worrying about money, [would be]. Something to encourage them to do it when they're actually seeing the benefits of it there and then, tangible and real benefits.'
>
> Female, 35, London

Transferring savings

The idea of automatically transferring savings to a savings account was viewed positively as it would make the process of saving easier. It would also avoid the risk of savings being used for regular spending, which was something that participants already struggled with. There were some concerns over the data security implications of this approach. For the app to work in this way, participants assumed that they would need to provide a lot of personal details. Participants therefore wanted the terms and conditions to be clearly outlined and accessible to the user, so they knew what they were signing up to:

'Yeah, very good. Until I got to this bit and then I think, am I setting up some sort of account with them? If they're transferring money into my savings... if it's something like this, I want to know completely what I'm signing up to, clearly, no jargon.'

Female, 34, London

Coming up with a plan to save through cooking

Participants completed a pre-interview task which included a section on what they had eaten over the past five days and what the cost of these meals had been. Participants found logging their meals easy, as they cooked at least three meals a week from scratch and could list the ingredients they had used. They struggled to identify how much these meals had cost, however, because they had not broken down their food spending in this way before. Completing this task before the interview helped to focus participants' minds on how they might be able to save in the future.

Ways to save

The process of logging their food shopping behaviours helped participants to identify ways that they could save money. These included:

- doing one weekly shop instead of a number of smaller shops throughout the week;
- buying non-branded items – though some were very loyal to particular brands and were worried about the quality implications of switching;
- shopping at cheaper supermarkets;
- bulk buying; and
- Reducing the quantity of more expensive items that they ate.

Agreed commitments over the coming week(s)

After the discussion about how they could save money, the participants were asked to commit to certain actions following the interview. Some examples are shown in Table 1.

Table 1: Examples of actions participants committed to

Participant details	Commitments
Participant 1: female, 33; two-parent family; London	• Shop once a week at a lower-cost supermarket.

	• Plan and cook two cheaper meals each week – intention to cook with less meat and dairy products to achieve this.
Participant 2: female, 35; single parent; London	• Shop once a week at a lower-cost supermarket. • Plan and cook three cheaper meals – intention to achieve this by buying non-branded items.
Participant 3: female, 34; two-parent family; London	• Shop once a week at a lower-cost supermarket. • Use non-branded products. • Plan and cook three cheaper meals – intention to use a recipe book to find some new recipes to cook and help her plan. She does not currently plan/organise meals.

Concerns over continuously achieving commitments

Participants regarded meal planning and saving through cooking as something that would be easy to build into their lives. They were concerned, however, about rigidly sticking to a meal plan every week. For example, they spoke about how their children would often unexpectedly invite friends over for dinner, which would affect their ability to consistently stick to a weekly plan. Similarly, they questioned how likely they were to stick to their commitments after a busy day at work or when time was limited. It was suggested that, if this happened very often, it could lead to participants giving up on the app altogether. Participants recognised, however, that as with any other type of commitment they would need to devote time and effort in order to be successful. As such, they would need to be motivated to engage with the app in the first place.

Participants also suggested that certain changes to the app could make it easier for them to stick to their commitments. For example, they recommended that the recipes should be quick and easy to cook, so they could be prepared with their children and after work. They also only wanted access to a limited selection of recipes, so they could make a quick decision about what to prepare based on their personal preferences. Building on this, participants recommended that the recipes only include ingredients that could be easily purchased and used in multiple dishes to minimise waste.

Weekly progress updates

Weekly progress updates on savings were very appealing. It was felt that this would encourage participants to continue using the app and meal planner.

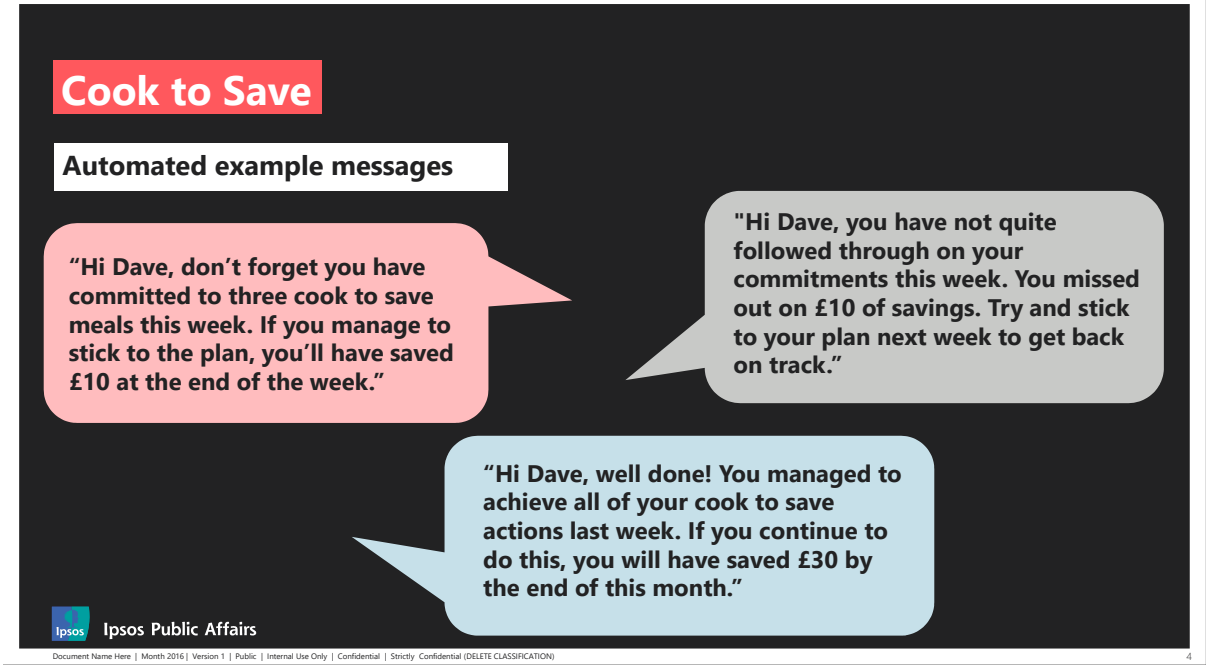
However, one of the participants raised concerns about their ability to accurately provide a figure for a weekly food shop, which would have implications for the accuracy of the progress updates:

> 'I wish I was a weekly shopper. Like I say, I've given you an average, I could not tell you [what my precise weekly food spend is].'
>
> Female, 34, London

Example messages

After participants' initial thoughts on weekly progress updates were gathered, the participants were shown a set of stimulus materials. These included some example messages that participants could receive whilst using the Cook and Save mobile app (see Figure 1).

Figure 1: Research stimulus prepared by Ipsos MORI for use with Cook and Save participants



Participants valued the idea of automated messages that provided updates on savings progress. Congratulatory messages were preferred over those that focused on commitments not being met. Further, it was suggested that one or two weekly messages would be sufficient: any more could put users off from continuing with the app:

> 'I think you want to feel that someone is there for you, doing it with you. I think it's how the human mind works, you feel like if you're supported when you're doing something.'
>
> Female, 35, London

In light of this, messages 1 (pink box) and 2 (blue box) in Figure 1 were received most positively. They were both interpreted as being encouraging, which would motivate participants to continue using the app. Views were more mixed on message 3 (grey box). Telling users what they had lost by not sticking to the outlined commitments could make users more determined to change their behaviour in subsequent weeks. There were also concerns, though, that these kinds of messages could be off-putting and could lead people to stop using the app:

> 'It's not about being told off. I don't care about being told off. If I then didn't stick to it I would feel like, "Oh sod it, I didn't do it last week, what's the point of doing it this week?"'
>
> Female, 34, London

Follow-up interviews

In their follow-up interviews, all three participants recalled the key aspects of the Cook and Save mobile app and had managed to stick to the commitments agreed. Further, they reported that they felt as motivated at the end of the trial period as they had following their initial interview (follow-up interviews were conducted one to three weeks after the initial interview). However, participants acknowledged that one of the motivations for sticking to the commitments was knowing that someone was going to call and discuss what they had achieved.

Two of the participants had managed to make savings as a result of following the Cook and Save idea. One participant had saved £5 in one week, whilst another estimated that they had saved £40 over a fortnight. All of the participants were keen to continue planning their meals and trying to put aside the money they saved in this way. Participants suggested that they might not continue to stick to all of their original commitments, especially those that related to swapping in cheaper, non-branded products. They found that doing this had resulted in less enjoyable meals. They also had concerns about sticking to the other commitments in the long term, without an app to support them. All participants were keen to trial the app if it were to be made available.

Recommendations

Participants were positive about the idea of saving money through cooking. However, further qualitative and quantitative evidence would be needed to take this idea forward. In order to conduct further qualitative research, a small-scale prototype of the app could be developed and tested with families. This would help us to find out whether users are likely to use the app on a regular basis and whether it could lead to sustained savings behaviour. It would also help us to ascertain how people would use the app and whether it would have the functionality to enable them to plan meals as a family activity with their children.

For participants to stick to the commitments they make, the app would need to be easy to use. One way of doing this would be for the app to store a shopping list, so the ingredients for the planned meals could be easily logged and accessed when the user went shopping. The app could also show price differences between supermarkets, raising the potential of saving even more.

Endnotes

[1] Money Advice Service. (2016). The squeezed segment. These are working-age consumers with significant financial commitments but relatively little provision for coping with income shocks.
[2] Despite the challenges, most 'squeezed' consumers think that, on balance, they are good with money. They take a mainly responsible and disciplined approach to managing their finances, though in reality this just consists of vigilant daily monitoring of their bank balance and payments, rather than proper planning. The 'squeezed' like to see themselves as being in control, and this dogged checking of 'money in and money out' provides them with at least some sense that they are in charge of their financial situation. Therefore, while they can be effective tactically, what they lack is a more strategic approach to their money: they tend to focus exclusively on the here and now, ensuring that they are able to meet their immediate financial needs, but they do not think more broadly or longer term. Most also have a number of 'savvy' tricks they regularly deploy to tide them over when money is short, but these tend to be reactive, short-term responses, not concerted plans they adhere to all the time. Often the 'squeezed' believe that working hard and earning more will ultimately alleviate their current financial challenges, though not all see that other issues – relating to spending and saving – would also contribute to an improved situation. Money Advice Service. (2016). The squeezed segment at p. 3.
[3] Behavioural Insights Team. (2015). The Behavioural Insights Team update 2013–2015. Retrieved 28 March 2018 from http://www.behaviouralinsights.co.uk/publications/the-behavioural-insights-team-update-report-2013-2015.
[4] Locke, E. A., & Latham, G. P. (2002). Building a practically useful theory of goal setting and task motivation: A 35-year odyssey. American Psychologist, 57(9), 705–771.
[5] Gollwitzer, P. M., & Sheeran, P. (2006). Implementation intentions and goal achievement: A meta-analysis of effects and processes. Advances in Experimental Psychology, 38, 69–119.
[6] Ariely, D., & Wertenbroch, K. (2002). Procrastination, deadlines, and performance: Self-control by precommitment. Psychological Science, 13(3), 219–224.
[7] Behavioural Insights Team. (2015). The Behavioural Insights Team update 2013–2015. Retrieved 28 March 2018 from http://www.behaviouralinsights.co.uk/publications/the-behavioural-insights-team-update-report-2013-2015.
[8] Hallsworth, M., Beery, D., Sanders, M., Sallis, A., King, D., Vlaev, I., & Darzi, A. (2015). Stating appointment costs in SMS reminders reduces missed hospital appointments: Findings from two randomised controlled trials. PLOS ONE, 10(10), e0141461.
[9] Karlan, D., McConnell, M., Mullainathan, S., & Zimman, J. (2014). Getting to the top of mind: How reminders increase saving. Management Science, 62(12), 3393–3411.
[10] Thaler, R. H. (1999). Mental accounting matters. Journal of Behavioral Decision Making, 12, 183–206.

6. Updating beliefs about the probability of experiencing financial shocks

Idea: Motivate people to save by helping them to consider, and update, their beliefs about costly events that might happen in the future.

Why was it tested? Many households in the UK have less than one month's income set aside in savings. A quarter of the Money Advice Service's (MAS) `financially squeezed'[1] segment have no savings at all. One potential driver for this is that people tend to overestimate the probability of positive events happening to them and underestimate the probability of negative events happening to them. This `optimism bias' may make people less likely to save for unanticipated events. People may mistakenly believe that certain costly events, such as their boiler breaking down, are less likely to happen to them than they actually are.

If we could find a way to update the beliefs of consumers about future costly events to overcome this optimism bias, this could potentially be applied across face-to-face financial advice and guidance, communications with consumers, and other products and services.

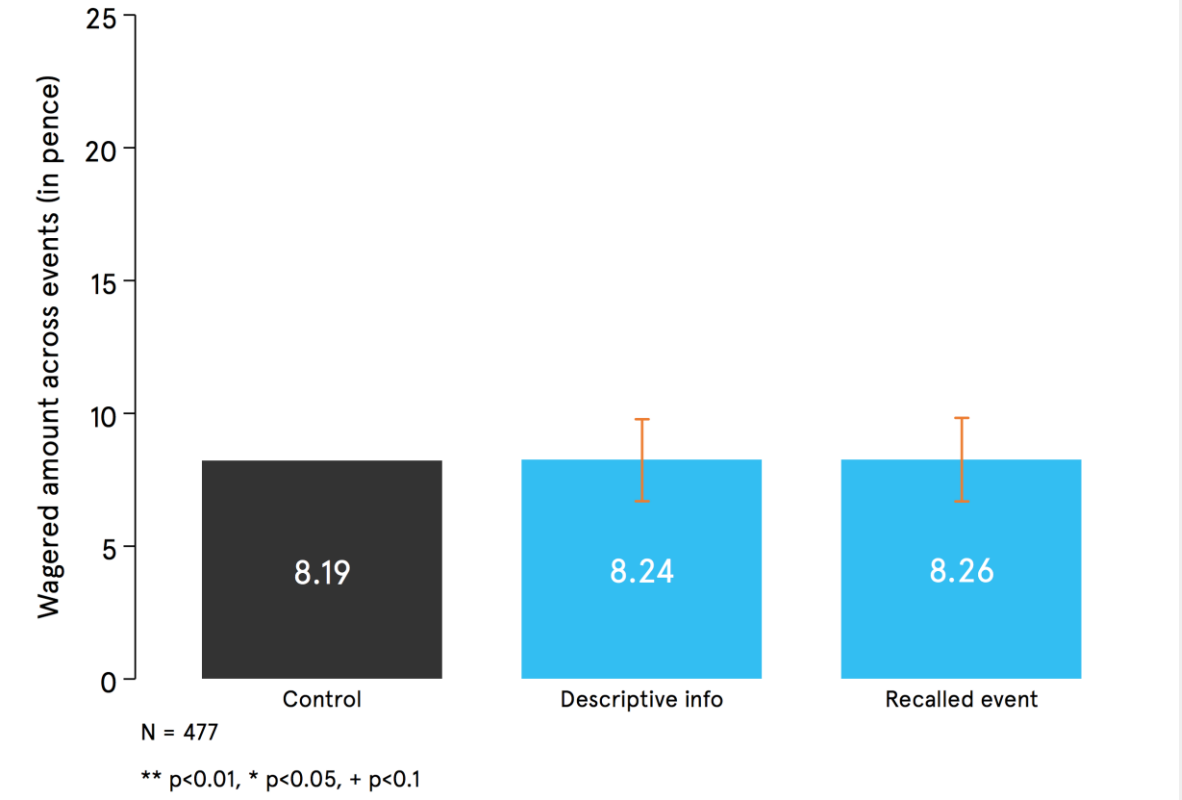
`Belief updating' is already a subject of interest for experimental economists. We drew upon this existing research to design two interventions. The first intervention offered descriptive information about the likelihood of unanticipated and costly events. The second encouraged participants to recall similar events that had happened to them. Both interventions aimed to challenge optimism bias, one with external information about the reported incidence of events and the other by making memories of similar unanticipated events more salient.

How was it tested? We ran an online randomised controlled trial using our online testing platform, Predictiv. Beliefs about the future were measured by asking participants to bet on the likelihood of specific events (a car breaking down, technology such as a mobile phone breaking, and needing to repair a pair of glasses) happening to them over the next month and the next three months. We conducted follow-up surveys after one and three months to check whether any of these events had happened to our participants.

A control group was not shown any material before being asked to estimate the probability of these three events occurring. In the first intervention, participants were provided with an infographic that presented self-reported data from people in the UK about the incidence of a range of costly events. In the second intervention, participants were asked to think about the last time one of these unanticipated costly events had happened to them or a member of their household.

Findings: Neither of the interventions significantly changed the amount that participants bet on the likelihood of the car breakdown, technology breakdown or glasses repair events happening to them (see Figure 1). This was true for both time periods (one month and three months).

Figure 1: Amounts bet on the events happening averaged across both one and three months



Additionally, the results of our follow-up surveys at one and three months did not support the existing evidence suggesting that people are systematically overoptimistic about whether unanticipated and costly events will happen to them. The reported incidence of car breakdown costs was not significantly

different from that suggested by the bets of the participants. For glasses repair and technology breakdown it appeared that, on average, our participants overestimated the likelihood of these events happening.

Recommendations: We do not recommend that this idea is taken to a field pilot at this stage, although further research would be useful to better understand the results.

This is initial, exploratory research about how accurate people are in their beliefs about experiencing financial shocks. To our surprise, we found that, when prompted, people either accurately estimated or overestimated the probability of financial shocks rather than underestimating them. Some of this may be driven by the test drawing the attention of our participants to financial shocks, which is unfortunately likely to happen with any intervention that asks people to think about 'unanticipated' events.

Further research could explore whether similar results are found if the experiment is repeated in another experimental setting, such as a public space, and whether the results hold for a broader range of financial shocks

Why was it tested?

The idea is to help people to consider and update their beliefs about how likely unanticipated and costly events are, thereby encouraging them to save to cover the costs of these events.

Many households in the UK have less than one month's income set aside in savings.[2] A quarter of the MAS financially squeezed segment have no savings at all. One potential contributor to this low level of saving is that people tend to overestimate the probability of positive events happening to them and underestimate the probability of negative events happening to them.[3] This 'optimism bias' may make people less likely to save for unanticipated events, as they mistakenly believe that an unanticipated cost, such as a boiler breakdown, is unlikely to happen to them. More moderate beliefs about one's own future have been shown to be associated with more prudent financial decision-making.[4] People with moderately optimistic beliefs may have more savings, whereas people with extremely optimistic beliefs tend to save less.[5] Unrealistic optimism can extend to a belief that future income will rise much more than future expenses, especially for more distant time periods.[6] A bias towards optimism can

be maintained by people even in the face of actual unanticipated and costly events happening to them.[7] This can lead people to save too little for future expenses as they overweight the probability of their income increasing and underweight the chance that a costly event will occur.

The ambition of this work was to find an intervention that could help people in the MAS financially squeezed segment to update their beliefs about the possibility of unanticipated, and costly, events happening to them. If the beliefs of people who participated in the test were updated, then this may have led them to take more account of the possibility of these events happening and be more open to saving to cover the costs of these events as a result. A successful approach to belief updating has the potential to be applied across face-to-face financial advice and guidance as well as other communications with consumers to encourage saving and potentially other prudent financial behaviours.

Quantitative findings

Test design

We used our online testing platform, Predictiv, to run an online randomised controlled trial that sought to update the beliefs of our participants.

Our design work drew on a number of approaches to measuring and updating beliefs available in the existing academic literature.[8] Our experiment measured the beliefs of participants about the future by asking them to place bets on the likelihood of three different costly events (car breakdown, technology such as a mobile phone breaking, and glasses needing repair or other optician costs) happening to them.

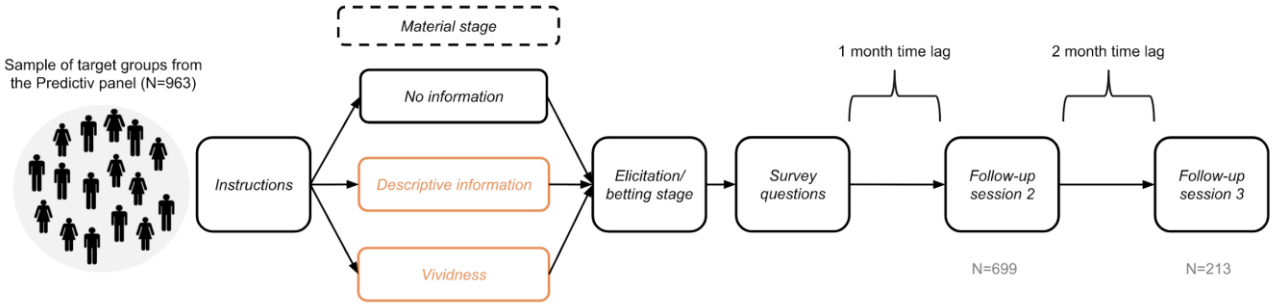
If participants were certain that they would need to spend money on repairing glasses (for example) over the next month, then they were asked to bet 25p on 'Yes' to indicate this. If participants were certain that they would not need to spend money on repairing glasses over the next month, then they were asked to bet 25p on 'No' to indicate this. Various degrees of uncertainty could be indicated by betting differing amounts on 'Yes' and 'No'. For example, betting 15p on 'Yes' and 10p on 'No' would indicate that a participant thought it was slightly more likely that they would incur a glasses repair cost than not.

Each participant had six bets to place (three events each happening at one and three months), with 25p available for each bet. We then recorded whether the

beliefs of our participants about the likelihood of these events happening to them were accurate based on their reports about whether the events we asked them about had actually happened in the one and three months following the initial session on Predictiv.

Participants were randomly assigned to a control group or to one of two intervention groups designed to help them update their beliefs about the future. Figure 2 shows the various stages of the test.

Figure 2: Stages of the Expect the Unexpected test



Participants in the control group were asked to place bets on the likelihood of each of the three costly events happening to them directly after reading the instructions for the experiment.[9]

Participants in the first intervention group were shown an infographic presenting self-reported data from people in the UK about the incidence of a range of costly events before being asked to bet on the likelihood of the three events we had chosen happening to them (see Figure 3).[10]

Figure 3: Example of intervention 1 visual

Infographics were provided on the average frequency of car breakdowns, technology breakdowns, boiler repairs and replacements, and the aggregated frequency of all unanticipated and costly events. Smiley faces and sad faces were used to represent the relative probabilities, because research has shown that people can process information better when it is presented with visual aids as opposed to when it is expressed as numerical probabilities.[11]

Participants in the second intervention group were asked to think about the last time an unanticipated and costly event had happened to them or their household (for example, a boiler or car breaking down) (see Figure 4). These participants were asked to write down what had happened, when it had happened, how much it had cost and finally how it had made them feel.

Figure 4: Stimulus provided in intervention 2

Take a few moments to remember and visualise the last time you, or somebody in your household, unexpectedly experienced:

- Your car needing repairs or replacement.
- Your boiler needing repair or replacement.
- Your mobile phone, laptop or other technology breaking down.

1. Please briefly describe what happened and when it happened.
2. How much did it cost and how did you pay for it?
3. How did it make you feel at the time?

People tend to estimate the frequency of an event, or the likelihood of its occurrence, 'by the ease with which instances or associations come to mind'.[12] Thus, people tend to 'consider what they recall in making a judgement but also use the ease or difficulty with which that content comes to mind as an additional source of information'.[13] So a terrorist attack may be judged as highly likely to happen because of the ease with which shocking events can be called to mind. In contrast, a road traffic accident may be judged less likely as any one instance may be harder to recall, despite road traffic accidents happening much more frequently than acts of terrorism.

The aim of our second intervention was to use this bias, often called 'availability'. When betting on how likely it is that an event will happen to them, participants may rely on the specific example we have asked them to recall, finding it easy to access as they have just described it in detail. We hypothesised that an easily recalled previous unanticipated cost could make participants more likely to believe that an unanticipated event would happen to them in the following one or three months.

After participants had placed their bets, we asked a number of additional questions to help us understand their responses.[14] We also gathered data on how numeracy skills may have interacted with performance in the test. We asked participants numeracy questions developed by MAS and National Numeracy.[15]

Participants were paid 10p for each stage of the test that they participated in. Additionally, we paid an amount to charity based on the accuracy of the bets made by participants. Participants could earn up to an additional £1.50 for charity depending on the accuracy and size of their bets.

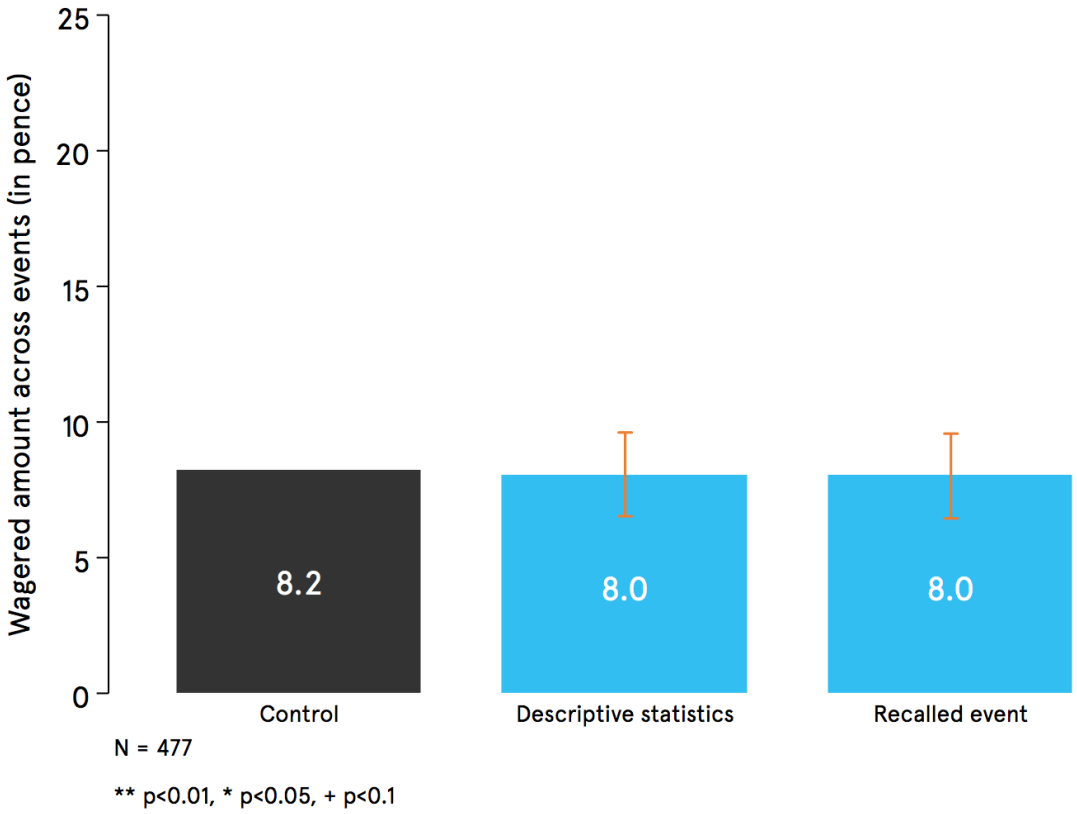
Results

The primary results were focused on the predictions of our participants. The results show that, for this test, neither intervention affected the amount that participants were willing to bet on the likelihood of future unanticipated and costly events happening.

Figure 5 expresses the predictions of our participants as the average amount that participants bet on each of the three events happening as an average for both time frames (one month and three months).[16] There are no significant differences between the control and either of the intervention groups.

Those participants who were shown visual information about how often various costly events tend to occur over a year did not change their bets compared to the control group. Those participants who were asked to recall a previous unanticipated cost also did not change their bets compared to the control group.

Figure 5: Amount bet on the events happening averaged across both one and three months



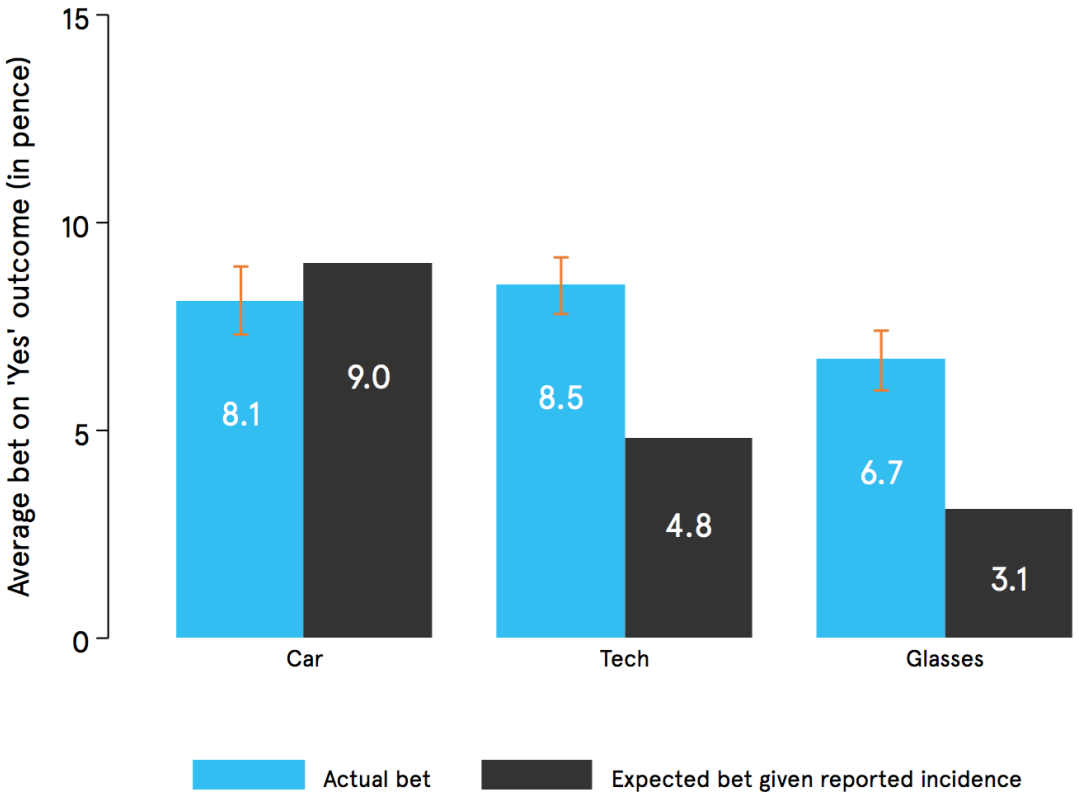
For the second part of our results, we report what our participants told us actually happened and compare this with their predictions. We contacted participants after one month and after three months to find out whether the events that they had bet on had happened. Of the participants, 73 per cent (699) returned for the first follow-up and 22 per cent (213) for the second follow-up. This means that, although there are results for the second follow-up, we can only point to trends in the data, so we have not included these results in this summary.

Participants who answered more numeracy questions correctly also earned more money for charity. This is an interesting finding, since data from the first stage suggested that higher levels of numeracy were correlated with lower bets on the likelihood of an event happening. This suggests that the lower bets from participants with higher numeracy were indeed more accurate.[17] Whilst we should be cautious about generalising from this single set of results, they suggest that there may be merit in considering different approaches to belief updating to

encourage more numerate consumers to save, as their beliefs about the future may already be more accurate than those of less numerate consumers.

Finally, the results of our one-month follow-up do not support the suggestion in existing research that respondents are systematically optimistic about whether unanticipated and costly events will happen to them (see Figure 6). Using the number of events reported to us in the follow-up tests, we can calculate how much, on average, participants should have bet on an outcome occurring.[18] We found that, for car breakdown, the average amount bet was not different from the amount that should have been bet if the participants had had realistic (economists would describe this as 'well-calibrated') beliefs about the likelihood of experiencing car repair costs. For the other two unanticipated and costly events that we asked participants to bet on (glasses repair and technology breakdown), participants seemed to overestimate the likelihood of these events happening in their initial bets, compared to their reports on whether the events had happened when they returned after a month. This lack of optimism may be driven by the fact that being asked to estimate how likely events are to happen may increase the salience of discrete financial shocks (such as technology breakdown) to participants. By prompting participants to place bets on how likely a specific event is to happen, their beliefs may be altered compared to those who are not asked.

Figure 6: Comparison of average bets on events happening after one month compared to reported incidence of these events after one month



Recommendations

The interventions, perhaps because they used a relatively light touch approach, did not result in people updating their beliefs about how likely it was that an unexpected and costly event would happen to them. Importantly, there is some evidence in our results that our participants may not have held systematically overoptimistic beliefs about the future. This differs from the findings in the existing research. Indeed, for glasses repair and technology breakdown, our participants overestimated the likelihood of these events happening – in other words, they were pessimistic.

In light of these results, we do not recommend that the interventions tested are piloted in the field. Further research is required to explore our findings, which challenge existing research on optimism in beliefs about the future. This could involve replicating our findings in different controlled environments or testing whether different types of events are subject to differing levels of optimism and pessimism. If we found consistent pessimistic, or indeed accurate, beliefs about

unanticipated and costly events, then this would suggest that belief updating may not be helpful in encouraging consumers with these beliefs to save.

In addition, this test only looked at participants' beliefs about the likelihood of singular events happening, not events in combination. There is a vast range of possible unanticipated costs that each individual could experience. Anticipating these potential events, predicting how much they would cost and setting aside a large enough buffer to pay is clearly a difficult exercise to undertake. In the Lab we asked participants to bet on separate events, to see whether we could affect beliefs on this simpler task as a first step. Further research could consider building on this to see whether bundles of unknown and known events – such as a car repair, a technology breakdown and optician costs – would drive different responses to our existing interventions. It may be that the complexity of considering bundles of events would mean that people would think about and plan for them in a different way. If we found events, or bundles of events, where participants were systematically overoptimistic, there could be merit in exploring further how beliefs about the future could be updated or better calibrated.

Further research is also required to explore the link between well-calibrated beliefs and individual motivation (and ultimately action) to save for a rainy day, which was not tested here. Specifically, there is a need to explore whether beliefs could be better calibrated through more intensive interventions that have a stronger link to savings. For example, using transaction-level data to bundle unexpected costs together and then prompting people to consider this spending as one category or 'mental account' may help individuals to accurately budget and save for unanticipated costs. More vivid or emotional interventions, such as videos or life stories, may also be interesting options to explore.

Endnotes

[1] Money Advice Service. (2016).The squeezed segment. These are working-age consumers with significant financial commitments but relatively little provision for coping with income shocks.
[2] Finch, D. (2016). Hanging on: The stresses and strains of Britain's 'just managing' families. Resolution Foundation.
[3] Camerer, C., & Lovallo, D. (1999). Overconfidence and excess entry: An experimental approach. American Economic Review, 89(1), 306–318; Malmendier, U., & Tate, G. C. E. O. (2005). Overconfidence and corporate investment. Journal of Finance, 60(6), 2661–2700; Sharot, T. (2011). The optimism bias. Current Biology, 21(23), R941–R945.
[4] Malmendier, U., & Tate, G. C. E. O. (2005). Overconfidence and corporate investment. Journal of Finance, 60(6), 2661–2700.
[5] Puri, M., & Robinson, D. T. (2007). Optimism and economic choice. Journal of Financial Economics, 86, 71–99.
[6] Berman, J. Z. (2016). Expense neglect in forecasting personal finances. Journal of Marketing Research, 53(4), 535–550; Puri, M., & Robinson, D. T. (2007). Optimism and economic choice. Journal of Financial Economics, 86, 71–99.
[7] Sharot, T., Korn, C. W., & Dolan, R. J. (2011). How unrealistic optimism is maintained in the face of reality. Nature Neuroscience, 14(11), 1475–1479.
[8] Participants in previous experiments have been asked to compare their own personal risk to the average person's risk of experiencing an event: Weinstein, N. D. (1980). Unrealistic optimism about future life events. Journal of Personality and Social Psychology, 39(5), 806–820. Other experiments have asked participants to state their beliefs about the likelihood of an event happening twice: once before and once after receiving information about the actual incidence of that event: Sharot, T., Korn, C. W., & Dolan, R. J. (2011). How unrealistic optimism is maintained in the face of reality. Nature Neuroscience, 14(11), 1475–1479.
[9] Whilst it is interesting to note how much money the participants bet on each event happening in the control group, it cannot be interpreted as showing exactly how likely a participant thought an event was to happen. This is because, whilst two participants may both have thought that there was about a one in three chance of their car breaking down (for example) in the next three months, one participant may have placed more money on it than another because they may have been willing to take a bigger risk.
[10] Examples were drawn from a MAS survey aimed at all UK adults. Money Advice Service. (2013).Unexpected costs: Quantitative research report.
[11] Spiegelhalter, D. (2017). Risk and uncertainty communication. Annual Review of Statistics and Its Application, 4(1), 31–60.
[12] Tversky, A., & Kahneman, D. (1973). Availability: A heuristic for judging frequency and probability. Cognitive Psychology, 5, 207–232 at p. 208.
[13] Schwarz, N., Bless, H., Strack, F., Klump, G., Rittenauer-Schatka, H., & Simons, A. (1991). Ease of retrieval as information: Another look at the availability heuristic. Journal of Personality and Social Psychology, 61(2), 195–202.
[14] These questions covered the perceptions of participants around whether they trusted Predictiv to donate money to charity on their behalf, whether they would return to Predictiv one and three months later to answer the follow-up surveys, and whether they owned a car.
[15] The numeracy questions were drawn from Money Advice Service. (2015). Technical report for the 2015 Financial Capability Survey. They were developed with advice from National Numeracy (https://www.nationalnumeracy.org.uk).
[16] Our sample size is lower than the full number of observations because some participants were excluded from the analysis. This concerns individuals who reported not owning a car or who violated the assumption of monotonicity on any of the measures (for example, if a participant bet 20p on an outcome happening within one month but less than 20p on the outcome happening

within three months). These exclusion criteria are stringent and reduce our statistical power. We retain more power (78 per cent of the sample on average) by looking at the intervention effects by event, but this did not yield significant effects.

[17] Whilst we cannot rule out that these more numerate participants were lying to earn as much for charity as possible, the pattern of their bets does not suggest this. To earn the most money for charity, participants would have had to have made extreme bets (25p on No or 25p on Yes), then return after one and three months to report that the incident they had bet on had, or had not, happened. We found that the proportion of participants making extreme bets (amounts of 0p and 25p) was comparable across numeracy levels. Participants with high numeracy (score of 3 or 4) made extreme bets in 56.6 per cent of the cases, compared to 52.4 per cent for participants with a numeracy score of 3 or lower. Only 13.3 per cent of all participants stated consistent extreme beliefs (i.e. 25p bet for all six possible bets). This suggests that for all participants, including those with higher numeracy, lying to earn maximum rewards for charity was not the most likely explanation for their earning money from accurate betting.

[18] For this calculation, we take the reported incidence of each event and multiply it by the maximum bet. For example, if the reported incidence of tech repair is 19 per cent, then the average betting amount we expect to see if participants are well calibrated is 0.19 × 25p = 4.75p. Note that there are reasons why participants might deviate from this amount other than being poorly calibrated. For example, individuals who are risk averse about making the right bet may be less inclined to bet everything on one outcome (for example, 25p on Yes) and instead may prefer to spread their bet more (for example, 15p on Yes and 10p on No). Follow-up research could look to exclude these alternative explanations using methods proposed in, for example, Offerman, T., Sonnemans, J., Van de Kuilen, G., & Wakker, P. P. (2009). A truth serum for non-Bayesians: Correcting proper scoring rules for risk attitudes. Review of Economic Studies, 76(4), 1461–1489.

7. Guidance That Is Right On Time

Idea: Make offers of financial guidance relevant and helpful by using data on current account transactions to precisely time and target offers to coincide with impactful moments in people's lives.

Why was it tested? There are a number of behavioural barriers to seeking financial guidance that could be overcome by an offer that is precisely targeted and presented at the right time. Exaggerated perceptions of risk around financial decisions can lead to a preference for the status quo, meaning that people are unlikely to be proactive in seeking guidance. Additionally, overconfidence about the likelihood of good outcomes can lead to a perception that financial guidance would not be helpful. If we can target offers effectively then these barriers can potentially be overcome by removing the need for people to seek guidance themselves and making the offers at a time when financial guidance is most likely to be helpful.

We are more receptive to changing our habits during significant life changes or periods of transition, such as moving house, getting married or a change in our work circumstances. Offering guidance at appropriate moments may also be more likely to lead to people taking action and seeking and accessing guidance. Financial institutions may be able to use customer data to identify changes or periods of transition their customers are experiencing, and effectively apply the abovementioned behavioural insights to achieve positive outcomes for those customers.

