Reducing rent arrears at Metropolitan Housing

Final project report from The Behavioural Insights Team

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1 Executive summary

1.1 Background

Rent arrears present a considerable challenge for Metropolitan Housing (MH), with around 15-20% of MH customers in arrears at any one time. A project between MH and The Behavioural Insights Team (BIT) began in early 2017, with the aim of using behavioural insights to address MH's arrears situation. This report is structured around the three key stages of this work, in addition to two separate scoping studies, as follows:

Stage 1: 'Explore'

BIT initially undertook several stages of exploratory work, to gain a deep understanding of the determinants of arrears, and the context within which decisions about paying rent are made. As part of this 'Explore' work, BIT conducted predictive analytics work on MH's historical transaction and arrears data, to look for patterns with the rent arrears data, and look for variables that predict whether someone will enter arrears before it happens (summarised at Appendix B).

The Explore stage also involved detailed qualitative research with customers and front line staff, to deliver a rich understanding of both customer perceptions of Metropolitan and the experience of being in rent arrears, as well as front line staff's views of the arrears process. BIT also conducted a wideranging literature review of relevant academic and policy literature on arrears and wider financial behaviours, to guide thinking for this project, and to act as a reference for MH in their own future behavioural insights projects (included in section 7).

Stage 2: 'Solution'

Building on this exploratory work and BIT's previous experience in designing behavioural interventions, we created a longlist of potential solutions for tackling the arrears problem. These solutions included behavioural interventions that were relatively feasible and easy to test, but also a number of ideas intended to be 'stretch goals' to inform MH's medium or long term plans for applying behavioural insights to their business challenges. The longlist of solution ideas is included at Appendix D – Solutions ideas.

Stage 3: 'Trial'

From the longlist of solution ideas, in collaboration with MH, we selected a small number of ideas that were judged to be both feasible to implement, and also hold potential for high impact. These ideas were piloted through three Randomised Controlled Trials (RCTs), each tackling a different aspect of the arrears problem. Firstly, by encouraging more customers to pay their rent by Direct Debit (DD) we expect less customers to fall into arrears (Trial 1). Secondly, by reminding customers when their rent is due, we expect less customers to fall into arrears (Trial 2). Finally, by improving MH's suite of

arrears communications, we expect that who fall into arrears to exit the process more quickly (Trial 3). The results from each trial are summarised below, with more detail in sections 3, 4 and 5.

Scoping studies

Additionally, two scoping studies (published as separate documents) were intended to inform innovative approaches using behavioural science to significant business problems: the transition to Universal Credit, and missed maintenance appointments.

1.2 Summary of Explore stage

1.2.1 Data science

We constructed a predictive model using a year of MH's transaction and arrears data. This model aimed to predict future likelihood of entering arrears based on customers' past arrears behaviour and other demographic variables. The model achieved a three-times efficiency improvement over random chance. That is, by using the model to identify the most at-risk 20% of customers, this 20% captures 60% of customers who subsequently enter Priority 1 (the highest level) arrears.

This data science exercise also shows us that the greatest risk-factor for entering arrears in the future is having spent more weeks in arrears (than other customers) over the past year. This suggests that targeting past-arrears customers (e.g. with pre-emptive support) will be more effective than targeting customers on other variables – though some other variables do have a modest predictive power of future arrears. These include value of rent, increasing age of tenants and higher air quality/lower traffic accident areas, which all predict a *decrease* in Priority 1 arrears risk while extra cohabiting residents (such as children) predict an *increased* Priority 1 arrears risk.

1.2.2 Customer and staff qualitative research

Qualitative interviews with MH staff and customers suggested a complex arrears picture, but with key categories of customers emerging. Each category was associated with different primary drivers for being in rent arrears:

- Struggling customers who are genuinely trying to meet their financial commitments but experience challenges with insufficient income relative to outgoings, or low levels of financial capability.
- **Strategic** customers who make a decision not to prioritise paying their rent, or have their 'head in the sand' so decide not to engage with MH in the arrears process.
- **Disorganised** customers who fail to pay rent as they are simply disorganised or forgetful, not because they have made a strategic decision or are financially struggling.

While we knew that customers enter arrears for these reasons, the scope of the current project did not allow us to determine a robust method to allocate customers to each group, or calculate the relative sizes of each group, as a first step towards developing more targeted interventions. This

might be a worthwhile exercise for MH to undergo, albeit resource-intensive, requiring extensive survey work of customers to identify and categorise their main reasons for entering arrears.

1.3 Summary of Trial results

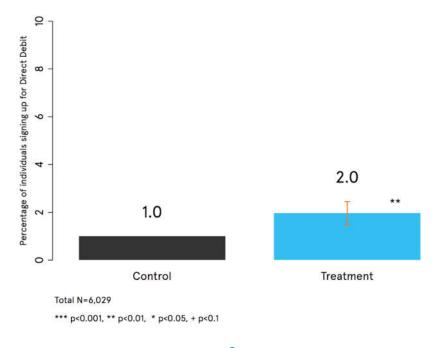
Randomised controlled trials (RCTs) are the best way of determining whether an intervention is successful, considered to be the 'gold standard' of impact evaluations. The key feature of an RCT is that it involves a randomly assigned control group, who do not receive any intervention (or receive the 'business as usual'). This enables you to compare the effectiveness of an intervention against what would have happened if you had changed nothing.

1.3.1 Trial 1: increasing sign-up to Direct Debit

The intervention consisted of sending a letter or postcard to MH customers not currently paying through Direct Debit (DD), plus two SMS messages (one coinciding with the letter, and one a week later). Four variations of this intervention were tested, varying the format (postcard vs. letter), the ease of signing up (tear-off DD form included vs. not) and the inclusion of an incentive (£1000 prize draw vs. not). A control group received no letter, prize draw or SMS.

Overall, we find that customers who received any of the four interventions were significantly more likely to sign up to DD than customers in the control group. The intervention roughly doubled the number of DD sign-ups. This is statistically significant. However, the absolute numbers are still very small, as presented in Figure 1: 60 customers (2%) signed up in the treatment group, compared to 30 (1%) in the control group. For this reason comparisons between the interventions are not robust (discussed in section 3.5.2).

Figure 1: Impact of the interventions on percentage of customers signing up to pay by DD



1.3.2 Trial 2: Reducing the number of customers who enter arrears

The intervention consisted of sending of a reminder to customers to pay their rent. Customers who pay their rent weekly (and who were not in receipt of housing benefit and did not pay by DD) were placed in two groups. The treatment group received a weekly SMS (on a Monday morning) reminding them to pay their rent, while the control group received no reminder SMS.

We found that customers who received SMS messages were significantly less likely to fall into arrears during the trial period than those in the control group. The intervention decreased the proportion of customers who fell into arrears at least once during the trial period by 5.6% points, from 57.2% in the control group, to 51.6% in the treatment group. This is a relative reduction of 10%, and is a statistically significant difference. These results are presented below in Figure 2.

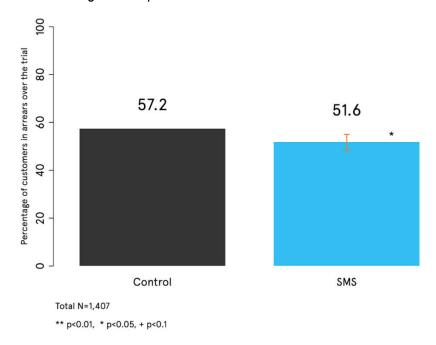


Figure 2: Impact of the intervention on arrears status

1.3.3 Trial 3: Helping customers get out of arrears

This trial tested a new suite of behaviourally-informed arrears communications to increase the speed that customers exit the arrears process.

When MH's general needs customers enter rent arrears they receive a series of correspondence. This involves (in order) Letter 1, Letter 2, Notice of Seeking Possession (NOSP) and Letter 5. The treatment group received alternate versions of each of these communications, and received an SMS message to coincide with each letter. The control group were sent the business-as-usual set of correspondence. The treatment letters incorporated a variety of behavioural insights, including simplification, clearer calls to action, reciprocity and personalisation. The trial letters and SMS messages can be found at Appendix E.

Our analysis found that customers in the treatment group were in arrears for an average of 6.6 weeks, compared to an average of 6.9 weeks for customers in the control group, however this difference was not statistically significant.

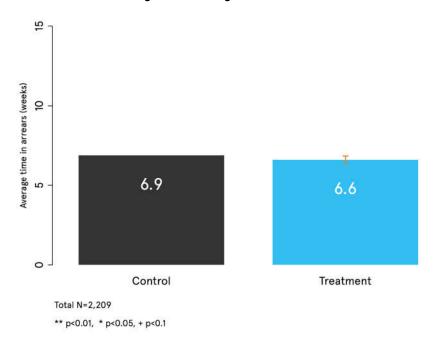


Figure 3: Average time in arrears

We also found a lower arrears balance between the two groups, although again this difference between control and treatment groups was not statistically significant. Our analysis did however, suggest treatment customers left the trial at an earlier stage, and made more contact with MH – and these differences were statistically significant (discussed in sections 5.5.5.2 and 5.5.3).

1.4 Discussion and recommendations for future work

Results from the three RCTs suggest that behaviourally-informed communications hold significant potential for positive improvements to MH's arrears situation. Specifically, the interventions were successful in:

- significantly reducing the number of customers entering arrears;
- increasing the number of customers paying by direct debit;
- increasing the number of customers in arrears making contact, and
- less conclusively, may have slightly brought forward the point at which customers exit arrears.

Human behaviour can be very difficult to change, particularly in light of the fact that some customers face significant barriers (e.g. a genuine inability to pay) or strong conflicting motivations (e.g. a strong aversion to signing up to Direct Debit to maintain greater control over financial outgoings). In this

context the three trial results represent a success, and offer valuable learnings to MH as they continue to draw on behavioural insights to find further improvements.

Below we note some general observations from all three trials – more specific points are included in the detailed summaries of each trial later in this report.

Differential impacts on different customer segments.

One of the key insights is that we are likely to have had a greater impact on some types of customers than others, and this is to be expected given the different barriers and motivations we face. Broadly we identified three categories of customers defined by their main causes of facing arrears: financial pressure (the struggling), forgetfulness and lack of financial organisation (the disorganised), and deliberate choice to prioritise other expenditures or to 'use' rent arrears as a cheap form of credit (the strategic). A full segmentation exercise dividing the customer base into these categories has not been undertaken, as it would require significant survey work to understand, and allocate, the motivations of the whole arrears customer base. However, this insight nonetheless helps to interpret the results of the three trials, and may assist with the development of further behavioural solutions.

For instance, whilst we had success in encouraging Direct Debit sign-up, our impact is likely to be limited at those struggling to pay (and thus as greater risk or having a DD payment fail), and those who are deliberately using arrears to their advantage, are both strongly motivated to maintain control of their outgoings and therefore motivated against the use of DD. We suggest it is therefore likely that the incentive to use DD was most effective among disorganised customers (who are most likely to benefit from it, and least likely to be averse to it). It may take a much stronger incentive to motivate the strategic customers.

The results of Trial 2 (into arrears) suggest that reminders to pay rent can reduce the number of customers who enter arrears by 10 percent. Again, we might speculate such a reminder is likely to be most effective amongst two of the three categories: disorganised customers, for whom a timely prompt is a helpful reminder to pay rent; and the strategic, for whom a social norm informing them that most people pay their rent on time may recalibrate their beliefs about the acceptability of entering arrears. Again, those who genuinely struggle to pay are not likely to be helped by a reminder SMS. Indeed all light-touch 'nudge' type interventions will have limited impact on those with major financial difficulties, to the extent that they are forced to make genuine trade-offs between, for example, buying food and paying their rent. An exception to this might be the increased contact rates among those in arrears seen in Trial 3. By taking a more friendly and approachable tone, it is plausible that this increase in contact included struggling customers, for whom eliciting greater communication should be considered a success, compared to the alternative strategy of disengagement and failure to address the issue.

Quantifying the number of customers who fall into each segment (struggling, disorganised, strategic) would therefore be a useful next-step, such that MH can strategically direct their efforts towards nudging the disorganised, developing stronger incentives or sanctions for the strategic, and offering more intensive support to the struggling. We note, however, this is a substantial undertaking, as it would require extensive surveying of their customer base to identify, and allocate, their financial situation and motives/causes for entering arrears.

Capacity building

One of the major motivations for running this project was to allow MH to learn and develop the behavioural-insights capabilities to run their own projects in future. To this end BIT provided a series of training sessions, whilst the wider project was designed to help MH staff learn-by-doing. Following feedback from MH, we understand the significant time and effort in designing, launching and managing RCTs presented some challenges. However, based on what has been learnt so far, we recommend MH continue on a journey of testing and adapting, potentially working towards an ambitious program in the future that encompasses both segmented and targeted communications. We recommend starting by identifying 'low hanging fruit' where a.) the behaviour might conceivably be influenced, i.e. is not subsect to unusually stubborn practical or behavioural barriers, b.) delivering the intervention (i.e. making changes to MH process) is feasible, and c.) data collection on the behaviour in question is also feasible.

Additionally, some of the analysis was made more challenging as a result of data that is complex and in certain situations, of questionable reliability. Such data may have historically served MH's analysis purposes but may undermine the aspiration of developing a culture of testing and optimisation. Considering ways to simplify or rationalise data management will help MH to manage future BI projects.

Additional takeaways for MH

One key insight emerged which is likely to be dampening all efforts to reduce rent arrears. Our explore work suggested a 'last mile' problem – where customers' intentions are thwarted at the final stage through obstacles and extra frictions that make it challenging to follow-through. In this case, customers systematically reported difficulty in getting through to speak to MH staff. The power of any previous intervention may be diluted through the friction involved in completing an action. We recommend that MH examines this issue further, and we stress the importance of making the desired behaviours (many of which require calling MH's telephone line) as easy as possible. Any steps taken to ease this process for customers is likely to pay dividends in the impact it has on arrears resolution (this would include, but not be limited to, reducing the hold time significantly). Alternatively, rather than focusing on making it easier to get through on the phone, MH might consider using BI to further encourage channel shift towards digital interactions through a website or app, to reduce the reliance on phone communication.

We also suggest MH conduct further work to enable robust return on investment (ROI) calculations. Quantifying the financial savings of a single extra customer paying by direct debit, or exiting the arrears process earlier would allow MH to calculate overall organisational impact from BI projects, and model different levels of investments to help develop a business case for further work.

Having worked closely with BIT on delivering this trial, MH's Insights and Income teams should be in a strong position to take these learnings forward, and embark on their own program of RCTs to extend learnings from this trial.

2 Background: Reducing rent arrears at Metropolitan

Rent arrears are a considerable challenge for MH, with around 15-20% of MH customers in arrears at any one time. To address these challenges, BIT undertook a project adopting BIT's standard TEST framework for how we approach a behavioural insights project. This covers four phases: Target (defining the target behaviour we wish to change); Explore (understanding the context within which decisions are made); Solution (creating interventions based on our previous trials and the behavioural science literature); and Trial (designing and running a robust trial to understand the impact of these interventions).

In this project, the overarching aim was to reduce MH's rent arrears, with three specific Target behaviours:

- 1. Encouraging greater uptake of Direct Debit among general needs customers
- 2. Encouraging customers to pay on time and thus reduce the number of those entering arrears
- 3. Encourage those who do enter arrears to clear their arrears or come to an arrangement more quickly.

Explore work, which included qualitative interviews with MH customers and staff revealed a complex arrears landscape. A key insight that emerged from this research was that there are three key categories of customers, and each category is associated with different primary drivers for being in rent arrears:

- Struggling customers who are genuinely trying to meet their financial commitments but experience challenges with insufficient income relative to outgoings, or low levels of financial capability.
- **Strategic** customers who make a decision not to prioritise paying their rent, or have their 'head in the sand' so decide not to engage with MH in the arrears process.
- **Disorganised** customers who fail to pay rent as they are simply disorganized or forgetful, not because they have made a strategic decision or are financially struggling.

The full output from the Explore work is available at Appendix C.

Based on the insights from our Explore work, BIT's previous trials and the wider behavioural science literature we developed a longlist of potential solutions. These ranged from adjusting the timings of communications, to deploying systems of behaviourally-informed incentives, and were intended to serve as a source of ideas for MH to consider applying in future. A full summary of ideas is provided at Appendix D.

For the next stage of this project MH and BIT collaboratively prioritised the interventions, identifying three solution ideas which were deemed to be both highly feasible and had high potential impact. These formed the basis of the three trials summarised in this report as follows:

- 1. **Trial 1**: Increase the proportion of customers who pay their rent by DD, based on the premise that Disorganised customers are less likely to fall into arrears if they have a DD that does not require a repeated action to pay their rent.
- 2. **Trial 2:** Remind customers when it is time to pay their rent. Strategic and Disorganised customers may respond to a timely prompt to pay, which is intended to reduce the number of customers entering arrears.
- 3. Trial 3: Increase the speed that customers exit arrears by improving MH's suite of arrears communications. At the individual level, we do not know if customers are Struggling, Strategic, or Disorganised, so this trial tested a series of behaviourally-informed communications that incorporated insights designed to motivate payment amongst Strategic and Disorganised customers, and to increase contact from those Struggling or unable to pay.

The remainder of this report summarises the findings from these three trials. Details of the Explore work and the longlist of Solutions can be found in Appendices C and D respectively.

3 Trial 1: Encouraging uptake of Direct Debit

3.1 Background

This trial intended to reduce arrears by increasing the number of customers paying their rent by DD. However, qualitative research with MH customers indicated high levels of resistance to paying rent using this payment method.¹ Of MH's customers, approximately 30% pay their rent by DD. Fieldwork conducted as part of the project suggested that low uptake is not due to low levels of awareness of DD; customers broadly understand both how it works and its benefits (and frequently use it to pay other bills), but there remains resistance to this method of paying their rent (see Appendix C for further detail).

For many MH customers, particularly those on benefits, the benefits payment schedule was a perceived barrier to paying by DD. Customers were concerned that a fixed DD date might not align with the date they receive their income, and often did not realise that the DD payment date could be aligned with their personal benefit or income schedule. Some customers had incurred bank charges in the past as a result of failed DDs.

Other customers, particularly those with negative experience of MH, preferred to use methods like a rent payment card as they felt it was more secure. Another commonly mentioned factor was concern about using DD for relatively large expenditures (such as rent), particularly when money is tight and DD is not compulsory. Some older customers preferred paying at the post office, in the "old fashioned way".

This trial aimed to test behaviourally-informed interventions including incentives and pre-filled DD forms to overcome these barriers to paying rent by DD. See sections 6 and 9 for further information on the behavioural insights harnessed in these interventions.

3.2 Interventions tested

The intervention consisted of sending a letter or postcard to MH customers not currently paying through Direct Debit, plus two SMS text messages (one coinciding with the letter, and one a week later). Four variations of this intervention were tested, three of which had a cash prize of £1000. A control group received no letter, prize draw or SMS.