People are familiar with the general principle that banks and other commercial organisations use individual data to target them with offers of commercial products. The transaction data that are ordinarily used by banks to target products to their customers could also be a reliable indicator of significant life changes or periods of transition in customers' lives. Banks could use these datasets to refer customers in a timely fashion to impartial financial guidance that is appropriate to the customers' individual financial or life circumstances.

With this idea, we wanted to explore how signposting to information at timely moments – such as when an individual's salary increases or decreases – could be done in a way that prompts people to change their behaviour and take up financial guidance. The longer-term view is potentially to examine how this approach could be used to help people move towards meeting their financial

goals or to manage their money more effectively given their new circumstances. This idea was developed and explored in the Financial Capability Lab (the Lab) to provide important detail about how people react to and perceive signposting in a particular context, which would assist in the practical design of a field pilot.

How was it tested? A qualitative approach was used to explore how people perceive offers of financial guidance, use of their data and which messengers might be most appropriate. Two discussion groups were used. Follow-up interviews were conducted by telephone a week later.

Findings: At first, participants expressed a number of concerns about the idea, based partly on scepticism about the motives of financial institutions, which many participants felt would be driven by commercial concerns rather than the interests of their customers. Apprehension about intrusiveness also reflected a wider disquiet that organisations know too much about their customers. Some participants queried how receptive they would be to guidance that they had not proactively sought themselves.

The views of participants nevertheless developed in a more positive direction as discussion continued, highlighting the potential of the scheme if it were sensitively communicated as well as concrete suggestions for how to do this. Participants were interviewed a week after their discussion groups, by which time they had had the opportunity to reflect on the discussion and talk to friends and family about the idea. Following these discussions, participants were positive about the potential of the idea – indeed, in some cases, enthusiastic. Some participants who had initially considered the idea to be for `other people, not them' came to the view that they themselves could also benefit.

Participants agreed that communications were key. These would need to underscore the impartiality of the guidance to which customers were being directed, and perhaps be presented alongside some form of printed material from the government or a reputable independent organisation. Communications would need to be tactful, to the point and genuinely timely – participants were concerned about being overloaded by frequent letters. Communications would also need to stress that there would be no disadvantage to seeking guidance as customers would not have to accept it, and that their financial data had always been, and would remain, completely confidential.

Recommendations: The Guidance That Is Right On Time idea could exploit existing data-based targeting techniques that banks use to offer their customers products, instead using these techniques to refer them to impartial financial guidance. This has the potential to overcome some of the behavioural barriers to seeking guidance as well as potentially increasing the impact of any financial guidance that is taken. We are looking to partner with financial institutions to further explore when and how customers want to receive support, and what they think the most timely and effective moments would be for them. Further research would focus on the best way to present the support to make participants feel confident and secure in taking it up.

Our findings in the Lab suggest that it may be necessary to overcome significant initial suspicion of financial institutions. Any pilot should therefore include an endorsement, branding or kitemark from the government or a trusted third party, such as a charity. In order to build trust, it could also explicitly link to government, financial institutions and providers of independent, impartial advice and guidance.

To lay the groundwork for work in the field, we would explore how the data held by banks could be appropriately and effectively used whilst maintaining regulatory compliance and being helpful to customers

Why was it tested?

Rather than waiting for individuals to seek help, it could be offered at times when it would be most useful and appropriate based on information about actual financial transactions. For example, a financial institution could identify when salary payments are reduced or stop going into an account and use that moment to point the customer to appropriate independent, impartial financial guidance. Similarly, signs of a salary increase or windfall could be a good time for a bank to direct individuals towards help with meeting longer-term financial goals.

The Guidance That Is Right On Time idea could help to overcome some of the key behavioural barriers to the take-up of financial guidance. Most of us have a preference for the status quo as the risks of making changes to our finances can appear larger than the potential gains.[1] This could lead to disengagement with financial decision-making and a low likelihood of seeking the guidance required to make changes, particularly as status quo bias can be even stronger if there are many options to choose from (as there are for financial guidance).

Another potential barrier to seeking financial guidance is systematic overconfidence. Research has found that about 11 per cent of people may be systematically overconfident about financial decisions.[2] Where overconfidence is accompanied by low financial literacy, individuals may be less likely to think that they need financial guidance.[3] Guidance That Is Right On Time overcomes these barriers by taking the offer of guidance directly to people, rather than expecting them to actively seek it out. Whether people are overconfident, attached to the status quo or just too busy, this idea could potentially help.

Guidance That Is Right On Time is based on the fact that financial institutions and other commercial organisations already use individual data to target offers of commercial products. The same data could be used to offer timely prompts to customers to encourage them to take up financial guidance which is appropriate to their individual financial circumstances. People are more receptive to changing their habits during significant life changes or periods of transition, such as moving house, getting married or a change in work circumstances.[4] Messages delivered using the right channels and at the most appropriate moments, such as during periods of change or transition, may be more likely to be heeded and can therefore lead to people taking action and seeking guidance.

To explore how this idea might work in practice, it is important to consider 'messenger effects'. This term refers to the fact that people's interpretation of a message is influenced by their feelings about the person or organisation delivering the message.[5] Trust also plays a pivotal role in consumer choice.[6] Unfortunately, banks are often perceived as less trustworthy than the average person.[7] This means that although banks would be in a position to identify timely moments to signpost customers to financial guidance, the organisation that then *provides* the guidance is also important – customer uptake of the guidance might vary depending on the sort of organisation providing it. A lack of trust might mean that customers would be unwilling to take up financial guidance provided by their banks, or that their bank had signposted them to, as the customer might believe that the bank was only acting in its own interests. Customers may therefore prefer, and be more likely to act on, guidance provided by charitable or governmental organisations. The appropriate messenger for providing guidance is therefore an important factor to explore in the Lab, to support any design of a pilot.

Qualitative findings

A qualitative approach was selected to explore some of the perception and communication challenges that a pilot could face. Two qualitative discussion groups took place on 1st and 2nd August 2017 – the first in central London and the second in Birmingham – with seven and six participants respectively all drawn from the Money Advice Service's (MAS) `financially squeezed' segment.[8] Participants were recruited on the basis that:

- They had one current account that they used for the majority of their financial incomings and outgoings.
- They felt positive or neutral towards the general idea of seeking financial guidance. This helped to facilitate a practical discussion about how it might be possible to encourage more people to seek financial guidance, making it possible for participants to be engaged in the discussion without negative attitudes having to be overcome.[9]

Nine of the participants (five from London and four from Birmingham) subsequently undertook a follow-up telephone interview about their recollections of the idea and whether their opinions had evolved since the discussion.

Qualitative research seeks to understand not only what people do and think but also why this is the case. The findings from our qualitative work are intended to inform the development of field pilots by illuminating why aspects of a design may work well for some people and not others. When interpreting the qualitative research findings, it is important to note that, although all participants were recruited from the MAS financially squeezed segment, the small size of the sample means the findings we present are illustrative and exploratory rather than representative of the segment. It is equally important to be mindful of how, in any group environment, participants' views can be influenced by others present. The follow-up in-depth interviews helped to mitigate this risk. Providing people with the opportunity to give feedback privately, as well as in a group, also helped to ensure that we were able to understand their views in detail. Our qualitative work therefore provides important information on how the idea may play out in any field pilot, but the findings should not be considered as representative or generalisable evidence of what works.

The following sections outline:

- attitudes towards seeking financial guidance and perceptions of free guidance in particular;
- reactions to the Guidance That Is Right On Time idea and how it should be communicated; and
- Recommendations of participants to overcome some of the issues raised.

Seeking financial guidance and sources of financial guidance

Most participants were able to discuss recent direct experiences of life events that had prompted them to seek financial guidance. For example, they spoke of how their personal circumstances had changed by being made redundant or by moving into a property with higher rent.

For most participants, the default option was to look online. Some mentioned Google searches for information, whilst others had visited comparison websites or financial forums. A few referred to speaking to independent financial advisers for more complex financial decisions, such as taking out a mortgage:

> 'When I was made redundant last year, I needed advice [on] how to sort out my finances because I weren't sure if I was going to go straight into another job.'
>
> Female, 45, Birmingham

Some participants also mentioned going directly to their bank for guidance and said they had been surprised at the high quality of the information they had been given. Others, however, were distrustful of the guidance provided by banks; these participants suspected that banks had a vested interest in pointing people towards more profitable products.

Participants also spoke about seeking guidance from friends and family members. This was particularly true of those who knew people who worked in the financial services sector:

> 'I tend to... ask friends. If I know they work in a sector, in like finances, in banks or anything, I'll just be like: "What have you got on at the moment?" And then I'll have a look.'
>
> Male, 38, Birmingham

Perceptions of free guidance

Participants felt that guidance should be free in order to encourage people to look for and follow financial guidance:

> 'I don't think I'd pay for it. There's enough material on the internet. I feel that I just wouldn't want to pay for the service.'
>
> Female, 32, London
>
> 'I don't think I would pay for [financial guidance]. It [would be] like using an ATM that charges you to get money out.'
>
> Male, 27, London

Participants highlighted a number of criteria that free guidance offers would have to satisfy before they would be prepared to believe that the offers were right for them.

First, participants judged that impartiality was important. However, they felt that guidance was rarely free or impartial in practice and that someone would be paying for it – often, they assumed, those commercial interests that might benefit from it:

> 'I wonder whether it is completely impartial. There must be some way that [organisations that give advice] run. How do they keep themselves running commercially?'
>
> Female, 45, Birmingham

Second, participants stated that high levels of brand recognition drive trust. Money Saving Expert was mentioned by many of the participants as a trusted brand. Participants considered that the information provided on this site was up to date, impartial and accurate, and many of them had used the site as a key source of information. Similarly, participants trusted brands and organisations considered to be impartial and socially responsive, such as Citizens Advice as well as other charities, government bodies and statutory advice agencies:

> 'It needs to be a reputable website because there's so much rubbish on the internet. There's so many people trying to make money out of you. If it's a free service, that's a good sign because they're not trying to make money. So yeah, it needs to be something that is trustworthy, has a good reputation.'
>
> Male, 36, London
>
> 'Well, I trust MoneySavers [Money Saving Expert] because it's very well-known and I've seen him [Martin Lewis] on TV and stuff. But I wouldn't

> really trust any other just random financial advice website, unless it was a kind of government financial advice website.'
>
> Male, 36, London

Third, ease of access was stated to be important. Otherwise, some participants would not bother to seek guidance, even if it were free:

> 'It's so much easier to go online, isn't it, and just go to like a comparison site, chuck your details in, get a loan offer and you can have it within 24 hours, can't you?'
>
> Male, 29, London

The issue of guidance being free was important for participants. It could make the difference between them seeking guidance or not, provided other criteria on impartiality, trust and ease of access were satisfied.

Initial reactions to the idea and how these evolved

The widely differing life experiences of participants were reflected in widely differing preliminary views on the Guidance That Is Right On Time idea. As the discussion progressed, however, some clear themes emerged about how the idea could be communicated to secure the confidence of participants.

Participants would need to overcome their doubts about financial institutions

Many participants did not trust financial institutions. Participants spoke about how, since the financial crash, they were less likely to believe what their banks told them. Participants were therefore unsure at first about how amenable they would be to their bank signposting them to financial guidance.

Participants also questioned the extent to which their bank would be willing to direct them to impartial guidance. Participants had the perception that, as private companies, financial institutions are likely to be interested in making money by selling their own products rather than doing what is in the interests of their customers:

> 'I went to my bank just to get advice: Was I getting the best account? Had I the best overdraft? But then there was like a slight concern. Obviously the banks are there to make money as well, so it would be nice to have like an unbiased service.'
>
> Female, 32, London

> `How can it be impartial if it's coming from my bank? Because it's usually something that's in their interest.'
>
> Male, 37, London

Not everyone felt this way. Some participants, particularly those who had good and long-standing relationships with their banks, were more trusting and believed that the intentions of their banks were in line with customers' interests. These participants were more likely to be receptive to the idea of their bank signposting them to financial guidance:

> `I'm in [name of bank]. I love them. I always get through to them. I've never had any problems with them. They've never annoyed me like some of the banks have in the past. And one day they said, "We've noticed that your overdraft keeps climbing up... is there anything we can offer you to help you manage it?"... I didn't think anything about it, I think it's because probably I've had good service from them. I took that as them trying to help me personally.'
>
> Male, 38, Birmingham

Participants' previous experience of product offers had not always been positive

We were interested in exploring participants' reactions to the idea of their financial institution being able to target offers to them based on their account data. Participants reported that when their bank had contacted them about products in the past, they had felt uneasy about the ability of financial institutions to monitor their personal finances so closely. Some participants had found it invasive for their bank to have any role beyond passively looking after their money. Furthermore, these participants did not like feeling that they were being judged by their bank:

> `I felt a bit, not violated, that's the wrong word but like, a bit like that's my private [business], these are my private accounts, that money is there for emergency in my savings account, and I don't really like the idea of them nosing around in my incomings and outgoings, you know.'
>
> Male, 37, London

> `[The Guidance That Is Right On Time idea] seems a bit out of the bank's remit. They're only supposed to be looking after your money. They're not supposed to be watching what you do with it and then telling you how to use it.'
>
> Female, 34, Birmingham

Participants shared a number of examples of product offers they believed had been based on analysis of their transaction-level data:

- being advised that they could shift money from a savings account to deal with a shortfall in their current account (the participant felt 'it was none of their business');
- being given a 'pre-approved' personal loan, following which the participant had gone on a spending spree which they had come to regret (the participant thought 'it was almost like they were abusing the fact that they could see [my financial situation]'); and
- Receiving unsolicited offers of credit once the participant had established a decent balance in their savings account (the participant felt 'they were just trying to tempt me to get more debts, but I refused').

This was, to participants, unsatisfactory targeting – invasive, based on the interests of the bank and not the customer, and seeking to interest customers in products that they might not need and, indeed, that might not be good for them. However, this did not lead participants to the conclusion that the broader principle of targeting was wrong. Rather, participants were concerned about the manner in which this targeting had been undertaken and the motives which had underpinned it. One participant identified this as follows:

> 'When you read about credit cards and loans, you get that negative feeling because it can be invasive. But, if you're trying to save money, there are positives. We'd put away our money into an account where it's not accumulating any interest, so just popping up and advising you, giving you options, ISA accounts or there's other saving accounts available, that would be really beneficial.'
>
> Male, 33, London

Participants' views evolved markedly once they began to consider effective targeting of offers

Despite their experiences in the past, however, participants reacted increasingly positively when they began to consider effectively targeted measures for their current financial situation:

> 'I think it's good. It will help your situation. It's not like just throwing things at you. It will help you work together to adapt to your situation.'
>
> Female, 32, London

> 'I would jump at any of this. Saving money, I'm there. Helping me make the most out of the little money I'm earning, I would like this.'
>
> Female, 32, London

Participants felt that they would value information that was well tailored to their particular needs and that gave them the means to improve their situation. When the follow-up interviews took place, many participants commented on the idea as a potentially valuable, and personally helpful, initiative.

Communicating the scheme

Participants judged that communications would need to convince customers that the idea was designed for their benefit, not the benefit of banks. Communications would need to be concise and easily understood by customers. Communications would also need to be clearly linked to a guidance offer from an independent organisation with a clear social purpose.

However, one important consideration is that any communication could be perceived as insensitive at a difficult time. For example, people do not have to be told they have been made redundant:

> 'If you'd been made redundant then you get a message saying, "Oh we've seen that... you've got a lot less money and we've heard that you've been made redundant"... That could be quite irritating.'
>
> Male, 37, London

Particular care would be needed with online communications, which could appear impersonal and intrusive. Some felt telephone or face-to-face communications might be more appropriate, helping to build a rapport between bank and customer, which might encourage the customer to follow up on any information given:

> 'I would much rather take the time and sit down with someone so they can try and understand you personally, and your circumstances and everything that goes on.'
>
> Male, 32, Birmingham

Communications should therefore reflect the reasons that participants reacted positively to the idea of timely offers of impartial advice:

- Stressing that the guidance and organisations customers are being signposted to are independent:

> `It's better if that independent organisation is truly independent because if they're being employed by the bank, obviously they're still going to be working for the bank's interest. So they [need to] say clearly, "We are an independent organisation."'
>
> Male, 36, London

- Getting the right balance between highlighting that the information is tailored but not making people feel uneasy that their account activity has been closely monitored.
- Ensuring the information is personalised, but not intrusively so:

> `I think you would be more likely to go with it if it was a little bit more personalised. If it's just an automated message from the bank, it might not show it's specific to you as much as if somebody said, "We've noticed that your money has dropped each month."'
>
> Male, 29, London

- Focusing on the positives. For example, this might be an ideal moment for people to make constructive changes to their money management. Solutions should help them to do this rather than concentrate on what has changed in their life, particularly when that change is a negative event, such as redundancy.
- Highlighting realistic and achievable goals, such as saving modest amounts of money. Participants felt that this would make people more likely to engage with the guidance.

Ways to improve the guidance provided in the Guidance That Is Right On Time idea

Participants suggested a number of improvements that they thought could address some of their initial concerns with this scheme. Many focused on whether their banks could be trusted to signpost them to impartial information. A few suggested that a government endorsement might help:

> `Just create reassurance is the main thing for me... and maybe sink home that... this is a government [initiative]. It is a benefit. This is something that has been rolled out.'
>
> Male, 38, Birmingham

There was a suggestion that this scheme be made optional. This could ensure that only those willing to be contacted in this way would be provided with guidance:

> 'On demand, it's whenever you want, so it's down to me to be able to click on wherever and find that information.'
>
> Male, 33, London
>
> 'I want to be in control of my circumstances, not you trying to control my circumstances.'
>
> Male, 32, Birmingham

As mentioned above, our participants were selected on the basis that they were not negative in principle about receiving financial guidance. However, it would be important for any field trial that the principles outlined above were tested on all customers, including those who currently have more negative attitudes towards seeking guidance. Participants considered that some aspects of communications would be particularly important for convincing these customers:

- The educational and informational aspects might provide people with options that they had not previously already thought of:

> 'The one thing to convince people would be that you are given different options to compare what you do, you don't even have to do anything and then this can make you have an informed decision.'
>
> Female, 32, London

- Communications should give the bank a positive image, one that stands out against its competitors – for example, by showing that, unlike other banks, this bank is interested in its customers and wants to point them towards independent guidance:

> 'If you've been given an option [by your bank] and you can compare it with the market, it builds that trust.'
>
> Male, 33, London

- Getting the timing right is important:

> 'I think that guidance [being] right on time is key so they're not bothering you every two minutes – it's just coming when you actually need it'
>
> Male, 33, London

At the end of the discussion, some participants clearly saw potential for the scheme:

> 'The bank does know your finances better than anyone else. At the end of the day, they know what comes in and out every single month and they're probably the only ones that know that, unless you of course tell other

people, mortgage advisers or whatever. So I guess [the communications should] say, "We know it better than anyone else. We know what's going on." I guess that could convince them.'

Male, 27, London

Follow-up interviews

In the follow-up interviews, participants were able to recount the intention of the scheme and how it would work in practice. Participants restated their concerns early on in the follow-up interviews, predominantly questioning whether financial institutions would direct them to impartial sources of guidance or whether commercial considerations would take precedence. They also remained concerned about their bank monitoring their account activity so closely, and said they might not be receptive to being offered guidance that they had not proactively sought.

In the intervening period between the initial group discussion and the follow-up interviews, participants had had time to reflect on the issues raised and to talk to friends and family about the idea. Based on these discussions, a few participants reported thinking about how they would respond to a change in their financial circumstances. These participants also reflected that they could have responded in a more positive manner to previous changes they had experienced in their financial circumstances. This was particularly true of those who had recently experienced a change at work or were expecting an event such as a pay rise or promotion in the near future.

One participant reported that since the discussion group they had been more alert to existing communications and guidance they had received from their bank:

`I realised I looked at more messages from my bank [since the discussion group]. You know sometimes you feel guilty not reading them, so I have been looking at them. It has given me a shake because I am thinking I might miss something really important here.'

Male, 38, Birmingham

Participants also used the follow-up interview to discuss how they thought this scheme should be best communicated. Some mentioned that, initially, a period of awareness-raising about the scheme in the form of TV or printed advertisements would be useful:

`It could not just be an email out the blue.'

Male, 27, London

Following this, participants felt that targeted communications to individuals should be sent by email or text message. They thought this would give people time to think about the offer of guidance that they had been presented with. Participants also felt that the style should be personal and friendly so as to overcome any misgivings individuals might have about taking up the guidance:

> 'They need a friendly way of approaching it... make it more personal. Individual. They need to fit it to different people's circumstances. That would be more appealing.'
>
> Female, 32, London

Most participants were opposed to their banks making contact by phone. A couple of participants felt that an unsolicited phone call might raise their suspicions about the scheme and lead them to think that it was a scam rather than an initiative designed to help them.

Recommendations

The Guidance That Is Right On Time idea could take existing data-based targeting techniques that banks use to offer their customers products and use those techniques to signpost customers to impartial financial guidance.

We are looking to partner with financial institutions to further explore when and how customers want to receive support, and what they think the most timely and effective moments would be for them. Further research would focus on the best way to present the support to make participants feel confident and secure in taking it up.

Our findings in the Lab suggest that there may be significant initial suspicion to overcome due to a lack of trust in banks. Clear communications could help people to address concerns about the impartiality of guidance, trust and effective targeting.

Any pilot should also include an explicit endorsement – for example, specific branding or a kitemark from the government or a trusted third party (such as MAS or a charity). The idea could even be positioned as a government-backed scheme in which banks signpost customers to a new single financial guidance body.

To lay the groundwork for work in the field, we would explore how the data held by banks could be appropriately and effectively used whilst maintaining regulatory compliance and being helpful to customers.

Endnotes

1 Kahneman, D., Knetsch, J. L., & Thaler, R. H. (1991). Anomalies: The endowment effect, loss aversion, and status quo bias. Journal of Economic Perspectives, 5(1), 193–206.
[2] Porto, N., & Xiao, J. J. (2016). Financial literacy overconfidence and financial advice seeking. Journal of Financial Service Professionals, 70(4), 78–88.
[3] Palameta, B., Nguyen, C., Hui, T. S. W., & Gyarmati, D. (2016). The link between financial confidence and financial outcomes among working-aged Canadians. Social Research and Demonstration Corporation.
[4] Thompson, S., Michaelson, J., Abdallah, S., Johnson, V., Morris, D., Riley, K., & Simms, A. (2011). `Moments of change' as opportunities for influencing behaviour: A report to the Department for Environment, Food and Rural Affairs. London, UK: Defra.
[5] Kelley, H. H. (1967). Attribution theory in social psychology. Nebraska Symposium on Motivation, 15, 192–238.
[6] Harris, L. C., & Goode, M. M. (2004). The four levels of loyalty and the pivotal role of trust: A study of online service dynamics. Journal of Retailing, 80(2), 139–158.
[7] Sapienza, P., & Zingales, L. (2012). A trust crisis. International Review of Finance, 12(2), 123–131.
[8] Money Advice Service. (2016).The squeezed segment. These are working-age consumers with significant financial commitments but relatively little provision for coping with income shocks.
[9] People who were not receptive to the idea of seeking guidance were screened out at the recruitment stage. This decision was made on the basis that, in the limited time we had with participants in what was a small number of groups, we wanted to focus on the opinions of those who would be receptive to the idea of seeking guidance in principle. These people would be the target audience for any field pilot. If we had engaged with participants who were not keen on seeking guidance, then it is likely that a considerable portion of the group discussion would have been devoted to discussing the perceived barriers to seeking guidance generally, rather than focusing on the specifics of this idea.

8. Financial Guidance First Aider

Idea: Encourage more people to seek financial guidance by providing Financial Guidance First Aiders in the workplace. First Aiders would be trained members of the workplace's staff who are available on a confidential basis to any employee. First Aiders would discuss financial goals with employees before suggesting sources of impartial financial guidance to help the employee achieve those goals.

Why was it tested? Academic studies and work by the Behavioural Insights Team (BIT) have indicated that the timeliness of prompts is an important factor in encouraging behaviour change. This idea leverages this behavioural insight by making the timely provision of signposting to financial guidance easily available in the workplace. The existing evidence suggests that this signposting could be particularly effective if it were to coincide with financial changes, such as pay rises, bonuses or promotions. We were interested in exploring how signposting in the workplace at these moments could influence uptake of financial guidance.

We were also interested in testing messenger effects, whereby some messengers are more likely than others to be effective at influencing behaviour. To do this we explored ways of recruiting a First Aider from an existing workforce. An important element in messenger effects is trust. A close colleague, for example, may be more influential in signposting people to financial guidance than institutions or financial professionals, as the colleague could be perceived as more trustworthy.

The idea was selected as a good candidate for testing in the Financial Capability Lab (the Lab) as it has the potential to drive increased engagement with financial guidance using well-evidenced behavioural insights. To develop the idea, however, more evidence was needed. For example, it is important to understand which individuals might be best placed to be trusted messengers. Would a close colleague or a human resources (HR) professional be most trusted? Our work in the Lab aimed to explore these types of detail to support any field pilot of the idea.

How was it tested? A qualitative approach was chosen to help us understand the nuances and details of how to design a field pilot for this idea. Two discussion groups were held. A week after the discussion groups, follow-up one-on-one telephone interviews were conducted with some participants.

Findings: Participants were positive about the principles behind the Financial Guidance First Aider idea. They supported the notion of helping people to think

more about their finances and manage their money better whilst they are at work. They felt that the scheme could encourage people to be more aware of financial options and make better decisions.

Some participants found it difficult to understand why the First Aider would not directly provide tailored financial advice or guidance, rather than signposting people to free impartial guidance from other sources. Participants also mentioned existing schemes that they felt were effective and even provided tailored financial advice in some cases.

Concerns were expressed about confidentiality. Participants were worried about the level of personal financial information they would need to share and whether the conversations they had would stay private. They were aware that they would need to share a certain amount of information to enable the First Aider to signpost them to appropriate guidance, and this led to some unease. Participants were reassured about trust and confidentiality issues when the idea of the First Aider being a member of their HR team was introduced, as HR staff were described as accustomed to dealing sensitively with confidential and sensitive information.

The alternative possibility of the First Aider being a trained colleague was not received as positively. Participants wanted reassurances that any information shared would remain private. Participants were also concerned that the First Aider might not have appropriate financial experience, even after being trained for the role, and they queried whether an employer would give a colleague sufficient time to take on this additional responsibility.

Some participants were concerned about a First Aider being anyone from within their organisation, whether or not they worked in HR, again reflecting concerns about confidentiality.

Recommendations: In the Financial Advice Markets Review, employees, employers and the Financial Conduct Authority called for more financial guidance to be provided in the workplace, and the Financial Guidance First Aider idea was a response to this call. The idea was received well by our participants, and through our qualitative research we gathered clear guidance for how to adapt the idea in the next steps of development to make sure that it works for people and gives them what they need.

We are seeking medium and large employers interested in piloting a Financial Guidance First Aider scheme. The pilot would initially focus on providing training and support (developed by the Lab partnership) for First Aiders to enable them to

effectively carry out their role in signposting employees to independent, impartial guidance. Development work would then focus on understanding the particular context of each workplace to provide a relevant and helpful service whilst generating insights that could inform wider rollout of Financial Guidance First Aider schemes.

Why was it tested?

Many employees and employers would value the provision of financial advice in the workplace. A 2013 Scottish Widows employee survey found that a majority would be in favour of more provision.[1] Respondents to HM Treasury and the Financial Conduct Authority's 2016 consultation – reported in the Financial Advice Markets Review (FAMR) – agreed that `employers should play a bigger role in helping their employees to access financial advice and guidance'.[2] A number of the FAMR recommendations focused on providing support and materials to enable employers to respond to this challenge.[3]

The Financial Guidance First Aider idea could contribute to this policy priority by encouraging more people to seek financial guidance through the workplace. The idea would be to help employers to provide timely support for employees by training an existing employee to become a Financial Guidance First Aider, who would provide signposting towards impartial sources of financial guidance. Financial Guidance First Aiders would be trained members of the workplace's staff who would be available on a confidential basis to any employee. First Aiders would discuss financial goals with employees before suggesting sources of impartial financial guidance to help employees achieve those goals.

By referring to the person as a Financial Guidance First Aider, we aim to communicate that they would be there to provide an initial point of contact before handing over to more expert help. A comparable workplace scheme is Mental Health First Aid,[4] which has some similarities in terms of providing a first point of contact who is capable of signposting people to expert help but does not provide advice themselves. However, it is important to note that the Financial Guidance First Aider scheme would initially be offered as a service to sign up to rather than asking Financial Guidance First Aiders to proactively seek out colleagues who might benefit.

The Financial Guidance First Aider idea builds on several behavioural insights. First, financial guidance could be offered at specific timely moments with the aim

of increasing the likelihood of people accessing and using financial guidance. For example, the First Aider could offer guidance when pay rises, bonuses or promotions occur. Many academic studies, as well as BIT's own work, have indicated that the timeliness of prompts is an important factor in encouraging behaviour change.[5] The timely provision of guidance by the First Aider could therefore make a substantial difference to people's behaviour.

Second, we were interested in using messenger effects to maximise the likelihood of the Financial Guidance First Aider role having a positive impact. Some messengers are more likely than others to be effective at influencing behaviour. A colleague may be more influential in providing financial information than institutions or financial professionals, particularly when the colleague is similar to the person to whom they are providing support.[6] There is some evidence to suggest that perceived levels of authority are also an important factor in how we respond to different messengers, meaning an HR official may be able to use this to be more influential when providing signposting to financial guidance.[7] We were interested in generating some initial evidence in our Lab work about who the First Aider should be, as their potential to influence behaviour could vary substantially depending on their role or their relationships in the organisation. For example, a colleague (whether close or not) may be quite a different messenger from an HR professional, and the person receiving the advice may feel that the colleague is more relatable or similar to them, which may make the colleague more influential.[8]

A qualitative approach was used to explore how trust and messenger effects might influence how people responded to the First Aider idea. To inform any future pilot, we were interested in whether participants would be willing to share details of their financial situation with an HR professional, whether participants would trust that person to be impartial in their signposting, and whether people might find HR professionals more or less persuasive than a colleague. We were also interested in whether people might find it easier to talk to a colleague than an HR professional.

Qualitative findings

Methodology

The following sections outline the findings from two qualitative discussion groups which took place on 1st and 2nd August 2017 – one in central London and one in Birmingham – with eight and six participants respectively. Each discussion group

lasted up to two hours. Participants from the Money Advice Service (MAS) financially squeezed segment[9] were recruited on the basis that:

- They currently worked for a medium organisation (50–250 employees) or large organisation (more than 250 employees).
- They felt positive or neutral towards the idea of seeking financial guidance.[10]

After the discussion groups took place, nine of the participants (five from London and four from Birmingham) took part in a follow-up telephone interview lasting around 30 minutes. The interview explored their considered perceptions about the discussion and whether their opinions had changed at all.

Qualitative research seeks to understand not only what people do and think but also why this is the case. The findings from our qualitative work are intended to inform the development of field pilots by illuminating why aspects of a design may work well for some people and not others. When interpreting the qualitative research findings, it is important to note that, although all participants were recruited from the MAS financially squeezed segment, the small size of the sample means the findings we present are illustrative and exploratory rather than representative of the segment. It is equally important to be mindful of how, in any group environment, participants' views can be influenced by others present. The follow-up in-depth interviews helped to mitigate this risk. Providing people with the opportunity to give feedback privately, as well as in a group, also helped to ensure that we were able to understand their views in detail. Our qualitative work therefore provides important information on how the idea may play out in any field pilot, but the findings should not be considered as representative or generalisable evidence of what works.

The following sections describe:

- attitudes expressed during the discussion groups towards seeking financial guidance, participants' perceptions of free guidance, and participants' initial reactions to the general concept of having a Financial Guidance First Aider in their organisation;
- reactions to the more specific options of the First Aider being either an HR professional or a colleague; and
- How participants thought the role of the First Aider should be communicated to staff.

Seeking financial guidance and sources of financial guidance

There was a wide range of engagement with financial guidance amongst the participants. Some had sought financial guidance frequently, some had rarely sought guidance and some had only sought guidance when they had had a specific goal or situation that needed to be addressed. Participants had sought guidance in a variety of ways, including online, through friends and family, and through their bank. Those who had sought information online regarded this as a quick way of accessing options and information. These participants liked comparison sites, such as Money Saving Expert and uSwitch, as they could input small amounts of personal information and receive a range of options and further information.

Participants who were less comfortable online or who felt their friends were more financially informed were more likely to turn to friends for guidance before turning to online sources of information:

> 'There's always someone in your network or group who is quite savvy about certain things, so sort of talking to your friends and family.'
>
> Female, 42, London

Some participants would go straight to their bank if they needed any financial guidance; they were happier speaking to someone face to face, although this was not something they would do frequently. One participant said they would always ask their parents first, though they had never ended up choosing any of the options suggested.

Perceptions of free guidance

Participants valued getting free guidance, for example from their bank or the internet, but some felt that comparison sites in particular might have deals with financial organisations that push those organisations to the top of the list of options:

> 'I'm quite dubious about the commission structure behind these kinds of sites. Do they get more money for being higher on the list? That always plays in my mind.'
>
> Male, 28, London

In addition, participants often failed to tick the appropriate boxes to opt out of receiving future communications, meaning that they received unwanted material after they had accessed sites:

> 'But I think, once you put your details in, it's just a nightmare. Calls, emails, things like, you know, it's just a nightmare...'
>
> Female, 43, Birmingham

Initial reactions to the idea

At first, participants had mixed reactions to the idea of a Financial Guidance First Aider in the workplace. They supported the principles behind the idea and the fact that it would be free, and felt it could help people to think about and manage their finances better. Concerns around confidentiality, however, were expressed by many participants. There was also some uncertainty as to whether the First Aider would be providing the guidance themselves or even providing financial advice, rather than signposting people to impartial, independent sources.

The idea of having someone to help people meet their goals, such as saving to buy a house, or helping them through financial hardship particularly resonated with participants:

> 'I think for me I still could benefit from it because I'm in a position where I'm still trying to save for my mortgage. So hence just to be more informed and get ideas of how to save.'
>
> Male, 31, Birmingham

Experience of similar employer schemes

Some of the participants noted that the idea sounded similar to schemes already run by the companies they worked for. They explained that their employers provided guidance at certain times of the year, such as when pay rises or bonuses had been received, perhaps directing employees to savings schemes, individual savings accounts, pension schemes or information on how to invest in shares in the company. They appreciated the perceived timeliness of these offers, as the offers came at a time when the participants said they were receptive to the idea of thinking more carefully about their financial situation and, as such, they paid more attention to the information. Additionally, a few participants described how they were provided with tailored advice rather than just guidance, which they found particularly helpful as it gave them more confidence in taking action. Because of these positive experiences with employer schemes, participants liked the idea of a Financial Guidance First Aider:

> 'Well we have similar things already in my company, because [at the] end of the financial year, we get the bonus and we always get offers of where

we [could] spend it: for the pension or whatever other options there are.'

Female, 30, London

Trust and confidentiality

Participants raised a number of queries about trust and confidentiality. They were concerned about the level of personal financial information they would need to share, how comfortable they would feel sharing this with someone in their company and whether they could trust First Aiders to keep the conversation confidential (particularly in relation to spending habits). Participants appreciated that, to be signposted to appropriate information, they would need to be open about their finances. As such, when asked about what they thought they would need to share to make this idea work, participants tended to assume that they would need to offer up a detailed breakdown of their outgoings to the First Aider. The idea of doing this with someone from their workplace made some participants uncomfortable and, as such, led them to suggest that the First Aider would need to be a trained independent person from outside their organisation:

'In terms of outgoings, I wouldn't really feel comfortable with certain people in my company knowing how much I'm spending on bills etc.'

Male, 29, London

Confusion over the role of the Financial Guidance First Aider

When the idea was introduced, some of the participants assumed that the First Aider would be providing financial advice, rather than just signposting individuals to impartial guidance. Once this distinction had been understood, a few struggled at first to understand the point of having the First Aider. They felt that this might add an additional, unnecessary layer to the process of sourcing financial guidance:

'I [wonder] how much time you have to spend explaining to this financial First Aider and then they're not really going to be doing anything.'

Female, 39, Birmingham

Communicating the idea

Participants recognised that the success of such a scheme would hinge on a clear communications strategy. They suggested that communications would need to contain clear explanations about the scheme's goal of signposting people to

impartial financial guidance rather than providing direct financial advice. Providing this clarity would be essential to managing people's expectations about how the scheme could help them. Regarding channels of communication, participants were happy to receive information by email, if it was friendly and clear. Participants suggested that this alone might not catch everyone's attention, however, so the communications strategy would need to be broader than that. Complementary communications approaches suggested included information pages on company intranets, holding workshops and events, and face-to-face meetings.

Reactions to HR professionals as Financial Guidance First Aiders

The idea of the First Aider being someone in HR was generally supported by participants, for two main reasons. First, HR professionals were considered to have strong interpersonal skills and were therefore deemed to be able to build rapport easily. Second, the participants felt that they could be trusted to keep conversations confidential due to the professional requirement for this in their existing HR role. Participants did express some concerns, however, around HR professionals having the time and training to be effective in the Financial Guidance First Aider role.

Ability to build rapport

Participants felt that, if these conversations were going to be tailored and worthwhile, they would need to feel comfortable with the individual with whom they were speaking, as they would need to reveal personal information about their financial situation in order to be signposted appropriately. Participants believed that HR professionals would have strong interpersonal and rapport-building skills as part of their day-to-day role and would be well versed in dealing with sensitive issues. Those participants who had had recent contact with their HR departments all felt that their situation had been dealt with appropriately:

> 'HR teams are generally good at building rapport, trust and confidence. You're already happy to speak to them or go to that point in the building because you've already had previous experience.'
>
> Female, 42, London

Trust and confidentiality

Participants considered that the nature of the role of HR professionals meant that they would understand employee confidentiality procedures and how

personal information should be handled. They would already be able to access employee payroll and contractual information. They could therefore be trusted, it was felt, to keep financial details confidential:

> 'I'm going for a HR thing at the moment and I'd trust them.'
>
> Male, 25, Birmingham

Time and training

The key drawback that participants identified to an HR professional being the First Aider was that they might not be given time to take this role on in addition to their other duties. Participants felt the HR function in their organisation was already busy and questioned whether HR officers would want to do this role – particularly if they would need additional training. If, as a consequence, staff found it difficult to book a meeting with a First Aider, they could be discouraged from taking up the scheme.

Reactions to the Financial Guidance First Aider being a colleague from the general workforce

In contrast to the positive opinions of HR professionals, the idea of the First Aider being a colleague was generally not supported by participants. Participants were worried that the information they shared might not remain private, that the colleague might not have the right financial experience to be able to signpost them to appropriate sources of guidance, and that the colleague might not have the capacity to take on the additional workload.

Trust and confidentiality

Trust was key to the uneasiness participants felt about a colleague being the First Aider. They were sensitive to the fact that they would have to share personal financial details with the First Aider in order to receive the necessary guidance. They doubted that colleagues would have the ability to keep these conversations to themselves and were concerned that many offices do not have a culture of keeping discussions private:

> 'I don't think it would be possible to be 100 per cent [confident] that [the First Aider] will keep you private. People talk – that's how people are in the office.'
>
> Male, 29, London

Experience and training

Participants were concerned that colleagues might not have the right experience to discuss personal finance and to direct people to appropriate financial guidance. Participants would only want to speak to a colleague about their own personal financial situation if they felt that this person had strong financial skills in their own personal or work life:

> `Someone in accounts, say in payroll or, for example, our financial director who's obviously a bit of a whizz with all these finances.'
>
> Male, 29, London

Participants suggested that some of these issues could be addressed by training First Aiders. This training would need to be sufficiently detailed to enable First Aiders to build rapport with staff and impart relevant, impartial guidance:

> `I think that it would have to be an intense training on finances. It's someone's life that you're playing with, isn't it?'
>
> Female, 43, Birmingham

Time and capacity

Participants were also concerned about whether a colleague would have time to conduct this role on top of their main role in the organisation. Employers would need to give First Aiders sufficient time to conduct this role for any scheme using colleagues as First Aiders to be successful.

Follow-up interviews

Nine follow-up interviews were conducted with participants around a week after the discussion groups took place. The key purpose of these interviews was to test the participants' recall of the idea; we wanted to see which aspects had stuck with them since the initial group discussion. Further, we also wanted to see how participants' thinking about the idea had developed, if at all, in the intervening period, based on their experiences or discussions with others.

Regarding recall, all of the nine participants remembered key details about the idea discussed in the group, notably the name `Financial Guidance First Aider', the fact that the role involved signposting to guidance and the fact that the First Aider would be someone in their workplace.

Opinions of the idea had not changed. Participants generally still thought positively about the principles of the idea, which they envisaged being

particularly helpful for people trying to achieve a financial goal, people seeking help with general financial queries and people in difficulties:

> 'I think it could help me, although I am already pretty good at my finances. I think it depends on the goals: if someone is trying to get out of debt, or wants to buy a property, that could help too.'
>
> Male, 29, London

However, there was some mention in the follow-up interviews of the limits of this idea given that it would offer guidance only rather than advice. Some of the participants mentioned that, when they had spoken to friends and family about the idea, these people had suggested that free, high-quality guidance is already readily available. This, in turn, had prompted participants to question the value of the idea.

Further, over the intervening period, participants' perceptions that this role should fall to an HR professional rather than a work colleague had hardened. This would address key concerns around trust, confidentiality and financial expertise.

Finally, participants had also reflected on the name of the scheme in the period following the group discussion. Many felt that the term 'First Aider' had negative connotations and associated it with a crisis situation or a problem. Because of this, they were concerned that people might be less likely to seek financial guidance from a First Aider unless they were experiencing significant money problems. To make the idea more accessible, therefore, they questioned whether the role should be renamed; one suggestion offered was 'financial guru'.

Recommendations

In light of the positive response to the Financial Guidance First Aider scheme in our qualitative work and the support for more workplace financial guidance from policymakers through the FAMR, we suggest that the idea should be developed as a pilot with employers. In line with the qualitative findings, we propose that HR professionals should be the First Aiders.

Specific concerns would need to be addressed around timing, training, availability and confidentiality. The Lab would need to provide high quality training and employers would need to commit to making time available for the First Aiders to ensure they could fulfil the role.

A range of communication approaches – including those suggested by participants, such as multiple complementary communication strategies and a

focus on managing expectations – should be tested to determine which are most effective at clearly explaining what the purpose of the scheme is and encouraging people to make use of it.

We are seeking medium and large employers interested in piloting a Financial Guidance First Aider scheme. The pilot would initially focus on providing training and support (developed by the Lab partnership) for First Aiders to enable them to effectively carry out their role in signposting employees to independent, impartial guidance. Development work would then focus on understanding the particular context of each workplace to provide a relevant and helpful service whilst generating insights that could inform wider rollout of Financial Guidance First Aider schemes.

Endnotes

[1] Scottish Widows. (2013). Workplace pension report. The annual employee survey found that '57% of employees want financial advice in the workplace, predominantly on pensions', p. 16.
[2] HM Treasury & Financial Conduct Authority. (2016, March). Financial advice markets review: Final report. This paper reported on 268 respondents representing a range of stakeholders, including advisers, consumer groups, banks, insurers and individuals.
[3] HM Treasury & Financial Conduct Authority. (2016, March). Financial advice markets review: Final report; see, for example, Recommendations 11 and 12.
[4] Hadlaczky, G., Hökby, S., Mkrtchian, A., Carli, V., & Wasserman, D. (2014). Mental Health First Aid is an effective public health intervention for improving knowledge, attitudes, and behaviour: A meta-analysis. International Review of Psychiatry, 26(4), 467–475.
[5] Behavioural Insights Team. (2014). EAST: Four simple ways to apply behavioural insights, pp. 37–42; Thompson, S., Michaelson, J., Abdallah, S., Johnson, V., Morris, D., Riley, K., & Simms, A. (2011). 'Moments of change' as opportunities for influencing behaviour: A report to the Department for Environment, Food and Rural Affairs. London, UK: Defra.
[6] Durantini, M., Albarracın, D., Mitchell, A., Earl, A., & Gillette, J. (2006). Conceptualizing the influence of social agents of behavior change: A meta-analysis of the effectiveness of HIV-prevention interventionists for different groups. Psychological Bulletin, 132, 212–248.
[7] Hofling, C., Brotzman, E., Dalrymple, S., Graves, N., & Pierce, C. (1966). An experimental study of nurse–physician relationships. Journal of Nervous and Mental Disease, 142, 171–180.
[8] Kelley, H. H. (1967). Attribution theory in social psychology. Nebraska Symposium on Motivation, 15, 192–238; Sapienza, P., & Zingales, L. (2012). A trust crisis. International Review of Finance, 12(2), 123–131.
[9] Money Advice Service. (2016).The squeezed segment. These are working-age consumers with significant financial commitments but relatively little provision for coping with income shocks.
[10] People who were not receptive to the idea of seeking guidance were screened out at the recruitment stage. This decision was made on the basis that, in the limited time we had with participants in what was a small number of groups, we wanted to focus on the opinions of those who would be receptive to the idea of seeking guidance in principle. These people would be the target audience for any field pilot. If we had engaged with participants who were not keen on seeking guidance, then it is likely that a considerable portion of the group discussion would have been devoted to discussing the perceived barriers to seeking guidance generally, rather than focusing on the specifics of this idea.

9. Repay and Save

Idea: Enable employees to access a financial product that uses automated payments taken directly from salaries to help them to pay down their debts more quickly and transition easily to saving once they have repaid their debts.

Why was it tested? Programmes such as Save More Tomorrow are a proven success in the pension market, enabling people to save automatically through payroll and resulting in billions in extra savings in the USA. This approach has less commonly been used to help people pay down their debts.

The Repay and Save financial product first consolidates existing unsecured debt into a single loan. The payments on this loan are taken directly from the customer's salary. This decreases the cost of the debt as it is perceived as less risky than other unsecured debts, such as credit cards, and makes it easier to administer. In addition, customers no longer have to work out which of their debts to pay down first, as they now have a single debt. The second feature of the product is auto-escalation of both debt repayments and savings deposits. Customers can sign up for payments to be increased automatically, allowing them to defer increases in payments into the future. For example, increases in payments could be made only when an employee received a pay rise, or they could be scheduled to increase gradually every month. Escalation of payments enables customers to reduce their debt or build savings more quickly when they have additional money available.

With Repay and Save, once the employee has paid down their debt, they can be automatically switched to building up savings by continuing to make payments directly from their salary into a savings account. The transition to saving uses the power of defaults, a well-evidenced behavioural insight that suggests that once the regular payments from a person's salary have become a personal norm, the person is more likely to continue making those payments. This insight is often used to retain customers on financial products after attractive initial offers have expired (for example, interest-free introductory rates on credit cards). Repay and Save uses this insight to help people build up a savings buffer once they become debt free, aiming to reduce reliance on credit in the future. Whilst an employer could create this product for their staff, we developed this idea as a financial product that would be provided directly to employees through a third party such as a credit union or financial services provider.

The Repay and Save idea was selected for testing in the Financial Capability Lab (the Lab) as an innovative application of well-known findings in behavioural finance. Our work in the Lab is aimed at supporting any field pilot by highlighting the challenges there might be in designing the product and then explaining it to potential customers. We also recognise that the appropriate mechanism to increase payments is likely to be different when people are repaying debt as opposed to when they are building savings, and work in the Lab has therefore allowed us to explore the options with potential customers in a low-risk and low-cost manner.

How was it tested? Qualitative research was undertaken with people from the Money Advice Service's (MAS) 'financially squeezed' segment,[1] who regularly use multiple lines of credit. We wanted to understand in more detail how people who are financially squeezed might engage with the idea, so as to inform further design work on the product. One discussion group was conducted with experienced participants who had consolidated their debts in the past, and one was conducted with inexperienced participants who had not consolidated any debts. Six follow-up telephone interviews were conducted with a sample of participants from both groups a week after the discussion groups took place.

Findings: Both experienced and inexperienced participants expressed positive interest in the opportunity to consolidate their debts through Repay and Save. The opportunity to painlessly transition to saving once debts were repaid was welcomed by the majority of participants. Some of the benefits of automation and the link to the employee's salary, such as reducing the likelihood of missed payments, were also welcomed.

The challenges that participants identified fell into three broad categories – confidentiality, debt portability and the mechanism for increasing repayments:

- **Confidentiality concerns were expressed about payments made via payroll.** Participants were anxious that their colleagues might find out information about their financial situation. This was particularly pronounced for those who worked in smaller companies.
- **Participants wanted reassurance about the portability of the product.** Participants asked for information and reassurance about what would happen to their loan and savings if they left their current employer.
- **Increasing payments was a source of anxiety for a number of participants.** Monthly increases were seen as potentially problematic as

they could limit the ability of participants to respond to month-to-month changes in their financial position. Describing increases as 'automatic' was also a source of concern for participants, who worried about a loss of control and payments becoming difficult to manage. Participants were offered the ability to set a maximum payment amount, but this did not allay concerns about monthly increases.

Recommendations: Repay and Save combines well-evidenced behavioural insights with elements drawn from Save More Tomorrow, one of the most successful behavioural finance programmes. This is a promising opportunity to build a product that could offer benefits to all parties: employees could benefit from lower-cost debts and a more attractive switch to saving; employers could see increased engagement as money worries are reduced; and finance providers may find consolidated loans linked to salaries more attractive in risk terms. We are seeking a finance provider and a large company with a sufficient number of UK-based employees, or a debt consolidator or retail bank, to robustly test different variations of the product within one trial, particularly to explore the best mechanism for auto-escalation.

Why was it tested?

The Repay and Save idea is a financial product that uses automated payments taken directly from salaries to help employees to pay down their debts more quickly and transition easily to saving once they have repaid their debts.

There are three core components to the Repay and Save product, which occur sequentially:

1. **Consolidate existing unsecured debts into a single loan that is repaid from a person's salary each month.** Loans repaid from salaries are often able to offer significantly cheaper interest rates. Since automated payments can be guaranteed, the likelihood of missed payments, and any extra charges for these, is reduced.

2. **Payments increase over time** – for example, every month or when a pay rise or promotion happens. Increasing pension contributions automatically when people receive a pay rise or a promotion has been found to be highly effective at helping people save for retirement in the USA through the Save More Tomorrow programme.[2]

3. **Use this same automated system to transition people easily to saving.** Once the debt is repaid, payments begin to flow automatically into a savings account and can also increase in line with any pay rises. An essential insight here, however, is that paying off a debt can be a great feeling for those who have been in debt for a number of years, and therefore it is important that the product rewards such achievements. Repay and Save makes sure that people who have successfully repaid their debts have more cash in the bank from the first month of being debt free, purposefully creating the rewarding feeling of a financial windfall. It does this by setting the first monthly savings payment either at half the level of the final monthly debt repayment (i.e. £150 savings payment if the final debt repayment was £300) or at the same level as the first debt repayment (i.e. £50 if that was the initial payment amount). Payments then increase to a pre-determined cap in exactly the same way as did payments against the loan.

Linking automatic increases in repayments to increases in income uses the classic behavioural insight that people dislike losses up to twice as much as they like equivalent gains.[3] Most people are highly unlikely to increase pension saving or debt repayments of their own initiative as this can feel like a financial loss. If instead a person agrees to forgo a part of their future salary increases, then this reframes the increase in payments as merely a smaller increase in income rather than a drop in income. However, it is important to note that this aspect of the design of Repay and Save is potentially problematic for members of the MAS financially squeezed segment, as they may not receive regular pay rises or promotions. If pay rises and promotions were not forthcoming, then this would limit the increase in speed with which people would repay their consolidated debts, as increases in payments would not happen. In the qualitative research presented in this report, we therefore explored the option of monthly increases to a pre-determined cap with our study participants, to see whether an increase in the speed of repaying a debt was attractive.

Setting up automatic increases for points in the future uses the behavioural insight that people are far more likely to commit to making a positive but potentially painful choice in the future than in the present. For example, if we are offered the choice to eat salad or macaroni cheese on a given Wednesday night, we may be more likely to choose the less healthy macaroni cheese in the moment itself (when we are likely to be hungry and easily tempted). If we pre-order the meal some days in advance, we are more likely to end up eating a salad by the time Wednesday rolls around, as we follow through on the commitment we made to our past self.[4]

The transition from debt repayment to saving takes advantage of a behavioural insight that, once established, defaults are often left unchanged. This is part of a wider preference for maintaining the status quo over initiating change, known in behavioural science as the 'status quo bias'.[5] In a world where our attentional resources are limited but the things vying for that attention are potentially unlimited, we tend to focus our resources on the most immediate, pressing problems.[6] In the financial services sector, this bias can lead to consumer detriment as products are offered with attractive initial terms (for example, interest-free credit periods, high initial savings interest periods) that revert to less favourable terms after a certain amount of time. Many people sign up, but far fewer people initiate change once the favourable terms have ended. Repay and Save seeks to turn this on its head and make status quo bias work for people by transitioning them easily to saving once they have repaid their debts. We hypothesise that this will help people to take control of their debt and be less likely to use credit in the future.

The Repay and Save idea was selected for testing in the Lab as an innovative application of well-known findings in behavioural finance. Our work in the Lab was aimed at supporting a future field pilot by highlighting what challenges there might be in explaining the Repay and Save product to potential users. A qualitative approach was taken to explore this in detail.

Qualitative findings

The following sections outline the findings from this project's qualitative research activities. These included:

- **Two focus groups.** The groups took place in London on 19th September 2017. The first group comprised six participants who had consolidated their debts, and the second comprised seven participants who had experienced debts and had never consolidated them. All of the participants regularly used credit and had access to at least two lines of credit.

- **Six follow-up telephone interviews.** These were conducted with participants who volunteered (three from each group), around a week after the focus groups took place. They covered what participants recalled of the idea and whether their opinions had changed since the original discussion.

Qualitative research seeks to understand not only what people do and think but also why this is the case. The findings from our qualitative work are intended to inform the development of field pilots by illuminating why aspects of a design may work well for some people and not others. When interpreting the qualitative research findings, it is important to note that, although all participants were recruited from the MAS financially squeezed segment, the small size of the sample means the findings we present are illustrative and exploratory rather than representative of the segment. It is equally important to be mindful of how, in any group environment, participants' views can be influenced by others present. The follow-up in-depth interviews helped to mitigate this risk. Providing people with the opportunity to give feedback privately, as well as in a group, also helped to ensure that we were able to understand their views in detail. Our qualitative work therefore provides important information on how the idea may play out in any field pilot, but the findings should not be considered as representative or generalisable evidence of what works.

The following sections discuss how participants initially reacted to the idea of consolidating their debts and, in particular, how they reacted to doing so through their employer. It also summarises their reactions to loan repayments increasing automatically and switching to savings deposits after the debt is repaid.

Introducing the idea of consolidation

Participants who had not previously consolidated their loans identified that having all of their debts in one place would be more convenient and easier to manage. Accordingly, they thought it would be less likely that people would run the risk of missing payments:

> 'Rather than having to manage... paying off different cards and things at different times and thinking, "Right I need to do that today", you can just do it in one go rather than spending two or three days.'
>
> Male, 35, London

> 'There was enough to consider with your everyday utility bills and everything else, let alone credit that you owe to five places.'
>
> Male, 33, London

Participants also thought that consolidating their debts would make it easier for them to understand precisely how much they had to pay back. They explained that they would only have one interest rate to keep track of and make payments towards on top of the actual loan amount.

Participants did acknowledge that consolidating their debts could have a negative impact on their credit score. Whilst few considered this to be problematic in the short term, there were concerns about the effect it could have on their long-term goals, such as getting a mortgage:

> 'So like Step Change and people like that, if you go through them, it's going to show on your credit file... Then it's obviously going to have that effect on mortgages and stuff like that.'
>
> Female, 28, London

In addition, they were concerned about what kind of interest rate would be payable on a consolidation loan, with some assuming that it would be higher than normal. As such, they thought that they might end up paying more overall and were unsure as to whether the convenience that consolidation would offer would be worth the additional cost. Participants therefore stated that it would be important for them to research what interest rate would be applied with this product and how this compared with their current deals.

Participants in both groups also noted that consolidating their debts might not resolve their financial issues but mask them instead. Indeed, some of those who had previously consolidated their debts admitted that this process had lulled them into a 'false sense of security' that they were managing their finances appropriately. Given they felt more in control, they then sought out further credit:

> 'It almost feels like you've achieved something which technically you have, because you're going a step in the right direction for ease of mind and convenience for one payment, but psychologically it almost feels like you've paid back more than you have, whereas you haven't actually and so you can, yeah you can be tempted.'
>
> Male, 33, London

Consolidation through an employer

Participants had mixed responses to a consolidation loan being provided through their employer. Their main concern was confidentiality and the risk that their personal financial affairs would not stay private and would become 'office gossip'. This concern was voiced most strongly by those who worked for smaller organisations:

> 'You've got to hope that the person who's actually running the payroll keeps quiet.'

Male, 34, London

In contrast, those who worked for larger organisations stated that their employers already provided a wide range of employee benefits to a large number of people. As such, they were confident in their employers' ability to manage confidential information of this nature:

> `[In] corporate settings there's loads of employee benefits that you can get lost in them.'
>
> Male, 28, London

Participants questioned how portable a consolidation loan taken out through their employer would be. In particular, participants focused on what would happen to the debt if they left the company:

> `Say if you did unfortunately lose your job... it would be good if they said, "Right you're unemployed, we will freeze the loan until you start a new job."'
>
> Female, 28, London

Whilst participants spontaneously voiced concerns about taking out a consolidation loan with their employer, on further discussion, they identified some benefits. That their loan repayments could be made directly from their salary was seen as a distinct advantage. Participants suggested that, with the money being deducted at source, they would not miss it:

> `Like sometimes when you overpay tax and HMRC take it out your wages without you being able to say anything, you don't notice it's gone in a way.'
>
> Female, 25, London
>
> `I like the idea that it's coming direct from my wages before it hits my bank account. It's like having a season ticket loan for my bus pass, it becomes the norm and I just get used to it'.
>
> Female, 45, London

They also assumed that having the loan repayments deducted from their salary would be simpler for them. As the administration was being taken care of by their employer, participants thought that they would have one less thing to worry about. They also thought it minimised the potential for them to miss repayments:

> `It's not your problem because it's being dealt with by your payroll.'
>
> Male, 31, London

Introducing the idea of automatically increasing payments

Many people in the MAS financially squeezed segment may not be receiving pay rises and so their payments would not increase through the mechanism used in Save More Tomorrow, where increases are linked to pay rises. We therefore explored the idea of monthly increases in payments with participants. The idea with this automatic monthly increase would be to ensure that increases in payments did happen, and happened regularly, in spite of a lack of wage increases. Participants were hesitant about committing to monthly increases in payments. Participants were concerned that their personal circumstances might change significantly and with little warning, leaving them unable to cover their rising monthly payments. In addition, they felt their debt would be easier to manage and keep track of if they had a fixed payment each month:

> 'I wouldn't want it [to] increase personally, because your financial situation differs on a monthly basis, and although I might be able to say I'll pay that little bit extra next month, in six months' time and from six months' time forward, I might not be able to, my circumstances have changed.'
>
> Female, 45, London

> 'I think I'd rather just have a set rating, be like this is coming out, I know where I'm working, this is dedicated to this, because if it fluctuates then I don't know what I'd have left kind of thing.'
>
> Female, 25, London

Going into this in more detail, participants recognised that, if their debt repayments were to increase each month, they would need to reduce their other spending accordingly. They thought that this would be difficult to manage, particularly given that most considered that they already had a tight budget. They also thought this would pose an emotional burden and that the effort involved to keep on top of the ever-increasing payments would not match the benefits of paying the debt off more quickly.[7] They equated keeping the payments stable with being in control.

Part of this concern, however, was linked to how the idea was communicated in the stimulus material. In particular, participants suggested that using the term 'automatic' to refer to the increasing payments was a bit 'scary'. Participants stated that it made it seem as though the repayment amount was not under their control and would constantly change. Participants thought that any communications should refer to 'manageable increases' instead as this would be less daunting:

> 'The word "automatically" is a bit scary, because it sounds a bit like whoa, whoa, whoa, stop, hang on a minute.'
>
> Female, 25, London

Repayments turning into savings

The idea of repayments turning into savings was well liked by participants. Saving was typically not something they had been able to do, so they were keen to make use of a product which would help them overcome the barriers they faced in putting money aside:

> 'I like the idea of it as a person who's done hardly any saving in their years working, I like the sound of it.'
>
> Male, 25, London

They reasoned that, as they had already shown that they were able to manage without the money that was used to pay down their debt, they would not miss these funds if they were diverted into a savings account. Building on this, some participants spoke about how finishing paying off a loan could potentially trigger unhelpful behaviours. They explained this by saying that they had concerns that they would 'waste' the money they had previously been using to pay off their debts on additional spending. In effect, they would be 'rewarding' themselves for paying off their debt by spending money on things that they did not need. Transferring debt repayments into savings contributions could help people to resist these temptations:

> 'Probably go out on the piss, at least for the first couple of months. Because I've not had the money.'
>
> Male, 31, London

There was, however, some debate about what the size of these monthly deposits should be. Some participants argued that the first savings deposit should be the same size as the last debt repayment (which would have increased over time). They stated that, given they were used to paying this amount, they would not want the amount to change when they switched from making loan repayments to making savings contributions:

> 'I think keep it the same as the last repayment. If you've got that ability to change it if it's not working for you, you can go in and change it. So, if it's set you up to be used to £30 a month instead of £15 as a debt, keep that same £30 as a savings.'
>
> Male, 33, London

Others said that their preference was for the savings contributions to return to the same amount as the first debt repayment – in other words, they would save less each month than they had been paying towards their loan. They stated that having this little bit extra in their bank account would make them feel they were being rewarded for having paid off their loan. At the same time, they would still be putting money away into a savings account and this could motivate them to keep saving for the long term. However, even these participants did suggest that, in order for their savings pot to build up quickly, their contribution rate should eventually begin to increase again:

> 'We'll go back to your original amount because we'll give you something to say thank you for paying off your debt, but we'll also give you something to put away for a rainy day of about £100 and you get £100.'
>
> Male, 31, London

Participants were also divided on how easy their savings should be to access. Some preferred instant access, saying that they might need these funds at short notice in case of an emergency:

> 'When you've two kids and you live in London or whatever, everything's potentially emergency money. It might just be, the car might completely blow up, or it could be holiday that we feel we just really need, it's all some things are small, some things are big, so I'd like to be able to access it for those emergencies.'
>
> Male, 33, London

Others recognised that if their savings were too easy to access then they would likely run these funds down, and so there should be blocks in place to prevent them from doing this. Suggestions included incurring a penalty for withdrawing money or having preferential interest rates if they left their savings untouched.

Follow-up interviews

Six follow-up interviews were conducted a week after the discussion groups took place. Interviewees recalled without prompting that the idea focused on a consolidation loan. One was prompted to aid their recall that once the debt had been paid off, the payments would automatically turn into savings. Following the groups, some of the participants had spoken to friends and family about what they had discussed. To illustrate, one participant who had not previously consolidated her debts had spoken at length to her partner about the possibility. As a result, they had decided to investigate the consolidation process more seriously:

> 'My existing knowledge about consolidation was very vague and by talking it through with my partner and thinking about it since the group, it's made it clearer in my mind. It's something I will look into.'
>
> Female, 38, London

Another participant had spoken to her mother after the group and stated that the discussion had inspired her to pay off some more of her debt:

> 'I talked to my mum about it after the group and I ended up paying off a chunk of my debt, a little bit extra, so it was quite inspiring... talking and hearing about other people in the group who were in the same situation made it feel a lot more possible.'
>
> Female, 31, London

Participants' views on the Repay and Save idea had not changed over the week. They were still very positive about the debt payment transferring into savings contributions once the debt had been paid off. Whilst participants recognised that automatically increasing their debt payments would help them to pay off their loan more quickly, they felt this came at the cost of feeling less in control and an increased administrative burden. One participant suggested that regular reviews with the loan provider could help them to better manage these increasing payments and, as such, feel more in control of their changing financial situation:

> 'Yes, but [I] would prefer four or six monthly review where you could decide whether or not to increase your payments. If [I have] more [I] would like to have the option to put it towards the loan.'
>
> Female, 28, London

Recommendations

Repay and Save applies well-known and proven behavioural insights to build a financial product that could help employees to consolidate their debts, repay them more quickly through payroll and easily transition to saving. We are seeking a finance provider and a large company with a sufficient number of UK-based employees, or a debt consolidator or retail bank, to robustly test different variations of the product within one trial, particularly to explore the best mechanism for auto-escalation.

Workplace finance is a growing market in the UK, with a number of companies offering products. This idea offers a chance for this growing market to pilot a

behaviourally informed product in the field that could help people in the MAS financially squeezed segment to manage their money better.

Our work in the Lab found:

- **Support for the transition to the saving element of the Repay and Save idea.** It seems the opportunity to start saving, and do this automatically, could be an attractive part of a fully developed product.

- **A need for clear communication about the benefits of consolidating debts.** The participants claimed to desire careful weighing up of interest rates before they would be convinced to take this step. As a consolidated debt is likely to cost less money in interest than holding different forms of debt, this should be displayed prominently to the potential market. Additional messaging around the stability of terms once customers have consolidated their debt could pre-empt the concerns of the MAS squeezed segment (who we expect to have had stressful experiences relating to debt terms changing), encouraging them to take this step rather than stick with the status quo.

- **Automatic increases to payments on a monthly basis may not be practical for those on lower incomes.** The negative reaction to this option amongst our participants suggests that a major challenge to be explored in the field would be finding an appropriate mechanism for increasing payments. For those who receive the National Minimum Wage (NMW), it should be noted that pay rises are highly likely over the coming years as the NMW is due to increase to a government target of 60 per cent of median earnings by 2020.[8] Other options could also be considered – for example, targeting employers where increases are contractual or where staff may see increases in pay due to bonuses or commissions. However, escalating payments may not be suitable for all employees.

- **A need to provide assurances around confidentiality** for any participants in a future Repay and Save scheme. As such, it may be best to target large employers, where HR and payroll teams can provide a greater sense of anonymity and where the scheme can be offered alongside other workplace benefits. In smaller companies, measures could be implemented to ensure that the product is administered by a third party and that payroll staff within companies cannot determine whether a payment is a debt repayment or a savings deposit.

Field testing would need to track what happens to participants' use of credit and their total net worth, to see whether the product does indeed lead to reduced dependence on credit over time. This would need a significant time frame (likely at least a two-year period) in order to fully measure the impact of the idea. This means, for example, that enough time would need to elapse for payments to increase due to a pay rise (if relevant) and for debts to be paid off so we could observe transitions to saving.

Endnotes

[1] Money Advice Service. (2016).The squeezed segment. These are working-age consumers with significant financial commitments but relatively little provision for coping with income shocks.
[2] Thaler, R. H., & Benartzi, S. (2004). Save More Tomorrow™: Using behavioral economics to increase employee saving. Journal of Political Economy, 112(S1), S164–S187. Auto-escalation for repayments has been proposed in the USA but not linked to a workplace consolidation loan: Karlan, D. S., & Zinman, J. (2012). Borrow less tomorrow: Behavioral approaches to debt reduction (Working Paper). Chestnut Hill, MA: Center for Retirement Research.
[3] Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. Econometrica, 47(2), 263–292.
[4] Frederick, S., Loewenstein, G., & O'Donoghue, T. (2002). Time discounting and time preference: A critical review. Journal of Economic Literature, 40(2), 351–401.
[5] Behavioural Insights Team. (2014). EAST: Four simple ways to apply behavioural insights; Kahneman, D., Knetsch, J. L., & Thaler, R. H. (1991). Anomalies: The endowment effect, loss aversion, and status quo bias. Journal of Economic Perspectives, 5(1), 193–206.
[6] Shah, A. K., Mullainathan, S., & Shafir, E. (2012). Some consequences of having too little. Science, 338(6107), 682–685.
[7] This is potentially related to aversion to a perceived loss of income; tying increases to pay rises or promotions could help to address this aversion.
[8] Low Pay Commission. (2016). National Minimum Wage: Low Pay Commission report spring 2016.

10. Increasing Credit Card Repayments

Idea: Help people to pay off their credit cards more quickly and cheaply by increasing repayments using a slider interface.

Sliders are used across the financial services sector, often to help people decide how much they would like to borrow. The repayment sliders in our experiment were designed to help people avoid excessive interest charges whilst conforming to current regulatory requirements.

Why was it tested? People often base decisions on the first piece of information they are presented with, even if it is irrelevant or arbitrary. This can be particularly unhelpful in the context of financial decision-making, where these first pieces of information, or 'anchors', can significantly influence people's financial behaviour.

It is important to consider anchoring in credit card repayments. The current regulations require a minimum repayment for all regulated credit agreements. This is typically indicated prominently on the monthly statements sent to account holders. The minimum repayment is designed so that, even if credit card holders only make the minimum repayment each month, a small part (1 per cent) of their debt will still be paid off each month in addition to any charges or fees incurred. There is evidence to suggest, however, that this minimum repayment acts as an anchor that can lead to lower repayments. Over time, this significantly increases the cost of credit cards as card holders are holding debt and paying interest for much longer periods of time.

Repayment sliders were deemed to be a promising candidate for testing in the Financial Capability Lab (the Lab). They can incorporate a minimum repayment figure, but additional features of the slider can help customers to avoid excessive interest charges by reducing the effect of the minimum repayment anchor and therefore increasing their repayment amounts.[1]

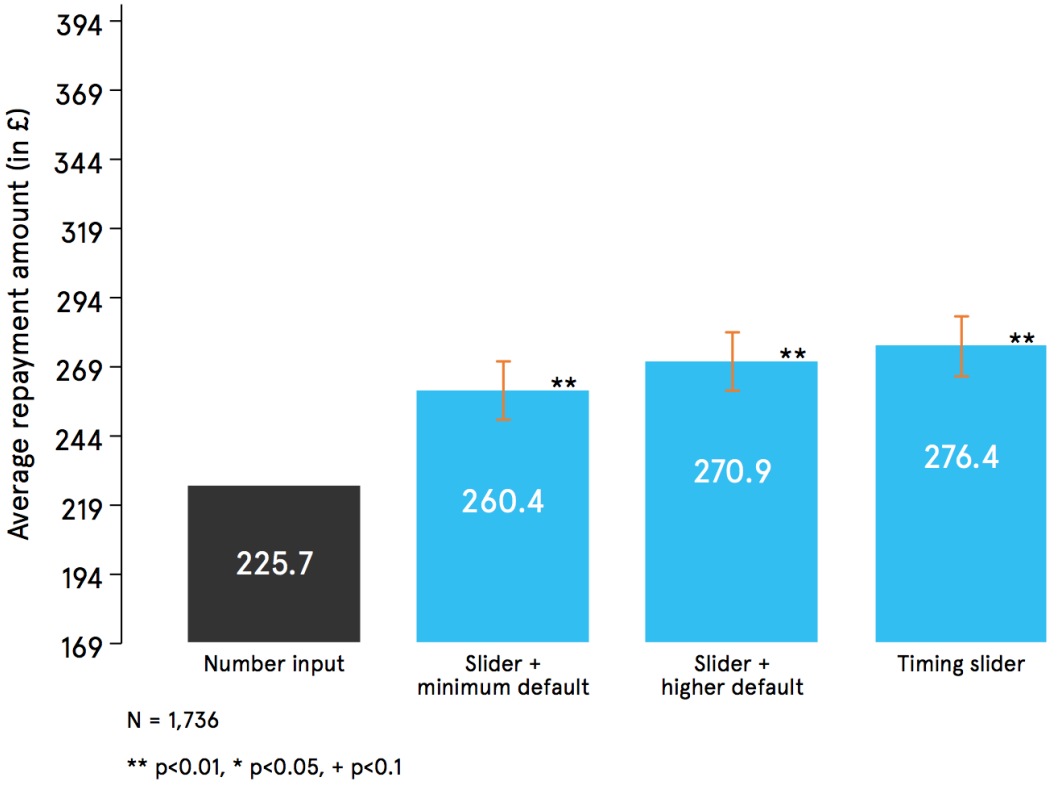
How was it tested? We built an online randomised controlled pilot using Predictiv that asked participants to make a series of simulated credit card repayment decisions. We presented participants with a scenario where they were given income and expenditure information alongside a simplified credit card statement with a minimum repayment anchor.

Participants were randomly allocated to one of four repayment interfaces:

- a control condition based on the industry standard: a box to enter the repayment amount;
- a monthly repayment slider interface with the slider set by default to the minimum repayment amount;
- a monthly repayment slider interface with the slider set by default to a higher repayment amount;
- a timing slider interface with the slider set by default to the minimum repayment.

Findings: Compared to the control condition, every slider interface condition resulted in a significant increase in the amount that participants chose to repay (see Figure 1). The increase in the repayment for the timing slider interface was significantly more than the increase for the monthly repayment slider interface with the minimum repayment default.

Figure 1: Effects of slider interfaces on repayment levels (stage 1 repayment decision)



The default repayment was £284 in the 'slider + higher default' condition and £169 otherwise.

Compared to the control, participants who used the slider interfaces to make repayment decisions were significantly less likely to be influenced by the minimum repayment anchor, even though this was the default position in two of the slider interfaces.

Recommendations: Based on the evidence from our work in the Lab, we think this idea could have a wide-reaching positive impact on consumers, particularly those who need the most support. It has the potential to reduce the cost of debt, and if field tests are successful and it is implemented at scale it could help millions of credit card holders. We are therefore looking for partners who can work with us to further develop and test this slider interface in the field.

If replicated in the field, these findings could help credit card providers to construct repayment interfaces that help credit card holders to avoid excessive interest charges; at the same time, credit card providers would be remaining compliant with the current regulations, which require a minimum repayment as part of a regulated credit agreement. We recommend that the interface be developed and implemented as part of a field trial with a credit card provider to test the influence of sliders on real repayment decisions. Evidence from a rigorous field trial could lead to wider roll-out across the industry or regulatory change.

Why was it tested?

The first piece of information a person is presented with often influences subsequent decisions or judgements, regardless of whether that information is relevant or helpful. For example, one study showed that spinning a wheel of fortune to produce a number between 1 and 100 influenced the number that people guessed when asked what percentage of African countries are in the United Nations. People whose spins landed on higher numbers on the wheel of fortune made higher guesses, whilst people whose spins landed on lower numbers made lower guesses.[2] Like random values from the wheel of fortune, arbitrary values can influence people's judgements. In the USA, anchoring people with an arbitrary number – the last two digits of their social security number, a number which is issued to each citizen – influenced the amount people were willing to pay for computer peripherals, wine and chocolate. People with higher social security numbers indicated they would pay more, and those with low

numbers stated that they would pay less.[3] Whilst there are many contexts in which anchoring effects could lead to undesirable behavioural outcomes, these effects can be particularly problematic in financial decision-making.

Credit cards have a minimum repayment that needs to be made each month; it is typically featured prominently on statements sent to account holders. The repayment itself is set out in regulation:

> `A firm must set the minimum required repayment under a regulated credit agreement for a credit card or a store card at an amount equal to at least that amount which repays the interest, fees and charges that have been applied to the customer's account, plus one percentage of the amount outstanding.'[4]

The minimum repayment is the lowest amount a person can pay and not incur fines or charges, so the amount is duly highlighted on credit card statements. However, there is evidence that this minimum repayment figure acts as an anchor for many credit card holders, and over time this can significantly increase the cost of credit cards as card holders making lower repayments are paying more interest for longer.[5] Experiments by Neil Stewart at the University of Warwick suggested that for `a typical scenario of an average debt of $4,000 and an annual percentage rate of 20% [...] a 2% reduction in minimum repayments roughly quadruples interest charges'.[6]

The Financial Conduct Authority's Credit Card Market Study reflected this concern:

> `We found [...] 1.6 million [credit card holders] repeatedly making minimum repayments. We found 8.9% of credit cards active in January 2015 (5.1 million accounts) will – **on current repayment patterns and assuming no further borrowing** – take more than ten years to pay off their balance.'[7]

One solution to this problem would be to remove the minimum repayment regulations. The minimum repayment is designed, however, so that even if credit card holders only make the minimum repayment each month, a small part (1 per cent) of their debt will still be paid off each month. This is a useful safeguard for consumers, particularly those who, through inattention or other circumstances, may otherwise end up with spiralling debts. Our work, therefore, focused on an intervention that could improve the situation for credit card holders without removing the safeguard provided by minimum repayments.

Sliders are used across the financial services sector, often to help people decide how much they would like to borrow. Short-term, high-cost credit has

particularly been associated with the use of borrowing sliders that highlight the amount consumers are borrowing and how much they will owe.[8] We hypothesised that slider-based interfaces make it easier to borrow by simplifying the interface and removing the need for card holders to manually calculate total cost, interest and monthly cost. We sought to repurpose this interface to create repayment sliders that could help credit card holders resist the anchoring effect of minimum repayments and increase their repayments above the minimum. Success in our Predictiv work would suggest that slider interfaces are a good candidate for testing in the field to help people take control of their use of credit.

Quantitative findings

The strong existing evidence base described above gave us confidence that the specific problem that we wanted to solve had been identified. As we also had a specific idea that we wanted to test, we decided to use Predictiv to run an online randomised controlled pilot to generate rigorous evidence about the impact of our idea – slider interfaces – on repayments.

To be able to measure the impact of slider interfaces, we wanted to test a number of potential repayment slider designs against the current industry default for repayment. To determine the industry standard, we conducted some market research about what this standard was in the kinds of online environments where we would be able to implement sliders. For all of the examples that we saw, the standard repayment interface involved entering a number in a box in the card provider's web page or app.

In developing the Predictiv test, we gave careful thought to the primary outcome measure that we would use to understand the impact of the slider interfaces. It is difficult to define what the optimal repayment behaviour might be for a particular person, as there are large variations in financial circumstances between individuals and for individuals over time. In the Predictiv test, we therefore focused on encouraging increases in repayments within parameters provided in the test environment. To do this, we gave participants hypothetical information about income, expenditure and outstanding debt. Participants were then asked to make a series of repayment decisions based on this information. If slider interfaces were shown to result in increases to repayment levels, relative to the existing industry standard, this would give us confidence to test repayment sliders with repayment decisions in the field.

The pilot test: design and results

As the Predictiv test was to be a simulation, with hypothetical amounts of income, expenses and debt and a hypothetical interest rate set by the test, there was a mathematically correct answer to the question of how much any participant should repay to minimise the debt that they owed within the test. We wanted to make sure that participants had the opportunity to consider how they would make decisions in real life as well as what the mathematically correct answer was.

To achieve this objective of testing both what participants thought they *should* and what they thought they *would* repay, we developed a pilot experiment with two separate decision stages.

The first decision in the pilot was a hypothetical scenario, in which a consumer was presented with income and expenditure information as well as a credit card statement. Participants were then asked to make a decision about what they *would* repay if they were in this position. To make this easier, we matched the income, expenditure and debt levels presented to participants to the information we held on the actual level of income of each participant. Whilst participants were not presented with their own statements or even real statements, these sorts of hypothetical scenarios have been shown to yield responses which are good predictors of actual behaviour.[9]

The second decision in the pilot measured whether participants had a good understanding of the mathematically correct repayment amount, given the constraints in the test. Participants were given the same scenario and repayment interface as before but were asked what they thought they *should* repay to minimise the total amount of interest. To incentivise performance, participants were paid a small sum for getting the correct answer. The mathematically correct answer was £350 – the difference between the income and expenditure information for all participants.

For each participant we tested both scenarios to see if they responded differently to the hypothetical and incentivised decisions. We recruited 500 participants, creating a sample that was demographically representative of the UK adult population. For this pilot, we did not introduce the slider interfaces; we showed participants the industry-standard repayment interface in which a number is entered into a box, as we were looking for differences between the hypothetical and incentivised decisions.

The results gave us confidence that participants were responding in different ways to the hypothetical and incentivised decisions. Participants seemed to bring real-life considerations into the hypothetical decision, reporting many real-life considerations in their responses to a free-text question about what factors they considered when making their decision. They repaid an average of £250:

> `Don't have much disposable income wanna clear it tho but need some money left to spend for treats' (participant chose to repay £242).

> `So I have enough money for emergencies each month' (participant chose to repay £201).