Table 1: DD trial arms

Condition	Description	
Control arm 1	No letter or SMS	
Treatment arm 2	 Behaviourally informed letter Cash prize (lottery) element (£1000) 	
Treatment arm 3 (As arm 2, but with the addition of a DD form and pre-paid envelope)	 Behaviourally informed letter Cash prize (lottery) element (£1000) DD form and pre-paid envelope 	
Treatment arm 4: (As arm 5 but without the cash prize element)	Behaviourally informed A5 postcard	
Treatment arm 5: (As arm 2 but sent in the form of a postcard rather than a letter)	 Behaviourally informed A5 postcard Cash prize (lottery) element (£1000) 	

Interventions are included at Appendix E.

3.3 Outcome measures

The primary outcome measure was whether a participant set up a DD within four weeks of the communications being sent, which involved a comparison of the four treatment arms (arms 2,3,4,5) compared to the control arm.

A secondary analysis was conducted to compare the outcomes between the treatment arms, but it should be noted that to mitigate against a risk of an underpowered trial as a consequence of multiple comparisons, the comparisons between each individual treatment was exploratory, and did not form part of the primary analysis.

To summarise the aims of the secondary analysis:

- comparing arms 4 and 5 provides an indication of the additive impact of the lottery element;
- comparing arms 5 and 2 allows us to determine the relative impact of a letter in an envelope (which needs to be opened), versus a postcard (which does not need to be opened);
- comparing arms 2 and 3 determines the impact of a letter including a semi-completed DD form and pre-paid envelope, compared to just a letter.

3.4 Implementation and challenges

We ran an RCT, the gold standard of impact evaluation methods in which a randomly allocated treatment group (receiving DD messaging) is compared to a control group who received nothing. Random allocation ensures the groups are identical except for receipt of the letters. Comparing the two groups on our outcomes of interest (signing up for DD) therefore allows us to attribute any differences in outcome to the impact of the intervention.

There were four challenges in implementing this trial, which are summarised below:

- Due to an error at the mailing house, the first SMS (scheduled to be sent at around the same time that the letter was received), was not sent as planned. This mistake was noticed a week after the trial began, and the SMS was subsequently sent on 26 April, rather than the planned date of 16 April. This delay between receiving the SMS and the letter may have limited the effectiveness of the intervention.
- After the trial had begun, MH realised that some customers who were already paying their
 rent by DD may have been selected for the trial sample. This was partly a consequence of
 data quality, and partly due to challenges in determining the current payment method for
 every customer. At the analysis stage MH supplied a list of customers (approximately 124
 across the control and treatment arms) who they believe may have already been paying by
 DD. Excluding these customers did not alter the results.
- MH's IT team requested three weeks' notice between supplying a list of customers for randomisation, and the start of the trial. This is a potential issue because a customer included in the trial might have chosen to already sign up for a DD in the intervening 3 weeks, but were then contacted and offered an incentive for something they may very recently have done. Customers who set up a DD in this period were excluded from analysis.
- The main call to action for this intervention was for customers to ring the contact centre to set up the DD, but during the trial period call inbound call volumes were high, partly as a result of another trial on rent arrears that was in the field. This 'last mile' problem of getting through on the phone may have limited the effectiveness of the intervention.

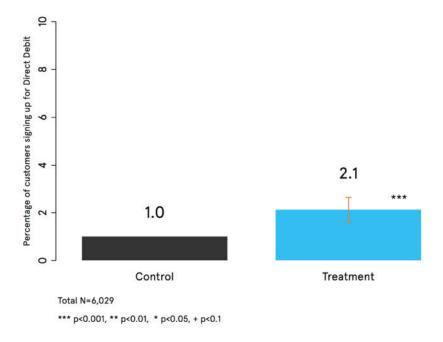
3.5 Results

This section outlines the findings from our primary analysis, which assesses the impact of receiving any of the four interventions compared to the control group, and our secondary analysis which compares each intervention arm individually to the control group. All analysis used linear regression.² We conclude with a discussion of the interpretation and potential impact of these results.

3.5.1 Primary analysis

Overall, we find that customers who received any of the four interventions were significantly more likely to sign up to DD than customers in the control group. The intervention roughly doubled the number of DD sign-ups. This is statistically significant. However, the absolute numbers are still very small, as presented in Figure 4: 64 customers (2.1%) signed up in the treatment group, compared to 30 (1%) in the control group.

Figure 4: Impact of the interventions on percentage of customers signing up to pay by DD



3.5.2 Secondary analysis

Our secondary analysis examines the impact of each of the interventions individually relative to both the control group, and each other. Overall, we find treatment arm 2 is the only arm that has a significant effect, equating to a 2.1% point increase relative to our control group. This suggests arm 2 was the most effective intervention, though this conclusion should be heavily caveated due to the low power of these subgroup comparisons. The results are displayed in Figure 5 below.

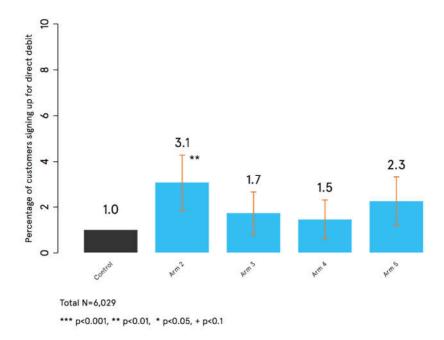


Figure 5: Impact of the interventions on percentage of customers signing up to pay by direct debit

As the absolute numbers of signups in each treatment arm were low, differences in pairwise comparisons between treatment arms were not statistically significant, so we are not able to estimate the specific impact of the lottery, pre-filled DD form, or postcard.

3.6 Discussion

The intervention roughly doubled the number of DD sign-ups compared to MH's 'business as usual'.

It became clear throughout our fieldwork for this trial that many of the barriers to DD sign-up are deliberate choices made by customers, often with reasonable justification, for example wanting to maintain control of their money, or having previously been fined for failed DD transactions. This is a valuable lesson in itself, as it suggests the issue is not primarily one of low awareness, unfulfilled intentions to sign-up, or behavioural biases. This implies there may be less scope for light-touch 'nudges' to have an impact. This was the rationale for focusing on using a cash prize incentive, to make the prospect of DD fundamentally more attractive. However, the £1,000 on offer may not have been sufficiently motivating for many customers.

An alternative that could be tested is to offer a prize for the customer to live rent free for a year. This would have been more expensive for MH, but a larger prize may have been more motivating than the sum of £1,000 which, while significant, may not feel 'life changing' for many customers. As the relationship between size of prize and attractiveness is non-linear, it may be that a larger prize is more effective and could justify the larger investment, but it is difficult to find the 'sweet spot' between size of prize and response without testing, and the relatively low number of extra DDs that resulted from this intervention make it difficult to make the case for further investment.

MH staff reported³ that on some days during the trial period MH's contact centre experienced exceptional call volumes, with particular spikes on the day that weekly rent reminder SMS messages were being sent (sent as part of a separate arrears trial currently being conducted by BIT). During our customer research, MH customers reported that it is frequently difficult to get through to the contact centre, and this difficulty seems to have been compounded during the trial period by our other trials that were also encouraging customers to call the contact centre. Therefore it is possible that other customers were attempting to get in contact with MH to setup a DD and enter the prize draw, but gave up when they were not able to get through.

The first SMS message was intended to be sent close to the moment that the customer receives the letter. In a number of other trials we have found strong effects from a combination of receiving both a letter and a SMS messages. While difficult to quantify or estimate, it is possible that the delay between receiving the letter and receiving the first SMS may have somewhat diluted the power of the intervention.

A doubling of uptake of DD is clearly a significant result, but questions remain as to how valuable this is to MH given the small absolute numbers. In designing the trial with MH it became clear that the true value to MH of a customer signing up to DD is not clear - the presumption is that rent payments will be more reliable. This is something which could be quantified in future work to ascertain the true business value of each additional DD sign-up. For instance, the treatment and control groups from this trial could be monitored for 12 months to see if there is any difference in payment behaviour or rent arrears as a result of being incentivised to sign up to DD.

3.7 Recommendations for future work

The result of this RCT suggest that a behaviourally-informed communication combined with a strong financial incentive can significantly increase DD signup. However, this is from a low base, and so MH will need to carefully consider whether or not this result is financially worthwhile given the costs of implementing and funding the prize draw.

However, lessons from this trial might be applied in other ways. We understand that as part of every customer conversation MH staff encourage the customer to sign up for DD. MH could develop a standard script incorporating behavioural insights language for staff to use when speaking to customers, or could offer a prize draw incentive when talking to customers on the phone. BIT would be happy to discuss this further, if it is of interest to MH.

Additionally, if MH are interested in pursuing further work into behaviourally-informed incentives, we advise an exercise to quantify the financial benefits of each additional customer moving to DD (for example in terms of lower processing costs) to allow an informed decision on the optimum levels of incentive to offer. See sections 6 and 9 for further information on the behavioural insights used in these messages.

4 Trial 2: Reducing the number of customers who enter arrears

4.1 Background

This trial aimed to reduce the number of customers who fall into arrears. A number of BIT's previous studies have demonstrated the power of a timely prompt in encouraging desirable behaviours. The rationale for this trial was that a proportion of customers may enter arrears not because they do not have sufficient income to pay their rent, but because they are disorganised, are too busy, or simply forget to pay. This trial intended to send a simple prompt to remind weekly payers when their rent was due.

The intervention used several well-evidenced behavioural insights. In addition to the power of timely reminders themselves, these incorporated elements of personalisation (using the customer's name, and being signed off by a named individual at MH); and social norms (highlighting that most other customers pay on time, harnessing our tendency to be influenced by peer behaviour, and undermining our tendency to excuse our bad behaviour on the premise that 'everyone does it'). See sections 6 and 9 for further information on the behavioural insights used in these messages.

4.2 Interventions tested

Customers who pay their rent weekly were placed in two arms. The treatment arm received a weekly SMS (on a Monday morning) reminding them to pay their rent, while the control arm received no reminder SMS.

Customers were excluded from the trial if they pay four-weekly or monthly, pay by direct debit, or were in receipt of full housing benefit (HB) or UC.

The SMS sent (from week 2 of the trial) was as follows:

Hi <first name>, your rent is due each Monday. Most of our tenants pay on time – thank you if you're one of them. Please pay your rent today. Thanks, John at Metropolitan. 020 3535 3535'.

Based on early customer feedback, the SMS was changed in week two of the trial - see the implementation and challenges paragraph for further detail.

4.3 Outcome measures

4.3.1 Primary outcome measures

We collected weekly data points at the customer level, giving us approximately 16 data points per customer (one data point per week) over the trial period from May to July 2018.

The primary outcome measures were:

- 1. **Proportion of customers falling into arrears over the trial period.** This was defined by Rentsense priority status (P1-P5).⁴
- 2. Average projected arrears balance over the trial period.

4.3.2 Secondary outcome measures

The secondary outcome measure was the rate of customer contact, for example the number of inbound telephone calls, emails, letters and SMS messages that were received from customers by MH's Contact Centre.

4.4 Implementation and challenges

We ran an RCT, the gold standard of impact evaluation methods in which a randomly allocated treatment group (receiving rent reminder SMS) is compared to a control group who were not sent the SMS. Random allocation ensures the groups are identical. Comparing the two groups on our outcome of interest (falling into arrears during the trial) allows us to confidently attribute any differences in outcome to the impact of the intervention.

There were several challenges in implementing this trial, which are summarised below:

- Due to an error, the first SMS was sent with an incorrect phone number. As a result any
 customer who tried to call MH by clicking on the number in the message would not have got
 through to the Contact Centre. This error was resolved by week two of the trial.
- A number of customers complained about receiving reminders to pay their rent. Anyone
 making contact with negative comments about the messages was removed from the
 treatment group, and sent no more messages for the duration of the trial.
- In week 1 of the trial, it emerged that a number of customers receiving weekly rent reminders were already in credit. While a relatively low proportion of customers raised a complaint, it was decided to stop sending messages to those 224 customers in credit.
- Feedback from MH's Contact Centre indicated that a significant (but unspecified) number of customers objected to the wording of the message, particularly if they had already paid that week, or were in rent credit. Based on the feedback that the wording could be interpreted as accusatory, and to account for customers who may already be in credit, the wording of the message was softened to include the line "thank you if you're one of them", after the social proof message that 'Most of our customers pay on time".

4.5 Results

This section outlines the findings from our primary analysis, which assesses the impact of receiving the reminder SMS compared to the control group. All analysis used linear regression.⁵ We conclude with a discussion of the interpretation and potential impact of these results.

As mentioned above, customers in credit and those who complained were no longer sent messages.⁶ However while these customers were sent no more messages they remained in our analysis; the only exclusions at the analysis stage from our initial sample were the 224 customers who were already in credit. As this trial aims to reflect the realistic challenges of operations for MH's income team, if such an intervention were to be rolled out more widely, it would be reasonable to expect a proportion of customers would opt-out of receiving the messages. Therefore retaining for analysis those customers who requested to be removed from the treatment permits a more realistic estimate of organisational impact from the trial.

Our final sample was 1,407 customers split evenly between control and treatment groups.

4.5.1 Primary analysis

Overall, we find that customers who received SMS messages were significantly less likely to fall into arrears at least once during the trial period than those in the control group. The intervention decreased the proportion of customers who fell into arrears at least once during the trial period by 5.6% points, from 57.2% in the control group, to 51.6% in the treatment group. This is a relative reduction of 10%, and is a statistically significant difference. These results are presented below in Figure 6.

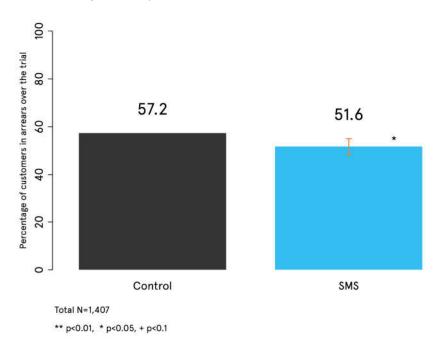


Figure 6: Impact of the intervention on arrears status

Where customers entered arrears during the trial period, our analysis also suggested no statistically significant difference in the projected arrears balance between the two groups. These results are presented in Figure 7 below.

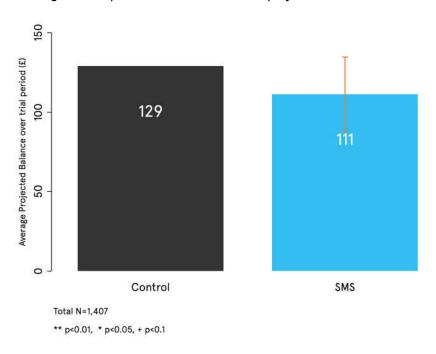
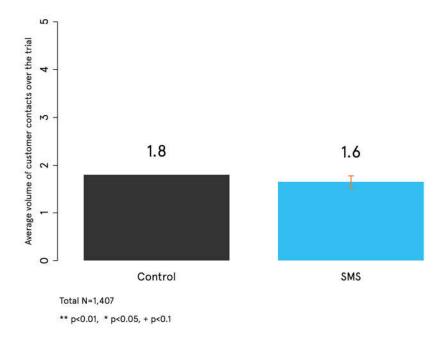


Figure 7: Impact of the intervention on projected arrears balance

4.5.2 Secondary analysis

As secondary analysis, we assessed whether there was any difference in inbound customer contact rates between the SMS and control groups. We find no substantive difference between the two groups, with the average customer contacting MH on just under two occasions over the trial period. These results are presented in Figure 8 below.

Figure 8: Impact on rates of customer contact



To examine the longevity of the impact, during the last four weeks of the trial half of the 512⁷ customers who had received SMS messages were re-randomised back to the control group - so received no further messages. This was intended to assess whether receiving the messages had created a habit which persisted after the messages were no longer sent, or if messages must be sent over the longer term to achieve consistent payment behaviour. Following the re-randomisation we conducted balance checks to ensure that the two new groups created (control and treatment) were similar in terms of the proportion of customers who had been arrears in the previous 12 weeks prior - i.e. there was no systematic difference between the recent arrears behaviours of the two groups.

Overall, we found suggestive evidence of a small effect on arrears as a consequence of no longer receiving the SMS messages; customers who had received messages in the first part of the trial but not the second appear slightly more likely to fall into arrears in the later stage, compared to those who continued to receive the messages. This could suggest customers did not receive enough messages to create a lasting habit; or that the intervention must continue for a longer period of time to achieve consistent reduction in arrears. However, these results are not at a level of statistical significance that we can be confident in a difference between the groups - further research would be required. The results are presented below in Figure 9. Note that in figure 9 the control group consists of people who had received reminder messages during the first part of the trial, but not in the last four weeks, while customers in the SMS group continued to receive messages throughout the trial.

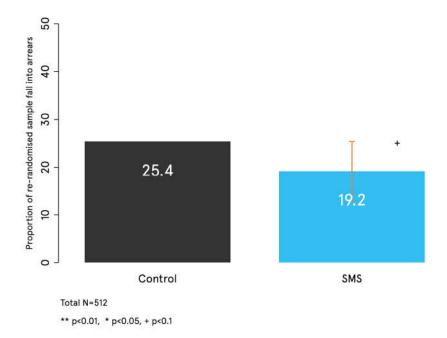


Figure 9: Impact of not receiving the intervention during the last four weeks

4.6 Discussion

The intervention reduced the number of customers entering arrears by around 10%. Despite some challenges in implementation, this suggests that simply reminding people to pay their rent could be an effective method of reducing MH's overall arrears, and help to achieve business efficiency.

With reference to the aforementioned categories of non-paying customers (struggling, strategic and disorganised), we suggest the intervention is likely to have been more effective with those who are strategically not paying, and in particular, among those who are simply disorganised and most likely to be forgetting to pay. Among those who simply cannot afford to pay (the struggling), this intervention does little to remove this barrier.

For practical reasons relating to data quality this trial did not include customers paying their rent in monthly or in four-weekly cycles. Customers on housing benefits were also excluded, as they are not required to pay their own rent (money is transferred directly to MH by DWP). But with the transition to UC an increased number of customers will become responsible for paying their own rent (many for the first time), and the results of this trial suggest that text message reminders could be effective in encouraging more regular payment.

While successful amongst weekly-paying customers, this intervention might be even more effective amongst four-weekly and monthly customers. It is easier to remember a day of the week to pay rent than it is to remember a day of the month or the current week in a four-weekly cycle - therefore customers in the less frequent payment cycles may respond even more favourably to SMS reminders than the weekly customers. Further testing would be required to understand response from monthly and four-weekly customers.

The secondary analysis suggested that it might be necessary to continue sending reminders to achieve lasting effects in terms of payment behaviour. Alternatively, the reminders may become less effective over time, as they lose their impact. To understand longer term effects, MH could experiment with a trial over a greater number of months, or years.