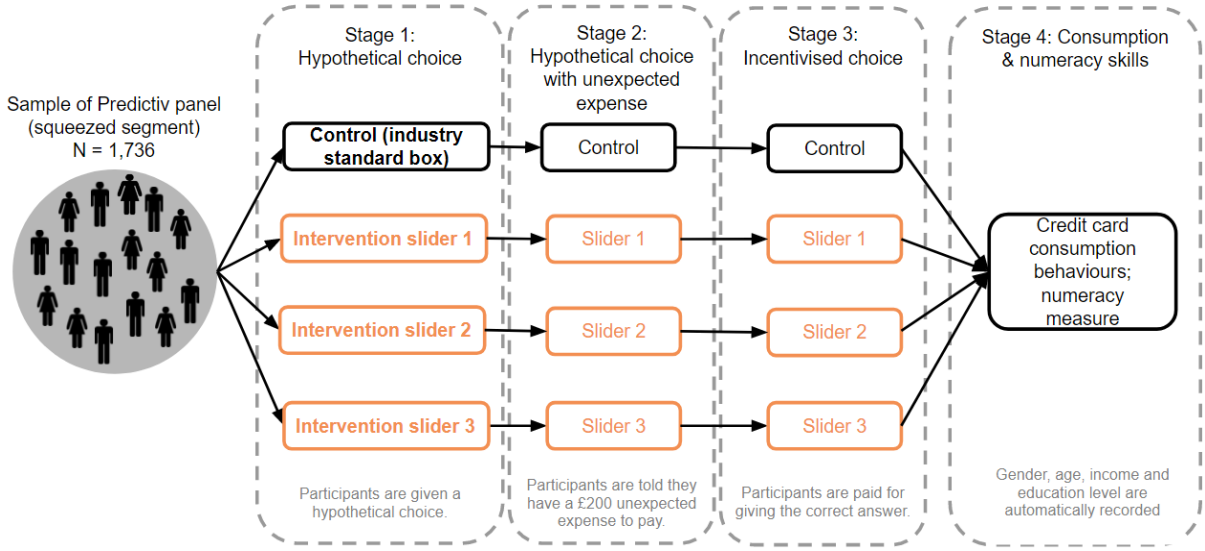
Most participants also failed to work out what they should repay in the incentivised decision. Participants tended to repay an average of £300 for this decision. Although the average repayment amount was higher in the incentivised decision than in the hypothetical decision, only half of participants chose to repay the correct amount of £350.

The main test: design

Stages of the experiment and outcome measures

Following the pilot, we moved on to the main test, all four stages of which are detailed in Figure 2. In addition to the hypothetical (stage 1) and incentivised choices (stage 3) that we had already designed for the pilot, for the main test we added an additional hypothetical stage (stage 2).

Figure 2: Experiment design



Addition of stage 2: hypothetical choice with unexpected expense

The additional hypothetical stage (stage 2) asked participants to decide what they would repay if they had had an unexpected expense. We asked participants: `Imagine this month that you've received an unexpected expense of £200. You had not anticipated or budgeted for this cost.' The idea of this stage was to provide additional data on how slider interfaces might affect decisions in real-life circumstances where people must constantly make trade-offs between different expenditure requirements.[10]

At the end of this new stage, we asked participants to enter an explanation of their repayment decisions in free-text answers. This allowed us to gain insight into any considerations the participants incorporated when making their decision in response to the unexpected £200 expense.

Stage 4: consumption and numeracy skills

Finally (stage 4), all participants were asked a number of questions drawn from Money Advice Service (MAS) research; these questions concerned the kinds of credit that they held and how they used it. We also asked participants numeracy questions developed by MAS and National Numeracy.[11] See Appendices X and Y for details of these questions.

Information provided to participants

All participants saw a simplified credit card statement, a version of which is included in Figure 3. We presented different income and expenditure information depending on the incomes of participants so those with higher incomes saw higher amounts for income and expenditure. Those with lower incomes saw lower

income and expenditure figures. However, the debt itself and the amount available to repay the debt (the difference between the income and expenditure figures given) were the same for all participants.

Figure 3: Simplified credit card statement

Pay Credit Card	
2298765698	
Outstanding Balance	**£5,000**
Available Credit	**£2,000**
Minimum Payment	**£169**
Payment due date	**13 November**

What we measured

The primary outcome of interest was the amount of money that participants allocated to repayment in Stage 1, the first hypothetical scenario. We were also interested in two secondary outcome measures. The first was the amount repaid in stage 2. The second (in stage 3) was the ability of participants to identify the mathematically correct repayment to minimise the total amount of interest that would be paid over the life of the debt.

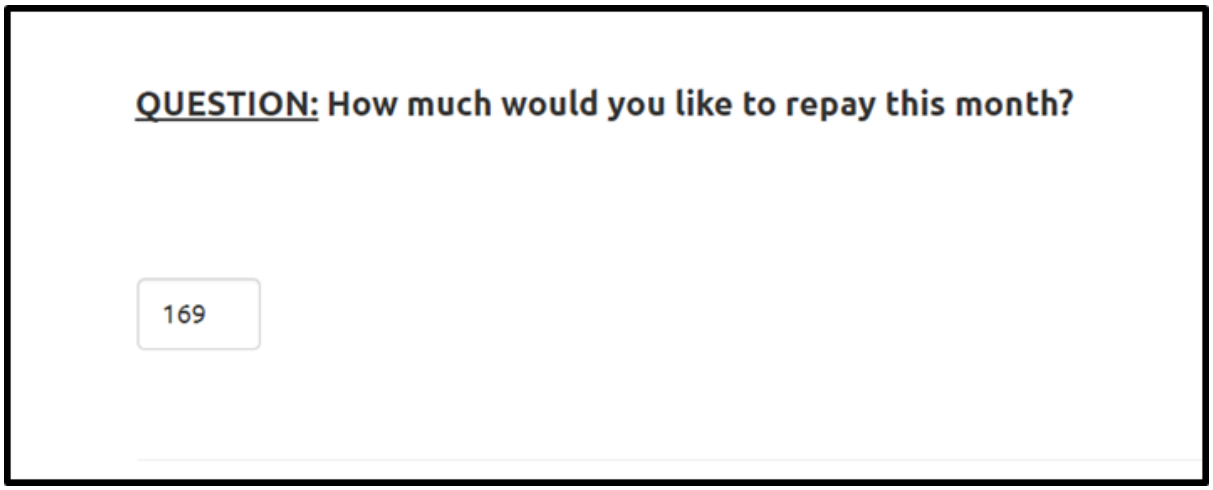
Arms of the test

We randomly allocated participants to a control condition and three different slider interfaces. The slider interfaces were designed in a way that would allow them to be added to existing industry-standard online credit card statements whilst remaining within the current regulatory framework, which requires a minimum repayment as part of a regulated credit agreement. Each of the three

slider interfaces introduced information on time to repay and total cost of the debt alongside the slider.

The control condition was a box for entering the desired repayment amount, pre-populated with the minimum repayment amount (see Figure 4).

Figure 4: Industry-standard repayment interface (box pre-populated with minimum repayment)



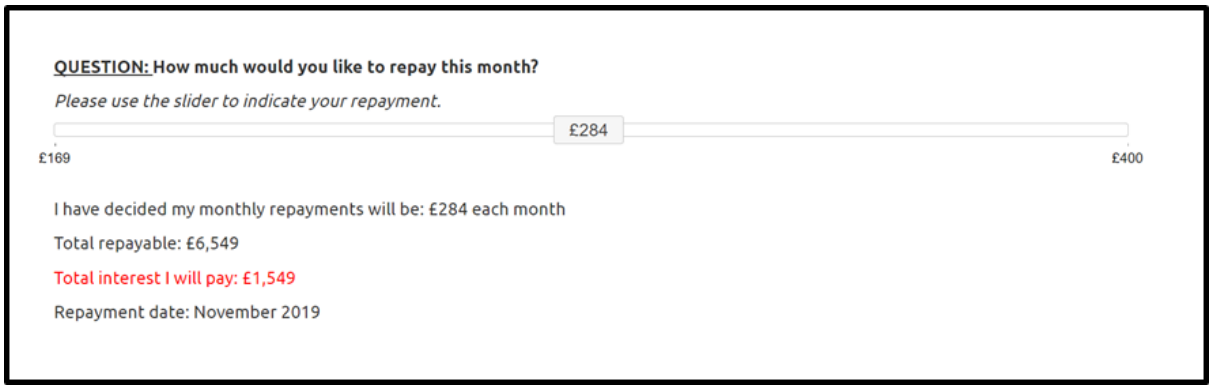
A second group of participants were presented with a monthly repayment slider interface. The scale on the slider ran from the minimum repayment on the left (£169) to the maximum available in the main test scenario (£400) on the right. The default position of the 'thumb' (the interactive part of the slider, which is clicked and dragged to set the repayment amount) was on the far left, the minimum repayment (see Figure 5).

Figure 5: Monthly repayment slider (minimum repayment default)

A third group of participants were also presented with a monthly repayment slider interface. The only difference this group experienced compared to the first slider interface group was the default position of the thumb, which in this case

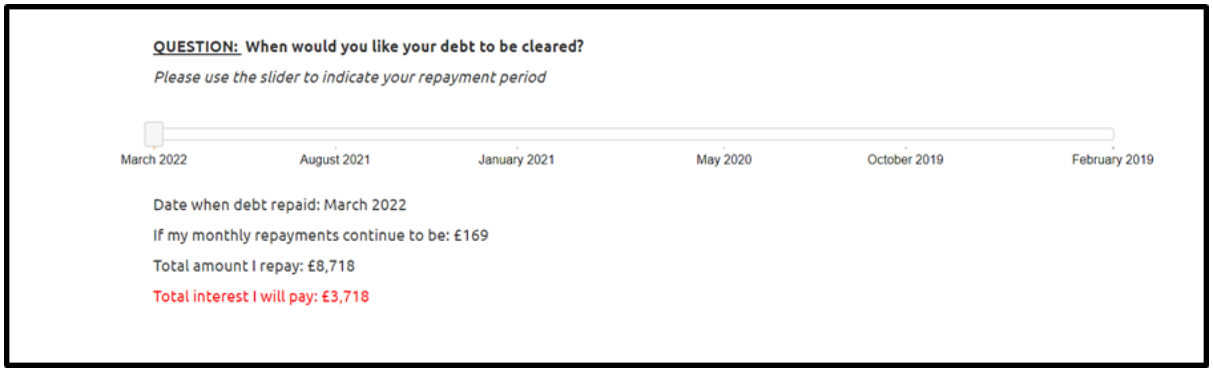
was set to the centre of the slider rather than the far left of it (see Figure 6). This allowed us to isolate the effect on repayment levels of changing the default position of the thumb on the slider. We expected this higher default position (with the thumb at £284) to anchor participants to make higher repayments than when the thumb was set at the level of the minimum repayment.

Figure 6: Monthly repayment slider (higher repayment default)



A fourth group of participants were shown a timing slider interface. The scale on the slider ran from the date participants would repay their hypothetical debt if they were making minimum monthly repayments (on the left) to the date they would repay their debt if they were making the maximum monthly repayments (on the right) (see Figure 7). In this way, we sought to isolate the effect of choosing a target date for repayments to be complete, rather than choosing a monthly repayment. The default position of the thumb was on the far left of the slider, meaning that the default was the minimum repayment.

Figure 7: Timing slider (minimum repayment default)



The main test: results

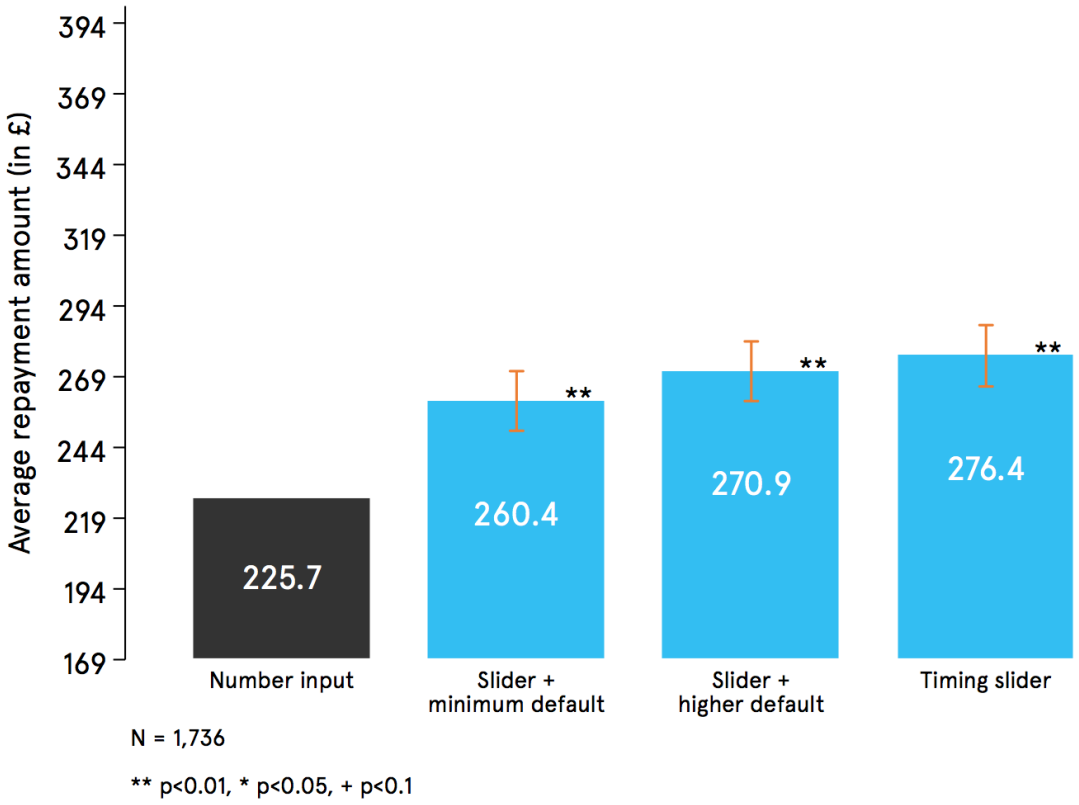
Our primary research question was whether the slider interfaces would increase the amount participants were willing to devote to repayment within Stage 1 of the

test. Our results show that, when compared to the industry-standard interface, all three versions of the slider interface significantly increased the amount that participants devoted to repayment across all stages of the test.

Looking specifically at stage 1, the hypothetical choice, participants chose to repay an average of £226 in the control condition. The monthly repayment slider interface with the minimum repayment default increased average repayments to £260. The monthly repayment slider interface with the higher default increased this further to an average of £271. Finally, the timing slider interface with the minimum repayment default increased average repayments still further, to £276. All of these effects are statistically significant.[12]

The monthly repayment slider interface with a higher default performed significantly better than the monthly repayment slider interface with a minimum default. There was an increase of £11 in repayments, which was statistically significant.[13] Most interesting, however, was that participants chose to repay more when using the timing slider interface than when using the monthly repayment slider interface when these both had minimum repayment defaults. For these interfaces we reinforced the minimum repayment anchor by setting the default position of the thumb at the minimum repayment available in the scenario. This was in addition to the minimum repayment information that all participants saw as part of the simplified credit card statement that appeared above all repayment interfaces in the experiment. The increase in average repayment was £16 between these two slider interfaces, which was statistically significant (see Figure 8).[14]

Figure 8: Effects of slider interfaces on repayment levels (stage 1 hypothetical choice)



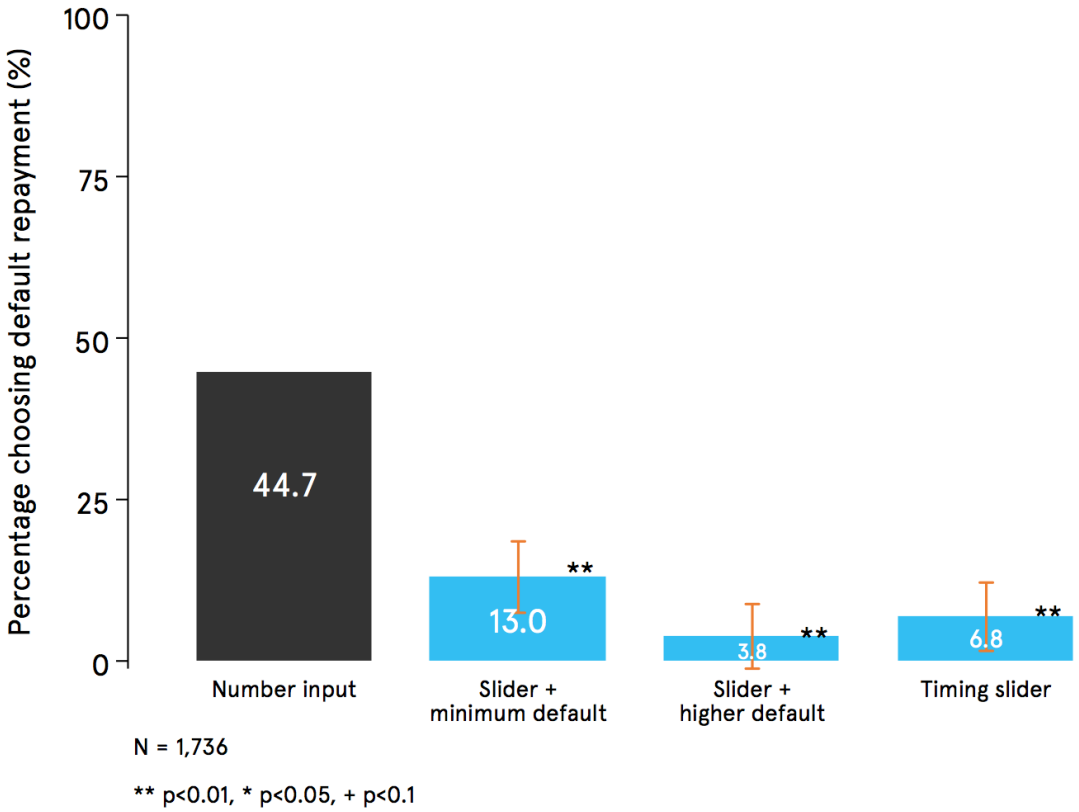
The default repayment was £284 in the `slider + higher default' condition and £169 otherwise.

We conducted additional checks on the amount of time participants spent interacting with each interface. Participants using slider interfaces spent significantly more time on the repayment page than those using the industry-standard (control) interface. It is potentially the case that the significant increases we saw in repayment amounts could have been due to participants spending more time on the page because they were actually doing the maths to find out the mathematically correct repayment amount. Our analysis suggests, however, that the repayment sliders had a significant positive impact on repayment levels irrespective of how long someone spent on the decision.[15] This means that we can be relatively confident that increases in repayments when using a slider interface are due to the different interface and not the time spent on the page.

Figure 9 shows the percentage of participants who stuck with the default repayment amount[16] across the different arms of the experiment. Four out of

every ten participants in the control group (those who saw the industry-standard interface with a box to enter the repayment amount) chose the default. The anchoring influence of the default dropped dramatically when participants used any of the slider interfaces. This is an exciting result as it suggests that there is the potential to counteract some of the negative consequences of the minimum repayment figure without removing it from the statements that credit card holders see.

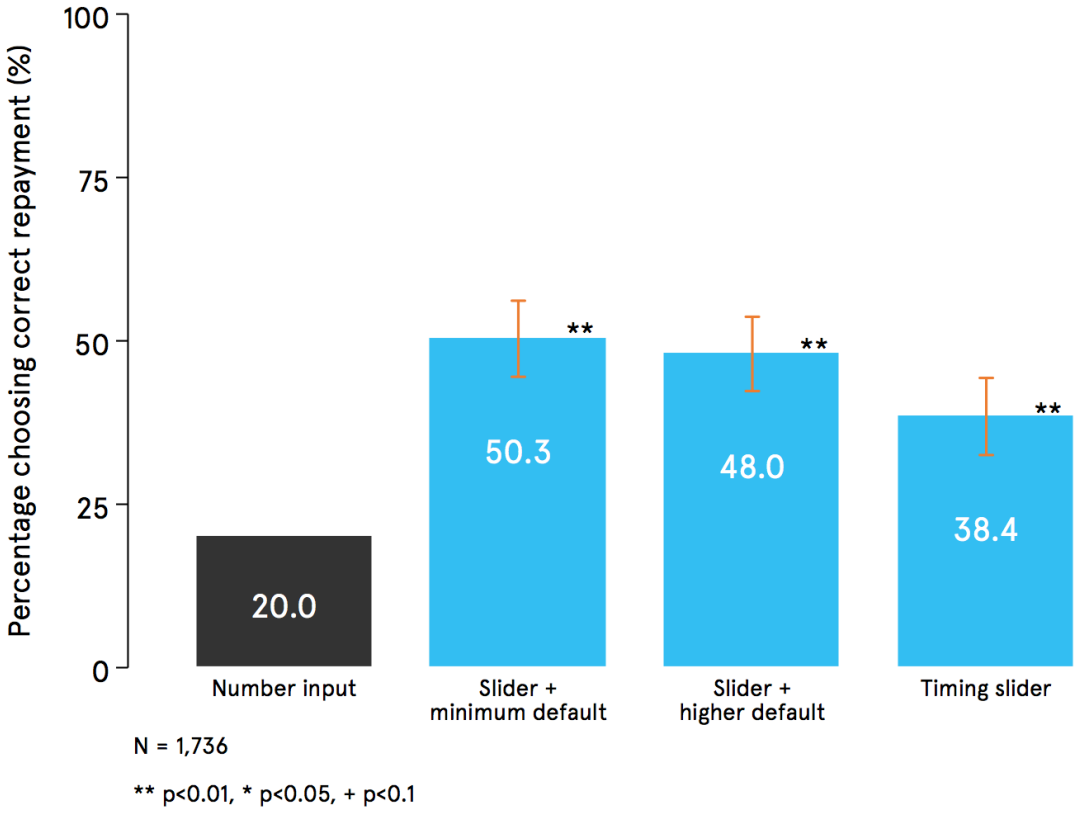
Figure 9: Exploratory analysis – percentage of participants who chose the default repayment amount across all stages of the test



Additional analysis suggests that, although all the slider interfaces reduced the impact of the default options, the timing slider interface increased payment amounts as well as reducing the impact of the default.[17] The monthly repayment slider interface (with a minimum repayment default) caused participants to move away from the minimum repayment compared to the industry-standard interface, though participants who increased their repayments did not necessarily pay more than participants who used the industry-standard interface and paid more than the minimum repayment. This suggests that the timing slider interface may be the strongest candidate for piloting in the field to increase repayments.

The final result to highlight is the proportion of participants who were able to discern the mathematically correct answer to the test. As discussed, the test was designed to elicit different responses at the different stages. The results bear out our hypothesis that participants would treat the hypothetical and incentivised stages differently (see Figure 10). When we paid participants based on their discerning the mathematically correct answer (stage 3, incentivised), they repaid more than in the two hypothetical stages. Still, only 2 out of every 10 participants chose the correct repayment amount using the industry-standard interface. The slider interfaces improved this proportion, leading to 4 (timing slider interface) to 5 (both monthly repayment slider interfaces) out of every 10 participants choosing the correct amount.

Figure 10: Percentage of participants choosing the correct answer in stage 3 of the test (across interventions)



Levels of numeracy[18] and income[19] were positively correlated with the likelihood of discerning the correct answer in the incentivised stage. Participants who were not able to answer any of the numeracy questions correctly and who reported the lowest level of income had an estimated probability of only 5 per cent of choosing the correct answer. By contrast, for those participants who answered

all of the numeracy questions correctly and reported high levels of income, the probability of choosing correctly was 60 per cent.

We also analysed the results against the additional information we gathered on the gender and age of participants. These factors did not make any significant difference to the results presented above.

Recommendations

These results suggest that repayment slider interfaces could help card holders to repay more than they otherwise would on their credit cards, thereby reducing the cost of their debts and helping people to manage their credit better. The slider interfaces increased repayments without removing the minimum repayment information. We are therefore looking for partners who can work with us to further develop and test these slider interfaces in the field.

Translating this design to the field will have some challenges. The controlled environment of our Predictiv test allowed us to present slider scales that exactly replicated the funds available for repayment. Scales for actual repayment decisions could theoretically track the exact amount of funds that a credit card holder has available at the moment they are making the decision. This would be an excellent outcome, but it would likely dependent on the effective implementation of open banking in addition to the individual credit card holder agreeing to share their data between their credit card and current account providers. Multiple credit cards and continued spending on those cards are also potential layers of complexity that work in the field may have to address. Nevertheless, there are other options that could be implemented for now, such as asking credit card holders to disclose their maximum available funds for repayment.

Further work would help credit providers to decide when in the customer journey slider interfaces are most beneficial for their customers and how often to present them. Any work in the field would therefore need to consider how single repayment decisions, like those we explored in this test, interact with repeated decisions. It may be that the effect of slider interfaces declines over repeated viewings, in which case providers could consider encouraging customers to make an initial direct debit decision using a slider. Payment options in future months could then be presented as opportunities to opt out of the direct debit. This would empower customers to have control over their finances but at the same time help customers to take advantage of their own inertia by requiring an active choice to be made to change the direct debit repayments.

Our results showed increases both in repayments and in the percentage of participants who worked out the mathematically correct answer without removing the minimum repayment information. This suggests that repayment slider interfaces are good candidates for helping to overcome the anchoring effect of the minimum repayment. In fact, the minimum repayment was reinforced as the default in two out of the three slider interfaces. Participants nevertheless repaid significantly more when presented with slider interfaces, compared to the industry standard represented by our control.

Endnotes

[1] In the field, increased repayment amounts will depend on there being available funds to increase repayments. Any field pilot should seek to explore the interactions between repayments using slider interfaces and the wider budget considerations of participants.
[2] Tversky, A., & Kahneman, D. (1974). Judgment under uncertainty: Heuristics and biases. Science, 185(4157), 1124–1131.
[3] Ariely, D., Loewenstein, G., & Prelec, D. (2003). 'Coherent arbitrariness': Stable demand curves without stable preferences. Quarterly Journal of Economics, 118(1), 73–106.
[4] Financial Conduct Authority. (2018). Handbook. Retrieved 2 April 2018 from https://www.handbook.fca.org.uk/handbook/CONC/6/7.html.
[5] Financial Conduct Authority. (2016, July). Credit card market study. Retrieved 2 April 2018 from https://www.fca.org.uk/publication/market-studies/ms14-6-3-credit-card-market-study-final-findings-report.pdf; Keys, B. J., & Wang, J. (2016). Minimum payments and debt paydown in consumer credit cards (Report No. w22742). National Bureau of Economic Research; Stewart, N. (2009). The cost of anchoring on credit-card minimum repayments. Psychological Science, 20(1), 39–41.
[6] Stewart, N. (2009). The cost of anchoring on credit-card minimum repayments. Psychological Science, 20(1), 39–41.
[7] Financial Conduct Authority. (2016, July). Credit card market study at p. 3.
[8] Citizens Advice. (2016). Payday loans after the cap. Retrieved 2 April 2018 from https://www.citizensadvice.org.uk/Global/CitizensAdvice/Debt%20and%20Money%20Publications/Payday%20Loan%20Report%202.pdf.
[9] Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. Econometrica, 47(2), 263–292; Peabody, J. W., Luck, J., Glassman, P., Dresselhaus, T. R., & Lee, M. (2000). Comparison of vignettes, standardized patients, and chart abstraction: A prospective validation study of 3 methods for measuring quality. JAMA, 283(13), 1715–1722.
[10] At this stage, we did not change the income and expenditure information we gave participants, so they were free to enter the same repayment amount as they did in the hypothetical stage, for instance imagining that they spent an extra £200 on their credit card.
[11] The numeracy questions were drawn from Money Advice Service. (2015). Technical report for the 2015 Financial Capability Survey. They were developed with advice from National Numeracy (https://www.nationalnumeracy.org.uk).
[12] At the 1 per cent level, this means that there is a less than 1 per cent likelihood that we observed these changes by chance; at the 5 per cent level, there is a less than 5 per cent likelihood that we observed these changes by chance.
[13] At the 5 per cent level.
[14] At the 1 per cent level.
[15] When we include time spent as a control in our regression analysis, we find that the main effect of the intervention sliders holds.
[16] For the control, this is the number pre-entered in the box (£169). For the timing slider with a minimum repayment default, this is the left-hand side of the slider. For the timing slider with a higher default, this is the middle point of the slider. For the timing slider, this is the left-hand side of the slider.
[17] In the regression analysis, we included a dummy for whether a participant accepted the repayment default as a covariate. This allowed us to look at effects at the intensive margin, meaning that we could evaluate the level of repayment for those who chose not to stick to the default.
[18] We asked participants four numeracy questions drawn from Money Advice Service. (2015). Technical report for the 2015 Financial Capability Survey. They were developed with advice from National Numeracy (https://www.nationalnumeracy.org.uk).
[19] We asked participants 'What is your household income?'. The options were £0–17,500, £17,500–35,000 and over £35,000.

11. Improving Price Comparison Websites

Idea: Make the presentation of fees and charges on digital comparison tools – such as price comparison websites (PCWs) – simple, salient and interactive, helping consumers to choose credit cards that are better suited to their specific financial situation. Digital comparison tools are useful in helping consumers choose between product and service options.[1]

Why was it tested? Credit cards are complex financial products. This complexity makes it difficult for consumers to understand their various features in order to choose the product that best meets their needs. Consumer decision-making, particularly when faced with complex choices, can also be subject to a number of biases.[2] Consumers tend to place a higher value on rewards in the present compared to rewards in the future (this is known as 'present bias').[3] Additionally, the value consumers place on a reward decreases very rapidly between the present and time points in the near future and then falls more slowly as rewards move further into the future (this is known as 'hyperbolic discounting').[4] Both present bias and hyperbolic discounting have been linked to increased borrowing.[5]

Consumers often exhibit overconfidence in their predictions about their future financial behaviour – believing, for instance, that they can pay off a balance within an interest-free promotional period.[6] Interest-free periods on credit cards are highly salient to consumers, whilst other features of credit cards receive less attention and therefore less competitive pressure.[7] Thus, interest-free introductory offers can become problematic when consumers do not pay off their debt within the promotional period and are then hit by high interest rates on their outstanding debt.[8] Presenting information in a way that highlights the total cost of such cards over time is likely to improve decision-making.

Vulnerable credit card users, such as those at risk of persistent debt,[9] could benefit from total cost information, as it may enable them to choose a product that better suits their needs (for example, with lower costs over the likely life of their debt, particularly from lower long-term interest rates). Making systematic minimum repayments can lead to large increases in the total cost of borrowing, as individuals hold onto their debt for longer.[10] In the UK, 1.6 million credit card users are systematically making minimum repayments whilst incurring interest. Given the importance of total cost information when making credit decisions,[11]

our idea was to improve the presentation of this information on PCWs to help consumers, including those 1.6 million minimum repayers, to choose credit cards that reduce the overall cost of their borrowing.

There is an opportunity to help a range of consumers choose better cards for their specific situation if simple, salient and personalised information can be incorporated into an enhanced PCW interface. Specifically, highlighting the total cost implications of making minimum repayments on different cards should support those who systematically make minimum repayments to choose the cheapest credit card for themselves. For those able to make higher payments, the idea was that any changes we made to the interface should also help them to choose the best card for their personal financial situation.

How was it tested? We tested the impact of different PCW interfaces on the ability of participants to choose the cheapest card for a given financial scenario. To do this, we ran an online randomised controlled trial using our online testing platform, Predictiv. This simulated a credit card purchasing decision on two different PCW interfaces and enabled us to produce rigorous evidence on the decision-making ability of participants when using a basic PCW interface versus an enhanced PCW interface with behaviourally informed features.

Participants were randomly assigned to one of two PCW interfaces:

1. A control condition based on the industry standard, which includes key product feature information about balance transfer rates and fees, purchase rates, monthly fees and annual percentage rates.

2. An enhanced version with behaviourally informed features drawn from existing innovative practices and the behavioural science literature. This included an interactive slider to vary intended monthly repayments, and it displayed dynamic information on total costs and amount of time needed to pay off the balance.

Sliders have been shown to help consumers understand the cost of borrowing[12] and improve financial decisions in experiments.[13] Sliders are not consistently included in PCWs, and those that currently exist do not have design features that highlight the consequences of systematic minimum repayments. Our enhanced PCW interface included a slider that allowed participants to compare the costs of cards with various different monthly repayments, including the option of only paying the minimum (by dragging the slider's indicator all the way

to the left). The position of the slider was defaulted to the amount stated in the financial scenario's repayment plan.

Additional features of the Improving Price Comparison Websites idea included:

- **Expressing the total cost of borrowing in pounds.** Presenting fees in pounds rather than as percentage rates can help individuals to make better financial decisions.[14]
- **Making fees and charges salient using a dynamic interface and colour.** The information on the total cost of the card and the time needed to repay the debt changed dynamically in response to participants' interactions with the slider. In addition, we highlighted the most important information using a colour that contrasted with its surroundings, taking advantage of the pop-out effect.[15]
- **Making it personal.** Personalisation of information has been shown to increase consumer engagement with complex financial products.[16] Sliders individuals to personalise their financial situation to increase the relevance of the material to them and their engagement with that material.
- **Expressing the time to repay the debt in years and months** (for example, 4 years and 3 months) rather than only in months (for example, 51 months), to make the information easier to understand.

In the test, participants were provided with two financial scenarios:

- Scenario 1 represented a systematic minimum repayer with a £5,000 balance to transfer.
- Scenario 2 was based on an average balance transfer amount, with a lower balance of £2,500 to transfer and a plan to make higher monthly repayments.[17]

Participants were first asked which credit card they would pick given the particular scenario, and this provided us with a measure of consumer choice. A follow-up question asked participants to pick the cheapest card, and they were financially rewarded for choosing the right answer. This was to obtain a measure of whether participants were able to comprehend the material in

order to identify the cheapest card for the given scenario. After making their selections, they were asked how confident they were in their decision.

At the end of the test, we also gathered data on how numeracy skills may have interacted with performance in the test. We asked participants numeracy questions developed by the Money Advice Service (MAS) and National Numeracy.[18]

All participants were current credit card users, in addition to being classified as part of the MAS financially squeezed segment.[19]

Findings: We found that the enhanced version of the PCW interface significantly improved participants' overall ability to choose the least costly card in the two financial scenarios. This result is illustrated in Figure 1. Performance was not statistically different across the two financial scenarios. Additionally, the enhanced PCW interface did not differentially improve performance in one scenario over the other, suggesting that this enhanced version was beneficial for decision-making for both financial scenarios (minimum repayers and higher repayers).

Figure 1: Average number (mean) of correct card selections across the two scenarios in the two interventions

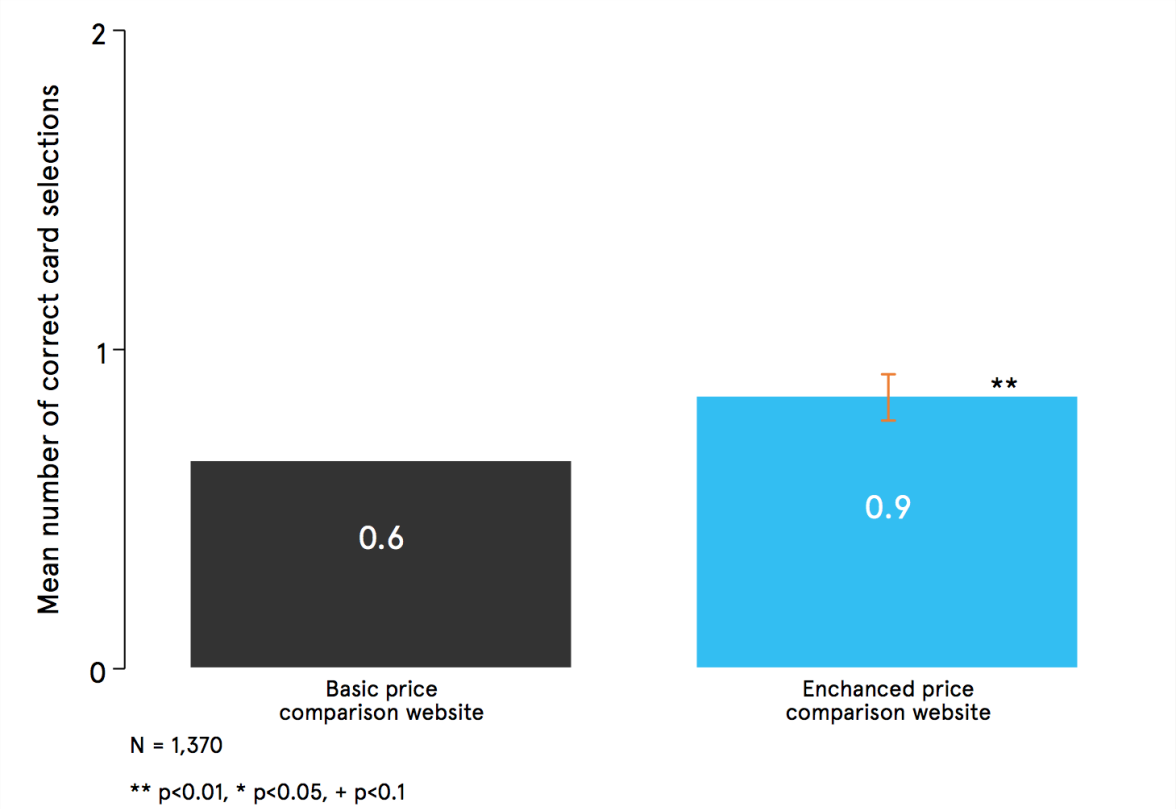
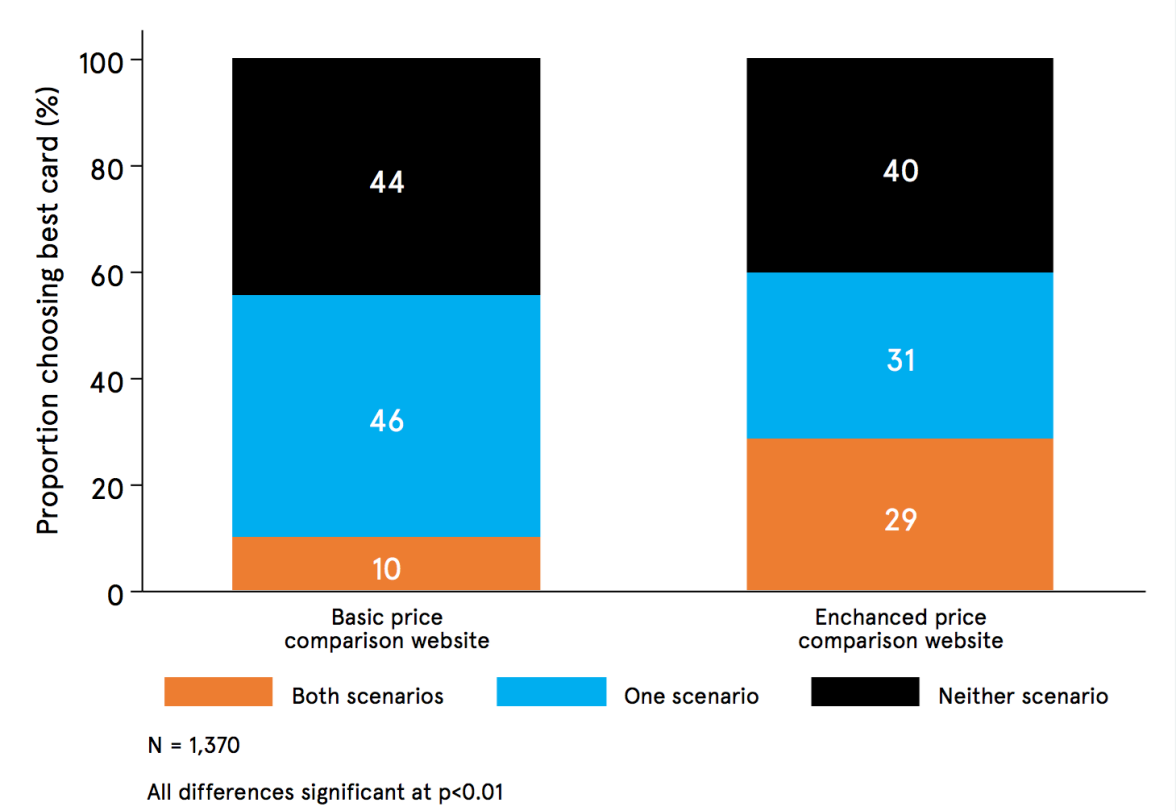


Figure 2 shows that 60 per cent of participants in the enhanced version of the PCW interface picked the cheapest card at least once, compared with only 46 per cent of participants in the basic version. This chart also shows that 40 per cent of participants in the enhanced version did not pick the cheapest card in either scenario. This was significantly lower than the 44 per cent of participants in the basic version. However, these findings show that there is an opportunity for further improvement in helping individuals to choose the least costly card for a given financial situation.

Figure 2: Percentage of participants who chose the best card in neither, one or both scenarios in the two interventions



Our finding of a significant difference between the enhanced PCW interface and the basic version was replicated when participants were rewarded financially for selecting the correct card: those participants who used the enhanced interface did significantly better. This suggests that participants who used the enhanced version of the PCW interface were more able to comprehend the cost implications of the different credit cards.

Our exploratory analysis also showed that participants who used the enhanced version of the PCW interface took significantly longer to make their card selections (seven seconds longer on average across the two scenarios). Finally, those who used the enhanced version of the PCW interface were also significantly more confident in their choice of credit card once they had made a selection.

Recommendations: These are encouraging findings that suggest our enhanced PCW interface could be effective in engaging consumers and helping them to

choose the best credit card for them, given their financial situation. Our results concerning consumers' confidence in their decisions are also encouraging.

Innovation amongst PCWs is already making it easier for consumers to search for and compare credit cards. It is also driving competition between suppliers to provide better deals and choices to consumers. We are looking to partner with a forward-thinking PCW interested in further improving the service they provide to consumers. Specifically, our aim is to test approaches used in this experiment in the field and to work with a PCW to test further improvements to help people choose the best and cheapest card for them.

We are also interested in partnering with financial institutions to test whether the behaviourally informed features of our interface can help their customers switch to more appropriate cards within the range offered by that financial institution.

Endnotes

[1] Competition and Markets Authority. (2017, September). Digital comparison tools market study. Retrieved 2 April 2018 from https://assets.publishing.service.gov.uk/media/59c93546e5274a77468120d6/digital-comparison-tools-market-study-final-report.pdf.
[2] Frydman, C., & Camerer, C. F. (2016). The psychology and neuroscience of financial decision making. Trends in Cognitive Sciences, 20(9), 661–675.
[3] Meier, S., & Sprenger, C. (2010). Present-biased preferences and credit card borrowing. American Economic Journal: Applied Economics, 2(1), 193–210.
[4] Ikeda, S., & Kang, M. I. (2015). Hyperbolic discounting, borrowing aversion and debt holding. Japanese Economic Review, 66(4), 421–446.
[5] Ikeda, S., & Kang, M. I. (2015). Hyperbolic discounting, borrowing aversion and debt holding. Japanese Economic Review, 66(4), 421–446; Meier, S., & Sprenger, C. (2010). Present-biased preferences and credit card borrowing. American Economic Journal: Applied Economics, 2(1), 193–210.
[6] Grubb, M. D. (2015). Overconfident consumers in the marketplace. Journal of Economic Perspectives, 29(4), 9–36.
[7] Shui, H., & Ausubel, L. (2004). Time inconsistency in the credit card market. Retrieved 2 April 2018 from https://eml.berkeley.edu/~webfac/dellavigna/e218_f05/ausubel.pdf; Financial Conduct Authority. (2016, July). Credit card market study. Retrieved 2 April 2018 from https://www.fca.org.uk/publication/market-studies/ms14-6-3-credit-card-market-study-final-findings-report.pdf.
[8] Financial Conduct Authority. (2016, July). Credit card market study.
[9] Financial Conduct Authority. (2018). Credit card market study: Persistent debt and earlier intervention – feedback to CP17/43 and final rules. Retrieved 2 April 2018 from https://www.fca.org.uk/publication/policy/ps18-04.pdf.
[10] Financial Conduct Authority. (2016, July). Credit card market study; Keys, B. J., & Wang, J. (2016). Minimum payments and debt paydown in consumer credit cards (Report No. w22742). National Bureau of Economic Research; Stewart, N. (2009). The cost of anchoring on credit-card minimum repayments. Psychological Science, 20(1), 39–41.
[11] Experimental research on credit decision-making has shown that consumers make trade-offs between monthly repayment amount, total cost and loan duration, and that total cost information is more important to individuals than interest rate information. See Ranyard, R., Hinkley, L., Williamson, J., & McHugh, S. (2006). The role of mental accounting in consumer credit decision processes. Journal of Economic Psychology, 27(4), 571–588.
[12] Citizens Advice. (2016). Payday loans after the cap. Retrieved 2 April 2018 from https://www.citizensadvice.org.uk/Global/CitizensAdvice/Debt%20and%20Money%20Publications/Payday%20Loan%20Report%202.pdf.
[13] We also found that sliders helped participants to make better credit card repayment decisions, as part of our Understanding Credit Cards Better trial. The repayment sliders in this experiment were designed to help people avoid excessive interest charges whilst conforming to current regulatory requirements. The report is available on the MAS and BIT websites, titled 'Increasing Credit Card Repayments'.
[14] Financial Conduct Authority. (2016). Credit card market study; Frydman, C., & Camerer, C. F. (2016). The psychology and neuroscience of financial decision making. Trends in Cognitive Sciences, 20(9), 661–675.
[15] Desimone, R., & Duncan, J. (1995). Neural mechanisms of selective visual attention. Annual Review of Neuroscience, 18(1), 193–222.
[16] Behavioural Insights Team. (2017). Improving engagement with pension decisions: The results from three randomised controlled trials.
[17] UK Finance. (2018). Cards. Retrieved 2 April 2018 from https://www.ukfinance.org.uk/statistics/cards.

[18] The numeracy questions were drawn from Money Advice Service. (2015). Technical report for the 2015 Financial Capability Survey. They were developed with advice from National Numeracy (https://www.nationalnumeracy.org.uk).
[19] Money Advice Service. (2016).The squeezed segment. These are working-age consumers with significant financial commitments but relatively little provision for coping with income shocks.

12. Understanding Credit Cards Better

Idea: Provide consumers with easy-to-understand prompts to help them use their credit card optimally.

Why was it tested? Consumers often end up paying avoidable credit card fees. This could be driven by consumers not knowing about, or fully understanding, the features of the credit card that they hold. Research by the Financial Conduct Authority (FCA) found that almost half of active credit card users stated that they did not know all of the important features of their current credit card (such as their credit limit). Credit cards often have different fees for different actions (such as for transferring a balance and taking money out of a cash machine), as well as different interest rates on the resulting debts. This complexity makes it difficult for suppliers to explain their products simply to consumers and in turn makes it hard for consumers to understand them.

Multiple trials conducted by the Behavioural Insights Team (BIT) have found that simplifying information and providing it at timely moments can lead to positive behaviour change. This suggests that streamlining information about credit cards and providing it at well-timed moments could help consumers to better understand the costs associated with using them and help them to change their behaviour to reduce their costs.

For our work in the Financial Capability Lab (the Lab), we focused on explaining the costs involved in using a balance transfer credit card (a balance transfer credit card is a credit card that offers an interest-free period on a debt transferred to the card; whilst initially the consumer does not pay interest on the balance transferred, usually they will have to pay a fee when they transfer the debt from their old card to the new card). This is a moment when consumers often incur costs, and they may find it difficult to understand why this is the case. Although this is only one example of many situations where consumers struggle to understand the terms of a financial product they are purchasing or using, this example is intended to act as an illustration of how timely, simple and salient information can improve comprehension.

How was it tested? We conducted two online randomised controlled trials using Predictiv. The first test sought to diagnose what consumers do and don't understand about balance transfer credit cards at the application stage. Participants were randomly assigned to see one of three examples of credit card provider web pages that invite consumers to apply for a balance transfer credit

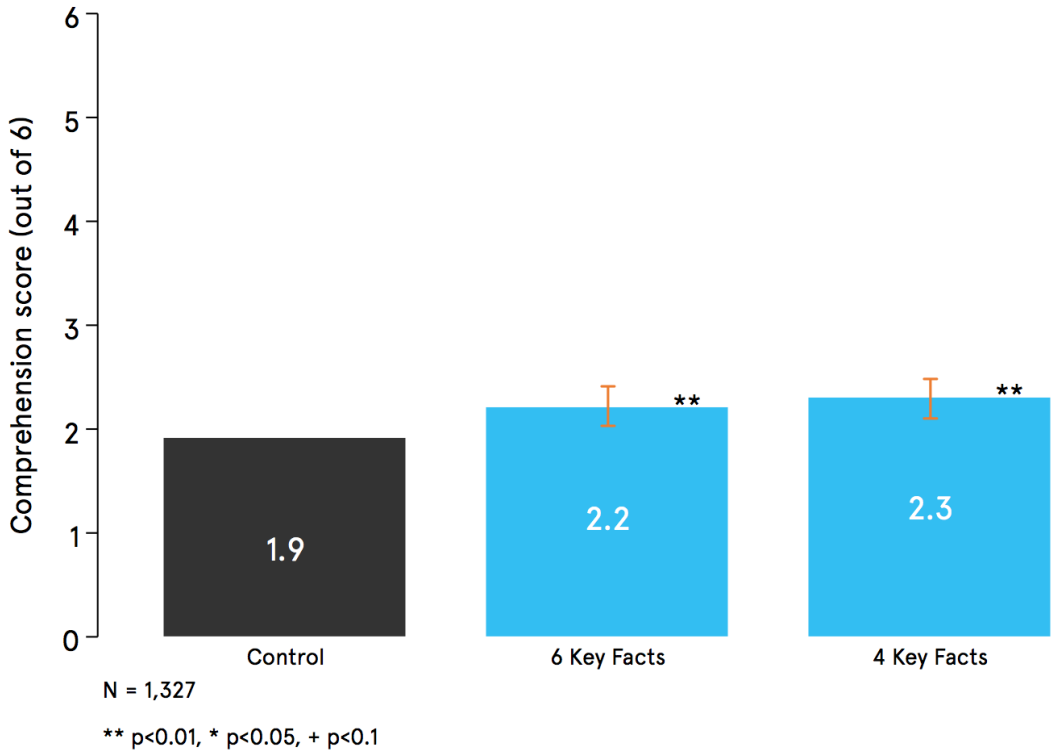
card. Participants were then asked questions to discern whether they had understood the costs explained on the page they had seen.

The second test repeated this design. The control was based on an example of a current provider's website. Participants were randomly assigned to this web page and two interventions that sought to apply behavioural science techniques including salience and simplification to the presentation of information, such as representing costs as pound values rather than percentages and telling participants that it would take less than two minutes to read the material.

Findings: In the first test, participants answered a third of questions about the costs associated with the credit card correctly, regardless of which provider's web page they saw. This suggested that there is sizeable room to improve consumer comprehension of credit card costs by optimising information presented at the application stage.

In the second test, we saw a statistically significant improvement in the average number of questions answered correctly by participants who saw the simple and salient information interventions, when compared to the control (see Figure 1). There was a 16 per cent increase between the control and the `six key facts' intervention and a 21 per cent increase between the control and the `four key facts' intervention.

Figure 1: Number of correct answers about balance transfers by intervention shown (six questions, second test)



Whilst the simple and salient information interventions improved understanding of balance transfer costs, we also found that participants were less likely to be interested in applying for the card they had seen when the web page included either of the simple and salient information interventions.

Recommendations: This approach of making information simple, salient and interactive could be applied across the credit card customer journey to help credit card holders to understand and therefore use their credit cards in a more optimal way. We are seeking credit card providers to co-develop the idea with us, potentially testing the approach at a number of different points along the customer journey. Our interventions significantly increased comprehension but there remains further room for improvement.

Why was it tested?

Consumers often end up paying avoidable credit card fees. For example, consumers commonly incur late payment fees in the first few months of using a new credit card, which may be because they are not aware of when the first

payment is due.[1] Similarly, consumers may not realise they will incur a fee when transferring a balance from an old credit card to a new one. Research by Which? found that 7 out of 10 consumers were not able to identify that they would be charged for a balance transfer when shown an example credit card offer.[2] This suggests many consumers pay credit card fees that they could have avoided because they do not fully understand the features of the product that they hold.

Research by the FCA found that almost half of active credit card users stated that they did not know all of the important features of their current credit card (such as annual fee, late payment fee, credit limit or annual percentage rate).[3] This lack of knowledge could be due to the complexity of credit card products and the way that information is presented to consumers. Credit cards often have different fees for different actions (such as fees for transferring a balance or taking money out of a cash machine), as well as different interest rates on the resulting debts of these actions. This complexity makes it hard for consumers to fully understand products. When a consumer receives their card through the post, they may be dissuaded from reading the accompanying terms and conditions, as they are often very long and use complex language.[4]

It is possible that a consumer may take out a credit card with the intention of using it primarily for transferring a balance (and focus their attention on the fees associated with this transaction) but then use it to make day-to-day purchases over the next few months without being aware of the associated costs. Research by the FCA found that, of consumers who had made a balance transfer to or from their main credit card in the past 12 months, 22 per cent were unsure whether they had an introductory rate on new purchases.[5] In these cases, a simple, salient and timely prompt when making a purchase is likely to help consumers to become aware of the associated costs and avoid paying more than they need to for using their credit cards.

Simplifying information can lead to positive behaviour change. A trial conducted by BIT made the most important information about beginning to draw down a pension simple and salient by reducing a pack of over 50 pages to a single page with a simple call to action to seek guidance. This led to 10 times more people seeking guidance about what to do with their pension as they approached retirement.[6] Similarly, the FCA has found that prompting people with salient and timely information can drive positive financial behaviour – for example, displaying how much a consumer paid for their home insurance in the previous year when notifying them of the price for the next year led to between 11 per cent and 18 per cent more consumers switching or negotiating on their home insurance policy.[7]

The existing evidence suggests that simple, salient and timely communications could help consumers to use their credit cards in a more optimal way.

With this idea, our objectives were to improve consumer understanding, reduce the costs from misunderstanding and potentially improve credit scores through consumers avoiding behaviour that is flagged as negative on credit reports.

For our work in the Lab, we focused on explaining the costs involved in using a balance transfer credit card, which is a credit card that offers an interest-free period on a debt transferred to the card. Whilst initially the consumer does not pay interest on the balance transferred, usually they will have to pay a fee when they transfer the debt from their old card to the new card. This is a moment when consumers often incur costs, and they may find difficult to understand why this is the case. Although this is only one example of many situations where consumers struggle to understand the terms of a financial product they are purchasing or using, this example is intended to act as an illustration of how timely, simple and salient information can improve comprehension.

To provide rigorous evidence for whether the idea worked in this particular case, we developed two online experiments: one to identify what the majority of consumers do and don't understand about balance transfer costs at the application stage, and a second online experiment to test different ways of making the important information simple and salient.

Quantitative findings

We conducted two online randomised controlled trials using Predictiv. The first test sought to diagnose what consumers do and don't understand about balance transfer credit cards at the application stage. Participants were randomly assigned to see one of three examples of credit card provider web pages that invite consumers to apply for a balance transfer credit card. Participants were then asked questions to discern whether they had understood the costs explained on the page they had seen.

The second test repeated this design. The control was based on an example of a current provider's website. Participants were randomly assigned to this web page and two interventions that sought to apply behavioural science techniques including salience and simplification to the presentation of information. Examples of such techniques include representing costs as pound values rather than percentages and telling participants that it would take less than two minutes to read the material.

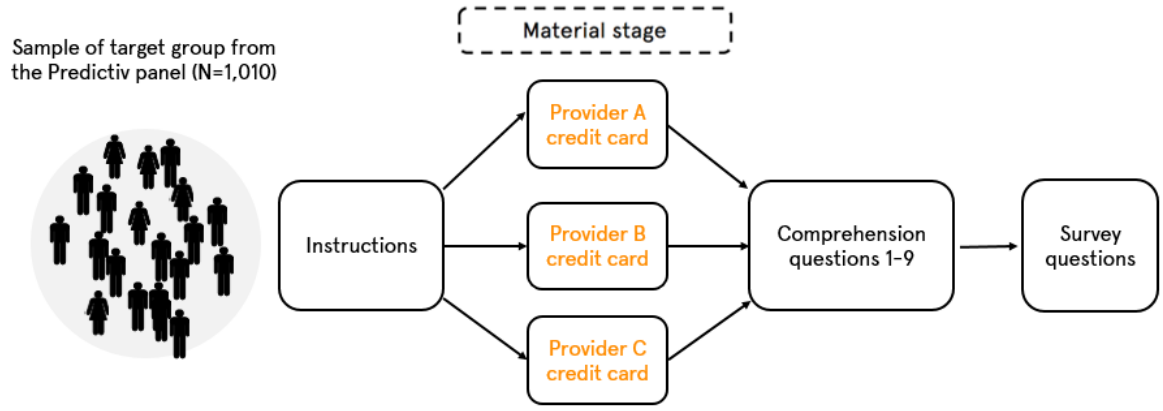
Test design: first test

In the first stage, we ran a randomised controlled trial using our online testing platform Predictiv to identify what participants understood about the costs of a typical balance transfer credit card having seen a web page containing that information. Participants were invited to take part in the test if they met the criteria for the Money Advice Service's (MAS) financially squeezed segment.[8]

Participants were randomly assigned to three groups, in which they saw one of three examples of a web page advertising a balance transfer credit card. Each group was shown an exact replica of a balance transfer credit card application page currently being offered by a UK credit card provider.

After viewing the web pages, participants were asked nine comprehension questions about the costs associated with the credit card they had viewed. Participants were paid a small sum to complete the test and could earn an additional 90p for correctly answering the comprehension questions. After participants had answered the comprehension questions, they were asked a further nine survey questions covering the kinds of financial products they currently used. We also gathered data on how numeracy skills may have interacted with performance in the test. We asked participants numeracy questions developed by MAS and National Numeracy.[9] Figure 2 shows the stages of this first test.

Figure 2: Stages of the first test

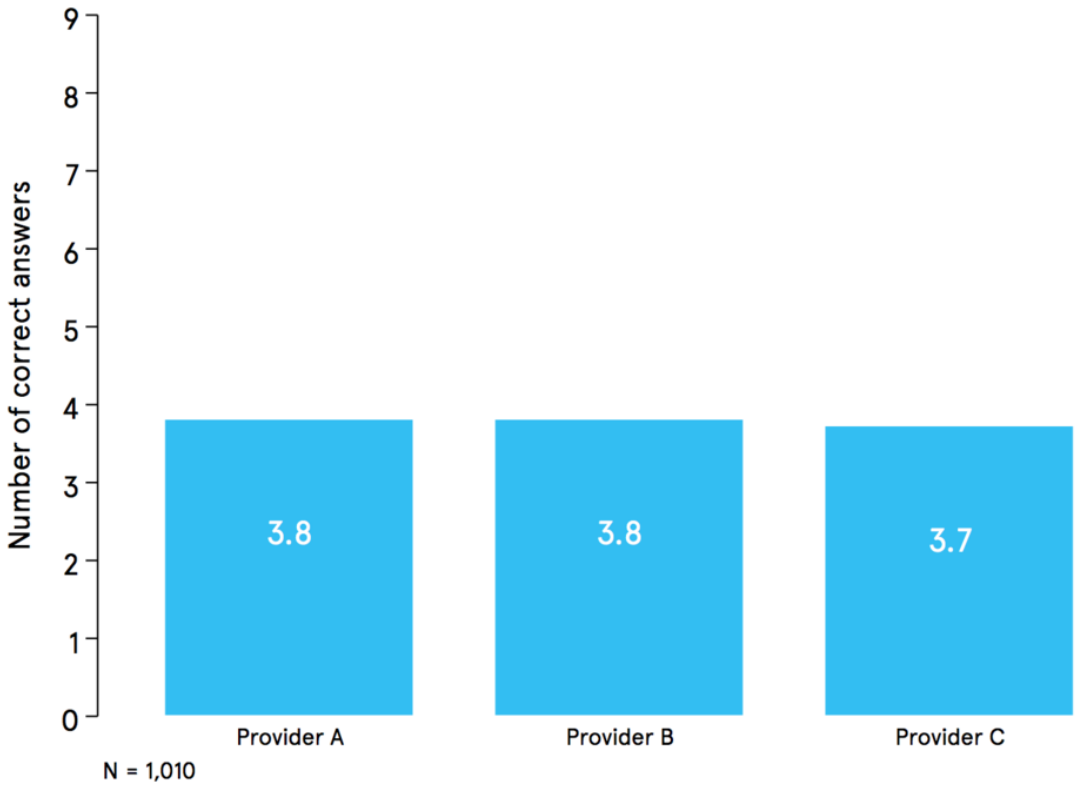


First test: results

Participants, on average, were able to answer three out of the nine questions correctly. There were no significant differences in the number of correctly

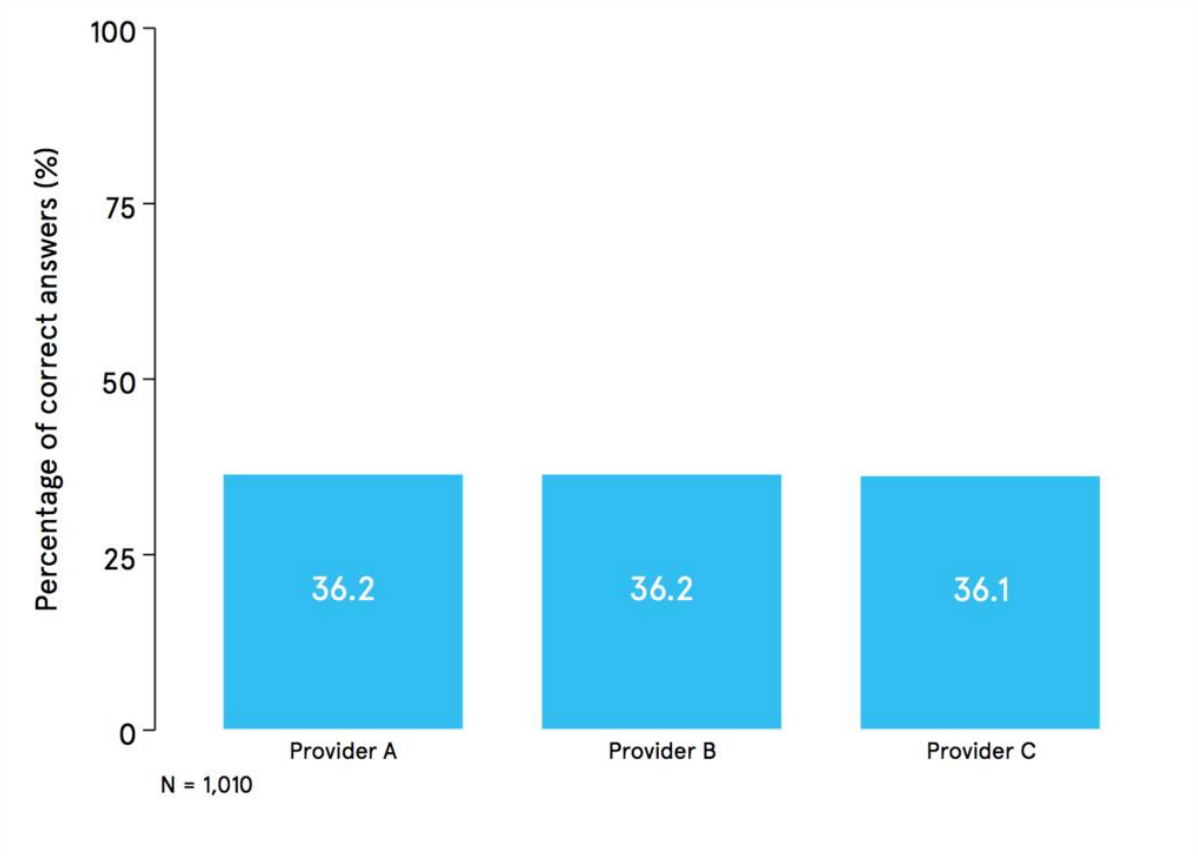
answered questions depending on which web page the participants were shown. Figure 3 shows the average number of correct answers for each web page.

Figure 3: Number of correct answers about the credit card costs associated with each provider



Advertising of balance transfer cards often relies heavily on the 0 per cent introductory interest rate offer. Following research conducted by Which?[10], we were concerned that participants might not understand that they would be charged a fee for transferring a balance from an old credit card to a new credit card. We therefore looked in detail at the number of correct answers to the following question: 'Will you be charged for transferring a debt from an old credit card to this card?'. We found that the majority of participants in this first test answered incorrectly (see Figure 4). Again, there were no differences in the average numbers of correct answers by web page viewed.

Figure 4: Number of participants correctly identifying that they would be charged a fee for transferring a balance by intervention shown (first test)



This test helped us to diagnose that those in the MAS financially squeezed segment struggle to understand the costs associated with a balance transfer credit card after having viewed a real-world example of a provider's web page. In light of this, we designed a second test to explore whether making relevant information simple and salient could improve comprehension of the costs of balance transfer credit cards.

Test design: second test

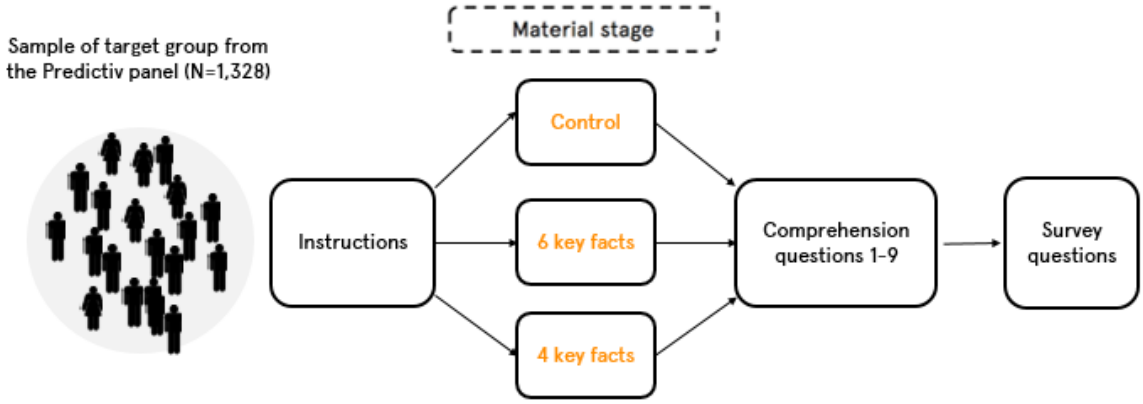
The second test used a similar design to the first. In this test, the control was based on an example of a current provider's website. We then tested the control against two alternative presentations of the relevant information to see whether we could improve the number of correct answers to the questions we asked in this second test.

Participants were randomly assigned to see one of the three web pages. After viewing one of the web pages, participants were asked nine comprehension questions about the costs associated with the credit card they had viewed. We

changed a number of the questions from those asked in the first test to ensure that we recorded levels of understanding of specific information that we had made simple and salient. This design allowed us to say whether understanding of the most important pieces of information for this moment in the consumer journey (for example, balance transfer fees) had increased. The changes were also designed to ensure we recorded whether understanding of elements that we had judged less important for this moment (for example, annual fee) had changed.

Participants were paid a small sum to complete the test and were given an additional 10p for every correct answer to the comprehension questions. We also gathered data on how numeracy skills might have interacted with performance in the test. We asked participants numeracy questions developed by MAS and National Numeracy.[11] Figure 5 shows the stages of this second test.

Figure 5: Stages of the second test



The two interventions that we tested applied a variety of behavioural insights to the presentation of the credit card information we judged most important for this moment in the consumer journey:

- **Turning percentages into pounds:** in a Mexican experiment, presenting fees in pesos instead of annual percentage rates helped workers to select funds with lower average fees in hypothetical choice settings.[12] We presented interest rates as pound figures rather than percentages.

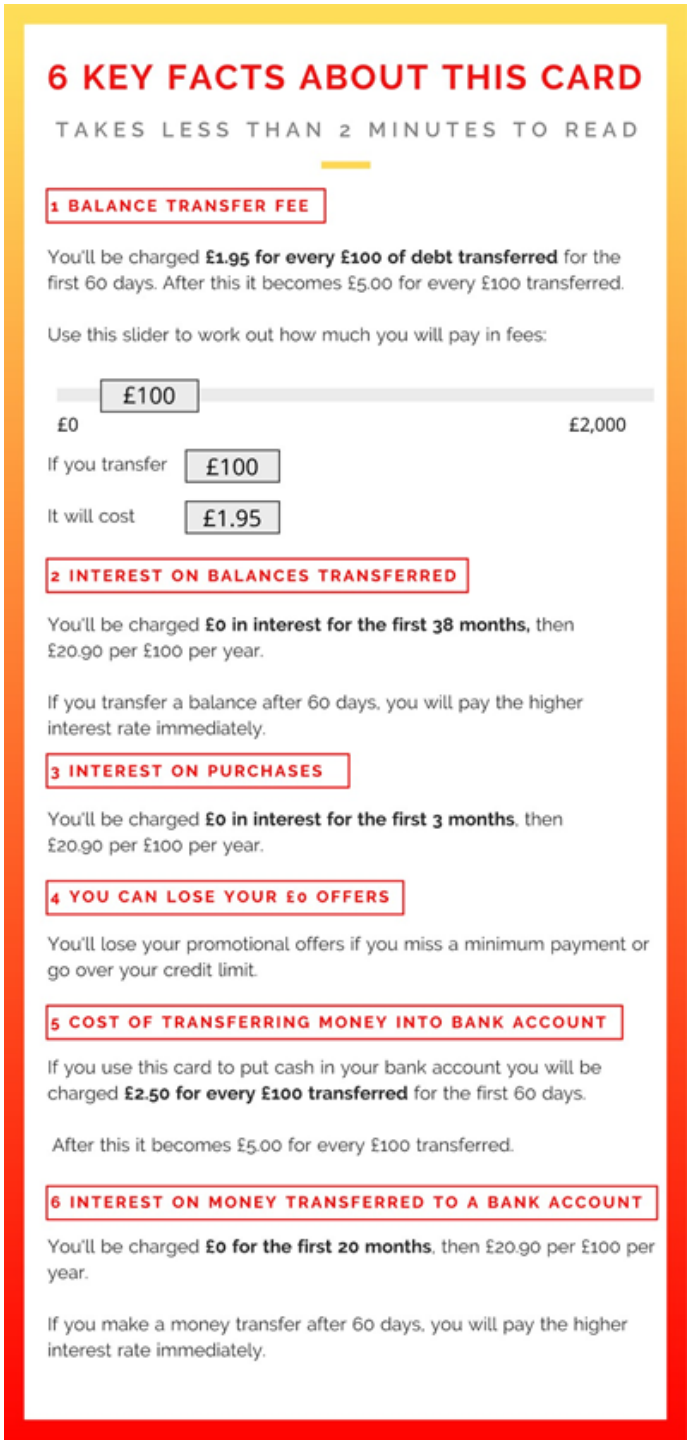
- **Chunking information into numbered bullet points:** in a previous US experiment, combining chunked information with fees listed in dollars instead of percentages led to a 66 per cent increase in comprehension.[13] In the interventions, we displayed the cost information as 'six key facts' or 'four key facts'.

- **Telling people how long it takes to read information:** in a recent online experiment conducted for the European Commission, stating that `reading the terms and conditions takes less than five minutes' roughly doubled the number of consumers who opened the terms and conditions, from 9.4 per cent to 19.8 per cent.[14] In the interventions we added the subheading `takes less than two minutes to read'.

- **Presenting balance transfer costs as an interactive slider:** in both interventions, we added an interactive slider that displayed the cost of transferring a balance. The slider automatically calculated and displayed for participants how much they would need to pay in fees to transfer different amounts onto the hypothetical credit card. The slider was designed to personalise the balance transfer fee information. If the participant interacted with the slider, the information on fees changed as the participant changed the balance they wanted to transfer. We predicted that this would make the relevant information more personalised and therefore more salient for those participants who interacted with the slider. Previous BIT trials have found that personalised information, such as adding the make of car to a car tax bill, increases payment rates, which may be due to the fact that the information in the bill becomes more salient.[15] Whilst not all participants in the test were looking to transfer a balance, in the real world those visiting this kind of web page are likely to be looking to transfer a balance.

Our first intervention listed `six key facts' about the card (see Figure 6), which mirrored the facts displayed in the control. In our second intervention, we removed two of the key facts listed (the information about the credit card that we felt was less important for participants to be aware of at the application stage).[16] We were concerned that including `six key facts' could lead to information overload, as the amount of information could be too much for an average person to understand quickly and easily.[17] This variation allowed us to test whether participants were likely to pay greater attention to less information and therefore understand it better.

Figure 6: Six key facts intervention

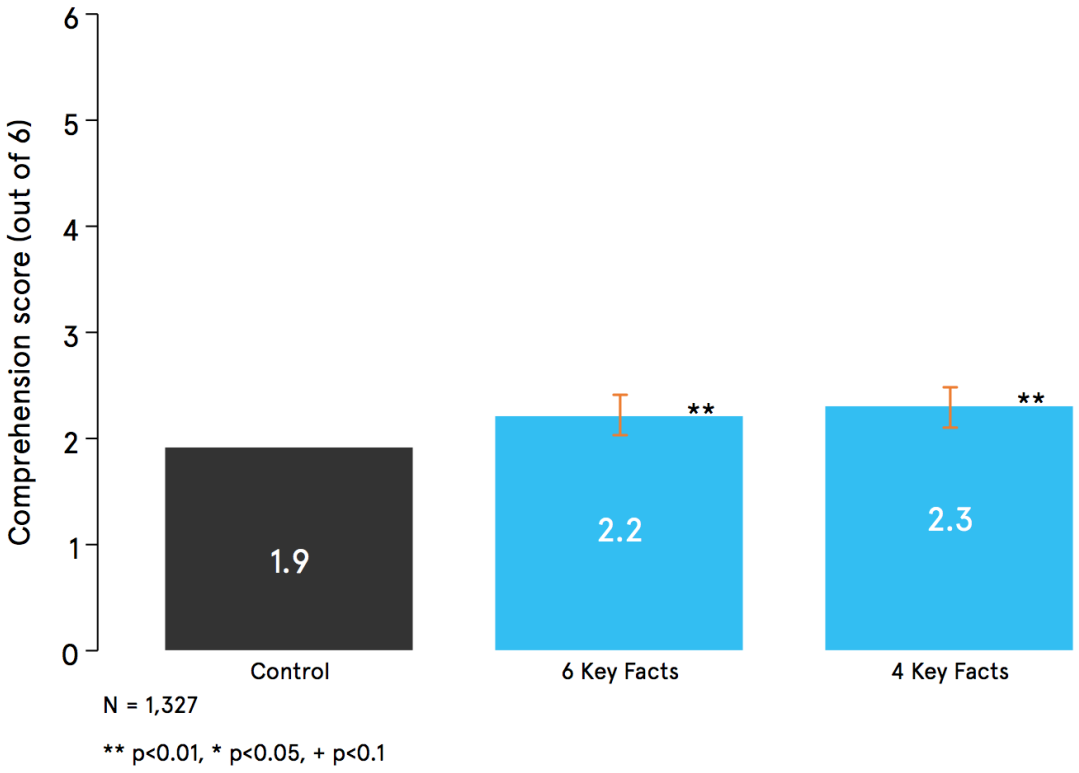


Results: second test

We found highly statistically significant increases in the average number of correct answers to the questions specifically relating to balance transfer costs for both interventions (six of the nine comprehension questions asked). There was a 16 per cent increase between the control and the 'six key facts' and a 21 per cent

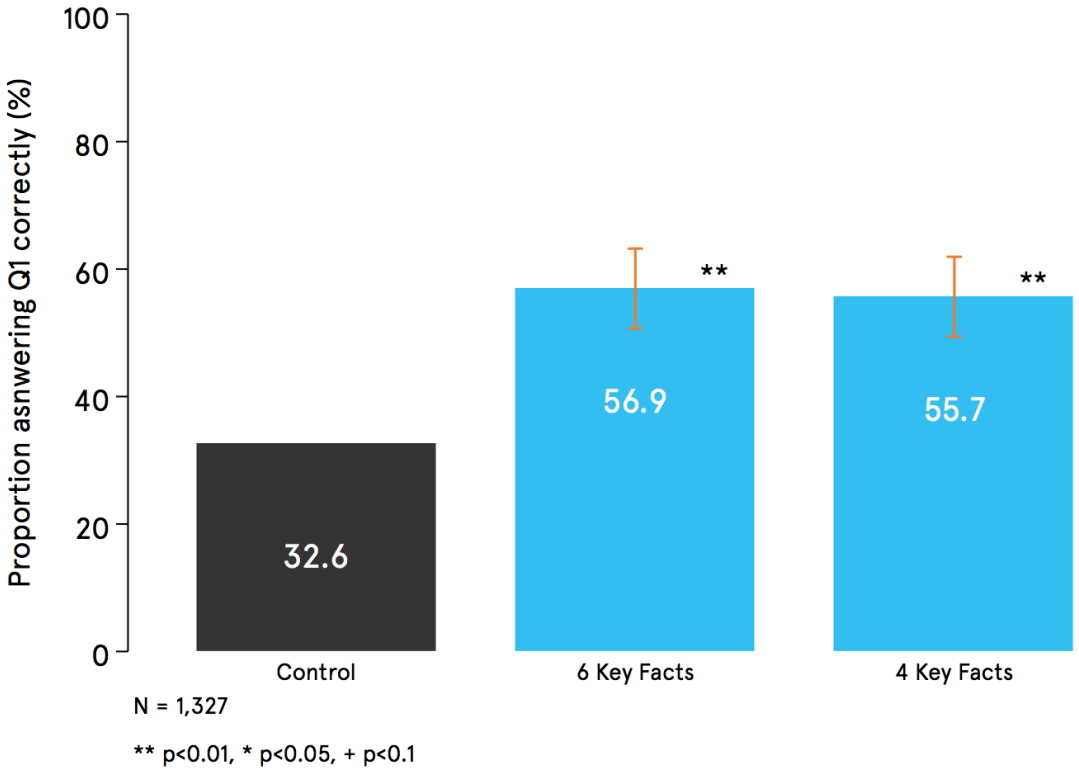
increase between the control and the 'four key facts'. Figure 7 shows the average number of correct answers to questions about balance transfers for the control and both interventions.

Figure 7: Number of correct answers about balance transfers by intervention shown (six questions, second test)



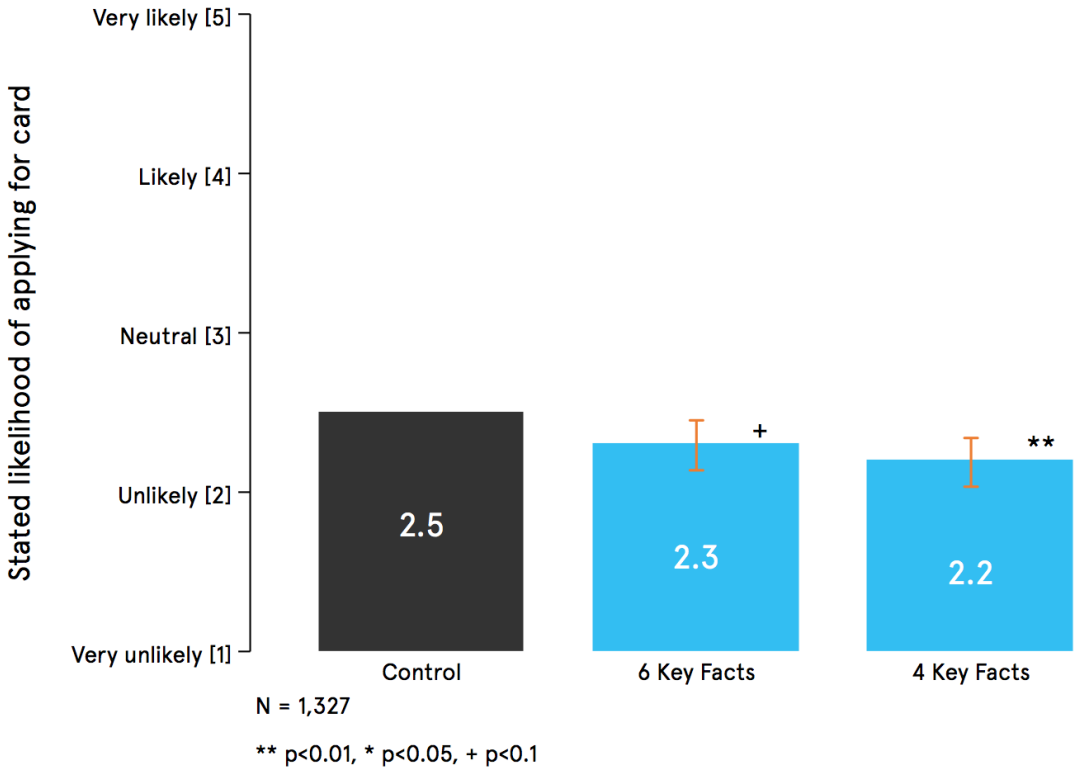
We also found highly statistically significant increases in understanding that a fee needed to be paid to transfer a balance. Figure 8 shows increase of 75 and 71 per cent for the 'six key facts' and 'four key facts' conditions, respectively, compared to the control. It is also worth noting that the proportion of correct answers in the control was significantly lower than if participants had just been guessing, whilst both of the interventions had proportions of correct answers that were significantly better than chance.

Figure 8: Comprehension of balance transfer fees being incurred by intervention shown (second test)



When participants were presented with information that improved their understanding (`six key facts' and `four key facts'), they were less likely to be interested in applying for the card (see Figure 9).