4.7 Recommendations for future work

We recommend building on this initial positive result with further testing of reminder messages. An extension of this trial might include customers on four-weekly or monthly paying customers, or those transitioning to UC. Further experiments might focus on a number of different areas, for example:

- different wordings for the SMS to test other behavioural insights for example whether reciprocity messages, or reminding customers that they had previously committed to paying on time - are more effective in this context than social norms;
- experimenting with times of the day or days of the week that the messages are sent;
- testing longer-term response to reminder messages.

The most effective way to have customers consent to receiving SMS reminders is to default them into the service, and allow them to opt-out. However, as a number of customers complained about receiving these reminders, MH might want to consider whether having customers actively opt-in would be more appropriate. This would come at the cost of having significantly fewer customers receiving the reminders (And potentially not the ones who need them most). Our recommendation is to continue to default customers into the service, since the number of complains was modest. However if this is not done, we recommend drawing on behavioural insights to consider how else to best maximise the number of customers opting into the service.

Having worked closely with BIT on delivering this trial, MH's Insights and Income teams should be in a strong position to take these learnings forward, and embark on their own program of RCTs to extend learnings from this trial.

5 Trial 3: Increasing the speed that customers exit arrears

5.1 Background

When MH's general needs customers enter rent arrears they receive a series of correspondence. This involves (in order) Letter 1, Letter 2, Notice of Seeking Possession (NOSP) and Letter 5, before a legal eviction process is evoked. There is also a parallel process of letters sent to people who remain in low levels of arrears.

We ran an RCT in which a control group were sent these business-as-usual correspondence, whilst a treatment group received alternative versions of each of these communications, and a series of SMS messages that coincided with each letter. The treatment letters incorporated a variety of behavioural insights, including simplification, clearer calls to action, reciprocity and personalisation, as well as accompanying SMS messages for each stage of the process. The treatment NOSP letters were in a handwritten envelope and included a post-it note and handwritten message on the outside of the envelope.

5.2 Interventions tested

The below figure summarises the entire process - the control arm is to the left hand side, and the treatment arm is on the right hand side.

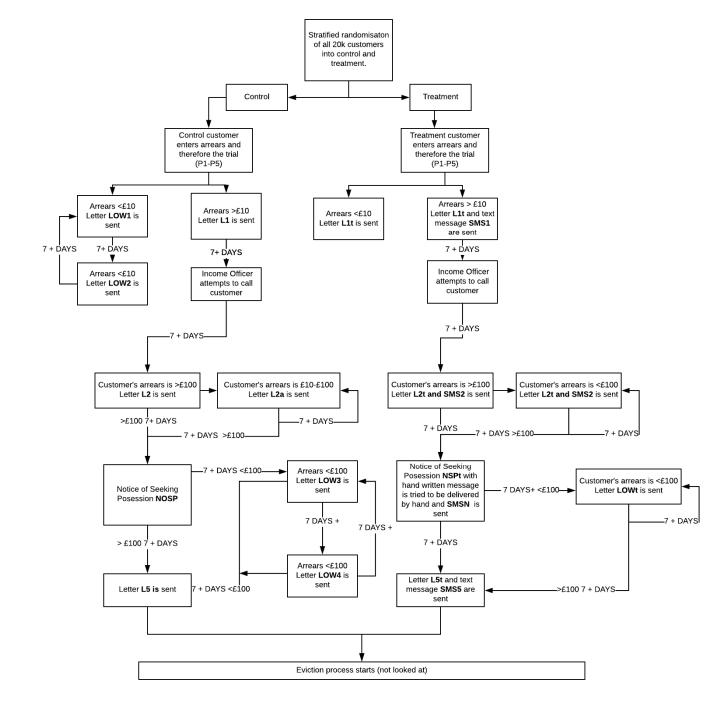


Figure 10: Arrears communications process

The main elements of the trial were the trial letters L1, L2, NOSP and L5, and SMS messages sent to customers to coincide with the arrival of each letter.

5.3 Outcome measures

We evaluated the impact of the new letters and SMS on the following pre-specified primary and secondary outcome measures:

5.3.1 Primary Outcome Measure

- 1. **Time in arrears**: the time (in weeks) taken for all customers to exit the arrears process (duration of having a non-P99 status i.e. no longer in arrears).
- 2. Mean arrears balance: variable of mean "Projected balance" in "All cases" data.

5.3.2 Secondary Outcome Measures

- 1. **Stage in arrears process**: How far in the process the customer gets (which letters are sent before they exit the arrears process).
- 2. Customer contact: Rates of inbound customer contact.
- 3. Number of cleared arrears.

5.4 Implementation and challenges

We ran an RCT to test the impact of the intervention on the above primary and secondary outcomes. Random allocation ensures the groups are identical except for receipt of the different letters and text messages. Comparing the two groups on our outcomes of interest therefore allows us attribute any differences in outcome to the impact of the intervention.

There were no significant challenges in implementing this trial.

5.5 Results

The numbers of customers receiving each of the letters were as follows:

Table 2: Number of letters sent

Letter	Control	Treatment
L1	1104	1105
L2	432	384
NOSP	173	143
L5	62	56

5.5.1 Primary analysis

Time in arrears

Our analysis indicates that customers in the treatment group were in arrears for an average of 6.6 weeks, compared to an average of 6.9 weeks for customers in the control group, however this difference is not statistically significant.

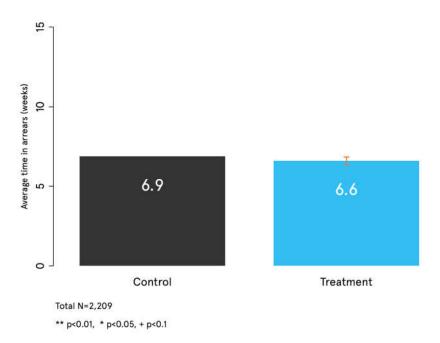


Figure 11: Average time in arrears

Mean arrears balance

Where customers entered arrears during the trial period, our analysis also suggested a slight reduction in the projected arrears balance between the two groups: a projected arrears balance of £124 for those in the control group, but £112 for those in the treatment group. However, we should again note that this difference was not statistically significant.

Figure 12: Average projected balance

124

124

112

Control

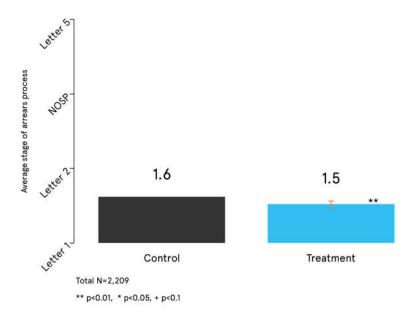
Total N=2,209

5.5.2 Secondary analysis

** p<0.01, * p<0.05, + p<0.1

Stage in arrears process: We find customers in the treatment group on average left the arrears process earlier than those in the control group. Both groups typically exited the arrears process between Letter 1 (stage 1) and Letter 2 (stage 2), however the treatment group had a slightly fewer customers progressing to later stages, indicated by a lower average of exit at stage 1.5 compared to stage 1.6. This difference was statistically significant.

Figure 13: Average exit stage of arrears process



5.5.3 Customer contact

We find customers in the treatment group on average contacted MH significantly more times relative to those in the control group. The average in the treatment group was at 2.7, compared to 2.3 in the control. This is a 17% relative increase in contact.

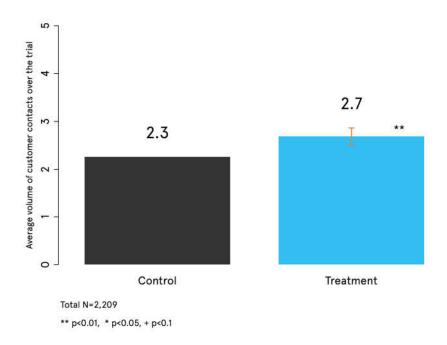


Figure 14: Customer contact during the trial

Arrears Clearances: We find no difference in the number of arrears clearances between treatment and control groups - the average was the same in each group.

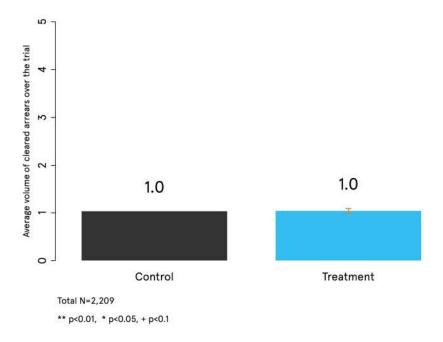


Figure 15: Volume of cleared arrears

5.6 Discussion

The results show that across all outcome measures the impact of the intervention was directionally positive (desirable), however our primary results did not meet the criteria for statistical significance. In the secondary analysis we did find statistically significant results, showing that we brought forward the stage at which customers leave the arrears process from 1.6 to 1.5. We also find that the intervention significantly increased the rate of customer contact.

Taking all this evidence into account we therefore conclude that the intervention is likely to have had a small but positive impact on the arrears process, albeit the impact on customers' payment behaviour is not definitive due to the lack of statistical significance.

We also found a statistically significant increase in contact rates amongst those who received the letters. The content of the treatment letters was intended to convey a supportive tone and a sense of MH being willing to help if the customer makes contact. We therefore view a 17% increase in rates of customer contact as a success, given the aim of trying to help and support customers with financial problems. Some of this increase may also be driven by the SMS messages which contain a phone number, and therefore make it easier to quickly dial the MH phone number. The increase in contact is achieved despite the acknowledged 'last mile' problem of getting through to MH on the phone - it is possible that an even greater numbers of customers attempted contact, but could not get through.

However, we did not see a difference in financial arrangements made by the customers, after they have made contact. It is not what actions were taken following the customer contact, if the action was not arrears clearance or an arrangement. For example, are these customers being referred to Income Support? We recommend that MH further interrogate their data to understand the customer outcomes from this increased contact.

These kinds of nudges are likely to have a relatively limited impact amongst the financially struggling, since none of the interventions fundamentally overcome this barrier of being unable to pay. Table 3 shows a big drop-off between letters 1 and 2, while the numbers for both arms converge at the L5 stage, and similar numbers of customers are left at both arms at the late stages of the process. One interpretation of this is that the first and second letters are successful in bringing forward the arrears resolution of the disorganised, leaving behind those genuinely struggling and unable to pay off their arrears, or the most strategic who are familiar with the process and fully intend to stretch their arrears as far as possible. This is but one plausible interpretation of events, with other explanations possible – but regardless, the majority of benefit appears to coming from treatment letters 1 and 2.

In conclusion, our primary results show no statistically significant impacts on customers' arrears. However, we take some encouragement from the fact that all results are directionally positive, with significant results found in our secondary analysis on both the speed of existing arrears, and rates of customer contact. On balance we conclude the letters may have had a small positive impact on the overall arrears process. However, we acknowledge that these impacts are not totally robust due to the lack of statistical significance, and modest size of the differences between treatment and control groups.

5.7 Recommendations for future work

The treatment letters and SMS appear to work at least as well as, and on some measures better than the business-as-usual (control) communication. Therefore we recommend rolling out the treatment letters as the new business as usual. If feasible, there would also be benefit to conducting further trials to seek incremental improvements to these arrears communications, while developing the evidence base to fill gaps in understanding around the impacts on different types of customers.

The trial involved a relatively laborious process of hand-written envelopes and post it notes on the NOSP letters. Based on the available data, we do not see any significant impact on NOSP response, so if the treatment process is to be rolled out, the handwritten elements of the NOSP could be dropped, without much likely impact.

6 Conclusions

Results from the three RCTs suggest that behaviourally-informed communications hold significant potential for positive improvements to MH's arrears situation. Specifically, the interventions were successful in:

- significantly reducing the number of customers entering arrears;
- increasing the number of customers paying by direct debit;
- increasing the number of customers in arrears making contact, and
- less conclusively, may have slightly brought forward the point at which customers exit arrears.

Human behaviour can be very difficult to change, particularly in light of the fact that some customers face significant barriers (e.g. a genuine inability to pay) or strong conflicting motivations (e.g. a strong

aversion to signing up to Direct Debit to maintain greater control over financial outgoings). In this context the three trial results represent a success, and offer valuable learnings to MH as they continue to draw on behavioural insights to find further improvements.

This project aimed to explore the behavioural drivers and various dimensions of the arrears problem, and consider how to apply a behavioural approach to designing and testing intervention. This approach is widely applicable, and having delivered a series of training workshops throughout the project (in addition to learning through collaboration), we encourage MH to undertake a similar approach with other business challenges.

Across the three trials we mostly achieved success in shifting the target behaviours. We are therefore encouraged that results from the three RCTs suggest that behaviourally-informed communications hold significant potential for positive improvements to MH's arrears situation, even where the behaviour (e.g. encouraging payments) can be difficult to shift, given the various personal and systemic barriers that need to be overcome.

Specifically, the interventions were successful in:

- significantly reducing the number of customers entering arrears;
- · increasing the number of customers paying by direct debit;
- · increasing the number of customers in arrears making contact, and
- less conclusively, may have slightly brought forward the point at which customers exit
 arrears.

These results have been achieved despite explore work demonstrating that for many, barriers to action were significant (e.g. a genuine inability to pay) or competing motivations were strong (e.g. a strong aversion to signing up to Direct Debit to maintain greater control over financial outgoings). In this context the three trial results represent a success, and offer valuable learnings to MH as they continue to draw on behavioural insights to find further improvements.

Below we note some general observations from all three trials – more specific points are included in the detailed summaries of each trial later in this report.

6.1 Differential impacts on different customer segments

One of the key insights is that we are likely to have had a greater impact on some types of customers than others, and this is to be expected given the different barriers and motivations we face. Broadly we identified three categories of customers defined by their main causes of facing arrears: financial pressure (the struggling), forgetfulness and lack of financial organisation (the disorganised), and deliberate choice to prioritise other expenditures or to 'use' rent arrears as a cheap form of credit (the strategic). A full segmentation exercise dividing the customer base into these categories has not been undertaken, as it would require significant survey work to understand, and allocate, the motivations of the whole arrears customer base. However, this insight nonetheless helps to interpret the results of the three trials, and may assist with the development of further behavioural solutions.

For instance, whilst we had success in encouraging Direct Debit sign-up, our impact is likely to be limited at those struggling to pay (and thus as greater risk or having a DD payment fail), and those who are deliberately using arrears to their advantage, are both strongly motivated to maintain control of their outgoings and therefore motivated against the use of DD. We suggest it is therefore likely that the incentive to use DD was most effective among disorganised customers (who are most likely to benefit from it, and least likely to be averse to it). It may take a much stronger incentive to motivate the strategic customers.

The results of Trial 2 (into arrears) suggest that reminders to pay rent can reduce the number of customers who enter arrears by 10 percent. Again, we might speculate such a reminder is likely to be most effective amongst two of the three categories: disorganised customers, for whom a timely prompt is a helpful reminder to pay rent; and the strategic, for whom a social norm informing them that most people pay their rent on time may recalibrate their beliefs about the acceptability of entering arrears. Again, those who genuinely struggle to pay are not likely to be helped by a reminder SMS. Indeed all light-touch 'nudge' type interventions will have limited impact on those with major financial difficulties, to the extent that they are forced to make genuine trade-offs between, for example, buying food and paying their rent. An exception to this might be the increased contact rates among those in arrears seen in Trial 3. By taking a more friendly and approachable tone, it is plausible that this increase in contact included struggling customers, for whom eliciting greater communication should be considered a success, compared to the alternative strategy of disengagement and failure to address the issue.

Quantifying the number of customers who fall into each segment (struggling, disorganised, strategic) would therefore be a useful next-step, such that MH can strategically direct their efforts towards nudging the disorganised, developing stronger incentives or sanctions for the strategic, and offering more intensive support to the struggling. We note, however, this is a substantial undertaking, as it would require extensive surveying of their customer base to identify, and allocate, their financial situation and motives/causes for entering arrears.

6.2 Capacity building

One of the major motivations for running this project was to allow MH to learn and develop the behavioural-insights capabilities to run their own projects in future. To this end BIT provided a series of training sessions, whilst the wider project was designed to help MH staff learn-by-doing. Following feedback from MH, we understand the significant time and effort in designing, launching and managing RCTs presented some challenges. However, based on what has been learnt so far, we recommend MH continue on a journey of testing and adapting, potentially working towards an ambitious program in the future that encompasses both segmented and targeted communications. We recommend starting by identifying 'low hanging fruit' where a.) the behaviour might conceivably be influenced, i.e. is not subsect to unusually stubborn practical or behavioural barriers, b.) delivering the intervention (i.e. making changes to MH process) is feasible, and c.) data collection on the behaviour in question is also feasible.

Additionally, some of the analysis was made more challenging as a result of data that is complex and in certain situations, of questionable reliability. Such data may have historically served MH's analysis purposes but may undermine the aspiration of developing a culture of testing and optimisation.

Considering ways to simplify or rationalise data management will help MH to manage future BI projects.

6.3 Additional takeaways for MH

One key insight emerged which is likely to be dampening all efforts to reduce rent arrears. Our explore work suggested a 'last mile' problem – where customers' intentions are thwarted at the final stage through obstacles and extra frictions that make it challenging to follow-through. In this case, customers systematically reported difficulty in getting through to speak to MH staff. The power of any previous intervention may be diluted through the friction involved in completing an action. We recommend that MH examines this issue further, and we stress the importance of making the desired behaviours (many of which require calling MH's telephone line) as easy as possible. Any steps taken to ease this process for customers is likely to pay dividends in the impact it has on arrears resolution (this would include, but not be limited to, reducing the hold time significantly). Alternatively, rather than focusing on making it easier to get through on the phone, MH might consider using BI to further encourage channel shift towards digital interactions through a website or app, to reduce the reliance on phone communication.

We also suggest MH conduct further work to enable robust return on investment (ROI) calculations. Quantifying the financial savings of a single extra customer paying by direct debit, or exiting the arrears process earlier would allow MH to calculate overall organisational impact from BI projects, and model different levels of investments to help develop a business case for further work.

Having worked closely with BIT on delivering this trial, MH's Insights and Income teams should be in a strong position to take these learnings forward, and embark on their own program of RCTs to extend learnings from this trial.

7 Appendix A - Literature review

7.1 Introduction

In their 2015 report Beyond Bricks and Mortar, MH made the case that a core aspect of their mission should be to encourage independence and community agency - to put customers in control of their own destinies, and to make customers more accountable in tackling their life challenges.⁸

This aspiration comes against a backdrop of increasing poverty: recent studies have estimated that 27 per cent of people living in social housing are in poverty before housing costs are taken into account, rising to 43 per cent after these costs are included.⁹

Such pressures increase the likelihood of entering into arrears. DCLG research indicates a significant difference in rent arrears between the social and private sectors: in the social housing sector around 12 per cent of tenants were not up to date with their rent, compared to just 4 per cent of tenants in the private rented sector. Of the tenants not currently in arrears, 5 per cent had fallen into arrears at some point in the previous 12 months. ¹⁰ There is concern across the social housing sector about increasing levels of arrears, particularly in the rollout of direct to tenant housing payments that are a feature of Universal Credit (UC). ¹¹

There is a small body of research into the psychological consequences of falling into mortgage and rent arrears. One study that used 22 years of longitudinal data in the UK found a psychological cost to being in household arrears, with a gendered dimension to this cost. The study found a negative effect on well-being for males as a result of entering arrears, while for females it is the persistence of being in arrears that is associated with detriment to well-being. Another European study using seven years of longitudinal data found that arrears have consequences for employment prospects and health outcomes, and that arrears are often a result of bad health or a period of unemployment.

There have been relatively few academic studies that investigate eviction as a results of arrears, and whether specific interventions have been effective in preventing such evictions. A 2015 paper that reviewed the evidence systematically found that tenant evictions due to rent arrears are generally caused by a number of factors other than just financial problems, and these can include a complex combination of financial, social, relational and health factors, including: unemployment, a lack of financial skills, sudden decrease in income, underuse of benefits or assistance, feelings of shame or lack of trust due to previous negative experiences, a history of unstable housing, insufficient social support, addiction or health problems.¹⁴

There is much research into biases and other behavioural factors that can lead individuals to make sub-optimal financial decisions. This document is not intended to be an exhaustive review of the academic literature related to rent arrears, financial behaviour, poverty, and debt, but is intended to give a flavour of the key insights from the academic literature and how they might be practically applied by MH to questions of arrears and other financial behaviours.

Behavioural science, which encompasses disciplines including social psychology and behavioural economics, lends insights that have significant implications for understanding behaviours around rent arrears, financial decisions, poverty and debt. A key insight is that people have a limited mental capacity and cannot carefully weigh up the pros and cons of every decision. Rather than careful and deliberate attention being given at each decision point (as assumed by rational choice theorists) people often rely heavily on environmental cues and simple psychological shortcuts to make quick decisions. These shortcuts can serve us well in some circumstances, but these can also lead to predictable 'behavioural biases' which lead us astray. A deep and growing literature on decision making processes demonstrate a variety of social and behavioural influences on decisions such as how and when to save or spend money, or access credit.

This review is organised by three categories of behavioural factors that influence rent arrears, financial behaviour, poverty and debt:

Human, cognitive and behavioural factors including: self-control, self-efficacy, motivation, emotion, personality, child development, educational attainment, mental bandwidth and behavioural biases. **Social factors,** including: social networks, social trust and freedom from stigma/stereotype threat. **Environmental factors**, including: housing quality, safe neighbourhood and green spaces, and their influence on well-being and mental health.

Attempts by policymakers or other socially-focussed organisations to improve personal circumstances often focus on the last of these factors: boosting economic resources, for example by increasing wages, helping people to get more information on government entitlements, or incentivising saving. But other factors (such as human, behavioural and social factors) also play an important role in people's experiences of everyday life and their response to challenging circumstances. For example, poverty or a low socioeconomic status can be associated with a reduced functioning of cognitive processes, such as attention and self-control - which are significant for setting goals and resisting the temptation of alternatives that might detract from that goal.

7.2 Human factors contributing to arrears and financial behaviour

7.2.1 Financial literacy

Financial literacy is an important human factor and refers to a range of capabilities that include: planning ahead; being aware of your personal financial situation; choosing financial products wisely; and managing money and getting help and advice. ¹⁵ Low levels of ability impact decisions taken on daily expenditure, budgeting and other financial choices, increasing the likelihood of debt and lowering the likelihood of positive outcomes if problems should arise.

Research suggests that levels of financial literacy in the UK are a cause for concern, with a recent OECD study placing the UK bottom in a list of 17 countries in a national league table of financial literacy. The UK Financial Capability Survey 2015 found that a third of respondents were unable to correctly calculate the impact of a 2 per cent annual interest rate on £100 in savings. The Further

qualitative research by the Money Advice Service found that many people did not recognise the real cost of credit or the relationship between credit interest and total repayment. Borrowers in the UK with poor financial literacy hold higher shares of high cost credit (such as home collected credit, mail order catalogue debt and payday loans) than those with higher financial literacy.

One possible response would be to aim to improve levels of financial literacy. Unfortunately, such financial education may offer only marginal benefits.^{20,21,22} A meta-review of 201 studies suggested that training to improve financial literacy could explain just 0.1 per cent of variance of financial behaviour.²³

However, there is promising research to suggest simple financial literacy training based on heuristics may lead to better outcomes that more formal or technical training. A randomised controlled trial (RCT) in the Dominican Republic tested two different training sessions for small businesses to improve financial decision-making: one standard accounting training, and another rule-of-thumb training that taught basic financial heuristics such as using drawers or jars to separate money for the business and the household. Businesses in the rule-of-thumb training were more likely to implement the material that was taught, and to keep accounting records.²⁴ The researchers theorised that rule-of-thumb training may be more effective because it is easier to understand than technical accounting training, and easier to implement.

Some studies have shown that people find it easier to understand information that is expressed in natural frequencies, for example talking about pounds rather than percentages.²⁵ Similarly, evidence from payday lending practises suggest that people find APR percentages confusing, and are less likely to take out payday loans if they see the total cost of the loan displayed in dollars rather than as a percentage.²⁶ MH could think about ways to increase financial literacy in practical and timely ways, rather than just offering more information or training.

A 2011 study looked at the efficacy of debt advice on the level of rent arrears of UK social housing tenants with rent arrears. They found debt advice was highly valued by residents, with arrears decreasing by 37 per cent among tenants referred for debt advice, compared to tenants in the control group increasing by 8 per cent.²⁷ Focusing informational resources on those in critical need (such as those facing eviction) may be a more effective strategy than considering general financial education.

Putting it into action: Data science work done by BIT suggested that using MH's previous arrears data to target approximately 20 per cent of all customers who have been in arrears in the last 2 months would catch approximately 62 per cent of those going into future arears. Using such predictive data MH could offer financial support or training at timely moments before the customer actually falls into arrears.

A recent Citizen's Advice qualitative study found that people need support to be more confident to take action on their money matters (49 per cent) but financial awareness does not necessarily translate to the desired actions; a gap between knowledge and actions can lead to significant differences between knowing what you should do, and actually doing it.²⁸

7.2.2 Emotional and personality factors contributing to arrears and other financial behaviours

Studies have identified that certain demographics, personality types or emotions are linked to high occurrence of debt. For example, younger adults, students and males^{29,30} are more likely to experience problems with debt troubles, particularly after first becoming responsible for their own finances. This may also coincide with gaining access to financial products such as credit cards or student loans. Not receiving financial mentoring from parents has also been shown to have a significant detrimental effect³¹, and various attitudes, such as impulsiveness^{32,33}, positive risk preference³⁴, over-optimism³⁵ and materialism³⁶ have all been linked to debt risk.³⁷

Research suggests that personality factors influence financial decision making. Using the 'big five', a widely used model of personality developed in psychology,³⁸ evidence suggests that people high in emotional stability and conscientiousness have higher levels of savings and lower levels of unsecured debt.³⁹ Individuals with higher levels of conscientiousness may also be better at gathering and processing information on financial decisions to make a more informed decisions, while those with greater levels of emotional stability may more calmly decide how to address a situation.

Once in debt, fear (compounded by low levels of conscientiousness and emotional stability) can contribute to a tendency to resist facing up to the situation, leading to a spiralling debt problem.

Putting it into action: Interventions that target particular groups (segmenting by demographics or behaviour) that are susceptible to adverse decision-making may be more effective than a blanket approach that targets all MH customers.

7.2.3 Self-control

There is an important gap between intended and actual financial behaviour. As in many other domains of decision making, intentions about our finances do not always lead to action.⁴⁰ While individuals may strongly intend to take positive financial actions such as saving money for the future they may lack the self-control to implement these intentions.⁴¹ Poverty seems to have an adverse effect on self-control, with one explanation suggesting that because those in poverty have less to lose from financial slip-ups in absolute terms, monetary self-discipline is harder to maintain.⁴² An alternative explanation is that everyone on the income spectrum gives in to temptation to a similar extent but that the relative consequences of financial slip-ups are larger for someone at a level of poverty; the consequences of 'wasting' £1 on an unnecessary luxury are greater for someone living on £10 a day compared to someone living on £50 a day.⁴³ An alternative argument is that that acting impulsively may not only reflect a difference in the ability to exercise self-control, but also be a manifestation of beliefs about the stability of the world. If the individual does not consider the world to be reliable or stable then prioritising immediate gratification might be a rational response (see also section 1.1).⁴⁴ Self-control factors may weigh heavily on decisions to focus personal budgets on prioritising rent payments over more pressing or pleasurable considerations.

7.2.4 Self-efficacy

Related to self-control is the idea of self-efficacy. Self-efficacy can be defined as the level of belief the individual has in their ability to succeed in specific situations or accomplishing specific tasks. The level of self-efficacy significantly determines how one approaches life goals and challenges as they emerge. There is a financial aspect to self-efficacy, relating to the individual's ability to manage their own financial tasks. MH's own research suggests that for many housing associations the relationship with their customers has often been too paternalistic. Recent studies show, for example, that social tenants are twice as likely as the general population to report low rates of self-efficacy."

Poverty and social exclusion may distort self-image, and this distorted self-image becomes a further source of disadvantage. ⁴⁹ Building customer confidence in their ability to manage life challenges may also address the concerns about increasing paternalism of the housing association and allow customers to take control of important aspects of their lives, engendering a sense of responsibility and autonomy.

A recent RCT amongst a highly stigmatised and socially excluded community (Indian sex workers) investigated the impact of improving self-image and perceived ability to effect positive change. This resulted in positive improvements in savings and health choices, which persisted for over a year after the end of the program.⁵⁰ Needless to say, levels of social stigma in social housing tenants are not likely to be comparable to those experienced by sex workers - but the study illustrates the power of stigma, shame and embarrassment to reduce self-efficacy, and the positive benefits of countering feelings of stigma.

Putting it into action: Enhanced levels of self-efficacy are among the stated policy aims of Universal Credit. However, introducing policies to increase self-reliance that are not behaviourally informed can have backfire effects (as has been the case in Universal Credit – see separate Universal Credit scoping study for more detail). As MH's own research suggests, social tenants have lower than average levels of self-efficacy, and changing this could yield beneficial improvements in financial behaviours and life outcomes.

7.2.5 Locus of control

Locus of control refers to the extent to which individuals believe they can control events affecting them. Internally driven individuals believe that events are driven by their own behaviour or actions, while externally driven individuals believe events are more influenced by luck, fate, chance or the interventions of other people. A strong internal locus of control can lead to people being more alert to and taking steps to improve their environment, as well as taking steps to improve their skills, abilities and competencies.⁵¹ An external locus of control can lead to an attitude of resignation: at the extreme end of the scale if an individual feels they are at the mercy of external factors they may feel resigned to their fate and make less effort to improve their situation.

Putting it into action: Staff Explore work suggested that some customers reach a point of resignation when their financial situation negatively spirals past a certain point. Similarly, if the complexity of the UC process makes the customer feel that the situation is out of their hands they

may concede defeat in the face of the challenge. A negative locus of control combined with either of these situations will reduce the likelihood that the customer takes positive steps to address the situation.

A locus of control can influence behaviours such as financial decision making and job seeking. A US study compared the search behaviour of individuals who believe that outcomes depend primarily on their own efforts (internal locus of control) to individuals who believe that outcomes are primarily matters of fate or chance (external locus of control), and found that those with an internal locus of control searched around 10 per cent more than those with an external locus of control.⁵² College students with an external locus of control have been found to exhibit the worst financial behaviours⁵³ and one study find a relationships between an external locus of control and getting into credit card debt.⁵⁴

A difference in locus of control may be associated with those more proactively seeking help or attempting to resolve their financial situation compared to those who take less active steps.

7.2.6 Intrinsic and extrinsic motivations

Motivation is our desire to do something. A useful distinction can be drawn between intrinsic motivation (doing something because it is inherently enjoyable or interesting) and extrinsic motivation (doing something because it leads to an outcome that is distinct from or separate to the action, such as leading to an incentive or reward⁵⁵).

In classical economic theory greater incentives such as rewards or punishments are generally assumed to lead to more effort, resulting in higher performance. However research has suggested more subtle effects whereby rewards might 'crowd out' internal motivation by signalling that a task must be difficult, unpleasant or risky. In a famous social psychology experiment researchers found that participants who were paid a higher sum to complete a boring task subsequently reported it as less enjoyable than those who had been paid a lower fee. Those paid less had somehow convinced themselves that the experiment was worthwhile or fun, while the extrinsic financial motivation in those paid a higher amount crowded out any intrinsic motivation that participants were able to find in the task itself.⁵⁶

Intrinsic motivation can also include reputational effects, and feelings of civic or moral responsibility. Relying on intrinsic motivations to encourage people to perceive certain actions as implicitly worthwhile may be a more effective driver of sustained behaviour over the long-term than a treadmill of rewards and incentives.

As an example of the complex effects of intrinsic and extrinsic motivations, a study found that offering monetary compensation for accepting the development of a nuclear waste site close to where people lived actually reduced the level of acceptance amongst those living in close proximity - the offer of a financial reward 'crowded out' people's sense of civic duty in accepting the development.⁵⁷ In the social housing context relying heavily on sanctions and rewards to change behaviour can might crowd out intrinsic incentives (such as a sense of 'doing the right thing') that are associated with certain desirable behaviours.

Intrinsic and extrinsic motivations also play a role in an individual's orientation to work. A longitudinal study in Finland found that school leavers with intrinsic work values at age 20 were more likely at age 23 to be in work that matched their abilities and interests. Work values that accentuated security, such as a preference for work that is safe or convenient have been found to be associated with coming from a lower income background.⁵⁸ Other research has found that although extrinsic motivation (such as wanting to earn a higher salary), can get people into work faster they may move into poorer quality jobs, report lower levels of job satisfaction and higher levels of work-family conflict.⁵⁹

7.2.7 Reciprocity

Research has shown that reciprocity is a powerful driver of human behaviour - when somebody does something for us we feel an urge to repay this favour. As an alternative to using standard economic incentives such as fines, introducing a small gift or reward can motivate people to "repay" what is perceived as a favour. The reward does not have to be large - small incentives or rewards can have disproportionate effects on behaviour. A BIT trial found that offering an inexpensive bag of sweets significantly increased the number of high-earning employees of a bank who donated a day's salary to charity. Providing a small reward could be a cheap and effective way in driving change – in the housing association context a £20 voucher might prevent hundreds of pounds of arrears or damage. The way such rewards are framed is very important: non-monetary rewards could be framed as a 'token of thanks' rather than as a quid pro quo, reducing the risk that any improvements will be reversed in the absence of further incentives.

Reciprocity can be used to pre-empt rather than reward a desired action. For instance, in the context of survey responses, it has been shown that giving an unconditional reward up front (whether people complete the survey or not) can motivate higher levels of response compared to the reward being contingent upon completing the survey⁶¹.

7.2.8 Goal setting and implementation intentions

It might seem obvious to focus on changing behaviour by increasing the motivation to behave in particular ways. However, limited time and willpower, and unexpected barriers and distractions mean that intentions often do not translate to behaviours. Research has found that a medium-to-large sized change in intention may result in only a small-to-medium change in behaviour. Closing the 'intention-action gap' can be a more effective way to change behaviour, especially where, as in social housing, strong motivations (for example threat of eviction) already exist. It is likely that an intention-action gap exists in behaviours such as rent arrears, property damage, and nuisance and annoyance: generally tenants want to meet their obligations but sometimes fail to do so. One way to address this, by using 'implementation intentions', would involve working with customers to specify the when, where and how of actions, and proactively considering how to overcome any barriers that emerge. Such an approach has been shown to be effective in closing the intention-action gap in numerous contexts such as increasing vaccination rates⁶³ and breast cancer screening rates.⁶⁴

In the context of savings behaviours, evidence from experiments shows that having a single savings goal rather than multiple savings goals results in a higher savings rate over 6 months. This effect is driven by the implementation intention associated with a single goal - having multiple goals evoke trade-offs that preclude people from entering the implementation mindset.⁶⁵

7.2.9 Mental health

Recent Citizen's Advice research found a link between financial skills and disability or long-term health conditions. 66 Those with chronic health problems or disabilities expressed lower ability keeping track and staying informed about money matters. This echoes Institute for Social and Economic Research (ISER) research suggesting that improving money skills has beneficial effects on physical health, particularly stress-related illnesses. 67

Recent research by the Money and Mental Health Policy Institute also suggested that the ability to manage everyday financial tasks such as keeping a budget or paying bills is impacted by periods of poor mental health.⁶⁸ Around one in four people experience a mental health problem during their lifetime and one in six adults have a mental health problem at any one time.⁶⁹ Issues around money seem to be particularly prevalent in individuals with mental health issues.⁷⁰ Depression and a sense of feeling dissatisfied with life is found to be twice as common amongst social housing tenants.⁷¹ This could be driven by the associations between unemployment, health problems, social isolation and mental health - and the fact that one or more of these are experienced in higher levels by tenants of social housing.⁷²

Financial capability (which might be defined as people's financial skills and knowledge - see section 2.1) is also impacted by periods of mental health issues. Research by the Money and Mental Health Policy Institute found that behaviours change when people are mentally unwell: in a survey 93 per cent reported that they spend more when unwell, 71 per cent put off situations when they are required to deal with creditors and 59 per cent reported that they had taken out a loan they would not have taken out otherwise.⁷³

Other aspects of financial capability that may be compromised by periods of mental ill health include: budgeting and numeracy; form-filling and paperwork; judgement; memory and time-keeping; anxiety; and impulse control.⁷⁴

7.2.10 Cognitive systems and capacity

A key insight in behavioural science is that there are multiple systems of cognition, and the differing processing styles of the multiple systems have important implications for our decision making. This multiple systems model is often associated with Nobel Laureate Daniel Kahneman, who labelled these as a 'fast' system 1, and a 'slow' system 2.⁷⁵ The fast System 1 offers automatic and intuitive processing, and occurs without effort - this is the system generally used as people go about their daily lives. In parallel, there is a slow, deliberate and reflective system involving analytic, reflective or deliberate thought – invoked when consciously or deliberately considering questions that constitutes some kind of cognitive challenge. A key difference between the two systems is that one is characterised by low effort, while the other is more effortful.

There are two particularly important dimensions to our cognitive processing capacities:

- 1. Cognitive bandwidth or mental processing capacity, which allows us to make complex and considered decisions (which could broadly be considered as system 2-style thinking)
- 2. Freedom from the traps of behavioural biases or cognitive shortcuts (heuristics), which can result in intuitive decisions (system 1-style thinking), which often lead to suboptimal outcomes.