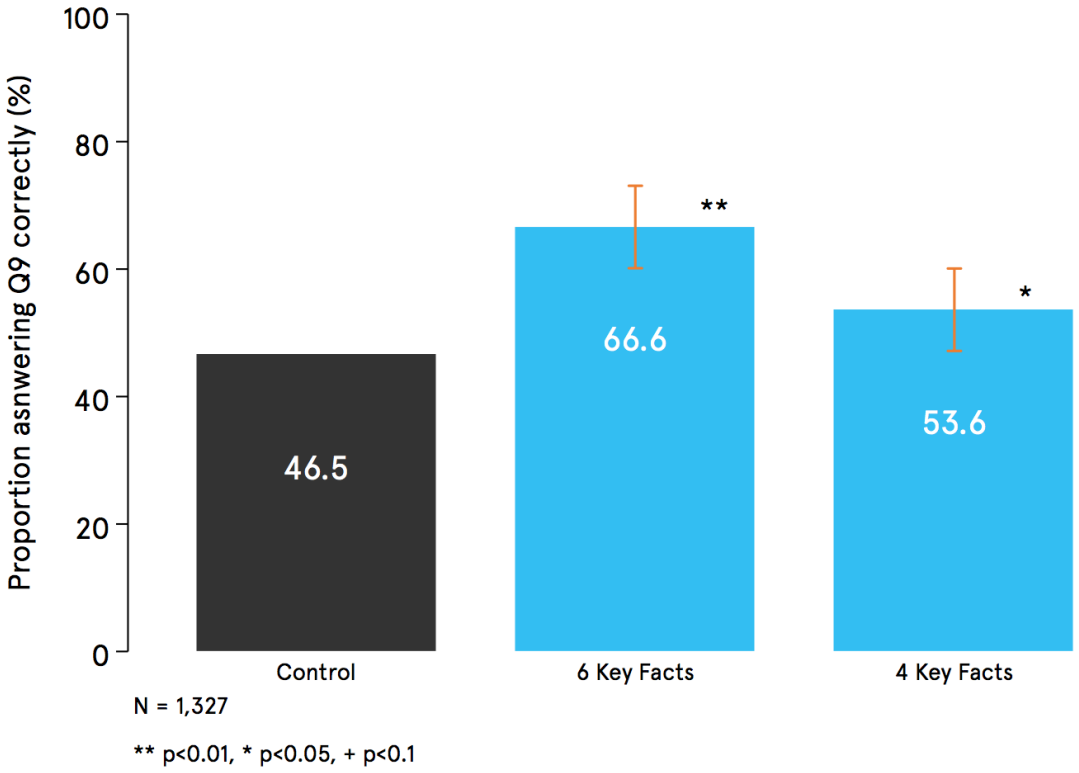
Figure 9: Stated likelihood of applying for the card across the interventions (second test)



The only difference between the two interventions was that two key facts on money transfer costs were removed for the 'four key facts' condition. Participants were able to find the relevant information if they clicked on a hyperlink to the summary box information. As approximately 3 per cent of participants clicked on the summary box link across both interventions and the control, we did not expect there to be widespread understanding of this cost amongst participants.

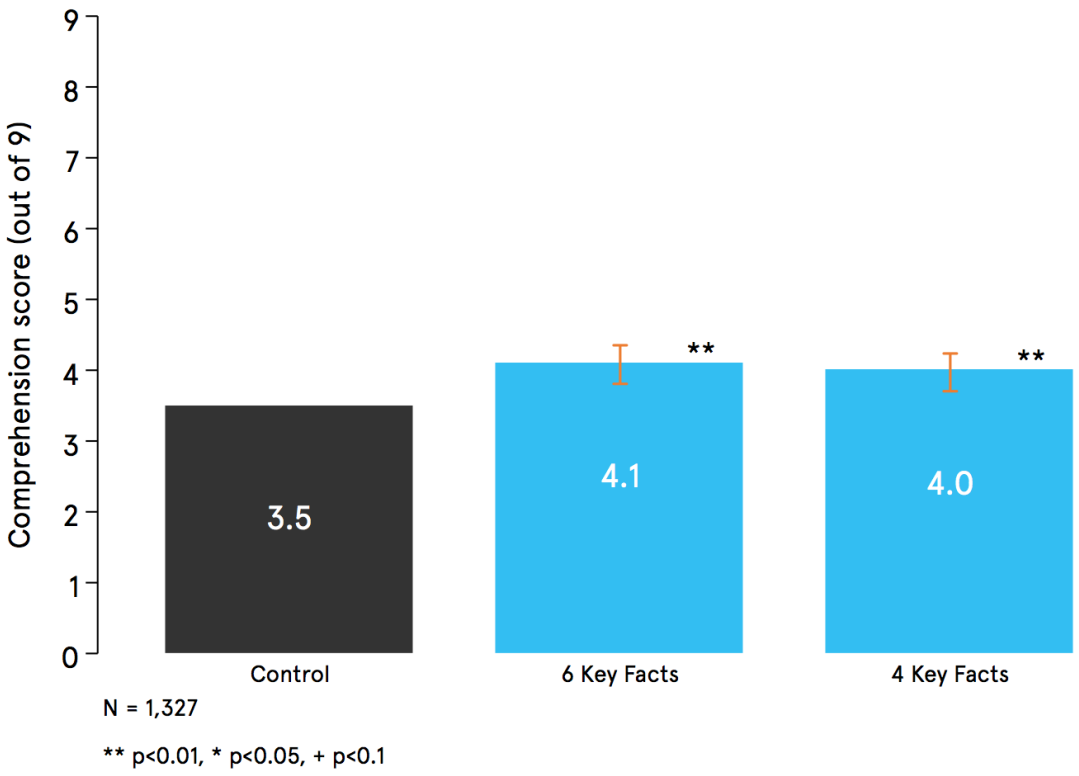
To assess understanding of money transfer costs, we asked all participants the following question: 'Will you be charged a fee for using the credit card to transfer cash into your bank account?' (a money transfer fee). We found that those participants who had seen the 'six key facts' intervention, which listed this as a key fact, were more likely to get this question right compared to those who had seen the control condition. Those participants who had seen the 'four key facts' condition were still significantly more likely to answer correctly compared to the control (see Figure 10). We hypothesise that this was due to participants guessing that a fee was likely to be charged, as they had been made more aware of costs in general through the provision of simple, salient information on fees for other actions, such as transferring a balance.

Figure 10: Comprehension of money transfer fees being incurred by intervention shown (second test)



Finally, looking across the full nine questions (covering balance transfer fees, money transfer fees and fees for taking money out of a cash machine), we found that, overall, both of the interventions led to statistically significant increases in the average number of correct answers compared to the control (see Figure 11).

Figure 11: Number of correct answers by intervention shown (nine questions, second test)



The longer 'six key facts' intervention did not appear to overload participants compared to a shorter 'four key facts' intervention. Despite the recorded improvements in understanding, there was still a significant gap between the improved level of understanding and all participants within the test being able to answer all questions correctly. This suggests that further testing of presentation formats and potentially more intensive interventions, such as forced choices and mandating consumers spending specific lengths of time on screens where reading is required, may need to be introduced to drive higher understanding.

Recommendations

These results suggest that simple, salient and timely communications across the credit card consumer journey may help consumers to understand credit card

costs and therefore use their credit cards in a more optimal way. Simple techniques, such as presenting fees in pounds rather than percentages and creating interactive sliders on web pages, have the potential to improve consumer understanding of the credit cards they apply for.

We believe there is still room for improvement in the interventions we present here. We are seeking credit card providers to co-develop the idea with us, potentially testing the approach at a number of different points along the customer journey.

Experimentation in the field would allow exploration of whether increased understanding of costs reduces the actual amount of charges incurred across the credit card consumer journey. We suggest credit card providers test a range of timely communications at various points along the customer journey, including at application, when the consumer receives the card through the post, and after the consumer has incurred specific costs (such as a fee for taking money out of a cash machine). Timely and easy-to-understand information could be presented via user interfaces across various channels including web pages, emails, post and text messages. We would then suggest tracking consumers' understanding of the products they hold over time, so as to measure how effective these additional communications are.

Endnotes

[1] Gathergood, J., Sakaguchi, H., Stewart, N., & Weber, J. (2017). Learning with your credit card: Evidence from consumer responses to penalty fees. Retrieved 2 April 2018 from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2960004.
[2] Which? Press Office. (2015, 22 September). '0%' balance transfers misleading consumers. Retrieved 28 March 2018 from https://press.which.co.uk/whichpressreleases/0-balance-transfers-misleading-consumers.
[3] Financial Conduct Authority. (2015). Credit card market study interim report: Annex 3: Results from the consumer survey. Retrieved 2 April 2018 from https://www.fca.org.uk/publication/market-studies/ms14-6-2-ccms-annex-3.pdf.
[4] Elshout, M., Elsen, M., Leenheer, J., Loos, M., & Luzak, J. (2016). Study on consumers' attitudes towards terms and conditions (T&Cs). Retrieved 28 March 2018 from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2847546.
[5] Financial Conduct Authority. (2015). Credit card market study interim report: Annex 3: Results from the consumer survey. Retrieved 2 April 2018 from https://www.fca.org.uk/publication/market-studies/ms14-6-2-ccms-annex-3.pdf.
[6] Glazebrook, K., Larkin, C., & Costa, E. (2017). Improving engagement with pension decisions: The results from three randomised controlled trials.
[7] Adams, P., Baker, R., Hunt, S., Kelly, D., & Nava, A. (2015). Encouraging consumers to act at renewal evidence from field trials in the home and motor insurance markets.
[8] Money Advice Service. (2016).The squeezed segment. These are working-age consumers with significant financial commitments but relatively little provision for coping with income shocks.
[9] The numeracy questions were drawn from Money Advice Service. (2015). Technical report for the 2015 Financial Capability Survey. They were developed with advice from National Numeracy (https://www.nationalnumeracy.org.uk).
[10] Which? Press Office. (2015, 22 September). '0%' balance transfers misleading consumers. Retrieved 28 March 2018 from https://press.which.co.uk/whichpressreleases/0-balance-transfers-misleading-consumers.
[11] The numeracy questions were drawn from Money Advice Service. (2015). Technical report for the 2015 Financial Capability Survey. They were developed with advice from National Numeracy (https://www.nationalnumeracy.org.uk).
[12] Hastings, J. S., & Tejeda-Ashton, L. (2008). Financial literacy, information, and demand elasticity: survey and experimental evidence from Mexico (Report No. w14538). National Bureau of Economic Research.
[13] Lacko, J. M., & Pappalardo, J. K. (2010). The failure and promise of mandated consumer mortgage disclosures: Evidence from qualitative interviews and a controlled experiment with mortgage borrowers. American Economic Review, 100(2), 516–521.
[14] Elshout, M., Elsen, M., Leenheer, J., Loos, M., & Luzak, J. (2016). Study on consumers' attitudes towards terms and conditions (T&Cs).
[15] Behavioural Insights Team. (2014). EAST: Four simple ways to apply behavioural insights.
[16] These two facts were about the fees associated with money transfers and the interest rates that apply to money transfers.
[17] Bawden, D., & Robinson, L. (2009). The dark side of information: Overload, anxiety and other paradoxes and pathologies. Journal of Information Science, 35(2), 180–191.

13. Offer Blocker

Idea: Provide a blocking service for credit offers. The Offer Blocker could work in two ways. The first service, the Simple Offer Blocker, would block unsolicited offers of credit by post, phone, text message and email. The second service, the Take Control Offer Blocker, would enable individuals to place a note on their credit score files at all of the credit reference agencies (CRAs) simultaneously. This note could state, for example, that the individual does not want to be offered credit, or certain types of credit, for a specific period of time. Both services would help people to take control of their spending and use of credit by making it harder for them to take out credit on impulse when they receive an unsolicited but attractive offer. Additionally, participation in an Offer Blocker service could act as a commitment device, helping people to stick to objectives they have set themselves on spending and use of credit.

Why was it tested? One of the strongest findings in the work of the Behavioural Insights Team (BIT) and in the relevant academic literature is that minor details can affect the amount of effort people need to expend to complete a task. This in turn has a large impact on whether a person does the task or whether they put it off, sometimes indefinitely. Behavioural scientists refer to these minor details that impede a behaviour or course of action as 'friction costs'. The Offer Blocker idea seeks to actively apply friction costs to help people take control of their spending and use of credit.

The idea was deemed to be attractive as it has the potential to simplify and improve existing services in a well-evidenced manner. The behavioural science on friction costs and their real-world application is well developed. Nevertheless, this idea was selected for qualitative testing as applying friction costs in a real-world setting, such as through a potential future field pilot, would require a good understanding of the detail of how the service would reach and resonate with consumers. We were interested in exploring how people receive unsolicited offers of credit, whether they would understand the purpose of the service and their thoughts on how it would work best for them.

How was it tested? Six face-to-face interviews were conducted in London between 19th and 27th September 2017. Six follow-up telephone interviews were conducted a week after the initial interview. The key focus was to establish

whether participants would want to use an Offer Blocker service and whether they felt this would have a positive impact on their spending and use of credit.

Findings: Initial reactions to the Offer Blocker idea were positive from all participants. Participants who felt tempted by unsolicited credit offers found the Simple Offer Blocker appealing as a helpful way of preventing people from taking out credit unnecessarily.

Participants who reported not being tempted by unsolicited offers seemed to be more attracted to the Take Control Offer Blocker, particularly if this service could have a positive impact on their credit score. They did not see themselves as needing restrictions, but anything that would improve their credit score was considered worthwhile. Participants responded negatively to the suggestion we made that the Take Control Offer Blocker should be accessed through a referral from a debt adviser, as this might unnecessarily limit access.

Participants felt that particular groups of people might benefit more from one service relative to the other. Participants told us that the Simple Offer Blocker might be more useful to younger and more inexperienced credit users, whilst the Take Control Offer Blocker might be more useful for more experienced users of credit. A single sign-up page was seen as a convenient and efficient way of engaging with both services. The idea of online registration was also generally appreciated by the participants.

Recommendations: This idea has the potential to help large numbers of people manage their credit better, but the success of any implementation in the field will depend on how effectively it is targeted. We are therefore looking for partners to engage in further research and development to determine how best to design the service and target those individuals who would benefit from this service the most.

Our qualitative work suggests that people who are financially squeezed may have positive reactions to both the Simple Offer Blocker and the Take Control Offer Blocker. However, it also suggests that the two services may serve people at different stages of life and with different levels of experience with managing credit. The suggested need for referral from a debt adviser to access the Take Control Offer Blocker should be removed, as this may be an unnecessary barrier to take-up of the service. Many of our participants were interested in the potential positive impact on their credit score of the Take Control Offer

Blocker, which suggests that the involvement of the CRAs in making this a reality for any field pilot should be prioritised.

To design an effective field pilot of either service, further research and development will be required to ensure that the service is correctly targeted towards groups that would benefit from it. Expertise and resources from the CRAs and credit providers, or their representative bodies, will be required alongside a non-profit, charity or public sector organisation willing to host the Offer Blocker services.

Why was it tested?

The aim of the Offer Blocker idea is to provide a blocking service for people who do not wish to receive unsolicited offers of credit. There are two potential parts to the Offer Blocker idea, and these seek to introduce friction to the process of taking out credit and to provide commitment devices to help people stick to their own objectives on their use of credit.

The Simple Offer Blocker service would involve a person completing a single short online sign-up form (which could be hosted, for example, on MAS's website), and completion of this form would result in the blocking of unsolicited offers of credit by post, phone, text message and email. This blocking approach can be seen in some existing services: for example, it is possible for people to register with the Telephone Preference Service to stop receiving unsolicited sales or marketing calls, and with the Mailing Preference Service to stop receiving unsolicited post. However, Offer Blocker would be more comprehensive and targeted than these services, as it would work across multiple communications channels to specifically block offers of credit. If users later decided they wanted to remove the Simple Offer Blocker, this could be done via a similar online form.

The Simple Offer Blocker idea uses the behavioural insight that applying friction costs by increasing the amount of effort people need to make to complete a task, even by a small amount, can have a large impact on reducing the likelihood that the person will complete that task.[1] In this case, having to go to a web page and fill out an online form to remove the Offer Blocker could be sufficient friction to make people leave the Offer Blocker in place. However, they would still have the freedom to remove the Offer Blocker if they wished.

The second part of the Offer Blocker idea is the Take Control Offer Blocker service. This service would also block unsolicited offers of credit but using a

different mechanism: a note on a person's credit file as held by all the CRAs. There is already the possibility of placing a 'notice of correction' (NOC) with the CRAs. The NOC is a short statement allowing a person to explain the content of their credit file, and organisations offering credit must take account of NOCs.[2] There are a number of issues with this system, however. The NOC service is not advertised as it was originally designed to help those challenging county court judgements against them. The existing system requires customers to request the note via post or email, and it is not joined up across the three main CRAs.

The Take Control Offer Blocker would build on the existing NOC mechanism to provide a joined-up service accessible via (again) a single short online sign-up form. For example, via the sign-up form, users could ask that no credit be issued to them for the next 12 months or that certain types of high-cost credit, such as payday loans, are blocked. The Take Control Offer Blocker service would append an NOC containing this request to the person's credit file. When an NOC is added to a credit file, it is likely to prevent credit being issued instantly, as an underwriter has to read the note. This means that potentially problematic changes, such as unsolicited increases in credit limits, could be blocked. The intention would also be for MAS and other debt advice agencies to work with the CRAs to ensure that use of this service is treated as evidence of the user taking control of their use of credit, and so use of the service could be a positive marker on credit files.

Like the Simple Offer Blocker sign-up form, the Take Control Offer Blocker sign-up form could be hosted by MAS. This page could be designed to help potential users draft an NOC that would help them stick to goals to reduce their overall use of credit or their use of specific types of credit. Submitted NOCs would then be registered with all active UK CRAs. If users later decided that they wanted to remove the restriction, they would just need to visit the web page again and, via a similar form, request deletion of the NOC or explain the changes they wanted to make.

The Take Control Offer Blocker uses the additional behavioural insight that making firm commitments that are recorded and shared with others can help people to achieve their goals.[3] This has been put into practice in the field by BIT, with commitment devices being used in UK job centres with the aim of helping hundreds of thousands of people to get back to work more quickly.[4] The note that users of the Take Control Offer Blocker would place on their credit file has the potential to act as an effective commitment device as it would record a self-defined objective that users could refer to (and that CRAs would have to refer to)

if the user were tempted to take out unsolicited or high-cost credit in the future. Importantly, the Take Control Offer Blocker preserves the freedom of users to change their mind and opt out in the future – if users really did need to take out a type of credit they had previously blocked, then they could return to the web page and opt out of the Offer Blocker service as simply as when they signed up. To ensure that the Take Control Offer Blocker would be used appropriately (for example, we were concerned that some people might sign up for the service without fully considering its potential effects), we also tested reactions to accessing the service via a referral from a debt adviser or a similar organisation.

Whilst both versions of the Offer Blocker rely on friction costs to help people keep the Offer Blocker in place, they also happen to decrease friction costs when it comes to people accessing the opportunity. They reduce the friction of signing up compared to existing services, meaning that the service is easier to access and use and therefore people are more likely to take it up. As previously mentioned, small changes in the difficulty of completing an action can have large impacts – for example, simplifying the process of applying to university has been shown to increase the numbers of students from low-income backgrounds attending university.[5] BIT has also found that directing tax letter recipients straight to the specific tax form they were required to complete, as opposed to the web page that included the form, increased form completion by 4 percentage points – a large increase for such a small design change.[6]

The Offer Blocker idea was considered a potentially exciting proposition for testing in the Financial Capability Lab (the Lab). Many of the biggest challenges to the idea may be around getting CRAs and credit providers to use the services, alongside technical challenges around recording and sharing information. It was agreed that the Lab could contribute by undertaking qualitative work that sought to provide further detail on how potential users of an Offer Blocker might perceive the service and what aspects were important to them.

Qualitative findings

The following sections outline the findings from six hour-long, face-to-face interviews in London with people drawn from the MAS financially squeezed segment[7], with follow-up telephone interviews a week later. The interviews were conducted between 19th and 27th September 2017.

Discussing credit can be emotive and personal. However, we needed to understand, in detail, how these types of services make people feel and how people might approach the service if it were available. Given these

considerations, face-to-face interviews were selected as the most suitable approach, as they afford participants privacy (relative to an approach such as focus groups) and also provide time for issues to be explored in depth.

The general concept was initially discussed with each participant in broad terms. Then the Simple Offer Blocker and the Take Control Offer Blocker were introduced separately and explored in turn.

Participants were recruited on the basis that they:

- had received at least one unsolicited offer of credit in the past six months;
- were using more than one form of credit; and
- Regularly used credit.

These specific recruitment criteria were set to ensure that the Offer Blocker idea would be relevant to participants.

The follow-up telephone interviews were conducted with all the participants a week after the original interviews took place. By this time, participants had had the opportunity to reflect on the original interview and discuss the idea and their thoughts on it with their family and friends. It was also important to understand what participants recollected from their interview and whether, and why, their views had changed in any way. This would help us to understand the most salient issues for participants and the communications issues that might arise if the idea were to be implemented.

Qualitative research seeks to understand not only what people do and think but also why this is the case. The findings from our qualitative work are intended to inform the development of field pilots by illuminating why aspects of a design may work well for some people and not others. When interpreting the qualitative research findings, it is important to note that, although all participants were recruited from the MAS financially squeezed segment, the small size of the sample means the findings we present are illustrative and exploratory rather than representative of the segment. It is equally important to be mindful of how, in any group environment, participants' views can be influenced by others present. The follow-up in-depth interviews helped to mitigate this risk. Providing people with the opportunity to give feedback privately, as well as in a group, also helped to ensure that we were able to understand their views in detail. Our qualitative work therefore provides important information on how the idea may play out in any field pilot, but the findings should not be considered as representative or generalisable evidence of what works.

The following sections outline detail from the interviews on:

- how people find and choose credit, their experience of unsolicited credit offers and their initial reactions to the Offer Blocker idea; and
- The perceptions of participants about the various elements of the Offer Blocker idea.

It also provides a summary of the follow-up interviews.

Finding and choosing credit

Participants described finding financial products in many ways. They looked online, took out new products with their current bank, took up unsolicited offers of credit and sought recommendations from friends or family. The approaches of participants tended to be linked to their perception of their own ability to manage their money.

Those who saw themselves as financial savvy reported looking online for the best deals either via a search engine or by going straight to specific price comparison websites. They tended to seek a range of information before making a decision on whether a product was right for them. Even if they had received an unsolicited offer of credit, they had researched it further before even considering taking it out:

> `I have usually found that out by going online and just having a look. I just put [in a search engine] in things like "best balance transfer deals" and normally what comes up is Money Saving Expert and then I have a look.'
>
> Female, 43, London

A number of participants described themselves as having been reckless with financial products in their youth, including products offered to them directly by the bank that held their current account, and unsolicited credit offers such as payday loans or store cards, which some participants were still paying off. As mature adults, they were now trying to be better with money. Participants suspected that banks, supermarkets and other credit providers were now sending them offers – mainly concerned with taking out credit cards and loans – because they had taken out credit before and regularly used credit:

> `[My partner and I] probably [receive offers of credit] because we both borrow money, so we are the kind of people that they love!'
>
> Female, 38, London

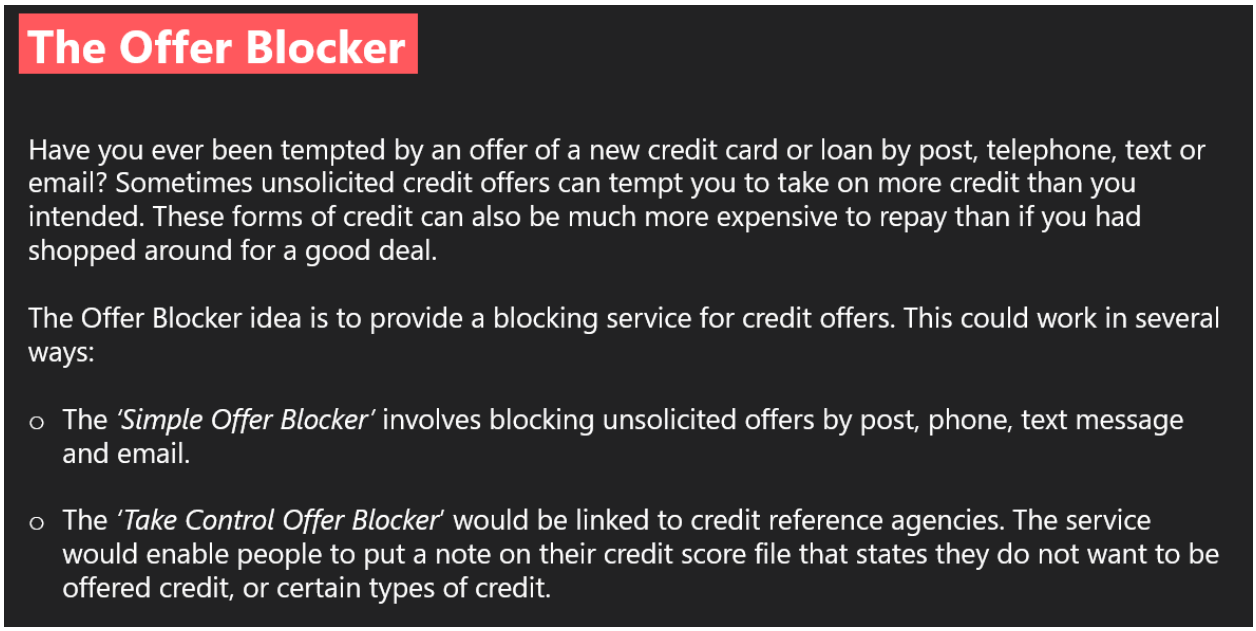
How participants felt about these offers tended to be driven by two factors: the frequency of the offers and how impulsive they considered themselves to be. Participants who received offers infrequently and did not see themselves as impulsive felt neutral towards the offers. They did not see them as having much, if any, impact on their lives. On the other hand, participants who were receiving offers frequently but considered themselves to be restrained in their use of credit tended to feel mild, short-lived irritation when they received the offers. They reported being annoyed that they had received unsolicited offers, but that irritation was brief as they would tend to put the offers straight in the bin without even reading them. Those who saw themselves as impulsive were the most concerned by the offers, because they had taken offers of credit out in the past and had negative experiences with debt as a result. Although these individuals tended to put the offers in the bin, they were concerned that they could be tempted by them:

> 'I just looked at it and put it in the bin... I don't want to be tempted to have any more credit or any more things that I can't pay off – you know, living outside your means again.'
>
> Female, 36, London

Initial reactions to the idea

Participants were presented in turn with three brief slides: one introducing the Offer Blocker idea and the other two containing summaries of the Simple Offer Blocker and the Take Control Offer Blocker concepts. There was discussion on each slide before the next one was introduced. An example is shown in Figure 1.

Figure 1: Stimulus provided to interviewees



All participants liked the idea of the Offer Blocker. Even if they did not feel it would necessarily be right for them personally, they still thought the idea would be worthwhile and helpful for others. Participants tended to focus, at least initially, on one of the Offer Blocker options.

Those who were immediately drawn to the Simple Offer Blocker regarded themselves as being open to temptation by unsolicited credit offers. They believed that the Simple Offer Blocker could have an instantly positive effect on them by removing the temptation to take out credit from unsolicited offers:

> 'Oh God, I would love that. That would be amazing. Just the whole thing. Just block everything. It is harassment, that's exactly what it is... It is just taking temptation out of the way which could really save you on a bad day.'
>
> Female, 36, London

These participants felt that in the past they had relied on credit when they were unable to pay a bill or purchase an item. This service could therefore encourage them to have better control over their finances, although it should be noted that only unsolicited offers would be blocked, so users would still be able to take out credit if they sought it.

In contrast, participants who reported not being tempted by credit offers seemed to be more drawn to the Take Control Offer Blocker and how the service would be linked to CRAs. They were interested to know more details about the

kind of impact this could have on their credit score. However, they did feel that the blocking of unsolicited offers could be really helpful for people who are tempted by such offers or who have had less experience of credit:

> 'I think more for other people, but potentially for me. I think I'm a little bit older and a little bit wiser – I am not tempted by every offer that comes along. I am not going to completely screw myself for short-term [gain], this weekend or the following weekend. If it is something really important I will have a think about it and [whether] I can afford it.'
>
> Male, 40, London

Reactions to the Simple Offer Blocker

Who is the Simple Offer Blocker for?

The Simple Offer Blocker was seen as being good for individuals who are tempted by unsolicited offers of credit or who receive many unsolicited credit offers. Those participants who did not see themselves as falling into these categories felt that young adults were most likely to be tempted by unsolicited credit offers. Participants suggested that young adults may be encouraged by their peers to spend more than they can afford on socialising and material possessions. As a result, participants considered that young adults would benefit from this service and so any advertising of this idea should target them. In some cases this reflected participants' recollection of how much more susceptible to over-committing on credit they had been when they were younger.

Removing the Simple Offer Blocker

The possibility of being able to remove the Offer Blocker was appreciated, as it would allow individuals to control when they do and do not receive offers. It was also suggested by one of the participants that, whilst this element of control would be useful, it is also unlikely that people would take the time to remove the blocking service:

> 'Once you have blocked it, it is a bit like anything you do where [you] sign up online, you forget you have done it. So they won't know they have even blocked the offers – and then they just won't be getting them, which is good.'
>
> Female, 43, London

This could mean that, even if people were tempted, the friction of removing the Offer Blocker service might still discourage them from taking out credit that they

didn't need, which is in line with the evidence around friction costs on which the idea is based.

Because participants considered the Simple Offer Blocker to be a very useful initiative, some did query the ease of the unblocking feature. Participants said that it was important that it would be easy to opt out but that, if it were too straightforward to do this, then some people might be tempted to opt out when they found themselves in a challenging financial situation.[8] It was therefore important that mechanisms for doing this were couched in appropriately cautionary terms:

> 'If people need the money, they are going to leave the [Offer Blocker] service to try and find whatever [credit] they can.'
>
> Male, 40, London

Registering in one place

The idea of registering in one place to stop all unsolicited offers of credit was received positively. Participants felt that this could be an efficient way to stop receiving all offers and that the process would be quick and easy:

> 'You don't have to do it with numerous different companies. It is much better, you can just go to this one place and it deals with everyone for you.'
>
> Female, 38, London

Online registration

The idea of online registration was well liked by most participants, as they were generally confident online and therefore happy to fill in an online registration form. It was argued that it might be more likely that people would apply for the Offer Blocker in response to a telephone call, as people might not find the time to do it otherwise, but participants generally felt that online registration was the way that people would expect to do it:

> 'For most things I fill in details online. I feel like I am constantly doing that actually. It is something you are just used to doing. [If the Offer Blocker were available now], it is something I would put on my to-do list and it would be something that when, I am sitting at the laptop, I would do.'
>
> Female, 38, London

Participants were asked about how they would respond if they were required to register for the Offer Blocker through the MAS website. The name 'Money Advice Service' was recognised by most of the participants, but not all were sure about the organisation's role or purpose. When it was explained that MAS provides impartial financial guidance and is associated with the government, participants were happy for the registration process to be done through its website. Its association with government gave participants confidence and addressed concerns around the possible unknown intentions or agenda of a private organisation:

> 'You know that [the Money Advice Service is] not trying to gain anything from you. They've got your best interests at heart and, in an age where responsible borrowing and responsible lending is important, not having that temptation would, is definitely a positive thing.'
>
> Male, 32, London

Whilst participants did not discuss the specifics of what information they would provide as part of the registration process, they generally felt comfortable about submitting personal details online. Indeed, one participant stated that doing this was a regular occurrence and so it was not something that they were concerned about:

> 'For most things I fill in details online, I feel like I am constantly doing that actually, if you order something online, you put in your delivery address. Even with Amazon when I have my account there, it is something you are just used to doing filling in your details online.'
>
> Female, 38, London

Reactions to the Take Control Offer Blocker

In relation to the Take Control Offer Blocker, participants who felt tempted by unsolicited offers of credit focused on setting restrictions, whereas those who did not feel tempted focused on the positive impact the product could have on their credit score.

Setting credit restrictions

Participants who felt they were vulnerable to being tempted by unsolicited credit offers felt that stopping such offers, and restricting their use of credit, would help them to sort out their current financial situation and debts. One participant even stated that she would stop all access to credit of any kind, which would give her time to get things 'straight'. Once participants felt they were in a better

position financially, they would then consider tapering back the restrictions or removing them altogether:

> 'It just sounds really supportive. If I had to sum it up in a word, it is, "We understand what you are going through, we are going to help you do this", not by any handouts or anything else, they are just going to give you some quiet time: "This is what we are going to do, let's lay it all out", pay it all off and get straight. That is what that says to me.'
>
> Female, 36, London

Positive note on credit file

Those participants who had been tempted in the past by credit offers but felt they would not take them up now were more interested in the mention of CRAs and a note on their file being seen in a positive light. Although these participants did not see themselves setting any restrictions in the note, they were attracted to the idea of having something positive on their file. They had damaged their credit ratings in the past and were keen to rectify this:

> 'That is interesting, that section there. Credit reference agencies and debt advice agencies are working to ensure the referral to the service is taken as a positive step.'
>
> Male, 40, London

However, some participants who thought the idea was generally positive also felt that it was not something that was appropriate for them. They saw this type of idea as being very useful for those who were inexperienced with credit, such as young people or individuals with severe debt issues:

> 'I think young people... they feel like they have loads of money but what they don't realise is that actually they have to pay it all back. And then they think, "That's alright, I'll pay it with next month's wages" but it doesn't really work out like that. They don't realise because they are inexperienced.'
>
> Female, 43, London

Referral from a debt adviser

Participants had mixed responses to the idea of needing a referral from a debt adviser to access the service. On the one hand, some thought it would be good for the types of individuals using this service to be in contact with a debt adviser. However, others felt this would be going against the principle of the individual taking control of their own financial situation:

> 'I don't like that. I don't really think I need a debt adviser to tell me I am in debt. I know I am in debt. This should be something I should be able to go online and do myself.'
>
> Female, 36, London

Follow-up interviews

Six follow-up telephone interviews were conducted with participants around a week after the initial interviews had taken place. Participants' recall of the ideas varied but after some prompting they were all able to remember the two Offer Blocker ideas they had discussed around unsolicited credit offers.

Participants remained generally very positive about the ideas that had been discussed. Participants who felt the ideas were relevant to them still thought that was the case and that they would take up one or both of the Offer Blocker services if they were available. They felt that the Simple Offer Blocker could be positive for anyone who was particularly vulnerable to unsolicited offers of credit, notably younger people, people who perhaps are more impulsive and people who live 'from week to week':

> 'This would be good for people like myself who have borrowed money and are able to afford at least a minimum amount of payment, but could still get credit and would still be tempted to more money or get another credit card, which may not be necessary.'
>
> Female, 38, London

The fact that the Take Control Offer Blocker would have a positive effect on a person's credit file remained key for some participants:

> 'This would be good for someone like myself who has not got a good credit score and wants to get it better. It lets credit agencies know that you are trying to take control of your finances. At the moment customers do not have much control over this kind of thing.'
>
> Female, 36, London

In both cases, communications would be key. Language would be important if it were to encourage people. For example, some thought that the term 'debt adviser' could be confused with 'debt collector'.

Whilst it would be important to target communications at those who are most vulnerable to unsolicited credit offers, some thought that there might be a danger that, if people do not have a current problem with credit, they may not take advantage of the scheme, even if they 'hate' receiving unsolicited calls.

Some participants worried that the requirement to go through a third party could make the scheme less accessible, and some were concerned about the possibility of using a debt agency. However, most felt that that this would be a useful model, as people would then be able to work with that agency to put together an action plan.

Recommendations

This idea has the potential to help large numbers of people manage their credit better, but the success of any implementation in the field will depend on how effectively it is targeted. We are therefore looking for partners to engage in further research and development to determine how best to design the service and target those individuals who would benefit from this service the most.

Our qualitative work suggests that people who are financially squeezed may have positive reactions to both the Simple Offer Blocker and the Take Control Offer Blocker. However, it also suggests that the two services may serve people at different stages of life and with different levels of experience of managing credit.[9] A field pilot design would also need to consider targeting the services appropriately. This is based on the finding that our participants thought that the Simple Offer Blocker might be more useful for younger and more inexperienced credit users, whilst the Take Control Offer Blocker might be more useful for more experienced users of credit. Any further work should consider further testing with people of different ages and with more and less experience of credit to further explore these responses in our interview work.

The registration process would need to be as quick and easy as possible to encourage individuals to access the service. The need for a referral to access the Take Control Offer Blocker should be removed, as this could be a barrier to relevant individuals using the service. Many of our participants were interested in the potential positive impact on their credit score of the Take Control Offer Blocker. This suggests two priorities for a field pilot of the Take Control Offer Blocker. The first is the involvement of a CRA in piloting the idea. The second is buy-in from CRAs to note the NOC as a positive factor in their scoring.

To design an effective field pilot of either service, further research and development will be required to ensure that the service is correctly targeted towards groups that would benefit from the service. Before this can happen, next steps should include engagement of the CRAs as a priority to examine the technical challenges of the idea, particularly of including the service as a positive factor in credit scores. Expertise and resources from the CRAs and credit

providers, or their representative bodies, will be required alongside a non-profit, charity or public sector organisation willing to host the Offer Blocker services.

Endnotes

[1] Behavioural Insights Team. (2014). EAST: Four simple ways to apply behavioural insights, p. 9–18.
[2] See http://www.experian.co.uk/consumer/faq/AR5.html.
[3] Bryan, G., Karlan, D., & Nelson, S. (2010). Commitment devices. Annual Review of Economics, 2(1), 671–698.
[4] Behavioural Insights Team. (2015). The Behavioural Insights Team update 2013–2015, pp. 7–9.
[5] Bettinger, E. P., Long, B. T., Oreopoulos, P., & Sanbonmatsu, L. (2012). The role of application assistance and information in college decisions: Results from the H&R block FAFSA experiment. Quarterly Journal of Economics, 127(3), 1205–1242.
[6] Behavioural Insights Team. (2014). EAST: Four simple ways to apply behavioural insights, p. 13.
[7] Money Advice Service. (2016).The squeezed segment. These are working-age consumers with significant financial commitments but relatively little provision for coping with income shocks.
[8] Note that this may indicate some misunderstanding amongst participants about whether they were able to take credit out at all when using the Simple Offer Blocker. The Simple Offer Blocker blocks offers of credit, not the ability of individuals to take out credit.
[9] It should be noted that some of our participants were keen for all offers of credit to be blocked. It is unlikely that either the Simple Offer Blocker or the Take Control Offer Blocker would be able to stop all offers of credit. For example, a person may have opted in to offers of credit when signing up to a current account, and the service would not be able to stop such offers. Nevertheless, users of the Take Control Offer Blocker could register an NOC declaring that they would like to put a full stop on credit, potentially over a specific period. This could stop them taking out credit offers that they might have agreed to receive previously, for example when signing up to a current account.

14. Card Controller

Idea: Enhance existing money management apps with features informed by behavioural science that help people to take control of their discretionary spending. We propose three main functions: helping consumers to set spending goals, providing feedback on progress towards those goals, and allowing consumers to set and remove limits on spending.

Why was it tested? Behavioural biases and influences in the environment can lead many people to spend more than they have or more than they have budgeted. For example, overconfidence can lead us to set unrealistic budgets as we think that we will find it easier to reduce our spending than it turns out to be, and we overestimate how much our salaries will increase in the future.

The proposed features of the Card Controller app are designed to address some of the behavioural barriers to controlling discretionary spending. These features include savings targets, feedback and limit setting. Setting goals with clear deadlines makes it more likely they will be achieved. Regular feedback on progress can help people to keep track of spending over time. Finally, the app would reduce friction by setting transaction limits that could result in a card being declined, with further action needed to remove the limit. Even a small amount of effort required to remove a spending limit may make people less likely to proceed with a transaction.

We chose to test this idea in the Financial Capability Lab (the Lab) as it has great potential to contribute to developments in the financial services and financial technology sector, where many companies are producing or trying to improve budgeting apps and services. A qualitative approach was selected to explore this idea in the Lab to help us understand how people would react to and engage with the proposed features of Card Controller.

How was it tested? Ipsos MORI conducted six one-to-one interviews to find out how people would respond to the Card Controller app's features. As the app features have not yet been developed for use in research, participants were asked to informally track their spending over two weeks and identify which restrictions they would set for themselves if they were using an app with Card Controller's features. Participants were later interviewed to explore how they

had experienced this task and to record whether their views on the Card Controller idea had changed and, if so, how.

Findings: Although there are limits to the conclusions that can be drawn from qualitative interviews with six participants, it was nevertheless encouraging that the Card Controller idea was seen as a helpful concept by all participants. Five out of six participants said that they would use an app with these features themselves if it were available.

Participants told us that they were using their credit cards for everyday spending and that they had ambitions to cut back on this spending. Nevertheless, they had not set limits in a systematic way or used commitment devices. After attempting to control their spending without an app to support them for two weeks, participants described small successes but described how they would have valued regular feedback on their progress.

Participants clearly recognised the value of setting limits on their spending, but they were concerned about experiencing their card being declined in social settings. The large variations in individual preferences, goals, behaviour and financial situations mean that any app features would have to be highly customisable.

Recommendations: The goal-setting, commitment and other features in this idea have the potential to help users take control of their spending. If further research found these features to be effective and to respond to users' needs, organisations could integrate the features into existing or new apps, helping to differentiate these apps from others. We are seeking a partner to develop and test money management app features that are drawn directly from the relevant academic literature, with the aim of providing rigorous evidence for whether they work.

Why was it tested?

The idea of Card Controller is to enhance existing money management apps with features informed by behavioural science that help people take control of their discretionary spending. We propose three main functions: helping consumers to set spending goals, providing feedback on progress towards those goals, and allowing consumers to set and remove limits on spending. The features we describe could help users to stick to a budget, whether spending is done on a debit card or a credit card. If Card Controller were linked to a credit card, its

features could help users to avoid accumulating unmanageable debts or begin to control their spending and reduce their debts accordingly.

To facilitate our qualitative work in the Lab, we described the idea as a stand-alone 'Card Controller app' to our research participants. However, recognising the extensive existing interest in budgeting and spending apps from consumer financial services firms, the idea is not to build a new app but instead to add these features to existing or anticipated products.

This idea was tested in the Lab because of the extensive academic literature that supports the use of goal-setting, feedback and commitment devices to help people change their behaviour. These techniques have been found to be effective at changing habitual behaviour – from increasing physical activity[1] to reducing energy use.[2]

In this chapter, we first explore why controlling spending and sticking to a budget is difficult for people and then explain how the Card Controller app's features are designed to help.

In order to stick to a budget, we first need to know what our income and expenditure are. When these amounts fluctuate on a monthly basis, this can be very challenging. We may have hundreds of transactions each month on our cards, and many different potential ways to classify spending. This challenge can be amplified by lack of access to information (perhaps we are not receiving bank statements monthly) or lack of time to convert information into a form that is useful for budgeting (it may take a long time to identify and categorise all payments we make each month on our current account).

The challenge of producing a budget has been recognised by many organisations: the market already offers many options. The Money Advice Service (MAS) has an online budget planner,[3] whilst many fintech firms are seeking ways to better gather, categorise and present information to assist in budgeting.[4] Retail banks are building budgeting functionality into their online banking and app-based services.[5] The advent of open banking in the UK[6] will allow even more information to be shared and used to improve these budgeting services.

Even if we have made a budget, there are many behavioural biases that may lead us to lose control of our spending. For example, we tend to give more weight to costs and benefits in the present than in the future.[7] We exhibit systematic overconfidence in many areas, believing we have more control than we actually do[8] or that we are better at something (budgeting, for example) than we actually are.[9] Finally, we can often lack the self-control to stick to a budget, overspending

on day-to-day items even when we have set ourselves a target to reduce spending for future benefit.[10]

The Card Controller app's features, as described to participants, use the following behavioural insights to help overcome some of these challenges:

- **Goal-setting:** the setting of goals can help people to counter their tendency to overspend.[11] Research shows that helping people to set a single savings goal is more effective than encouraging them to set multiple goals.[12] The Card Controller app's features would prompt users to identify a longer-term goal (such as a holiday or a level of savings). This focus on users' longer-term aspirations can act as a counterweight to the short-term pressures on cardholders to make individual spending decisions, perhaps on non-essential items.

- **Spending targets:** people are more likely to hit their target if it has a clear deadline.[13] The Card Controller app's features would help people to set realistic spending targets within specific time frames, creating clear deadlines. Transaction-level data could be used to help set challenging but realistic limits on future expenditure based on actual data about past expenditure and the goals that users set themselves. So, for example, if a user's goal is to reduce monthly spending by £200, then transaction-level data may be able to highlight areas where spending can be reduced to meet this goal.

- **Regular feedback:** recent research has found that consumers with low self-control who use a mobile scanning device to tally up their spending as they shop spend less than those who do not use this feedback device.[14] With this evidence in mind, the Card Controller app would use regular reminders in the form of text messages or app notifications to give feedback to people on how much they have spent and how this compares to their spending targets.

- **Setting limits:** the final, and most important, feature would be to stop all spending on the card outside the limits that have been set. This aspect of the app is a commitment device, meaning an arrangement made to increase the costs of not fulfilling a plan or goal.[15] Commitment devices can be 'hard', involving economic loss (such as requiring a donation to charity if the commitment is not met), or 'soft', involving psychological losses (such as reminders of failure).[16] Card Controller would use a soft commitment device, making it more difficult to overspend by blocking

spending outside limits set by the user. This commitment device uses the behavioural insight that small changes to the difficulty of completing an action can have proportionately large effects on the likelihood that people will complete that action (often called `friction costs').[17]

As well as placing limits on overall spend, the Card Controller app's features would include the opportunity to set limits on particular types of expenditure, such as in named shops or types of shop (for example, betting shops or cafes). Users could also set limits on spending during particular periods of time when they might be vulnerable to non-essential expenditure (such as after a few drinks).

At the same time, the Card Controller app's features would preserve the freedom of users to spend if they have a genuine need. A sliding scale of options would allow users to add different levels of friction to different decisions to overspend. For example, if a user had decided to limit their spending by blocking pizza delivery firms, any attempt to buy a delivery pizza would result in the card being declined. At the lowest level of friction, users would be required to send a text message back confirming the expense before re-attempting the purchase. Higher levels could include the requirement to answer security questions or referral to a friend or relative to approve the spending.

The Card Controller idea was selected for qualitative work in the Lab to explore how it could be developed and tested in a field pilot.

Qualitative findings

In Autumn 2017, Ipsos MORI held six face-to-face interviews, each lasting around an hour, with respondents from the London area. Participants were recruited on the basis that they were within the MAS `financially squeezed' segment.[18] Participants were employed; in socio-economic grades B, C1 or C2;[19] and aged between 25 and 45. Participants were all also using at least one credit card at least once per week, paying at least the minimum monthly repayment amount on their credit card (but never the full balance), and using online banking or a banking app on their smartphone.[20]

During the interview, participants were asked to describe how they used their existing credit cards. They were then introduced to the Card Controller app's features. At the end of the interview, participants were given a task with three parts: to track their spending over the following two weeks, to identify which card restrictions they would like to set for themselves, and to attempt to follow

any such restrictions without the support of an app. At the end of this two-week period, participants were interviewed again, this time by telephone, to understand their experience of the restrictions and to hear their more considered thoughts about the Card Controller idea.

Qualitative research seeks to understand not only what people do and think but also why this is the case. The findings from our qualitative work are intended to inform the development of field pilots by illuminating why aspects of a design may work well for some people and not others. When interpreting the qualitative research findings, it is important to note that, although all participants were recruited from the MAS financially squeezed segment, the small size of the sample means the findings we present are illustrative and exploratory rather than representative of the segment. It is equally important to be mindful of how, in any group environment, participants' views can be influenced by others present. The follow-up in-depth interviews helped to mitigate this risk. Providing people with the opportunity to give feedback privately, as well as in a group, also helped to ensure that we were able to understand their views in detail. Our qualitative work therefore provides important information on how the idea may play out in any field pilot, but the findings should not be considered as representative or generalisable evidence of what works.

The following sections outline participants' descriptions of their use of credit cards and their perceptions of different types of spending limits and how they should work. It also details participants' views having tracked their spending for two weeks and their recommendations for the app's future development.

Managing money and using bank cards

In the pre-interview screening process, participants all said that they felt in control of their finances. They also felt that credit was easy to obtain and that they sometimes ended up relying on it for non-essential spending that contributed to a short-term feeling of wellbeing. This expenditure included dinners out and small treats, such as a trip to the cinema. This was not perceived as giving in to temptation; instead, participants felt like they were using the flexibility offered by credit cards, and overdrafts in particular. Nevertheless, participants did find that these often small, non-essential items of expenditure added up over time:

> `[I could use my] credit card on anything from an M&S lunch to going out with my partner. Could be cinema tickets. Could be buying something off Amazon. But it's probably highest at the weekends.'
>
> Male, 38, London

Monitoring expenditure

Participants felt they kept track of their expenditure well. Most used a banking app or would go online to check their outgoings at irregular intervals. Participants reported relying on looking at their balance once or twice a week, perhaps after a larger-than-usual credit or debit card bill, or when they knew they were on the cusp of exceeding their overdraft or credit card limit. As they did not check their accounts regularly, they sometimes had to move money around as a consequence, such as from a holiday fund into their main bank account to cover bills:

> `I wouldn't want to know where every single penny was going. I think that's suffocating and it would be overwhelming to watch every penny.'
>
> Female, 34, London

Setting limits

Our participants had some experience of voluntarily limiting card use, but not in a systematic way. They described how they might set themselves limits for particular items, such as a holiday; for spending on regular items, such as no more than £5 a meal at lunchtime; or when they noticed that they were spending too much on something, such as online betting. Some participants tried to use their credit cards only for big purchases so that they would still retain money in their current account for when they needed it:

> `I prefer the credit card because it comes out a little bit delayed so, if I need [my current account] for an emergency or something, I know the money is there.'
>
> Female, 34, London

In all cases, participants relied on an overall sense that they should exercise self-control rather than methodically keeping to a fixed budget. No participant set themselves strict or systematic spending rules.

Discussing the Card Controller idea

Participants were briefed about the potential user-defined features of the Card Controller app:

- A time-related spending limit could be reset each period.
- Any goals set (such as saving for a holiday) could be illustrated with a picture that would be fully obscured to begin with but would gradually be revealed in line with the user's progress towards the goal they have set.
- A limit could be placed on total expenditure, spending in a particular outlet (or types of outlet), or spending at a particular time of day or on certain days.
- Users could decide on a frequency for text messages telling them how much they were spending compared with the limit they had set. They could also choose to be notified if they were getting close to their spending limits.
- If a user reached a spending limit, any further purchase would be blocked (their card would be declined). Options for overriding limits if this happened were offered for discussion.

Initial responses to the idea

Participants all understood the Card Controller app's features and related them to their own circumstances. They all responded positively to the idea when they were first briefed about it:

> `I think it would be a really good way to organise your spending. A lot of the things we buy we don't really need.'
>
> Female, 34, London

All participants could identify people for whom the app's features would be particularly useful. Indeed, four participants thought it would be useful for themselves at the moment and would use it immediately. The other two participants felt that they now managed their money much more closely than in the past but that the app might have been very helpful to them when they were younger. The participants highlighted a number of positive perceptions of how the app's features might work:

- It would force people to make an effort to spend money on something:

> 'I'd have to go through the effort of having to say "Yes" and sending the message back and unblocking something.'
>
> Female, 35, London

- Participants thought that anything that could reinforce their good intentions and ability to resist temptation would be helpful:

> 'I think it is quite a good thing because people can get carried away with Ubers and stuff... I know we have a bad habit of getting Deliveroo or UberEATS and I think that, if something like [the Card Controller idea] came up, it would make us think twice and [say], "Actually, you know what, I'm not going to get lunch today. I'm just going to go to the canteen." I think it would be pretty good. It's just a nudge.'
>
> Female, 34, London

- It would make people more mindful of what they were spending their money on and encourage them to take ownership:

> 'You'd take a bit more ownership of your self-appointed limit. If I was left with £500 [out of my limit], I'd feel that was positive reinforcement. I'd feel pleased that I'd got that £500 in my pocket now.'
>
> Female, 32, London

- It would help people to gain control:

> 'Sometimes people just tend to forget how much they are spending, but this app would be very useful to monitor my own expenses and making me think again.'
>
> Male, 38, London

However, participants did report some concerns to be considered:

- It could lead to difficulties in an emergency:

> 'Say we're out for [a] night out. Suddenly, one of the children are ill. I've got to get a cab back. I don't want to be going through [unblocking my card] when it's an emergency situation.'
>
> Female, 35, London

- There was a 'shame' element:

> 'I'd be embarrassed... because I'd feel like I'd been declined because I'm poor or I've been an idiot... I'd rather go overdrawn.'
>
> Female, 32, London

- Limits might be too easy to override. Participants emphasised that it would be important to get the balance right between dis-incentivising the block's removal whilst still giving people the opportunity to do so if they wished:

> 'I am not completely [sure] that I would not override [the block] all the time.'
>
> Female, 32, London

- The time of year could influence how likely people are to use the app:

> 'I think for certain times of the year it would be harder. Like Christmas... and my birthday. But, as a general rule, I think it would be reasonably easy to stick to.'
>
> Female, 32, London

The overall spending limit

Most participants agreed that strictly enforced, self-imposed spending limits would be acceptable. However, they cautioned that essential payments, such as rent and bills, should never be blocked.

Participants were generally more relaxed about the idea of their card being blocked during an online purchase than they were about the prospect of experiencing a block in public, due to the potential for embarrassment. Participants felt embarrassment could lead to a short-term pressure to remove their limit, which might not be in line with their long-term goal(s). Regular updates about expenditure were requested to help avoid this happening.

The period of time over which a limit should be calculated – weekly, fortnightly or monthly – was regarded as something which should reflect individual preferences, in particular the way people get paid or budget. Similarly, the frequency of message updates was regarded as a personal matter and it was therefore felt that users should be able to determine such settings for themselves:

> 'I'm the sort of person who gets annoyed by automated texts. But better that than having to log on to check.'
>
> Female, 32, London

Other types of limits or blocks

Blocking or limiting specific shops or types of service received general support, as most participants regarded themselves as susceptible to particular types of purchases. Two participants had an interest in betting. One suggested that a block or limit on betting would remind them that 'it was not something that I am supposed to do' (Gender, Age, Location). Other participants suggested that they would set a limit for day-to-day expenditure, which they said seemed to accumulate without them noticing:

> 'Yes, a limit on takeaways I could like. So that you do not have to go to the effort of thinking, especially, for example, if you've had a drink and your limitations lower and you think to yourself, "I really fancy that kebab!" Or because you've [decided to limit yourself] to one takeaway a week.'
>
> Female, 35, London

> 'I couldn't sleep once and you just go [online] and buy a coat for 150 quid. It's just really stupid and you shouldn't be buying a coat at 3am just because you are bored.'
>
> Female, 32, London

Limits or blocks were considered potentially useful for contactless payments, which involve very little friction when deciding whether or not to make a purchase. A block could reinforce users' willpower if it is weak regarding certain lower-value goods:

> 'I sometimes just buy things for the sake of it. If I had to put in a pin, that might be a little more of a deterrent for those silly little everyday purchases like chocolate bars or coffees, which just add up.'
>
> Female, 32, London

Participants also suggested that it might be valuable if the app's features asked users to double check that they really needed to take out the amount of money from a cash machine that they had requested, as long as it did not take long and the user would remain in complete control.

Participants did not generally relate personally to the potential for blocking expenditure at particular times during the day, such as Saturday afternoons, when some people may be susceptible to gambling. For the most part, they expressed a preference for blocking expenditure for that purpose at any time.

Participants did worry about their expenditure in the evening and at night. Regarding the evening, they were concerned that their resolve might be

weakened in pubs, clubs and restaurants after a few drinks or when feeling sociable:

> 'So it's 2.30 in the morning, you've got work tomorrow, [it could be useful to have an app which suggests], "Do you really need to be pulling out £200?" Seeing it come up "two zero zero" makes it appealing.'
>
> Male, 35, London

Setting limits

Most participants would prefer to set up limits digitally. No participant thought they would need to talk to anyone before setting up a limit. The general feeling was that many people, including themselves, would feel uncomfortable talking about their finances:

> 'I would be quite cagey about having to talk to [someone].'
>
> Female, 32, London

However, participants noted that the option of a face-to-face or telephone discussion could be useful for some as an additional option should they want to discuss certain things, if they sought guidance and encouragement, or if they wanted to explore the most useful ways to use the app. Similarly, an intuitive online or live chat facility could be useful for anyone who needed some preliminary guidance or assistance:

> 'It might be good to get some advice, and just about some key points and suggestions and thought processes, I think that would be quite useful.'
>
> Male, 38, London

Changing and removing limits

Participants expressed that there needed to be some friction to remove a limit, but equally they thought there would probably be occasions when it would be highly desirable that a limit be removed. As one participant articulated:

> 'It's a really difficult one because it's almost like you need them to be a little bit tough but then at the same time you want a little bit of flexibility. Some sort of balance [would be required]. Something to just make it a little bit inconvenient that will make you think, "Actually no, I'll leave it this time."'
>
> Female, 34, London

Some participants felt that overriding their limits via text might be a little too easy.[21] There was a feeling that, in order for the app to be effective, the effort required to override the limit should be greater:

> 'I think it should have something where you have to log in online so it's a conscious decision. You are not going to sit there when you've had a fair few drinks going "I've got to log in to it", whereas replying "Yes" is very easy.'
>
> Female, 35, London

Getting the balance right between ease of lifting a limit and making people think about what they are doing was an important issue for participants. When reflecting on this, participants raised some suggestions as to how to deal with the issue: not being able to override the limit at all once it had been set, having to talk to someone to override the limit, or introducing a triple-check text message system.

Other participants, however, thought the level of difficulty for removing a limit – the requirement to reply 'Yes' to a message and then to confirm that as a double check – was about right:

> 'Say you were stuck somewhere and you needed to get home. You don't want it to be a big faff because you're getting stressed about getting home. But, at the same time, you don't want to be stuck in this loop of debt. So, I think it's probably about right.'
>
> Female, 32, London

Receiving feedback

Participants favoured receiving regular updates on their financial position, including progress against their limit, perhaps once or twice a week. Such updates could work similarly to mobile phone provider updates on the number minutes of people have remaining on their contract. Being reminded about spending on particular types of products – such as takeaways, coffees or cabs, as mentioned earlier – would be particularly valued:

> 'In Shell you've spent this, in River Island you've spent this, in this shop you've spent that, in Sainsbury's you've spent that. That I would find fantastic... I don't think there are any drawbacks. You can think, "[Goodness me], why am I spending so much money in [a] Shell petrol [station]? I am only buying sweets and drinks. It would make you think about how you are spending your money.'
>
> Female, 35, London

Participants suggested that the messages could perhaps specify precisely how much the cardholder had spent to date (as a sum of money) and what proportion of their limit had been reached (as a percentage or fraction), rather than providing a vague statement that the cardholder was 'half way' or 'getting close' to their spending limit. A traffic-light system was also suggested: red when the user is close to the limit and green for low spending to date.

Participants would like the app's features to be able to analyse spending. Cardholders tended to be familiar with this functionality from loyalty cards, which often monitor types of expenditure. Graphical representation of spending might be helpful, perhaps comparing monthly spend (in total or one of the categories covered here) with previous months or years. Ideally, this would be similar to the functionality found in some energy providers' apps and fitness apps that track progress towards goals.

There was a preference to receive feedback via the app. However, some suggested a conversation would be valuable as a complement to the app-based feedback. This would enable users to talk through how they were using the app in practice and whether there were ways in which they could get more out of it:

> 'I'd like to be able to have that conversation with someone and thrash it out with someone... who'd say to me, "Right, well, why don't you try doing this instead?".'
>
> Female, 35, London

Participants were clear that this discussion would not have to take place face to face or over the telephone. They felt that an intuitive online or live chat facility could be as useful and more convenient.

Savings goals and feedback

The ability to set a savings goal and receive reminders paired with a chosen photo was presented to participants as an option. This was received positively by participants, who considered it might help people to realise that they would not meet their goals if they did not maintain their blocks on expenditure:

> 'It would keep you on your toes in terms of what your purpose is and why you've set a certain limit. It goes straight to the point and the picture helps with that as well.'
>
> Male, 33, London

Follow-up interviews

Participants were interviewed for the second time two weeks after their first interview. In the intervening period, they had identified which restrictions they would like to set themselves.

Participants recalled some of the key elements of the proposed features of the Card Controller app: that they would make them think twice about unnecessary expenditure and provide them with opportunities to understand and track their expenditure.

Participants said that the discussion had made them think differently about their spending habits. In particular, they said that they would benefit from thinking more about making short-term or day-to-day purchases on their credit cards. They discussed how the Card Controller app's features could help with this goal. Five of the participants would use the Card Controller app themselves immediately if it were available (compared with four at the start of the research) and all six thought it would be helpful to others, particularly young people and those with less experience in budgeting:

> 'You spend money without thinking, you might get two takeaways and that's your weekly food allowance. [The Card Controller idea] makes you think about how you are managing your money.'
>
> Female, 35, London

All participants had set themselves voluntary limits and all described this as a useful exercise. We did not record the actual amounts, but participants reported that they believed they had reduced their unnecessary expenditure. Participants said that they would have liked reminders to keep them focused on their spending targets and long-term goals and, ideally, complimentary emails when they had successfully met their target.

Participants mentioned several features that they felt would improve the app: alerts should be sent well before the limits are reached so that users can avoid having to lift a block; the app's features should encourage the setting of short-term goals, such as an imminent holiday, which may be easier to relate to than a distant objective; and the app's features should be personalisable (users should be able to decide the frequency and type of alerts).

Recommendations

The goal-setting, commitment and other features in this idea have the potential to help users take control of their spending. If further research found these features to be effective and to respond to users' needs, organisations could integrate the features into existing or new apps, helping to differentiate these apps from others.

We are seeking a partner to develop and test money management app features that are drawn directly from the relevant academic literature, with the aim of providing rigorous evidence for whether they work.

The interest in the app amongst our participants was encouraging. However, participants expressed a wide range of preferences for the frequency of feedback, goal-setting support and friction levels to remove limits. Product development in the field would need to consider how to introduce flexibility to the features of the app (for example, being able to set different types of limit and frequencies of feedback) whilst ensuring the app remains evidence-based by only offering features that have a strong grounding in the behavioural science literature.

Further consideration of how spending limits are implemented is required to ensure that there are no unintended consequences for the payment of priority bills and expenditure. A field pilot would need to consider how any limit-reaching blocks affect users – specifically, the frequency and volume of people being negatively affected by their card being declined.

Development of an effective field pilot should draw on expertise from card providers, fintech companies, advice charities and retail banks to help us overcome any technical challenges of the idea and continue to build on the enthusiasm and requests recorded in our qualitative work.

Endnotes

[1] Normand, M. P. (2008). Increasing physical activity through self-monitoring, goal setting, and feedback. Behavioral Interventions, 23(4), 227–236; Shuger, S. L., Barry, V. W., Sui, X., McClain, A., Hand, G. A., Wilcox, S., & Blair, S. N. (2011). Electronic feedback in a diet- and physical activity-based lifestyle intervention for weight loss: A randomized controlled trial. International Journal of Behavioral Nutrition and Physical Activity, 8(1), 41.
[2] Allcott, H., & Mullainathan, S. (2010). Behavior and energy policy. Science, 327(5970), 1204–1205; McCalley, L. T., & Midden, C. J. H. (2002). Energy conservation through product-integrated feedback: The roles of goal-setting and social-orientation. Journal of Economic Psychology, 23, 589–603.
[3] See https://www.moneyadviceservice.org.uk/en/tools/budget-planner.
[4] See meetcleo.com, squirrel.me, mint.com, and monzo.com for examples of fintech budgeting products.
[5] Danske Bank has built budgeting tools into its online and app services; see, for example, Danske Bank. (n.d.). Danske Bank launches new money management tool [Press release]. Retrieved 2 April 2018 from https://www.danskebank.co.uk/en-gb/About-the-bank/Media-and-Press/Press-releases/2014/Pages/spending-overview-ni.aspx.
[6] See https://theodi.org/open-banking-standard.
[7] O'Donoghue, T., & Rabin, M. (1999). Doing it now or later. American Economic Review, 89(1), 103–124.
[8] DellaVigna, S., & Malmendier, U. (2006). Paying not to go to the gym. American Economic Review, 96(3), 694–719.
[9] Neale, M. A., & Bazerman, M. H. (1985). The effects of framing and negotiator overconfidence on bargaining behaviors and outcomes. Academy of Management Journal, 28(1), 34–49.
[10] Thaler, R. H., & Shefrin, H. M. (1981). An economic theory of self-control. Journal of Political Economy, 89(2), 392–406.
[11] Dolan, P., Hallsworth, M., Halpern, D., King, D., & Vlaev, I. (2010). MINDSPACE: Influencing behaviour through public policy. London, UK: Cabinet Office.
[12] Soman, D., & Zhao, M. (2011). The fewer the better: Number of goals and savings behavior. Journal of Marketing Research, 48(6), 944–957.
[13] Gollwitzer, P. M., & Sheeran, P. (2006). Implementation intentions and goal achievement: A meta-analysis of effects and processes. Advances in Experimental Psychology, 38, 69–119.
[14] Montinari, N., Runnemark, E., & Wengström, E. (2017). Self-scanning and self-control: A field experiment on real-time feedback and shopping behavior (Working Paper No. 2017:15). Lund University.
[15] Bryan, G., Karlan, D., & Nelson, S. (2010). Commitment devices. Annual Review of Economics, 2(1), 671–698.
[16] Bryan, G., Karlan, D., & Nelson, S. (2010). Commitment devices. Annual Review of Economics, 2(1), 671–698.
[17] Behavioural Insights Team. (2014). EAST: Four simple ways to apply behavioural insights, pp. 9–18.
[18] Money Advice Service. (2016). The squeezed segment. These are working-age consumers with significant financial commitments but relatively little provision for coping with income shocks.
[19] These are social grades. For more information, see Ipsos. (2009). Social grade: A classification tool. Retrieved 8 January 2018 from https://www.ipsos.com/sites/default/files/publication/6800-03/MediaCT_thoughtpiece_Social_Grade_July09_V3_WEB.pdf.
[20] These recruitment criteria sought to ensure that the Card Controller idea would feel relevant to participants as they were regular users of credit cards who were not clearing their balance. Support from a Card Controller app could therefore help them to reduce the cost of their debts.
[21] For example, by replying 'Yes' to a text message notifying the user that their card had been declined due to the limit they had set and asking them whether they wanted to override the limit.

15. The role of planning tools and reminders where decisions are made under pressure

Idea: Help people to make better financial decisions when they are under time and/or money pressure. Simple plans (often called 'implementation intentions') alongside reminders could help people under pressure to make positive financial decisions such as repaying more than the minimum amount on their credit card balance.

Why was it tested? Time and resource pressures, including financial pressures, can focus us on tasks that are directly in front of us, making us neglect other important tasks that are less salient or that require us to think about the future. Behavioural scientists call this effect 'tunnelling'.

Tunnelling can be a particular problem when we have borrowed money on a credit card. Credit cards require that a minimum repayment is made on the existing debt each month. This is typically featured prominently on the monthly statement. Whilst this minimum repayment can prevent debt spiralling, the figure can also act as an anchor, leading to lower repayments and potentially leading to large increases in the cost of borrowing. Repaying credit card debt more quickly can significantly reduce total cost.

People in the Money Advice Service (MAS) 'financially squeezed' segment[1] can be stretched for both money and time due to demands from their jobs, families or both. Time and money pressures can cause people in the segment to focus on short-term and reactive decision-making rather than planning for the future. With more time or resources, these people might make decisions with positive longer-term implications, such as making repayments that are higher than the minimum on their credit cards. Asking people to come up with simple plans outlining the actions they would then take in a certain situation in the future – an approach known as 'implementation intentions' – has been shown to help many people follow through on their intentions despite the pressures of everyday life.

We wanted to test whether simple plans could help people in the MAS financially squeezed segment to make longer-term financial decisions that reduced the overall cost of their borrowing. This idea has the potential to be a low-cost and scalable option to encourage people to make decisions that

benefit them in the longer term. These simple plans may help people to pay off more than the minimum amount on their credit card debt without requiring significant additional investments of time or attention.

How was it tested? In 2012, Anuj Shah, Sendhil Mullainathan and Eldar Shafir published their work on a series of experiments testing how people made decisions when operating under situations of scarcity and pressure, related to time, money or other resources.[2] One of their experiments was based on the popular game show *Family Fortunes*. We developed a new randomised controlled trial from the original design of the *Family Fortunes* experiment. We then ran this new experiment on our Predictiv platform for online experiments.

Our experiment tested whether implementation intentions could help participants to repay higher amounts when under time and resource pressure. Participants faced a series of *Family Fortunes*-style questions (for example, 'Name something that usually breaks when you drop it') and were given a limited amount of time to answer. Correct answers matched the most common answers given by 100 people, whom we had previously asked the same questions. Participants received a point for each guess that was one of the top five most common answers in our survey of 100 people. Participants were incentivised to perform well: they received more money the more points they scored. To try to score more points, participants could borrow extra time to make more guesses about which answers might be in the top five most common responses. As with a credit card product, borrowing had to be repaid at the end of a certain period – in this experiment, borrowers could repay credit at the end of each round of questions, but they had to repay all debt by the end of the final round.

The experiment simulated some of the borrowing and repayment decisions consumers regularly face when they use credit card products. In the experiment, we simulated the time pressure people in the MAS financially squeezed segment can be under by giving only 15 seconds for the participants to answer each question. We recorded the performance of participants in the game (how many points they scored) and their average repayments as a proportion of any extra seconds they borrowed as part of the game. We also looked at the borrowing choices of participants.

However, our test did not replicate a real-life customer journey, where someone intentionally chooses a credit card product and then borrows money. Instead, we gave participants a series of borrowing or repayment choices within

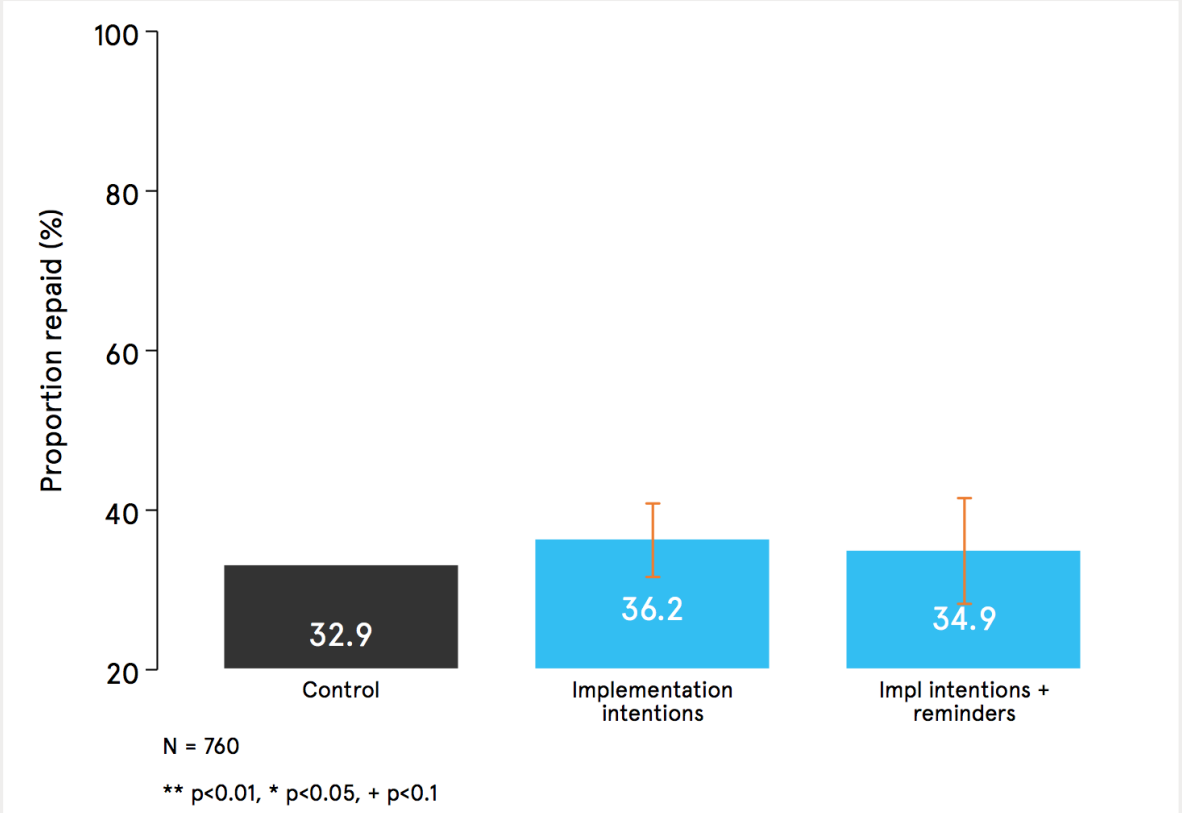
a specific laboratory game. This distinction is important for the experiment's findings and any wider conclusions we draw from them.

To test whether planning through implementation intentions would increase total scores and repayment levels within the game, participants were randomly allocated to one of three groups:

- A control group where participants could score points and borrow time. Repayment of borrowed time was required at the end of each round of questions.
- An intervention group where participants were asked to make a simple plan for repayment of any time they might borrow before they started the main game.
- A second intervention where participants made a simple plan and received a reminder of their plan when they came to make repayment decisions.

Findings: In this experiment, simple plans (with and without reminders) were not effective in increasing relative repayments on debt (seconds borrowed within the test) or helping people to score more points. We saw a slight positive increase in average payments as a proportion of overall debt. However, as can be seen in Figure 1, this result was not statistically significant.

Figure 1: Average payments as a proportion of overall debt



Participants in our intervention groups borrowed 29–34 per cent more than those in the control group. Participants in the intervention groups did repay more than those in the control, but this was because they borrowed more on average so they did not repay a higher proportion of their debt overall.

Finally, the majority of participants who made an implementation intention concerning how much they would repay each round did not choose to repay more than the minimum amount (20 per cent). There was a significant and positive relationship between participants setting a higher repayment commitment and then repaying a higher amount. Further research would be required, however, to establish whether this relationship was causal.

Recommendations: We do not recommend taking this idea to the field at this stage. The majority of our participants did not make a plan to repay a higher level than the minimum. Plans and reminders also appear to have increased borrowing relative to the control group.

Whilst the suggestion to make a plan was designed to increase the salience of repayment choices, it may also have increased the salience of the option to

borrow. It is important to note, however, that any real-world application of this intervention would likely be part of a wider credit journey where the consumer would have already decided to borrow. In this scenario, a test of implementation intentions need only focus on repayment decisions.

There is strong evidence for the usefulness of simple plans or implementation intentions in a number of areas – for example, helping people to attend appointments and job interviews. However, the specific environment in which we make a choice, and the presentation of it, can have large effects on our decisions. Borrowing and repayment decisions are complex, and careful consideration of the customer journey is necessary. Simple plans and reminders for repayment may still be appropriate for financial decisions, but further research is required into which points in the customer journey are appropriate.

Finally, the design of the Predictiv experiment may be appropriate to explore other types of credit product, such as overdrafts.

Why was it tested?

When under time or money pressure, people may struggle to make effective financial decisions. Simple plans (often called `implementation intentions') alongside reminders could help people under pressure to make effective financial decisions, such as repaying more than the minimum amount on their credit card balance.

In 2012, Anuj Shah, Sendhil Mullainathan and Eldar Shafir conducted a series of laboratory experiments, including a version of the game show *Family Fortunes*, where they looked at how scarcity of time and resources (for example, money) alters how we allocate attention. The thesis is that time or money scarcity leads people to engage more deeply in some immediate problems whilst neglecting other more strategic or long-term problems, a phenomenon the authors called `tunnelling'.[3]

We know that many people in the MAS financially squeezed segment find themselves under pressure to make financial decisions. This can be due to a lack of money or time in the context of demands from jobs, families or both. Around a third of people in the MAS financially squeezed segment have credit card balances that they `revolve' by only making minimum repayments.

To address this issue, people in the MAS financially squeezed segment who are revolving their credit card balances could increase their repayments. Inspired by the research into scarcity and the many ideas in the existing literature for addressing tunnelling, we wanted to test interventions that could encourage increased credit card repayments whilst taking into account the time and resource pressures people in the MAS financially squeezed segment may face.

As explored in previous research and in work by the Financial Capability Lab (the Lab) on increasing credit card repayments using slider interfaces,[4] our decision-making is often influenced by the first piece of information we are presented with, even if it is irrelevant.[5] Experiments have demonstrated the power of initial information in 'anchoring' our expectations. For example, one study showed that spinning a wheel of fortune to produce a number between 1 and 100 influenced the number that people guessed when asked what percentage of African countries are in the United Nations. People whose spins landed on lower numbers made lower guesses, whilst people whose spins landed on higher numbers made higher guesses, even though the number the spin landed on should have absolutely nothing to do with a person's guess at the answer.[6]

There is a requirement that all regulated credit agreements include a minimum repayment, which is included in the monthly statement sent to the product user. The minimum repayment ensures that consumers pay off at least a small fraction of their debt each month, in addition to fees and charges. Evidence suggests, however, that the minimum repayment also acts as an anchor that can lead to lower repayments.[7] Over time, lower repayments also greatly increase the cost of credit cards, because their holders continue to pay interest for far longer periods of time.[8] We were interested in whether people under time or money pressure may be particularly susceptible to this effect as a result of tunnelling, and whether there are interventions we could design to help.

One option would be defaulting individuals into making higher automatic repayments. There are, however, potential pitfalls of this option. For example, higher automatic payments might lead to pressures resulting in other forms of higher-cost credit being taken out to cover everyday bills.

Implementation intentions, a non-binding form of commitment that involves prompting people to develop their own plan of action in order to achieve a goal, have strong evidence for their effectiveness in a number of areas. This approach is based on the behavioural insight that there is often a disconnect between intentions and actions. People intend to do something but often fail to follow through on their intentions.[9] For example, a high proportion of people who

respond positively when asked whether they intend to exercise fail to do so in reality.[10] Similarly, whilst consumers often express an intention to save, they tend to fail to implement changes in their everyday lives and therefore commonly do not save as they intend.[11]

Prompting people to create a plan can improve the likelihood of them putting their intentions into action. For example, encouraging people to plan their future actions (by writing down the date and time of appointments) increases healthcare appointment attendance.[12] Implementation intentions work by tying an action (that will help someone to move towards achieving a particular goal) to a particular cue, in advance of the cue arising. When the cue arises, the pre-existing plan means the action is ready to be carried out, which makes it easier to complete than if the plan had to be devised there and then.[13]

In addition to examining simple plans and implementation intentions, we wanted to test whether timely reminders could help people to stick to the plans they had made.[14] This leverages existing Behavioural Insights Team work – for example, trials with HM Courts and Tribunals Service demonstrated that sending a simple text message in addition to issuing the regular reminder letter (compared to just issuing the letter) doubled the size of payments of fines and charges, helping to reduce the expense of sending bailiffs to visit debtors.[15]

To test whether implementation intentions and reminders could help people in the MAS financially squeezed segment to repay more than the minimum required repayment whilst under pressure, we designed an online randomised controlled trial using Predictiv, our online testing platform. The aim was for this research to give us rigorous evidence for whether our idea worked in a lab setting, to help us decide whether to take this idea to a field pilot.

Quantitative findings

Creating an experiment that reflects real-life decision-making

Shah, Mullainathan and Shafir's original *Family Fortunes* experiment found that those participants who had less time to answer the questions performed less well on the test. Additionally, those participants who had this time pressure borrowed more than those under less pressure. This extra borrowing by the participants under pressure did not seem to improve their score in the game.[16] For our test, we aimed to replicate the pressure and borrowing findings of the original test, whilst adding options for repayment and the simple plans and reminders that we

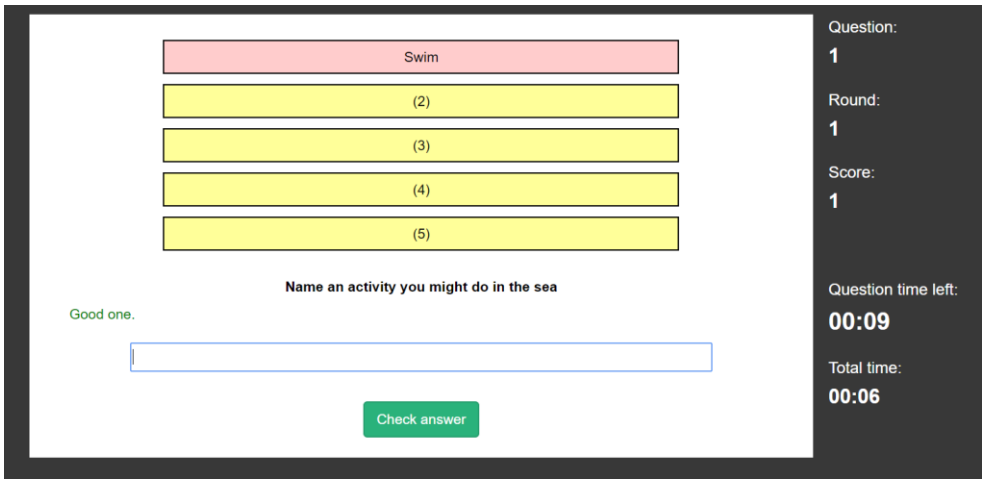
hoped would help participants repay more than the minimum and so score more points in the *Family Fortunes*-style game.