Cognitive capacity and human factors are closely related: our knowledge and intelligence (analogous to our computer's hardware and software) depend on our cognitive bandwidth - our capacity in a given context to deploy that intelligence and knowledge usefully (analogous to our computer's capacity to run programmes). Scarcity of time or money has been shown to dramatically reduce bandwidth and have implications for other cognitive activity (see also section 2.8).⁷⁶

This distinction may help to explain why people in disadvantaged circumstances can make decisions that seem 'irrational' or counterproductive and which may lead to suboptimal outcomes. Researchers in a US study found only a modest difference in intelligence between people on high and low incomes, but when they prompted subjects to think about money worries before the test, the intelligence scores of the low-income subjects dropped dramatically. This effect was also tested in a real world situation with Indian sugarcane farmers who are paid for their crop once per year. The farmers tend to be poor just before a harvest and relatively well off a few weeks after the harvest. Over this period their effective IQ scores increased by over 10 points (which is the equivalent of moving from an average to an exceptional intellect, or from borderline intellectually challenged to average).77 While some behavioural biases are generally considered to apply universally across populations, there is also evidence that certain groups may be disproportionately affected by particular behavioural biases. For example, low income and low levels of education are associated with greater susceptibility to the use of heuristics and biases to guide their decision-making.⁷⁸ This tendency may also relate to social factors - older people and people in lower socioeconomic groups may receive less sales or marketing information and also be more isolated from supportive social networks. While people with a cushion of financial resources have time, capacity and social networks that help to challenge their cognitive biases, people living in poverty with constrained capacity are forced to make decisions in a rushed way and with less information - resulting in a tendency to fall back on heuristics.79

This system 1 / system 2 distinction also offers a helpful framework for thinking about different types of behavioural interventions. An intervention may be intended to trigger the fast system 1, so prompt a certain behaviour without assuming considered or reflective thought. Alternatively, an intervention may engage the slow system 2, intending to override initial system 1 responses and create a context in which a more considered decision is made. Finally, an intervention may simply change the choice architecture such that a 'mindless' choice is made that to some degree bypasses both systems 1 and 2.

Putting it into action: MH customers with day-to-day money and time challenges may experience a reduction in their decision making abilities. This does not necessarily reflect a lack of interest or effort - but may result in decisions which seem surprising or 'adverse' and which even the customers may find hard to explain or justify in retrospect.

7.2.11 Present bias and procrastination

Procrastination is the (temporary) behavioural avoidance of an undesirable activity. This behavioural insight is of key importance to many behaviours around debt and rent arrears - indebted customers often leave it late to seek help and there can be a reluctance to engage with or to talk about the problem - by which time a legal process may have been initiated. This is stressful for the customer, and expensive for the landlord.

An unwillingness to engage with a stressful situation is closely related to 'future discounting'.^{80,81,82} A greater sensitivity to psychological and financial costs and rewards in the present compared to the future motivates us to postpone or ignore actions with immediate costs, in favour of those with immediate benefits.⁸³ This tendency to 'put off' unappealing thoughts or activities is commonplace, whether it's completing a piece of work (95 per cent of college students procrastinate⁸⁴), failing to prepare for a stressful performance or appointment, starting a new fitness regime, or delaying the need to make a difficult decision. Future discounting and its implications for credit decisions have been widely studied.⁸⁵

Suboptimal decisions around credit may have implications for an individual's ability to pay rent and other day-to-day costs. When making credit decisions, individuals often exhibit present bias by focusing on the immediate rewards of credit (such as immediate consumption or paying off overdue bills), whilst placing less consideration on future repayments.^{86,87} A US survey found that individuals who exhibited present bias were more likely to have credit card debt, and have significantly higher levels of credit card debt.⁸⁸ However, the direction of causality is unclear - whether individuals who have high levels of debt become more present biased, or whether their present bias led them to take out credit. A European study suggested 'the youngest, poorest, most urban and least educated individuals are the most likely to be hyperbolic discounters' - meaning that they strongly prefer smaller rewards sooner over larger rewards later.⁸⁹ A study in Turkey found that 29 per cent of low-income individuals exhibited present bias compared to 6 per cent of high-income individual.⁹⁰ Other research suggests that having a high income can result in a greater feeling of control over your future and therefore less present bias.⁹¹

Assessing future costs may be particularly difficult when credit products have fluctuating interest rates, such as mortgages and credit cards with introductory offers. A large RCT found that consumers were 13 per cent more likely to accept a credit card offer with a low introductory interest rate for a short period of time, even though they would have paid less interest over the next two years if they had accepted a slightly higher introductory interest rate lasting for a longer period. A failure to address the complex issue of resolving a rent arrears problem may be caused by a tendency to discount the longer term benefits of being in a net-positive financial situation with your landlord, while prioritising shorter term financial priorities.

A body of literature on construal level theory suggests that as the mind shifts between distal (distant) versus proximal (closer) events, there is an associated shift in information processing styles. Decisions that are psychologically distant in time are characterised by a more abstract and goal-focused style of processing while decisions that are psychologically closer in time are characterised by more concrete, tangible and task-based thinking. This offers a helpful explanation for high rates of discounting and suboptimal financial decisions: focusing on proximal and immediate challenges is a response to very tangible daily threats of an uncertain way of life. A distal mindset that allows for more highly considered responses in the medium to long-term is a privilege associated with middle-class levels of financial security. Or to describe it another way: the ability to wait or delay a reward depends on trusting both that the reward will still be available in the future, and that you (the individual) will still be around to enjoy the payoff at that point in the future. A level of confidence in both of these becomes less certain with increasingly vicarious lifestyles. A recent study suggests that increasing levels of community trust and community cohesion - giving people a sense that they have a supportive safety net - can reduce levels of discounting and increase trust.

As well as decisions about taking credit, present bias may also have important implications for budgeting and mental accounting. In the absence of a proper mental account that hypothecates budget between rent, bills and living costs, an individual with a tendency to discount the future may prioritise short term or more pleasurable costs (such as entertainment) over more future-focused strategies such as saving money for rent, paying off bills or saving for the future.

A tendency to focus on the present and discount the future may also be reinforced by the structure of Universal Credit (please refer to the separate scoping study document for a detailed behavioural analysis of UC). The direct payment to the tenant of the housing benefit element of Universal Credit (where it had previously been paid directly to the landlord) might offer a temptation to spend the cash among those with a high rate of discounting the future.

7.2.12 Mental accounting

In economic terms money can be described as 'fungible' - meaning that any one unit of it is exchangeable for another. However, we often psychologically separate funds into different mental accounts and treat them as non-interchangeable. For example, studies have shown that money which is 'won' (e.g. from gambling or lotteries) is much more likely to be spent in a discretionary manner than money which is earned through labour.⁹⁶

However, our tendency to use methods of mental accounting may also help us budget more effectively. For example, a traditional savings technique is to separate cash earnings amongst a number of envelopes earmarked for various needs such as 'food', 'clothes', 'rent' etc. Though there is nothing stopping people from taking money from one envelope and mis-spending it, simply dividing and labelling cash in this way can help overcome temptation. Field experiments in rural India have found that partitioning savings in this way increases self-control, reduces temptation to spend the money and encourages saving. In addition, the presence of a visual reminder (a photo of their children on the envelopes) increases the savings rate. This suggests that inducing guilt associated with violating a savings rule and partitioning the earmarked money can significantly increase savings. If a customer does not mentally account they may not create a budget that allows them to meet their highest priority demands, such as energy and rent. Financial products such as 'jam jar' accounts may help to create helpful patterns of mental accounting.

Lack of mental accounting may be particularly acute for tenants who are receiving Universal Credit, as the self-reliance and budgeting abilities assumed by Universal Credit may be insufficiently developed in many tenants.

Putting it into action: Our Explore work with MH front line staff suggest tenants sometimes prioritise paying bills such as TV subscriptions ahead of paying their rent. This may be a rational decision given that the sky service is more likely to be terminated for non-payment than they are to be evicted from their home for late payment. However, it would be preferable if MH customers did not perceive their rent money to be 'fungible' in the sense that it can be used for other purposes. Harnessing our tendency for mental accounting, it may help to encourage customers to think about setting up hypothecated or 'jam jar' accounts to keep rent money ring-fenced. This would not only

discourage customers from using their rent money inappropriately, but is also more broadly evidenced to be a helpful budgeting tool.

7.2.13 Framing

Changing the way that costs and savings are presented, or 'framed', can also be a useful trigger to change spending habits. ⁹⁹ For example, the use of cash may subjectively feel more expensive than using a credit or debit card. Costs are sometimes framed in terms of the value of other commodities, for example students' habit of measuring their bills in terms of the number of alcoholic drinks the money could otherwise buy. Helping people understand the way that costs accumulate can also help, for example presenting total lifetime savings of a higher miles-per-gallon car. ¹⁰⁰ In a BIT trial we included the lifetime running costs of washer-dryers on the price label, resulting in a small but significant shift in purchases towards more expensive, but more efficient products which would be cheaper in the long run. Experimenting with price frames may influence longer term thinking leading to more responsible financial behaviours, such as paying rent.

One of the strongest and most studied framing effects is loss aversion. This could be summarised as a stronger negative reaction to possible losses than a positive reaction to the equivalent possible gain. This effect has been shown in many situations, including health decisions (framed as number of lives lost versus number of lives saved) and financial behaviours.¹⁰¹

As an example, research has examined the impact of how a bonus related to student test performance is offered to teachers. When teachers were offered a potential bonus in advance and told they would have to give it back if their students did not perform adequately, their students scored better on the test compared to the students of teachers who were told they would potentially get an identical bonus but only after the test. The prospect of losing an amount of money motivated the teachers to improve their students' performance more than the prospect of simply gaining the same amount of money. Deterrence and threat messages can be an effective way of highlighting the losses associated with taking an action and have also been shown to be effective at changing behaviour. Research has shown that making the potential negative repercussions salient and emphasising the losses associated with taking no action can promote action in payment behaviour. 104,105

Putting it into action: Talking about the loss of a tenancy may have a stronger emotional impact to a customer than framing the situation more positively by talking about keeping their tenancy.

7.2.14 Salience and timely reminders

Drawing attention to something, by making it eye catching, simple or accessible can have significant influences on behaviour. This is known as increasing salience, and the impact of this technique has been shown in various trials. A number of trials have successfully used this insight: for example, putting a handwritten post-it note request on envelopes increased response rates to a survey sent by the Irish Revenue. 106 A BIT trial with DVLA tested the efficacy of various messages on individuals who

do not tax their vehicles. Including an image of the actual untaxed vehicle in the letter increased the salience of losing it and increased relicensing by 9 percentage points.

Putting it into action: MH could build on this research to increase the salience of losing the customer's home, for example by including a photo of the home on an arrears letter.

When using prompts to encourage particular behaviours, the timing of the prompt is also highly significant. 107,108 People are particularly susceptible to influences on their habits during periods of significant life transitions (such as when moving house, getting married, having a child or losing a close relative). 109 Less significant life events can also catalyse actions, and these smaller 'decision points' can also help to break habits. For example, experiments have shown that people eat less popcorn when it is served in several smaller boxed portions instead of one large box, because the large box offers less of an obvious decision point at which to decide to stop - this is known as the partitioning effect. 110 The failure to act on steadily increasing debt or rent arrears may be rooted in the same problem - if the daily increase in debt is relatively small, there is no obvious point at which to break the habit of inaction. It is for this reason that steadily, incrementally worsening situations can often lead us into problems of far greater severity than we would have allowed to happen had the situation occurred more suddenly. Changing our habits or behaviour often feels like an admission that our previous behaviour was wrong unless we can point to a clear change in our circumstance to justify the change in behaviour.

The power of a timely prompt has been shown in a number of contexts. A BIT trial demonstrated that sending text message prompts to encourage people to pay court fines 10 days before bailiffs were due to arrive increased payment rates by three times. Asking people to leave legacy gifts at the moment they were writing their wills was found to increase charitable donations, 111 and asking people to sign an honesty declaration at the beginning of a form, rather than at the end, significantly increases the accuracy of responses. 112

The commercial world is highly aware of the power of a timely prompt. Unsolicited offers of credit via text messages, mail or email are likely to tempt consumers to take out these forms of credit over products that are not heavily advertised. Research by the UK Financial Conduct Authority (FCA) found that UK borrowers often prioritise factors such as certainty of approval, flexibility and familiarity, over the absolute cost of credit. High interest loans are often advertised in the UK as available within 10 minutes of approval of loans in 10 Minutes, 24/7. In contrast, credit unions offering loans at lower interest rates usually require an individual to sign up to be a member during opening hours and take much longer for the money to be deposited once approved, adding friction to the process.

Thinking about natural 'break' or interruption points in the arrears process may help to identify moments when habits and previous behaviours can be interrupted. Similarly, if customers have been through the arrears process multiple times, their familiarity with the processes may lead to a weariness or cynicism. They may know at what point they can resolve the situation, or at least take small steps to show they are working towards resolving their situation - without serious risk of losing their tenancy.

Putting it into action: Our explore work suggested there is a cohort of customers who have been through the process several times and understand the process, or there may be informal information sharing networks between customers about the arrears process and what the customer can get away with. Surprising such customers with a cosmetically different (albeit technically identical) arrears process could be an intervention that challenges their sense of familiarity.

7.2.15 Defaults and status quo bias

Instead of making an active decision when faced with a complex choice, many individuals will simply follow the path of least resistance.

116,117 Doing nothing, or taking the default option are such paths of low resistance. Creating a system of defaults that support long term positive financial behaviours could help improve financial decision making and reduce rent arrears.

In the context of saving for pensions, researchers in the US found that employees stuck with defaulted pension contribution settings, even when amending them was an option. UK pension policy has changed to reflect such learnings about default effects. From 2018 all employers must automatically enrol their workers into a pension, with the opportunity for employees to opt-out. A recent report from the National Audit Office found that, among companies that have already started, opt-out rates have been between 8 and 14 per cent, a substantially lower figure than had been expected. The Department for Work and Pensions (DWP) estimates that 9 million more people will start to save or save more for retirement because of automatic enrolment into workplace pensions. While there have been calls for default rates to be significantly higher than this, a study at one UK firm with a 12 per cent default employee contribution rate found that after 12 months of employment, only 25 per cent of employees had stuck with this default while about 60 per cent had shifted to a lower contribution rate. This suggests that default settings work best when they are broadly in line with individual preferences, and if they are not they will be less effective in encouraging the desired behaviours.

Default effects have also been demonstrated in a number of contexts other than financial behaviours. For example, in the context of organ donation a requirement for an individual to opt-out to agree to donate organs (presumed consent) results in far higher levels of agreement than a requirement to opt-in. 122,123 When given options for specifying optional extras in the car buying process, people made different decisions based on whether the default was a highly specified model with options they could remove, compared to a basic model with extras they could add. 124 Finally, when making the decision to agree to further contact from a website, whether the site user is required to opt-in to agree to further contact or opt-out to refuse further contact has a highly significant impact on rates of sign-up 125 - a finding widely understood in the world of internet marketing.

Possible explanations for the power of default effects include procrastination, status quo bias, anticipated regret^{126,127} and information overload (for more on information overload see section 2.19). Levels of knowledge may also significantly influence the default effect: in financial contexts low knowledge individuals opt for the default allocation more often than high knowledge individuals.¹²⁸

Thoughtful leverage of default effects could have a powerful impact on encouraging desirable behaviours in the context of rent and arrears processes.

Putting it into action: Simple defaults could be used to encourage greater rent payments, for example by defaulting people into Direct Debit or making online payments the default option (particularly among people with lower levels of knowledge of financial capability). Reducing the number of steps involved in undertaking the process (e.g. clicks to fill in online payment information) will also help to reduce friction costs associated with paying rent. However, it is important to remember that default effects are less likely to be effective if the default presented is too far from natural preference.

7.2.16 Anchoring

Arbitrary information that comes to mind or is presented to us can 'anchor' or guide our subsequent decisions. A famous study involving New York cab drivers revealed how anchoring can influence decisions around work and pay. 129 Contrary to the predictions of orthodox economics, on days when cab drivers earned more per hour (for example on wet days they spent less time looking for customers), they finished their shift earlier. Drivers appeared to set a target for the amount of money they wanted to earn in a day (an anchor) which blinded them to the possibility of working longer shifts on days when they could earn more. This illustrates how certain mental shortcuts may lead workers who do not have regular hours or predictable shifts to earn less than might be expected from an orthodox, 'rational' viewpoint.

Anchors can take the form of suggested savings goals or examples, ¹³⁰ or information on the behaviour of peers. ¹³¹

The default of putting money into a savings account is likely to have a strong effect on savings rates. Similarly, anchoring effects may influence decision making in other arenas of financial decision making, such as rent arrears.

Putting it into action: Customers on Universal Credit and zero hours contracts (or other fluctuating incomes) need to pay a different amount of housing top-up to MH each month. Our Explore work suggested customers may anchor on a certain amount they need to pay more than they actively calculate and budget for the month-to-month variance.

7.2.17 Friction costs

Small hassle factors and 'friction costs' can disproportionately influence behaviour. ¹³² The harder you make it for an individual to undertake a behaviour the less likely they are to do it. This particularly applies in areas such as tax and debt, as people often find these matters stressful, tedious and confusing - so anything to reduce the hassle and make it easy for the customer to take a particular behaviour may be effective. A trial run by BIT and HMRC found that providing a link in debt letters that took individuals directly to the relevant form rather than to the general website (which would then signpost them to the form) significantly increased the collection of debt despite the additional 'friction' being just one mouse click. ¹³³ Even trivial amounts of friction place demands on individuals' limited cognitive resources, and as levels of friction increase, people often use strategies and rules of thumb to make decisions, which often result in suboptimal outcomes.

Perversely, when people on low incomes are uncertain about their eligibility to receive an entitlement, they may choose not to apply in order to avoid the risk of having to return an overpayment. To apply for Tax Credits in the UK, claimants must declare complex financial details, such as earnings details from two years prior to the application, to check their eligibility. In addition, if an individual's circumstances change throughout the year that they receive Tax Credits, they must declare these changes to ensure they are paid the right amount. In the first year that Tax Credits were launched, one third of claims were overpaid. 134

Our explore work revealed that there may be a number of frictions when Income Team staff engaging with consumers. A significant source of friction is the difficulty in customers getting through to the Income Team when they try to call. Customers placed on hold (particularly if they are calling from mobiles that may have little credit) may not persevere long enough to be able to take the steps MH are trying to encourage. One IC in Roundshaw reported very low response rates to a questionnaire about what kinds of help and support was needed - although there was friction in expecting people to complete the form and sent it back through the post. Considering these 'procedural' points of friction may have powerful effects, and not considering these frictions could result in a 'last mile' problem - an issue where actions and intentions are thwarted at the final stage through obstacles and extra frictions that make it too challenging to complete the final stages of an intended action.

Putting it into action: There are many frictions within MH processes which could be reduced. One significant friction cost identified during our customer research is the last-mile problem of getting through to MH staff on the phone – lengthy hold periods may cause many to give up. This is far from ideal given many customers prefer to pay their rent over the phone, and many other tasks (responding to arrears letters, setting up arrangements, signing up to Direct Debit) are also commonly done over the phone.

There are also significant friction costs implicit in the Universal Credit system - please see separate scoping study document for a detailed survey of the behavioural implications of Universal Credit.

7.2.18 Cognitive load and scarcity

A scarcity of time combined with a large number of tasks to complete can make us feel overwhelmed. This is probably a feature of most people's lives, but may be particularly pronounced in those with both time limitations and financial worries or emotional distress. In the same way that a computer runs less efficiently when many programs are running at the same time, such challenges have serious consequences for our judgement and decisions. ¹³⁵ People on low incomes often have to make a larger number of critical decisions each day compared to those with larger financial and time resources. These effects of scarcity can be particularly great for economically deprived individuals, ¹³⁶ ethnic minorities and the elderly, who are often strained by other preoccupations such as financial challenges, unemployment, discrimination, and loneliness. ¹³⁷

Scarcity can induce a short-sightedness (or tunnelling) that affects our ability to make good decisions and plan for the future - as we are focused disproportionately on the present (this is also closely related to temporal discounting - see section 2.8). Such scarcity effects may be particularly pronounced for those customers on benefits: conditions that are a feature of Universal Credit, such as

attending regular meetings with a Work Coach or the requirement to spend up to 35 hours per week in active job seeking alongside their other life commitments will place considerable cognitive load on claimants. The sanctions regime (which is intended to be firm but easy to understand, but is actually experienced as complex by many claimants), results in a pause or reduction in payments on claimants that do not meet their entitlement conditions. This further increases scarcity, both cognitively and financially. Within this project, a separate scoping study will look specifically at the transition to Universal Credit.

While intended to promote self-sufficiency and responsibility, the overall cost of depleting psychological resources may impact attention, self-control, long-term planning, and offset the intended increase in self-reliance of the re-designed system.

The timings of benefits patterns may also be significant. If benefits are paid monthly in arrears while rent is paid in advance weekly or fortnightly this may result in increased cognitive load in calculating your current position. Similarly, 'zero hours' contracts, whereby workers must be available for work but are not guaranteed a minimum number of working hours, have risen in prominence in recent years with a recent figure estimating the total workforce on such a contract at over 900,000.¹³⁸ This creates considerable challenges in knowing regular income and creating a budget or mental account. The chaotic nature of these kinds of income patterns may add to cognitive load.

7.2.19 Information and choice overload

Evidence suggests that while people are attracted to choice sets with large numbers of alternatives, they may be less likely to actually make a choice when presented with a greater number of options. Beyond a certain number of choices, the effort required to make an optimum choice can outweigh the benefit of the extra options, and increases the likelihood that the individual opts for the path of least resistance - which may be to avoid the decision or take no action at all. 139,140 This may have implications for a number of ways that MH communications with its customers. There may be a limit to the amount of information that an individual may be able to absorb in one sitting, particularly if the situation is stressful or distracting, such as a meeting with a Housing Officer or Income Coordinator.

Putting it into action: Explore work suggested that at the tenancy signup stage people are overwhelmed with information from the Available Homes team relating to their tenancy, so are unlikely to absorb much of what they are given or told. Considering a more timely moment to introduce much of this information may increase the chance that it is assimilated by the customer.

7.2.20 Information avoidance

A tendency to actively or strategically avoid information that may cause stress or anxiety has been termed the 'ostrich effect'¹⁴¹ - similar to the ostrich's tendency to respond to stressful situations by pretending they do not exist. Active information avoidance occurs when the individual is aware that information exists and has free access to it, or even incurs a cost for not accessing it. Information avoidance has been observed in the context of disease testing¹⁴², investment management¹⁴³ and moral decision making.¹⁴⁴

Less research exists on information avoidance in debt or consumer financial situations, but qualitative evidence suggests that avoiding demands for money from creditors is a frequent behaviour among individuals with high levels of debt¹⁴⁵ - a strategy with higher long-term costs as levels of debt continue to build.

An individual pushed into debt through delays to Universal Credit payments reported that "it made me so depressed that I locked myself in my flat and I refused to open any letters because I was scared of it being bills."¹⁴⁶

Putting it into action: Conversations with front line MH staff who visit customers in their homes suggest they often see piles of unopened letters (and this is a finding reflected in other BIT research projects). An active decision to not open letters could reflect such an information avoidance strategy, rather than just disorganisation.

7.3 Social factors relevant to arrears and financial behaviour

Social dimensions influence decisions around rent arrears, debt and financial decisions in a number of ways. These include the power of social norms, social trust and the effects of social stereotypes and stigmas.

7.3.1 Social norms

We are strongly influenced by the behaviour of other people around us, particularly if we believe those people are similar to us. 147,148 Social and cultural norms are the behavioural expectations, or rules, that exist within societies or groups. Such norms can be explicit (for example a 'No Smoking' sign) or just implicit from observed behaviours within a group (for example an expectation to shake hands when meeting someone). As people often take their understanding of social norms from the behaviour of others, behaviours can develop and become quickly entrenched. Some social norms have a powerful automatic effect on behaviour (for example the expectation of being quiet in a library), and these kinds of automatic norms can influence actions in both positive and negative ways.

Debt, spending and financial behaviours can be influenced by social norms.¹⁴⁹ Library workers at a university campus in the US were found to have similar retirement savings behaviour to that of their colleagues; precisely why this occurred is not understood, but it may be that colleagues talk to each other about their retirement plans which influences the decisions they make.¹⁵⁰

As well as social norms that emerge from conversation and information sharing, as many financial behaviours are not visible to others, individuals may make assumptions about what other people are doing, and these assumptions will subsequently influence their own behaviour. A BIT study found that the British public think that 65 per cent of the population are not saving enough for retirement, when government studies suggest this figure is around 43 per cent (Ipsos MORI, 2015). In contexts such as tax compliance, it has been shown that people hold erroneous views on what the majority of other people are doing, and correcting these can lead to higher levels of compliance with desired

behaviours. Highlighting the positive behaviour of others in a trial to encourage payment of taxes, BIT found that messages such as '9 out of 10 people pay their tax on time' resulted in a 15 per cent increase in tax compliance. Before being exposed to this norm, people may believe it to be more common - and therefore socially acceptable - than it really is.

Neighbourhood ties or relationships are a form of social effects, and may influence a customer's likelihood of being in rent arrears. Honesty has been widely studied, and the literature suggests it is a malleable behaviour influenced by factors such as decision contexts, the perceived behaviour of others and the individual's state of mind.¹⁵²

Putting it into action: Our Explore work suggested strong social networks exist in many MH estates, and that customers often share information with each other about the arrears process. This may lead some customers to believe that arrears problems, or not paying rent, are more common or widespread than they are in reality.

7.3.2 Social trust and social stereotypes

Living in a community that contains strong social bonds may facilitate positive financial behaviours, such as saving, as well as negative ones such as norms around not paying rent; or the creation and propagation of negative identities and adversarial 'us and them' attitudes between tenants and landlords.

In many countries, communities encourage savings through Rotating Savings and Credit Associations (RoSCAs). RoSCAs work when participants agree to make regular contributions to a fund which is given, in whole or in part, to each contributor in rotation.¹⁵³ The clubs work because the group members trust each other to pay into the fund regularly and exert social pressure on each other to do so. Although this method is used by many communities globally, it is no longer popular in the UK.¹⁵⁴ This may be a result of negative news stories about thefts of Christmas Savings Club funds, or transient populations in big cities may erode the social trust needed for these clubs to operate effectively.

There is evidence to suggest that beyond the challenges of poverty itself, a link between poverty and social status could have a further impact on the individual, negatively affecting financial decisions. Stereotype threat is a phenomenon whereby people who belong to negatively stereotyped groups non-consciously experience anxiety about the stereotype to which they believe they conform, leading to decreased performance on related tasks.¹⁵⁵

For example, a lab study found that found that maths scores for low-income participants dropped after hearing a script that mentioned negative stereotypes for people on low incomes, while the scores for high-income participants improved and middle-income participants stayed the same. The Another lab experiment suggested that priming middle class people to believe they are lower on the socioeconomic scale than they actually are leads them to perform worse in a task of picking out the best credit card offer. Finally, evidence from another study found that low income students performed worse if they had previously been asked questions about their parents' income and occupation, compared to people who had not been asked these questions. This suggests that aside from the actual challenges of poverty there is an additional negative impact from real or perceived inequality on

financial decision making.¹⁵⁸ On the other hand, a study found that people living in poverty performed better on tests (equivalent to a 10 point increase in IQ) or were more likely to consider making use of programmes that would benefit them if they had recently been asked to recall a proud moment or past achievement.¹⁵⁹ Using these insights, BIT ran a trial to increase the proportion of BME police officers passing an online recruitment test. Historically, BME candidates have not performed as strongly on a situational judgement test that is a required stage in the process to join the police. The BIT trial tested inviting BME candidates to reflect on what might make them a good addition to the force, and what significance that would have to their community. The result of this was to almost entirely close the gap in pass rates between BME and white candidates.¹⁶⁰

This body of evidence on social stereotyping suggests that empowering or disempowering encounters can have an impact on the ability to overcome disadvantage. Exposure to environments in which individuals are uncomfortably challenged in such a way that the negative stereotype is promoted (for example in job interviews, discussions with banks or housing officers) may result in a debilitating effect on performance in those situations.

7.3.3 Social support and finding a job

Higher levels of social support can improve people's reemployment chances. A person's weak ties (their network of acquaintances) and their strong ties (their closer friends and family) have an influence on reemployment. For high status individuals, information about jobs that led to employment was more likely to come from weak ties than from closer friends, but people who had been out of work for longer were more likely to find jobs via their strong ties. Other research has found that weak ties and a broader network help to find out about jobs but skills and confidence are necessary to make the most of such links. Strong ties can offer practical and emotional support in the process of applying for a job. 162,163

7.3.4 Benefit take-up and welfare stigma

One third of welfare claimants in the UK report experiencing some degree of stigma around their claim. 164 Welfare stigma is derived from the view that, 'being poor constitutes a form of social deviance because pulling oneself out of poverty is believed to be both positive and praiseworthy'. 165 As an attempt to protect their self-worth, individuals may be less likely to take up a benefit that they are entitled to. 166,167

Stigma is, of course, not the only factor influencing levels of benefit take-up. Joseph Rowntree Foundation research found that approximately a third of eligible people in the UK in 2009-10 were not claiming the means-tested benefits they were entitled to.¹⁶⁸ Other than stigma, reasons for not taking up benefits include a lack of knowledge about eligibility to entitlement; the value of benefits compared to the effort required to claim; and benefit design discouraging take-up.¹⁶⁹ The stigma or shame experienced in welfare dependency or financial challenges may also result in a diminished chance of seeking advice or assistance from Citizens' Advice, or other debt support organisations. Of course, this kind of stigma will only affect some individuals' propensity to claim benefits; others will be comfortable will the process. This kind of stigma may be particularly pronounced under Universal Credit, as even claimants who are employed in part time work are required to claim credit under the

same umbrella as the unemployed, rather than claiming tax credits or housing benefit to top up their earnings.

Stigma may also exert a more general influence over the experiences of social housing tenants, with reports that social housing tenants can be negatively portrayed in by the media, government and the social housing sector itself. A campaign has been set up to challenge such negative perceptions.¹⁷⁰

7.3.5 Family and social networks

Social networks can have powerful effects in helping individuals balance significant demands on their cognitive resources, and have been shown to encourage positive financial and parenting behaviours. This includes the role of grandparents and other significant adults, as well as diverse social groups.¹⁷¹ Support from social networks has been shown to alleviate stress from parenting and poverty, as well as open channels for reciprocal aid and information sharing.^{172,173,174} If low-income families are embedded in social networks with low levels of human and social capital, they are less likely to be exposed to strategies or information that may improve their children's cognitive and socioemotional development.¹⁷⁵ Being part of a social network that supports responsive parenting reinforces this behaviour as a social norm.^{176,177}

In areas with strong social networks or neighbourhood ties, failure to pay bills or falling into arrears may cause embarrassment, and such strong social ties may facilitate information sharing, and ultimately reduce arrears.¹⁷⁸ Alternatively, such informal information sharing networks might work to share information about how far the process can be taken without fear of eviction.

Putting it into action: Our Explore interviews with Income team suggest that customers often have an understanding of how far the arrears process can be taken without adverse consequences, and this kind of information - as well as information about when Income Coordinators are visiting an area - is often shared between customers.

Social networks might also be an effective tool to encourage other positive financial behaviours. An experiment in India randomly assigned villages to a savings intervention, which involved allocating a monitor. By having a savings monitor, individuals were able to save 35 per cent more than those who were not allocated a monitor. The effect was strongest when the saver and monitor knew each other well.¹⁷⁹

Community trust may also reduce short term or myopic decisions in low-income individuals. A trial in Bangladesh found that increased community trust can decrease temporal discounting in low-income populations which may lead to forward-focused educational and financial decision making - if people feel supported in their communities they may be more likely to escape poverty. If a feeling of being supported in communities, through support of friends and families, can lead to better financial outcomes this suggests that improving community bonds may be a more effective route to improving financial decision making than focusing on individuals. ¹⁸⁰

7.4 Environmental factors

Environmental factors include private environments such as housing, as well as public environments, such as parks and safe communities. There is a growing body of evidence that higher quality of housing and local environmental are associated with positive life outcomes. For example, natural experiments in the US and UK have found that randomly assigned social housing tenants that had trees near their property had greater capacity for directed attention (focus) and were more effective in managing major life issues. ¹⁸¹ They also had better mental health ¹⁸² and exhibited lower levels of aggression. ¹⁸³ By contrast, school children exposed to aircraft noise over long time periods showed lower levels of persistence on challenging tasks. ¹⁸⁴

Additionally, there is a growing body of evidence on how the built environment can influence mental health (itself strongly associated both with financial problems and diminished life chances) - some of this evidence is summarised below. Many of these factors would be beyond the control of MH to change, but it might be helpful to be sensitive to the relationship between the environment and the individual when considering behaviours around rent arrears and debt.

7.4.1 Built environment, mental health and well-being

It has been argued the built environment has a number of channels of influence, including: its effects as an environmental stressor; through its influence over social support mechanisms; through labelling and symbolic effects; and through the act of the planning process.¹⁸⁵

Stress factors can include both environmental and social stressors. As an environmental stress effect, noise can be highly detrimental. High household density and noise levels have an impact on parents' interaction with their children, increasing anxiety levels and leading to disruptive child behaviours. Interaction with their children, increasing anxiety levels and leading to disruptive child behaviours. One study found that housing density was negatively associated with parental responsiveness. This in turn led parents in crowded homes to speak in less complex, sophisticated ways with their children compared with parents in uncrowded homes - which offers a potential explanation for the link between residential overcrowding and delayed cognitive development. Living in a noisy environment has been shown to disrupt sleeping patterns, affecting cognitive performance and impair optimal decision-making and lower focusing of attention and filtering of relevant information. Research suggests that there is a negative correlation between early childhood cognitive development and noise levels in the home. Residents who live on noisy and high traffic flow streets are also less likely to know or like their neighbours to parents, while also making it less safe for children to play outside and interact with others.

The effects of living in a crowded environment is another important influence on well-being and mental health. High social densities (many people living together) have been shown to increase levels of anxiety¹⁹³, although those given more control over their environments or those with a high locus of control (see section 2.5) find this less stressful¹⁹⁴. Lab experiments have suggested interesting gender differences: men are more stressed by increased spatial density¹⁹⁵ (smaller spaces) while women are more stressed by increased social density (more people living in the same spaces).¹⁹⁶

Outside of the lab, there seems to be a relationship between density and mental health ¹⁹⁷, including findings of different brain activity in city-dwellers. ¹⁹⁸

The height of buildings may also be a determinant of well-being, with relationships suggesting a relationship between height of the property in a building, and psychological distress among children. ¹⁹⁹ A possible explanation for this finding is that group spaces (such as playgrounds) are farther away from people living on higher floors, resulting in fewer opportunities for parents to allow their children to play outside.

Twenty per cent of homes in England are below the Decent Homes Standard (Department for Communities and Local Government, 2015), which impacts most on low-income families.²⁰⁰ But our sense of attachment to where we live, and the quality of relationships with other neighbouring residents has been shown to account for a large proportion of residential satisfaction.²⁰¹ While residents involved with their local communities have higher levels of satisfaction that are not determined by the quality of homes, satisfaction levels of those with lower levels of connection are more determined by the quality of where they live.²⁰²

Labelling of areas or estates as 'bad' or 'problematic' may both cause a downward spiral of desirability to live in certain places, but may also affect the mental health of people living there. This is because people may internalise some of the stigma of living in low quality housing, and possibly blame themselves for how they live (see sections 2.4 on self-efficacy and 3.4 on benefits stigma).

Additionally, people feel better when they can control their environment²⁰⁴, and consequently have better mental health outcomes. Evidence suggests an association between stress and stress-related illness and insecure home ownership (rent or mortgage debts)²⁰⁵.

Putting it into action: Our Explore interviews with the Income Team suggest that customers often have an understanding of how far the arrears process can be taken without adverse consequences, and this kind of information, as well as information about when Income Coordinators are visiting an area is often shared between customers. Community relationships may be as important a determinant of satisfaction with the quality of accommodation as the accommodation itself. In areas where the stock cannot be improved, it might be more effective to focus efforts on building social capital between residents.

7.4.2 Built environment and social networks

Subtle differences in the layout of the built environment may also influence support and social networks (which may impact on feelings of control in response to challenges such as being in rent arrears or claiming Universal Credit) - the form of the built environment can impact friendship and group formation. Physical layouts such as arrangements of stairs and access roads determine the chances for meetings, and these meetings are the basis for friendships and group formation. Length of street (for example in through roads compared to cul de sacs) affected the quality and

strength of neighbour relationships - the less traffic on a road the more likely people were to describe their neighbours as friendly.²⁰⁸ But unwanted social interaction in longer passageways has been found to cause withdrawal and avoidance of others, which decreases social network formation.²⁰⁹ People like to regulate or control their interactions with others, and when they cannot they may become more hostile to others. Just dividing longer spaces into smaller units using doors has been found to mitigate the effects.²¹⁰

Access to shared or semi-private 'defensible' spaces that have come to be controlled and regulated by residents²¹¹ can to be associated with lower levels of crime and increased levels of social network formation.²¹² The presence of shops close to residents can cause a perception of unwanted social contact, less control of group spaces and an impact on group formation.²¹³ Mixed land use (for example a mix of residential, commercial and industrial units) is associated with lower proportions of people who consider their neighbours as helpful.²¹⁴ However, relationships with neighbours can be a 'double edged sword' - the chances of both being friends with people and disliking them increased with physical proximity. You are stuck with the people close to you, whether you like them or not.²¹⁵

This body of research suggests that physical environments have a significant determining effect on wellbeing (in many forms), financial decision making processes, as well as a generational influence - low environmental quality impacts childhood development, potentially leading to a generational cascade of disadvantage.