At the end of every month, credit card users make choices about whether to repay debt or carry it over (and incur interest). By including repayment decisions at various points during the game, we hoped to simulate some of the features of real-life repayment decisions regarding credit cards within the constraints of a laboratory setting.

The basic game design

Participants were asked a series of questions (for example, 'Name something that grows in a suburban garden') across several rounds, and they were given a limited amount of time to answer the questions (see Figure 2).

Figure 2: Participants had limited time to get as many answers correct as they could in response to *Family Fortunes*-style questions



To score points, the participants' answers needed to correspond to the five most common answers given by a nationally representative sample of 100 people in the UK whom we surveyed before we ran our experiment. Participants in the experiment received a point for each guess that was one of the top five most common answers.

Participants' performance in the experiment was incentivised. They received 20p for every 10 points they scored, and the top 10 per cent of performers received an additional £5. Participants also received a small sum for completing the test. The total points score for each participant was converted into an Amazon voucher, which they were given at the end of the test.

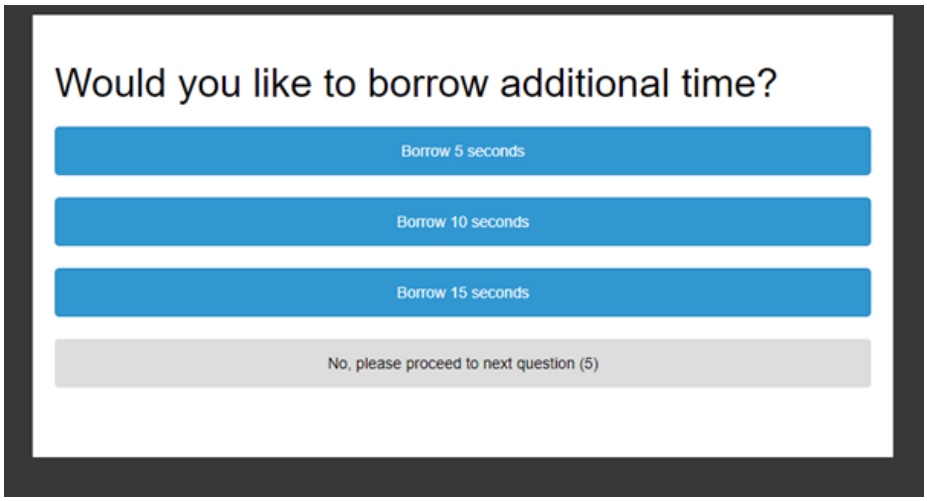
Pilot tests: developing the game's mechanism

We developed pilot versions of the test before launching our main experiment. These pilots allowed us to test four core assumptions:

1. **Increasing time pressure hurts performance.** In their original experiment, Shah, Mullainathan and Shafir found that players who had less time did worse than players who had more time.[17]

2. **A non-trivial number of participants choose to borrow time.** In the main experiment, we wanted to see whether we could influence people's repayment decisions, so we needed a sizeable proportion of participants to borrow time. Figure 3 shows the borrowing interface participants encountered.

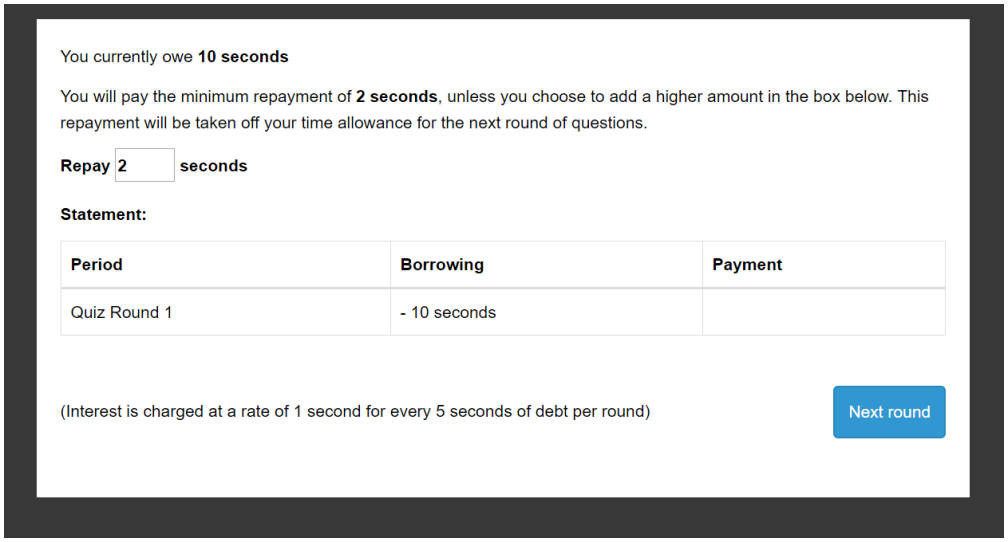
Figure 3: Participants had five seconds to decide whether they would like to borrow time in pilots 2–4 and the main experiment



3. **The addition of the interest rate did not greatly reduce overall levels of borrowing.** In the main experiment, we wanted to charge interest, as credit cards do, on debt that participants postponed repaying. Pilot 3 therefore added an interest charge to any seconds borrowed.

4. **Participants choose repayment levels close to the minimum in the absence of any intervention.** In the main experiment, we wanted to see whether we could influence people to pay off their debts sooner by paying more than the minimum repayment (see Figure 4). If everyone chose to repay straight away then we would not have a population on which to test our interventions.

Figure 4: The repayment screen that we introduced in pilot 4 – it appeared after each of the first four rounds



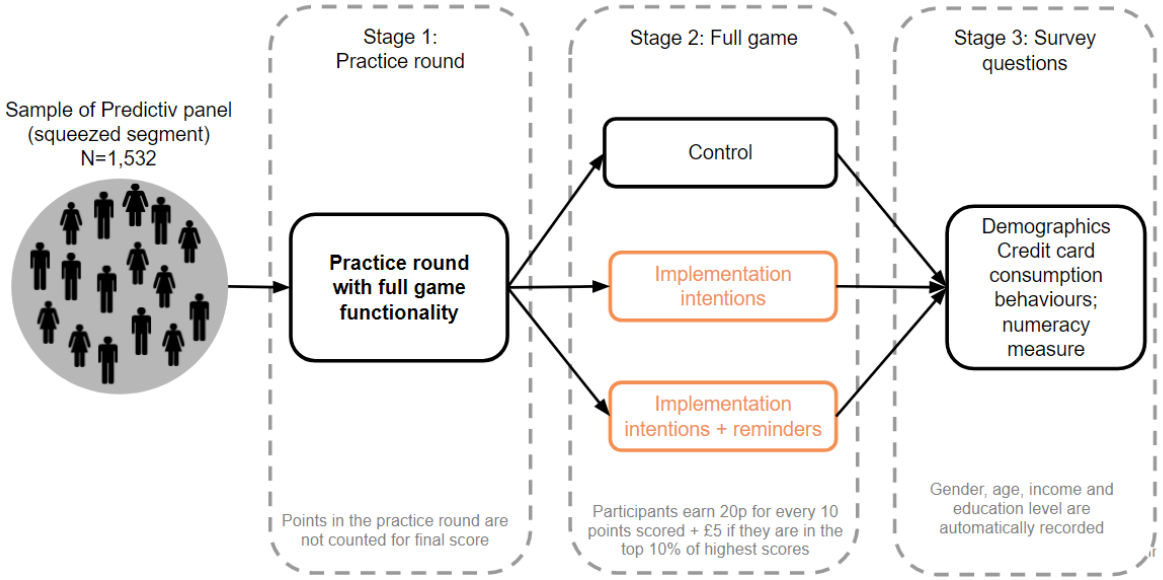
Our pilot results did not substantially challenge any of these assumptions.

The main test: design

In our main experiment, our 1,532 participants went through various stages: instructions, a short practice round, further instructions, the full game of 30 questions split into five rounds with repayment decisions between each round, and then survey questions.

In these survey questions, participants were asked various demographic questions, including a series of questions about their spending and credit behaviour.[18] We also gathered data on how numeracy skills may have interacted with performance in the test. We asked participants numeracy questions developed by MAS and National Numeracy.[19] The full game is outlined in Figure 5.

Figure 5: Test overview



Intervention groups

We randomly allocated participants to three different groups - a control group and two intervention groups (see Table 1).

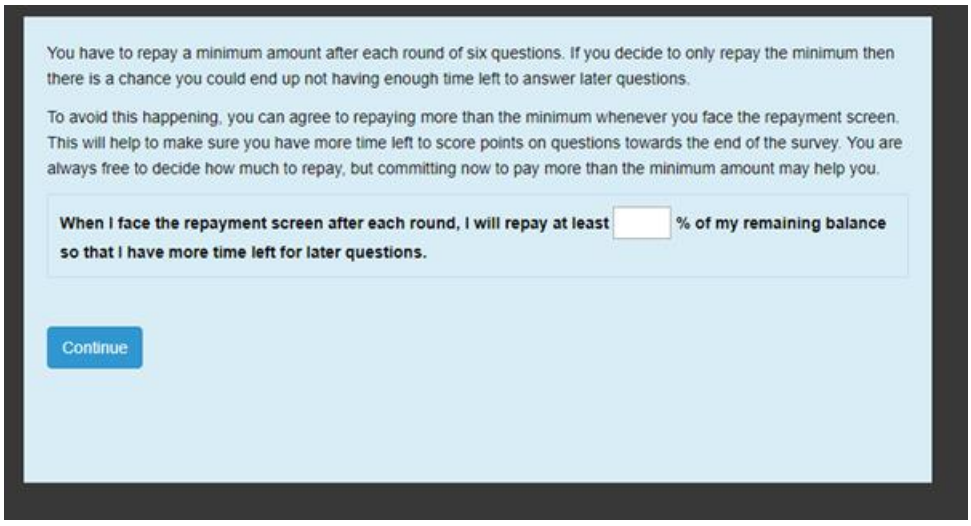
Table 1: Overview of the conditions in the test

Group	Intervention
Control	Participants played the game as normal, without any plans or reminders.
Implementation intentions	Participants were prompted to think about their performance and their repayment strategy for any borrowing before they started the main game. This means they were asked to take a moment to consider how best to win vouchers that they could spend on internet shopping. This implementation intention intervention was designed to help participants increase their repayments above the minimum amount whilst retaining the freedom to allocate repayments as they wished for each period. We told participants that if they decided to only repay the minimum amount each round

	then there would be a chance they could end up with too little time left to adequately answer later questions.
Implementation intentions plus reminders	Studies in other contexts (in particular healthcare) have found that reminders are influential in encouraging individuals to follow through on intentions.[20] We wanted to see whether reminding people of their original implementation intentions (i.e. how much they had committed to repay) at each repayment screen would affect their performance, borrowing and repayment choices.

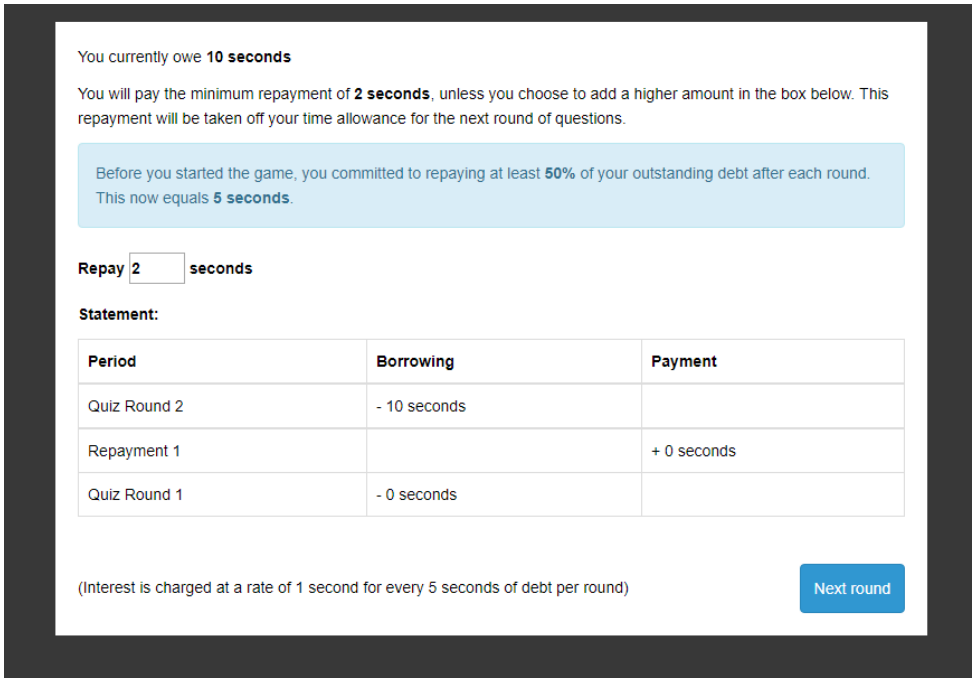
Figures 6 and 7 show the implementation intentions and reminder screens. The implementation intentions screen (Figure 6) was seen by participants in both intervention groups before the start of the main game. For participants in both intervention groups, 20 per cent was the minimum repayment amount. If participants entered an amount less than 20 per cent on the implementation intentions screen, a pop-up reminded them that they needed to repay at least the minimum. Note that participants were told in the initial game instructions that 20 per cent was the minimum required repayment.[21]

Figure 6: The implementation intentions screen



The second intervention group saw an additional light blue box on their repayment screen. This box reminded them of their original implementation intention (Figure 7).

Figure 7: The repayment screen with the implementation intentions intervention included



What we measured

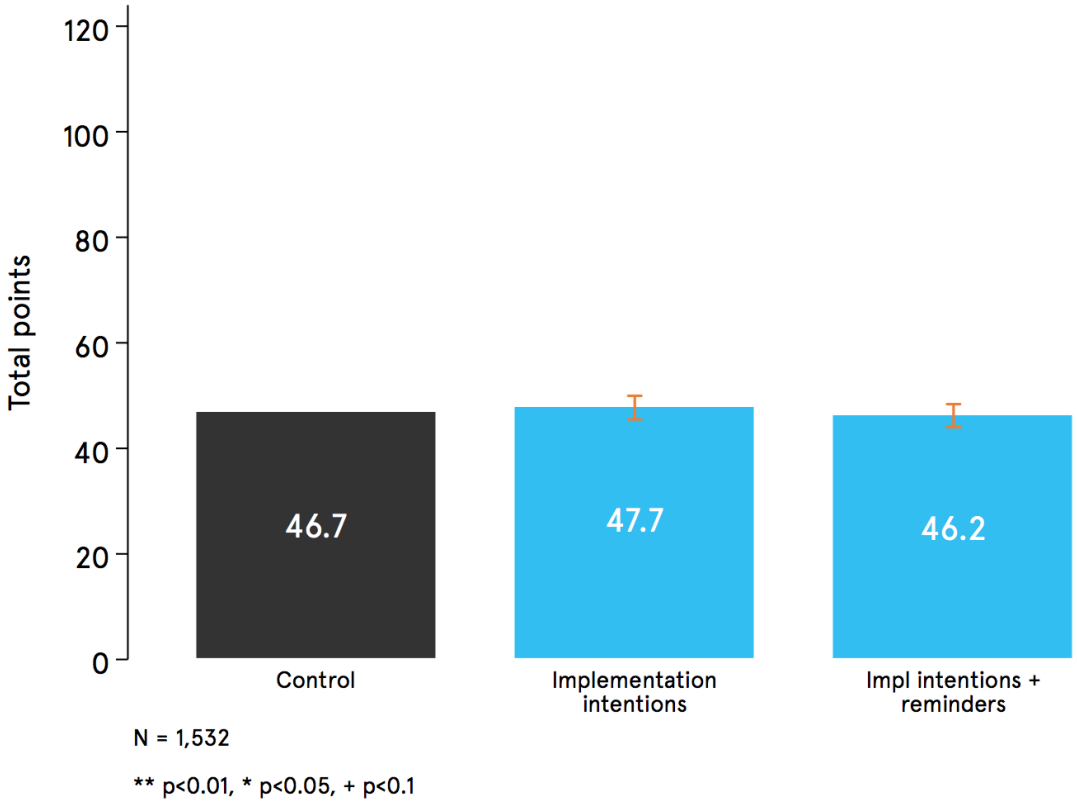
Our primary outcome measures were total points scored and average proportion of repaid time relative to outstanding debt. We only analysed the repayments made after the first three rounds of questions as any outstanding debt was automatically deducted before the participant started the fifth and final round. Although those with higher outstanding debt had less time, all participants had at least some time available for the final round. As participants could not borrow time in the fifth round, all participants were debt free by the end of the game.

We also looked at the number of seconds borrowed as a secondary outcome measure. At the end of the game, we asked participants in the intervention groups whether they could remember the plan to repay that they had made at the beginning of the game.

The main test: results

We found no statistically significant difference between the control and interventions for total points scored on average (Figure 8) or average repayment for those who borrowed time (Figure 9). As not all participants in each group chose to borrow, the numbers of participants included in the analyses below vary.[22]

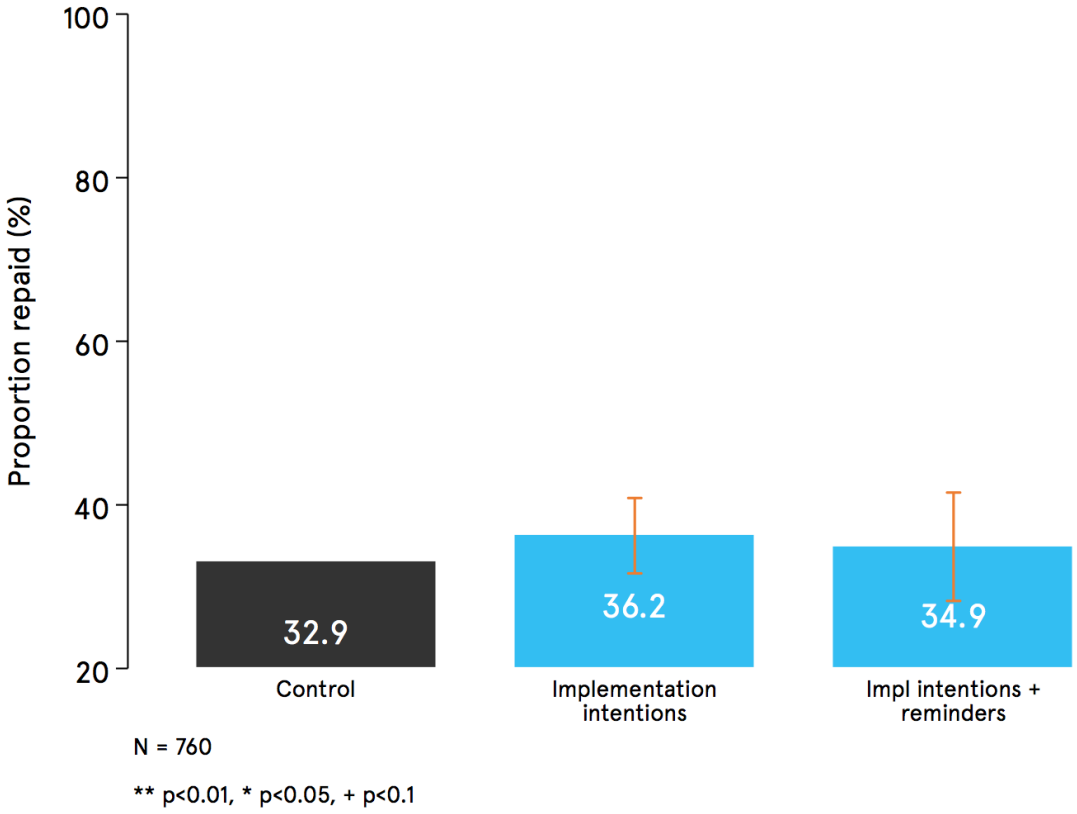
Figure 8: Intervention effects on total points scored



N = 1,532

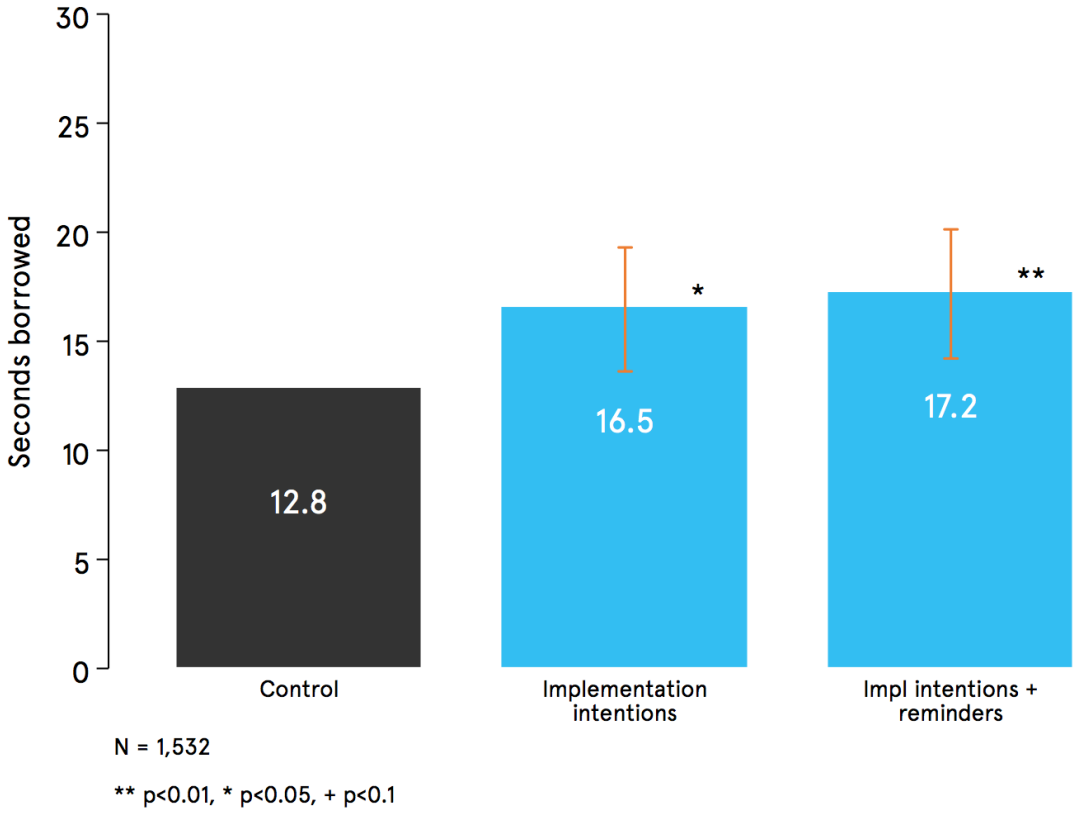
** p<0.01, * p<0.05, + p<0.1

Figure 9: Intervention effects on proportion of total debt repaid



We also looked at whether there was a difference in the total amount of borrowed time across the different conditions (Figure 10). We found that our implementation intentions interventions both significantly increased total borrowing on average by 4 seconds (a 31 per cent increase compared to the control). Borrowing was also higher for participants who were asked to make implementation intentions and then provided with reminders (4 seconds or a 34 per cent increase relative to the control). This result implies that drawing the attention of participants to repayment options may have also drawn their attention to the possibility of borrowing within the context of this experiment.

Figure 10: Intervention effects on total time borrowed



Our interventions aimed to encourage participants to repay more than the minimum amount. It was striking that, despite this, the average repayment for participants in both intervention groups was strongly clustered at 20 per cent – the minimum repayment (see Figure 11). Borrowing and repayment choices involve complex trade-offs; as has been observed with credit card repayments, it may have been that participants were anchored towards this figure.[23]

Figure 11: Intervention effects on average repayment levels

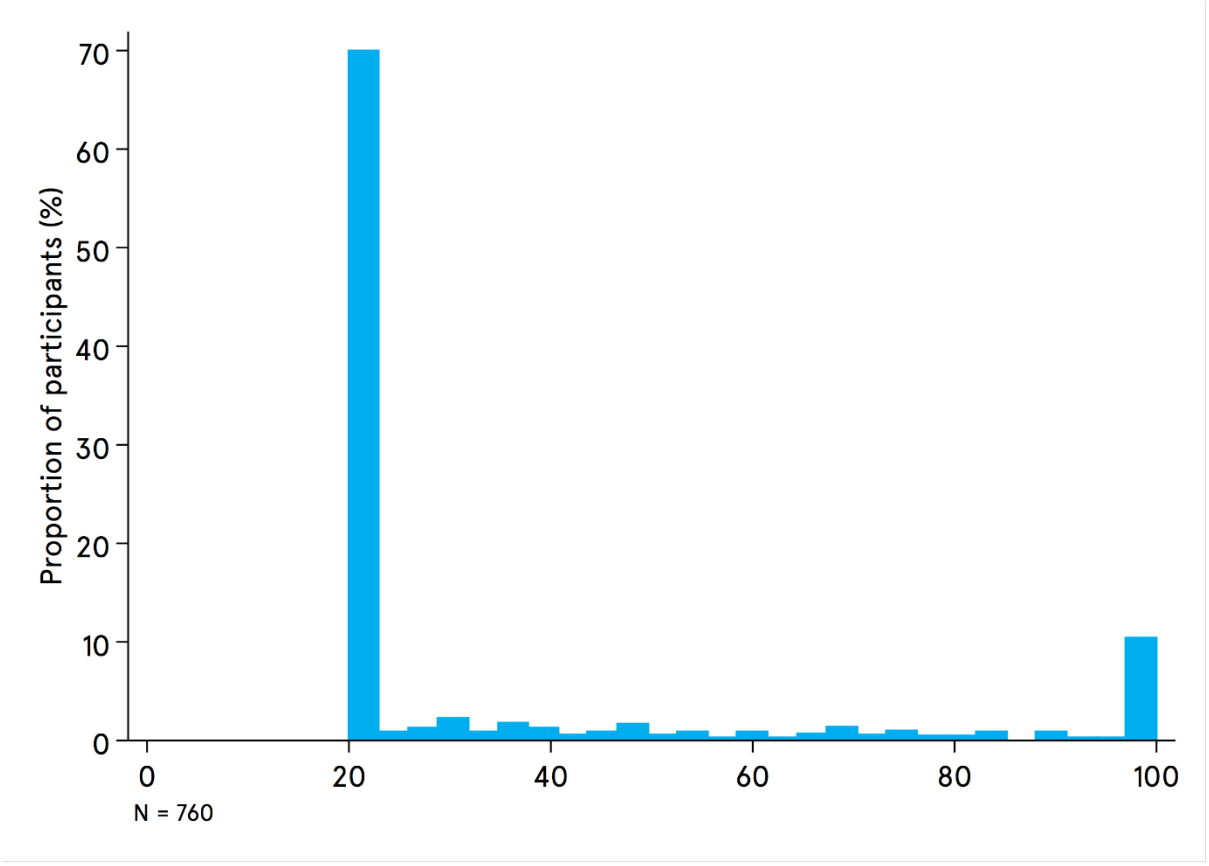
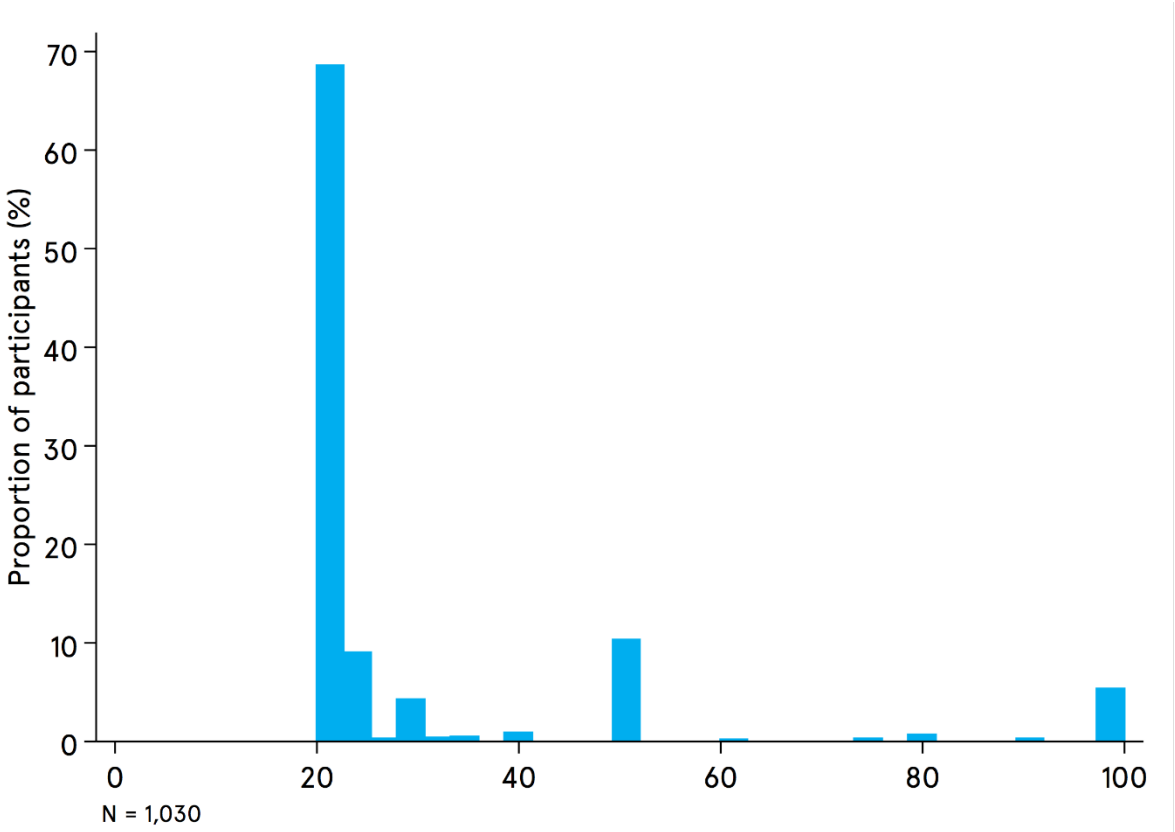


Figure 12 shows the distribution of repayment plans (combining plans made both with and without reminders). We found that the majority (69 per cent) of participants who made plans chose the minimum repayment level of 20 per cent. The design of our implementation intention was therefore not effective at encouraging participants to consider repaying more than the minimum.

Figure 12: Distribution of repayment commitment for participants in interventions 1 and 2; participants in the control group did not make a commitment



Nearly 7 out of 10 of our participants chose 20 per cent as their planned repayment level, suggesting that many people may have initially planned to repay less than 20 per cent, only to see an error message that prompted them to input at least the 20 per cent minimum into the box. The input box was blank by default. Including a higher default repayment may have led to higher implementation intentions (and higher repayments too). If we ran the test a second time, we could try using stronger language or framing the plans as losses to be avoided rather than gains to be made.

Nearly 9 out of 10 (86.4 per cent implementation intentions only and 88.4 per cent with additional reminders) participants who made an implementation intention were able to accurately recall the plan they had made at the start of the game. As the majority of participants who made plans could also recall them at the end of the game, we would not expect reminders to have much additional effect within the scope of this 15 minute experiment. The difference between recall and commitment was higher for the intervention with reminders, but this

was not statistically significant. We can therefore not exclude the possibility that differences might have been due to chance.

Whilst our reminders were all sent within a 15 minute game, many card holders may only look at their credit card statement once a month or even less frequently. Whilst reminders can sometimes backfire, for instance by irritating people,[24] they may well still be helpful in a real-life credit-related decision-making context, where time lags are much longer than in our experiment.

As part of our exploratory analysis, we also highlight some additional interesting results:

- **Committing to pay higher than the minimum amount may help people to follow through on their plan.** One of the main reasons we did not find a stronger effect of implementation intentions is that the majority of participants did not commit to a repayment level above the minimum. Amongst the group that did commit to higher repayments, we found a statistically significant positive correlation between the amount participants planned to repay and the average repayment they made relative to their outstanding debt overall. Whilst it is important to stress that this is not necessarily supportive of a causal relationship, it does suggest that it might be worth exploring whether strengthening the original implementation intention could help people to repay more than the minimum amount.

- **The performance of borrowers was lower than that of those who did not borrow.** We looked at the difference in scores between participants who chose to borrow time and those who did not. Again, whilst the differences cannot be causally attributed to borrowing, this comparison allows us to draw parallels with the original experiment by Shah, Mullainathan and Shafir, which found a negative effect of borrowing on performance in the *Family Fortunes*-style game. We saw a significant negative correlation between having borrowed time as well as total borrowing, and the participants' total score. We also found a significant positive correlation between average repayments (as a proportion of debt) and total score.

- **Higher levels of numeracy increased score and average repayments.** As in some of our other Lab research, we found that those with higher numeracy performed better. Numeracy was positively and significantly correlated with both total score and average repayment relative to total debt. The effect size was large: for repayments, the difference between individuals

with the lowest numeracy score and the maximum score was 19.3 percentage points. One avenue for future research may be specifically targeting and supporting those with a lower capability to make effective decisions.

Recommendations

We do not recommend taking this idea forward at this stage. The majority of our participants did not make a plan to repay a higher level than the minimum amount. Plans and reminders also appear to have increased borrowing relative to the control group.

Whilst the suggestion to make a plan was designed to increase the salience of repayment choices, it may also have increased the salience of the option to borrow. It is important to note, however, that any real-world application of this intervention would likely be part of a wider credit journey where the consumer would have already decided to borrow. In that scenario, a repayment implementation intention may not necessarily increase the salience of borrowing to the consumer.

There is strong evidence for the usefulness of simple plans and implementation intentions in a number of areas – for example, helping people to attend appointments and job interviews. However, the specific environment in which we make a choice, and the presentation of it, can have large effects on our decisions. Borrowing and repayment decisions are complex, and careful consideration of the customer journey is necessary. Simple plans and reminders for repayment may still be appropriate for financial decisions, but further research is required into which points in the customer journey are appropriate.

Finally, the design of the Predictiv experiment may be appropriate to explore other types of credit product, such as overdrafts.

Endnotes

[1] Money Advice Service. (2016).The squeezed segment. These are working-age consumers with significant financial commitments but relatively little provision for coping with income shocks.
[2] Shah, A. K., Mullainathan, S., & Shafir, E. (2012). Some consequences of having too little. Science, 338(6107), 682–685.
[3] Shah, A. K., Mullainathan, S., & Shafir, E. (2012). Some consequences of having too little. Science, 338(6107), 682–685.
[4] This experiment looked to help people to pay off their credit cards more quickly and cheaply by increasing repayments using a slider interface. Sliders are used across the financial services sector, often to help people decide how much they would like to borrow. The repayment sliders in this experiment were designed to help people avoid excessive interest charges whilst conforming to current regulatory requirements. The report is available on the MAS and BIT websites, titled `Increasing Credit Card Repayments'.
[5] Tversky, A., & Kahneman, D. (1974). Judgment under uncertainty: Heuristics and biases. Science, 185(4157), 1124–1131.
[6] Tversky, A., & Kahneman, D. (1974). Judgment under uncertainty: Heuristics and biases. Science, 185(4157), 1124–1131.
[7] Financial Conduct Authority. (2016, July). Credit card market study. Retrieved 13 March 2018 from https://www.fca.org.uk/publication/market-studies/ms14-6-3-credit-card-market-study-final-findings-report.pdf; Keys, B. J., & Wang, J. (2016). Minimum payments and debt paydown in consumer credit cards (Report No. w22742). National Bureau of Economic Research; Stewart, N. (2009). The cost of anchoring on credit-card minimum repayments. Psychological Science, 20(1), 39–41.
[8] Stango, V., & Zinman, J. (2009). What do consumers really pay on their checking and credit card accounts? Explicit, implicit, and avoidable costs. American Economic Review, 99(2), 424–429; Stewart, N. (2009). The cost of anchoring on credit-card minimum repayments. Psychological Science, 20(1), 39–41.
[9] Sheeran, P., & Webb, T. L. (2016). The intention–behavior gap. Social and Personality Psychology Compass, 10(9), 503–518.
[10] Rhodes, R. E., & Bruijn, G. J. (2013). How big is the physical activity intention–behaviour gap? A meta-analysis using the action control framework. British Journal of Health Psychology, 18(2), 296–309.
[11] Choi, J. J., Laibson, D., Madrian, B. C., & Metrick, A. (2004). For better or for worse: Default effects and 401 (k) savings behavior. In D. Wise (Ed.), Perspectives on the Economics of Aging (pp. 81–126). Chicago, IL: University of Chicago Press.
[12] Milkman, K. L., Beshears, J., Choi, J. J., Laibson, D., & Madrian, B. C. (2011). Using implementation intentions prompts to enhance influenza vaccination rates. Proceedings of the National Academy of Sciences, 108(26), 10415–10420.
[13] Gollwitzer, P. M. (1999). Implementation intentions: Strong effects of simple plans. American Psychologist, 54(7), 493–503.
[14] Behavioural Insights Team. (2014). EAST: Four simple ways to apply behavioural insights.
[15] Behavioural Insights Team. (2014). EAST: Four simple ways to apply behavioural insights.
[16] Shah, A. K., Mullainathan, S., & Shafir, E. (2012). Some consequences of having too little. Science, 338(6107), 682–685.
[17] Shah, A. K., Mullainathan, S., & Shafir, E. (2012). Some consequences of having too little. Science, 338(6107), 682–685.
[18] Work by Haaland and Roth finds that responses are consistent when participants are asked such questions immediately compared to in an obfuscated survey that is administered with a time lag. See Haaland, I., & Roth, C. (2017). Labor market concerns and support for immigration. Retrieved 2 April 2018 from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3017420.
[19] The numeracy questions were drawn from Money Advice Service. (2015). Technical report for the 2015 Financial Capability Survey. They were developed with advice from National Numeracy (https://www.nationalnumeracy.org.uk).

[20] McLean, S. M., Booth, A., Gee, M., Salway, S., Cobb, M., Bhanbhro, S., & Nancarrow, S. A. (2016). Appointment reminder systems are effective but not optimal: Results of a systematic review and evidence synthesis employing realist principles. Patient Preference and Adherence, 10, 479–499; Robotham, D., Satkunanathan, S., Reynolds, J., Stahl, D., & Wykes, T. (2016). Using digital notifications to improve attendance in clinic: Systematic review and meta-analysis. BMJ Open, 6(10), e012116.

[21] We chose the 20 per cent minimum repayment as a compromise between our lab environment and actual minimum repayment levels in the real world. If we had picked too high a figure, we would not have had an opportunity to test the effectiveness of implementation intentions. If we had picked too low a figure, it might have seemed like we were misrepresenting real-life rates. It follows that 20 per cent was the compromise that could be most easily manipulated using mental arithmetic by numerate participants – for example, 'If I pay 20 per cent of my 10 second debt now, it will leave 8 seconds.'

[22] The numbers (N) in these figures vary because the measure was specific to (1) everyone; (2) everyone in interventions 1 and 2; (3) those borrowing across all groups; and (4) those borrowing in interventions 1 and 2. For instance, Figure 8 includes results from everyone, whilst Figure 9 only includes those who borrowed across all groups – some participants did not choose to borrow at all.

[23] Academics, including Neil Stewart, have looked at the distribution of repayments on credit cards above the minimum required level. For instance, see Stewart, N. (2009). The cost of anchoring on credit-card minimum repayments. Psychological Science, 20(1), 39–41. See also Financial Conduct Authority. (2016, July). Credit card market study. Retrieved 13 March 2018 from https://www.fca.org.uk/publication/market-studies/ms14-6-3-credit-card-market-study-final-findings-report.pdf.

[24] Recent work on charitable giving finds that email prompts to donate can lead to individuals unsubscribing from the charity's mailing list: Damgaard, M. T., & Gravert, C. (2018). The hidden costs of nudging: Experimental evidence from reminders in fundraising. Journal of Public Economics, 157, 15–26.