These environmental factors are less suited to an intervention tested in a RCT, but it could be useful for MH to consider the relationship between wellbeing and the environment in terms of its planning strategy for the future.

7.5 Conclusion

This literature review is intended to provide 'food for thought' to MH on how a number of insights across a variety of strands of academic literature might be practically applied to questions of arrears and other financial behaviours. Similar insights may also apply to challenges around well-being, mental health and social cohesion.

There are obviously complex interplays between the different categories contained in this document. For example, environmental and social factors influence cognitive processing and our susceptibility to suboptimal thinking, while subtle details in government welfare policy may influence self-perception and customers belief in their own ability to face and overcome life challenges. For a social housing organisation with geographical spread across towns and regions, different factors may apply to a greater or lesser extent in different parts of the country.

We hope this document can assist MH with a better understanding of its own customers, and how communications, policy and service design relating to arrears and financial behaviours (and possibly more broadly beyond financial behaviour) can be developed with a more realistic understanding of how customers think and relate to each other, and to the places where they live.

8 Appendix B - Data science work

8.1 Summary

In this note, we present the results of a machine learning exercise designed to predict whether a Metropolitan Housing (MH) tenant is likely to enter high-priority arrears (defined as Rentsense P1). This preliminary data science work is intended to initiate consideration of whether MH might proactively target customers before they fall into arrears, rather than (or in addition to) MH's business as usual process of contacting customers after they have fallen into arrears.

By reviewing customers' current situation and looking back at their historic data, we find that the proportion of weeks in which the customer was in high priority arrears during the last year is the overwhelming predictor of their current arrears state, explaining more than 90 per cent of their arrears behaviour.

If a tenant has been in high arrears in 10 or more weeks over the past year, the chance of them being in high arrears in the coming 2 months is 32 per cent. If the customers has been in arrears less than 10 weeks over the past year the chance of being in arrears in the coming 2 months is only 5 per cent.

By using this predictive modelling to target the most at-risk customers, MH could effectively target their efforts at those most at-risk of arrears. Specifically, the top 20% identified by the model as most likely to fall into arrears will contain 62% of the customers who actually will fall into arrears. Put simply, this is a three-times better 'hit rate' than chance (i.e. compared to targeting pre-emptive support at random customers).

We find that other variables - such as greater rent value, increasing age, and increasing air quality - are weakly predictive of arrears and so slightly boost the predictive power of the model, but their contribution to the model is minimal compared to historic arrears. This is consistent with findings from other social housing organisations. For example, Hackney Council, who followed a similar data science methodology with their tenant data found that no single factor was highly predictive of going into arrears, other than past arrears behaviours.²¹⁶

If MH decided to try to proactively identify people likely to fall into arrears and offer these customers pre-emptive support services, they should target support at those who have a history of arrears.

8.2 Background

'Data science' has become something of a buzzword for 'anything innovative that uses data'. This might include visualising data, summarising it in various ways, or using it to predict events or outcomes. Our focus is largely on the last of these three, which is generally called 'predictive modelling'. This usually consists of gathering a large set of historical data, using computer algorithms to find patterns in the data that it would be impractical or impossible for a human to find, and then using those patterns either to understand the process in question or to predict where and when specific events are likely to happen, in order to plan for and respond to those events.

In this project we use predictive modelling to test if MH's data on customer behaviour and demographics (combined with publically available datasets on neighbourhood characteristics) can be used to predict who will fall into rent arrears before this happens. If the model has predictive power, this could indicate that targeting customers (for example by offering them a package of financial advice or support) before they fall into arrears could be more effective than reactive engagement after the point they have entered arrears.

8.3 Summary of arrears situation

As of 15 August 2017, MH had 19,142 general needs tenancies who had gross balances of less than £10,000 and greater than - £10,000. These customers were the cohort for this analysis. This means both customers in arrears and in credit were included in the analysis.

'Notional arrears' are the actual balance at the end of a week, while 'projected arrears' are calculated using an algorithm by Rentsense.²¹⁷

Summary statistics	
General needs tenancies	19,142
Notional arrears (negative balance)	50.02%
Projected arrears	64.7%
True arrears	17.1%
Mean notional arrears	£404.67
Mean projected arrears	£520.63

Rentsense has a system of allocating different priorities to arrears cases. Customers are ranked from 1 to 5 (or no priority), with lower numbers being higher priority. About 17.1 per cent of tenancies as being in 'true arrears', with 11.43 per cent in the highest priority level (P1). 'True arrears' indicates that Rentsense thinks that the negative balance is likely to persist or worsen, rather than just being an artefact of being a monthly payer or paying a few days late. We will define our outcome variable as having Rentsense priority level 1, as these are MH's priority.

There are a low number of main tenants on universal credit, though a high level of tenancies with the main tenant on housing benefit. Listed monthly rent amounts vary substantially from £0 to £975.30 with a mean of £223.40.

8.4 Method

This analysis aimed to predict who is in high priority arrears on 15 August 2017 using data from 12 July 2016 - 15 June 2017 (i.e. at least two months before). This retrospective approach provides a testbed to ascertain which variables best predict future outcomes (i.e. what patterns in the data from July 2016 - June 2017 predicts arrears status 2 months later in August 2017). We combined data from the MH's transaction and tenant records with Experian data and the Indices of Multiple Deprivation²¹⁸, which measure how local areas are deprived in multiple ways (for example environmental factors, education and labour market outcomes).

We were careful to only include variables that may not be directly correlated to rent arrears themselves (for example previous bankruptcies).

8.5 Summary of analysis

We constructed a predictive model using this data and found that those customers who the model deemed to be the 20 per cent most risky tenancies subsequently contained 60 per cent of those who were in Priority 1 level of arrears. This is three times as many customers entering arrears as would be identified by random chance.

The chance of being in arrears in the future is primarily driven by the number of weeks over the past year the tenant has been in high arrears. Other demographic variables were not strongly predictive of entering arrears.

The data suggested that customers tend to persist in 'high priority' status (defined as Rentsense Priority Level 1), though tenancies may move in and out of that priority level from week to week.²¹⁹

In addition, we find that value of rent, increasing age of tenants and higher air quality/lower traffic accident areas predict a **decrease** in Priority 1 arrears risk while extra cohabiting residents (such as children) predict an **increase** Priority 1 arrears risk.

The following relationships were statistically significant.

- For every additional month a household is in Priority 1 arrears in the 48 weeks previously, the
 chance of being in Priority 1 arrears in 2 months' time increases by 5.5 percentage points. In
 contrast, each additional month spent in a lower priority arrears level increases the risk by
 only 0.4 per cent. This indicates that prior history of being in Priority 1 arrears is particularly
 predictive of future arrears.
- A £100 higher monthly rent amount is associated with a 0.33 percentage points lower chance of being in Priority 1 arrears
- A 10 year increase in the average age of the customer **decreases** the chance of being in Priority 1 arrears by 0.9 percentage points.
- One extra resident who is not a tenant **increases** the chance of Priority 1 arrears by 0.3 percentage points.
- Areas with better air quality and fewer traffic accidents (as measured by lower levels of 'outdoor barriers deprivation') have a lower risk of arrears

Full results are in the following regression table:

8.6 Regression table

Table 4. Probability of being in arrears, based on Experian and IMD data.

	Change in probability of being in Priority 1 arrears (in percentage points	
Tenant-level variables		
Monthly rent amount (£100 increase)	-0.330**	
Number of non-paying tenants in the household	0.328*	
Number of tenants	-0.102	
10% more female tenants	-0.049	
Average age of tenants (10 year increase)	-0.864**	
10% more tenants are OAPs	-0.060	
Universal Credit Recipient is main tenant	-3.761**	
Housing Benefit Recipient is main tenant	0.867+	
1 extra month in prior data in high priority arrears	5.53**	
1 extra month in prior data in any priority arrears	0.440**	
Areas (vs. London)		
Cambridgeshire	0.822	
Nottingham	0.367	
Derby	1.063	
Other	1.792	
Neighbourhood-level variables (scores are for a +0.1 change)		
Employment Score	-0.177	
Income Score	0.128	
Education, Skills and Training Score	-0.006	
Health Deprivation and Disability Score	-0.028	

Crime Score	0.042
Barriers to Housing and Services Score	0.006
Income Deprivation Affecting Children Index	0.025
Income Deprivation Affecting Older People Score	-0.026
Children and Young People Sub-domain Score	0.084
Adult Skills Deprivation Score	0.016
Geographical Barriers Sub-domain Score	-0.089
Wider Barriers Sub-domain Score	-0.055+
Indoors Subdomain Score	-0.081+
Outdoors Subdomain Score	0.12*
Constant	5.674
Number of households	19,142

^{**} means the variable is statistically significant at a 1% level, * at a 5% level and + at a 10% level.

We should note however that many of the characteristics are correlated with each other, and the relationships here are **associations** rather than **causal statements**. For example, we are not suggesting poor air quality drives rent arrears, only that the model identifies it as a correlating factor and thus one which has certain predictive power.

We also tested more complex models²²⁰ but found that the factors add to the model in a linear way rather than interacting with each other, so they did not add to the predictive accuracy. In essence, this indicates that targeting particular customers who are more likely to fall into arrears could be based on individual characteristics (such as arrears history), rather than on combinations of characteristics (such as complex demographics).

These findings are consistent with previous findings in the literature. Previous researchers have analysed both mortgage and rent arrears and found that neighbourhood effects (such as social trust and social ties) were more important than head of household and household characteristics (such as ages and number of people in the household). For example, the strongest protective factors against arrears were being able to go to someone in the neighbourhood for advice and thinking of oneself as similar to the people living in the neighbourhood. ²²¹

Persistence in arrears and other household financial problems has also been highlighted in previous research,²²² with up to three years of prior financial history being significant predictors of current levels of housing arrears.

We recommend that MH should aim to improve the capabilities of those with an arrears history, or seek to improve particular behaviours which lead to arrears, rather than focusing on any particular demographic groups.

8.7 Conclusion

This exercise suggested that the strongest indicator of a future arrears event was previously having been in arrears.

Based on this finding, we recommend that any efforts to proactively engage with MH customer before they enter arrears (rather than reactively contacting customers after they have already entered arrears) should primarily focus on those customers who have been in high priority arrears in more than 10 weeks over the previous year.

MH's future data science or predictive analytics efforts might focus on optimising or segmenting reactive communications sent to customers after they have entered arrears. For example by identifying cohorts of customers who would exit arrears without being contacted (and reducing efforts to contact these customers), or cohorts of customers who require more intensive communication or other support before they are likely to exit the arrears process.

9 Appendix C - Summary of customer and staff Explore work

Below is a summary of the key themes that emerged from our qualitative Explore work, based on a number of interviews with MH customers and front line staff.

9.1 Categories of customer

Our interviews suggested a variety of reasons that customers do not pay rent, which allows us to create a number of broad categories of non-payers. These include the following groups:

- Customers who are organised and may be trying to do the right things, but their financial commitments or outgoings simply exceed their income, meaning that they do not have enough money to make ends meet.
- 2. Customers who are financially disorganised or unable to budget.
- 3. Customers who are in and out of work, or who have unstable work patterns. Unstable work patterns lead to chaotic benefits and income patterns, with consequences for their ability to pay rent.
- 4. Non-working customers who have problems with benefits. Such problems include the switch to UC, or unexpected benefit deductions for other unexpected reasons, for example deductions when a partner moves into the property, or due to bedroom tax deductions.
- 5. Customers who are in denial, or who respond to arrears problems by placing their 'head in the sand'
- 6. Customers making a strategic decision not to pay their rent because they know, for example, how the arrears process works and how far they can proceed within it with a low chance of eviction. Alternatively, they may use rent arrears as a cheap source of credit during expensive times of the year, such as Christmas, school holidays, or the new school year.
- 7. Customers who have raised complaints about maintenance or repairs issues, and are withholding payment as a consequence. The issues and concerns they are reporting could be real, or this could be a form of strategic excuse for not paying rent. Either way, MH cannot pursue the arrears process in such cases.
- 8. Vulnerable tenants with additional issues, such as disability or mental illness that act as a barrier to paying rent.

For the purposes of considering solutions to the arrears problem, we have combined a number of the above categories into three broad groups, defined by the key behavioural factor leading to non-payment:

- 1. **Struggling** customers who are genuinely trying to meet their financial commitments but their outgoings or financial commitments are simply higher than their income, or they have low levels of financial capability.
- 2. **Strategic** customers who make a decision not to prioritise paying their rent, or have their 'head in the sand' so decide not to engage with MH in the arrears process.
- 3. **Disorganised** customers who fail to pay rent as they are simply disorganized or forgetful, not because they have made a strategic decision or are financially struggling.

9.2 Staff interviews

In April and May 2017 BIT conducted qualitative interviews with 13 front line MH staff. These included: a Tenancy Sustainment Officer, four Housing Services Managers, four Income Coordinators, two Income Officers, an Available Homes Manager and an Income Services Manager. Staff were interviewed at MH offices in Nottingham, North London, South London and over the telephone.

A number of key themes emerged from these interviews covering the reasons behind customer non-payment, the various challenges staff perceive customers as facing, as well as staff views on the MH arrears process and difficulties this may create.

9.2.1 Low levels of financial literacy amongst customers

MH front line staff reported low levels of financial literacy or capability amongst customers. Staff reported that on occasions when customers get a 'windfall' from benefits payments (for example their first relatively large UC payment) they feel tempted not to spend it on the purposes for which the payment is intended. It may be the first time that customers have had access to such a relatively large amount of ready cash. Faced with the temptation of cash in hand, and combined with the belief that they can pay back arrears over time if they get into debt, they may be tempted to 'splurge' this income inappropriately.

Despite low levels of financial literacy, staff reported that it can be hard to get customer engagement for training programmes to improve financial skills when MH have attempted such initiatives in the past. It was reported that this mirrors a general engagement issue - it is just hard to engage MH customers in many areas, although this is perhaps less true in the North, and there have been engagement successes in particular locations, such as Derby.

Staff also suggested that there may be some cultural dimensions to financial literacy or behaviours. Some cultural groups represented in MH's customer base display norms or preferences for cash-based transactions, and so are reluctant to use money management tools, such as DD. Alternatively, some groups may have a tendency to spend in the short term rather than plan for the future.

Several MH front lint staff also reported that the behaviour of many customers does not reflect the priorities MH would hope or expect of customers. For example, they would often prioritise paying their SKY bill over and above paying their rent.

9.2.2 Perceived unlikelihood of eviction

A general consensus among many front line staff we spoke to reflect a belief among MH customers that there was a fairly low chance of customer being evicted. The eviction process is long and protracted and it is difficult to evict tenants from social housing. This is particularly acute in London where judges are reluctant to evict, as exit from the social housing sector usually means entry into the private rented sector. Private rented sector prices are out of reach for most ex-social tenants, resulting in a high risk of homelessness for people evicted from housing association properties.

Additionally, staff felt that as few MH customers actually get evicted, much of MH's messaging around eviction feels like a hollow threat to many customers. In many areas of the country (particularly those

with stronger social bonds within communities) customers share information on how the eviction process works, what the tenant can 'get away with', and the limits of the eviction process. One Income Coordinator reported the experience of knocking on a customer's door, and within minutes other MH customers in the same street appeared to know the Income Coordinator was in the area, and began pretending not to be at home. The Income Team's jobs are also made more challenging by organisations such as Citizen's Advice giving advice to clients about the social housing eviction process, and how far they can fall into arrears without real risk of eviction.

Staff felt that a greater awareness of eviction, or fear of this threat would help MH front line staff, particularly amongst the Strategic and the Disorganised customers. Because MH rarely evict, it would be helpful if it was more widely publicised when they do. An additional frustration for some MH staff is that due to lack of joined up processes within MH, or due to surplus in social housing in some areas of the country, even after customers are evicted they return to MH as tenants again in the near future following eviction.

9.2.3 Challenges in engaging with customers

Many customers, particularly those who are behaving strategically or putting their 'head in the sand' in relation to their arrears situation, do not open letters from MH. It was also reported that they may not open benefits letters or other official correspondence. A decision to ignore correspondence may be a decision to strategically disengage, or the customer may simply feel overwhelmed by the situation - but the consequence is that they may not know the full extent of their arrears situation. Staff reported that 'head in the sand' customers can frequently express anger or denial once they have fully grasped the reality of their situation.

There are multiple parallel processes between MH and customers, and some front line MH staff felt this added to the difficulty of engaging with customers. For example, Income Officers, Income Coordinators, Money Advisors and Tenancy Sustainment Officers may separately be speaking to customers, making it more difficult for MH to engage with customers with a consistent message. Additionally, incentives can be misaligned between teams. For example, a Tenancy Sustainment Officer might be working to help a customer to maintain their home and tenancy, while an Income Coordinator may be tasked with moving the eviction process forward. It was reported that some teams are playing 'good cop' while others are playing 'bad cop'.

9.2.4 Issues with MH processes

Reflecting the findings of customer Explore work, it was reported that when customers try to call MH it can be difficult to get through on the phone and the customer may be left in the call holding system for prolonged periods. This can lead to a perception that MH are quick to demand rent, but much slower to solve problems. Furthermore, in some customer interactions, front line staff (such as Income Coordinators) are required to get the Income Officer on the phone to complete the customer interaction, which include getting payments made or setup. This adds an extra level of friction which is frustrating for both customers and staff.

Some staff also felt that letters were not always sent out quickly, and weeks can elapse between falling into arrears and being contacted - although it should be noted that there were contradictions in perceptions of this between different members of staff.

When letters are sent out, communications may be inconsistent, with Housing Officers and Income Officers having the latitude to customise communications. This can result in customers experiencing many varied communications journeys. It was also reported that Income Team staff may arbitrarily (rather than methodically) select priority cases each week to individually engage, with the remainder going through the automated process. The automated process can include a 'power dialler' automated call for some P1 customers that may feel very impersonal. One front line staff member suggested that increased use of email, SMS or even social media (alongside letters) may be more appropriate channels for customer engagement.

Staff also felt that processes to deal with repairs complicated recovery from arrears. When customers raise complaints about repairs this can halt any arrears recovery process, and some customers use this to delay processes for long periods of time.

Some staff felt that initial move-in risk-assessments are not detailed enough. Different teams have competing agendas - some teams have targets to move customers into homes (a volume target), while other teams have targets that depend on finding the correct kinds of tenants (a quality target). The various agendas and targets between teams may be in conflict, and if move-in risk assessments were handled in a more consistent and joined-up way, issues could be recognised and tackled earlier.

There were also capacity issues reported, particularly in the case of fraud or illegal subletting. Staff know of such many suspicious cases, but do not have resources to follow up on all of them.

9.2.5 Engaging too late

Related to the issue of MH staff not being strategic or joined up, some staff felt that MH only respond reactively in a crisis-driven way, rather than proactively to address issues before they become too significant a problem. They often know the customers who have regular issues, or particular individuals such as vulnerable customers or young care leavers who are at risk, and could make better use of risk-assessments and affordability checks earlier for such tenants. Furthermore, it was felt that customers are given an overload of information at the time they move in, but then may not be contacted again until problems have become severe.

9.2.6 Trust

The above issues contribute to a trust problem: staff suggested that tenants do not necessarily feel that MH is acting in their best interests. Customers may also not understand the impact of not paying regularly paying rent; they perceive MH as a rich and perhaps even greedy organisation, rather than recognising MH's own financial challenges. They often do not recognise, for example, that rental revenue pays for repairs, maintenance and upgrades.

There is a lot of help available from the tenancy sustainment team - but it is hard to get customers to take it up (particularly in London); tenants perhaps feel that organisations such as Citizen's Advice are more of a neutral source of support than MH.

9.2.7 Challenges with DD

Staff felt that DD was unpopular, mainly due to the costs that the customer incurs when a direct debit fails. This was reported very consistently among all the staff interviewed. It was also felt that customers are particularly wary of signing up to DD at the beginning of the tenancy - which unfortunately also represents one of the most timely opportunities to shift customers onto DD. Longer term, or older tenants have been paying for a long time also seem to be less keen to switch to DD.

9.3 Customer interviews

The below is a summary of themes that emerged from eight qualitative interviews, conducted with Metropolitan customers. The interviews were conducted over the phone by trained BIT qualitative researchers.

9.3.1 Benefit complications

Reasons given for initially getting into arrears varied, although one common claim was that they had entered into arrears due to their Housing Benefit claim or child tax being reassessed. Tenants described this as a situation beyond their control, which was a frustrating and stressful experience. In these cases, the cessation of payment was often not communicated to the tenants at the time, and were only informed of the situation once significant arrears had been incurred, or an eviction warning was served.

9.3.2 Bedroom tax

The bedroom tax was broached in a couple of interviews. Participants spoke of confusion when this was introduced, such as MH or the council not being aware of how many customers lived in the house. For some, this had resulted in an inability to afford the extra bedroom in their house. One participant suggested that it may be useful if MH Housing could formally help with facilitating house exchanges for customers, as this would be useful for customers who needed more, or less, bedroom space in their house. MH currently help some customers connect to the house exchange system, but do not have any further role after that point.

9.3.3 Agency work

Several participants described how their difficulties with arrears were often due to the nature of agency work, as they experienced difficulties maintaining steady work and inconsistent payments by the agency.

"I'm sort of in a Catch-22, because if I go with the agency and work 16 hours a week, and then I get signed off. Which means I don't get my housing paid then obviously with the agency they will promise you the earth to get you to work there, and you probably have one day here, two days next week which is no good to you because you are still not being able to cover your rent. Then you end up getting further and further in debt with your rent arrears which has happened" (#3).

9.3.4 Payment schedule

In one instance, a participant described how a problematic benefit payment schedule resulted in a consistent arrears problem. She described how MH charge a month ahead and housing benefit is paid a month behind, resulting in her constantly being in arrears.

9.3.5 Unhappiness with property

One participant discussed how she was so unhappy with her current house, she has decided to stop paying her rent. She described how it was unsuitable and dangerous for herself and young daughter, saying that she was "deteriorating, mentally and physically". She expressed frustration at MH for not addressing her concerns, described an inefficient repairs process which meant that customers felt "not appreciated as tenants". She explained that she actively hoped that she would be evicted as then she might be rehoused to a property she preferred.

"I just stop paying my rent, because I don't see why paying to put my daughter in danger. I just refuse to do it. So, if they evict me, then I'll just get rehoused somewhere else" (#1)

9.3.6 Errors in system

Two participants had been informed by MH that they were in arrears, which was later discovered to be an error. For one, there was confusion about the amount the council should have been paying in Housing Benefits and for the other, there was confusion in the transfer from Universal Credit. In both cases, the situation was exacerbated by rigid systems and poor communication from MH and the relevant authorities.

9.3.7 Mental state

Stress and ill-health often was cited by participants as exacerbating arrears problems, making it difficult to deal with the situation.

"I was in hospital and I couldn't do anything about it. So kind of stress and then more stress because I was trying to deal with arrears". (#5)

9.3.8 Contacting MH

Communicating with MH was widely perceived as a negative experience. Most participants described great difficulty trying to initially get through, saying it is an "absolute nightmare" due to waiting times. This was consistently a problem for customers, with many comparing MH to their previous landlords, the council, who had been much easier to communicate with.

"If you can get through to people and speak to them, it is normally alright. The trouble is when you can't get through and speak to them". (#4)

In some cases, MH texted customers asking them to call them back, which caused financial pressure, as a result of then having to make expensive phone calls. For those who were in regular communication with MH (e.g. had regular monthly meetings), this was reported to be less of an issue.

Customers differed in terms of preferred methods of communication, for example letters, phone calls or house visits. Generally, it appeared that MH did not take customer's preferences into account, even when tenants expressed a preferred method.

9.3.9 Repairs

The issue of how MH handled repairs was raised in every interview, and seemed to have a negative influence on how the organisation was perceived. It was often linked to an opinion that MH did not really care about their tenants. Waiting times for repairs could be months and required chasing from the tenant. In addition, repair appointments frequently were not kept, wasting customers' time and leading customers to believe that MH are merely "fobbing them off". For some customers who were already in stressful situations, the perceived hassle of dealing with this situation meant that they chose to live with the issue rather than attempt to resolve it.

"I've rang them about it [water leaking through kitchen floor] three or four times, but because I've got the fridge/freezer on one level, I'm managing without it. I'm fed up ringing them, so I just cope with what I've got" (#7).

For others, the situation was more serious, with one participant describing a situation which he had found very upsetting.

"I went about roughly two weeks without any gas, central heating, and no hot water. I couldn't phone anyone because it was Christmas and I had one emergency number, and they just said do you have a gas leak? I said no but I have got no gas supply or hot water and no central heating. They said no, we don't regard that as an emergency so we are not going to send anybody around. That was Christmas Eve." (#8)

Inefficiencies in the repairs process sometimes led to the view that MH "waste money like water" (e.g. multiple callouts). In terms of other problems, such as noisy neighbours or anti-social behaviour, MH were perceived as "weak", "amateur" and ineffective.

9.3.10 Competency

In some cases, customers felt that their arrears situation had been exacerbated by delays in MH making them aware of the situation. In these situations, MH had not informed them of their debt until the costs were very high, and they believed they could have prevented the situation from getting so bad, had they been informed earlier. One participant described how having this situation happen in the past had made her anxious and reduced her trust in MH's capabilities.

"Now I am in a position of where, just to make sure, I keep phoning every couple of months to ask if the housing benefit is still ok because I am so worried." (#6)

Some participants expressed doubt at the competency of the staff that they dealt with. For many, the benefits process is confusing, and they found it difficult to get concrete advice from MH or felt that MH did not fully understand the situation.

"I say to them, 'what's the difference between what housing benefit pays and what I pay, so what am I in arrears personally so that I know that when housing benefit makes their payment, so I know what I'm behind', but he doesn't know. He can't tell me how much housing benefit is going to pay" (#1)

For the participant who welcomed the prospect of eviction, it seemed that the warnings she was receiving were empty threats, leaving her in a state of limbo.

"Now I haven't a clue when they are going to decide, and half of my house is packed up" (#1)

In terms of coming to payment arrangements, some participants expressed frustration about not being given flexibility around payment (e.g. ability to pay off in bulk or instalments).

9.3.11 Inconsistency

Inconsistencies across the organisation was a complaint frequently voiced throughout the interviews. This was frustrating for many, and meant that customers often got a "mixed picture" and found that an arrangement which might be agreed with one person could be dismissed by another, the next time the customer phoned. In other situations, they found that arrangements made over the phone were then contradicted by the correspondence they received in a subsequent letter

"There are people who were really nice, there were two or three I spoke to, and then you get the paperwork and it ignores you" (#4)

9.3.12 Positive experiences of assistance received

A number of customers reported MH staff as being supportive, and described regular interaction with various officers from MH, who visited them at their homes. These visits seemed mainly to help the tenants understand the arrears situation, and assist them with various claims forms, such as sick forms or bills. The officers themselves were described as "lovely and helpful". Those who felt that they had worked collaboratively to come to an arrangement to pay off their arrears spoke positively about the experience, and said that it made the arrears seem more manageable.

"when you're in arrears and you're feeling anxious and you're trying to prolong it and because you don't know what to do, but you know what you're supposed to do, but just to get it done - they help to sort it out quicker" (#5)

Interestingly, the customers who perceived MH as helpful often were those who thought that the arrears situation was their own responsibility, and made comments such as "they are just doing their job" and "I owe them money", suggesting perhaps that they have lower expectations of the help they believe MH should be providing.

9.3.13 Negative experiences of assistance received

Conversely, some customers characterised MH staff as unhelpful and unsupportive. These participants describe how they offered little, if any, help. Assistance from MH had to be sought out, and the quality of the help very much depended on the individual member of staff you were speaking to. In other cases, customers felt that they had been offered help, but at too late a stage. Several

participants described staff as impersonal and uncaring, or sticking too rigidly to their policies. This sometimes felt like MH was trying to get rid of them as tenants, or not taking their situation seriously enough. They said MH staff could be more understanding when dealing with customers who are clearly going through a hard time.

"They threatened me they'd do that after a short time and I've been here over thirty years. On that side of it I disagree with them completely and they were wrong." (#4)

One participant described how they were moved to their new property over the Christmas break, without any consultation on move date.

"It started off pretty badly and I was a bit upset at the time and it was we want you out on the twenty-third of December, and you know that's Christmas. I didn't really have any choice, they just said we want you out by then." (#8)

For the two participants whose arrears had been as a result of a system error, they found that MH were very unhelpful and unsupportive throughout, exacerbating what was already a very stressful and embarrassing process for them. In these cases, the participants felt the situation was out of their control and were denied advice and assistance from MH.

"the worst part of this that I can remember is phoning MH, because I think I was told three things over the phone by someone at MH that really upset me. One was, 'we won't get involved' and 'this is your problem' and 'you need to sort it out'." (#8)

9.3.14 Resolving the situation

For all customers interviewed, being in arrears caused anxiety and stress. Many described their own mental state as the most important factor in resolving the situation, and even mentioned needing to "take your head out of the sand".

"just need to get on top of it to keep your own sanity, because if you don't you are going to end up down the road, where people commit suicide or whatever, and I can understand why". (#3)

Having a healthy state of mind was seen by some as a necessary to gain control of arrears.

"I [got the arrears down before because] I was probably just feeling better and trying to keep up with it" (#1)

9.3.15 Budgeting

None of the participants interviewed had a strategy for budgeting monthly bills and expenses. Participants made statements like "[you just] do what you need to do" or "just go by what I know". Some mentioned direct debit as useful for budgeting as it takes away the hassle and possibility of forgetting to pay a bill.

Although not unanimous, rent was mentioned by most as the highest priority bill on their list, with one interviewee saying: "[I'd] rather put money towards rent and keep that together" in terms of keep a

roof over their head, while others talked about situations where they had neglected paying other bills such as gas and electric in order to be able to pay their rent.

9.3.16 Direct Debit

There were mixed opinions from the participants about using direct debit to pay rent, and other bills. For many, their benefits payment schedule was a challenge, as they receive benefits in a four-weekly or fortnightly cycle, while direct debits are paid monthly. As a result of this misalignment, some customers had incurred bank charges in the past and were now averse to the idea.

"easier for me to manage it myself and make sure that the money is in the bank account... so if I pay myself I'm not going to go overdrawn because I'm going to wait until I've got the money in my hand" (#7)

Others, particularly those who had had negative experiences with MH, preferred to use methods like a rent payment card as they felt it was more secure. Another common concern was around using direct debit for large bills (such as rent), particularly when money is tight. Others, who were a bit older, preferred paying in the post office, in the "old fashioned way".

However, some did believe that direct debit was the best method of paying their rent, as it took responsibility of remembering away.

9.3.17 Customers on Universal Credit

Most of the participants interviewed did not seem to fully understand the benefits they were receiving, or how the benefit system worked.

For those on Universal Credit, there had been a delay when they had been initially transferred to the new system, which had left them "panicking". Many had found the transition to a new system difficult to understand due to poor communication about how long it would take to receive benefits, and what was covered by the payment. In addition to this, one participant described anxiety around the thought of all benefits being linked, due to the possibility of being sanctioned across all benefits.

"they don't tell you anything and you have to be a mind reader" (#2).

One person who was already on UC described it as "absolutely rubbish" and expressed concern that allowing customers to manage this amount of money themselves would potentially result in them getting into worse debt.

"if you have got somebody who hasn't had any money for six or seven weeks, and then all of a sudden you put, say £700 in their bank account, are they going to prioritise? Few will and a lot won't, so they will end up getting in a lot worse debt think I'll worry about it tomorrow". (#3)

However, one participant who had fallen into arrears as a result of an error in the system felt that paying rent themselves allowed them to keep track and retain control.

"It's a lot better now. I know I've paid it and I keep all the receipts. If there's any comeback, it tells you the time I paid it, the post office where I pay it" (#2)

9.3.18 Customers on Housing Benefits

When participants who were not yet on Universal Credit were asked if they would prefer if housing benefits were paid to them rather than directly to MH, there were mixed views. Some preferred that the money goes directly to MH, so that they could not be blamed if anything went wrong. Others, particularly those who did not use direct debit, preferred the current situation as they felt that it would just be added hassle and complication for them.

"it's another bill I would have to pay. Then I would have to go somewhere to pay it and it's easier for them to pay it for me" (#7).

One, who had recently had experience with poor communication from MH relating to a situation of benefits being stopped, thought it may be easier to pay herself "so you can keep on top of what is happening" (#6).

10 Appendix D – Solutions ideas

10.1 Introduction

Metropolitan Housing (MH) commissioned BIT to consider two research questions: how to reduce rent arrears, and how to increase use of Direct Debits (DDs) amongst its customers. This document outlines, for discussion, a longlist of behavioural interventions to address these two research questions.

The longlist of ideas contained in this document reflects the beginning of the Solution phase of the project; it builds on the Target and Explore stages, and is informed by our discussions with MH staff, customers, BIT's previous projects and the behavioural science literature. This longlist of solution ideas was ultimately discussed and prioritised in order to develop the interventions tested in the three trials.

Figure 14: Project methodology



Target: Setting clear behavioural objectives.



Explore: Understanding the context, the barriers, drivers and motivations.



Solution: Drawing upon our understanding of the context, and behavioural science research, to develop behaviourally-informed interventions.



Trial: Rolling-out and robustly evaluating the intervention

We recognise variability in feasibility across our suggested solutions. Some will be relatively feasible and easy to implement; others will be more challenging. We have offered an indication of both feasibility and impact for each idea. This is based on our understanding of MH's processes after speaking to staff and customers. Our conception of the complexity of MH's current processes is far from complete. Therefore, an aim of this document is to initiate a discussion about the practicalities of moving forward with potential interventions.

Interventions that are challenging to implement have been explicitly included in this review. This is in response to MH's request for bolder thinking on solutions to their challenges. Other ideas may be less

appropriate for an immediate RCT trial, but could be aspirations or 'stretch goals' to develop over the medium-term.

A number of solutions include incentives that contain a financial element such as lottery prizes or vouchers. These solutions are included for consideration on the assumption that MH can conduct a cost / benefit analysis. This would involve a financial calculation of the cost of rent arrears against the level of investment in incentives to prevent such losses. Any incentives will need to be designed with such a financial framework in mind. These calculations have not been completed, so we do not make a claim about appropriate levels of investment in incentives.

The Explore work identified eight distinct categories of customers who experience issues with rent arrears (see Appendix C for more detail). For the purposes of this discussion paper we have collapsed the categories of customers into three broad groups:

- Struggling customers who are genuinely trying to meet their financial commitments but their outgoings or financial commitments are simply higher than their income or they have low levels of financial capability.
- 2. **Strategic** customers who make a decision not to prioritise paying their rent, or have their 'head in the sand' so decide not to engage with MH in the arrears process.
- 3. **Disorganised** customers who fail to pay rent as they are simply disorganized or forgetful, not because they have made a strategic decision or are financially struggling.

Within the parameters of this project it is not possible to ascertain what proportion of MH customers fall into each category. However, it should be recognised that different types of customers exist and a 'one size fits all' approach is not ideal. For this reason, we suggest a mix of interventions that are appropriate for all three groups.

A potential risk of not segmenting customers is that an intervention that is effective for one group may have undesirable or backfire effects for another group. For example, offering tiered service for customers with good payment histories may influence the behaviour of Strategic customers but may engender a sense of unfairness or injustice in Struggling customers. Without data on the distribution of customers between the three groups it is difficult to make an estimation of overall positive and negative impact.

Finally, some of the suggested interventions would require trial partners to collaboratively develop an intervention. For example, introducing hypothecated accounts would require working with credit unions. Again, for reasons of practicality or feasibility, such ideas may not form an element of the proposed trial, but could form the basis of longer term plans as MH develops its BI capability.

10.1.1 Table 5: Summary of ideas for rent arrears

We have given an indication of potential feasibility and impact for each idea: Medium, or High. Please note some ideas would have a high impact, but only if included as a 'package' of interventions - such ideas are labelled 'High (as package)'. We believe ideas highlighted in orange are strong candidates for trial.

Idea	Feasibility	Impact	Target group
Part 1: Reducing Rent Arrears			
1.1 Adjust timing of rent payments			
I. Take 13 rather than 12 payments to create a rent holiday	High	High	Struggling
II. Align rent payment dates with 4 weekly income (or other income pattern)	High	High	Struggling, Disorganised
III. Have consistent rent payment dates for all customers in an area to create familiarity / memorability	Medium	Medium	Struggling, Disorganised
1.2. Make the rent payment and arrears process easier			
I. Reduce the hold time on inbound calls to make contact easier	Medium	High	All
III. Make all payment options as easy as possible by removing friction costs and hassle factors	Medium	Medium	All
III. Have several specific options for future payment available	Medium	Medium	All
IV. Send customers an SMS message the day before rent payment is due, to remind them of the payment date	High	High	Disorganised
V. Make the arrears process less familiar for people going through it repeatedly	Medium	Medium	Strategic
1.3. Incorporate behaviourally-informed messaging into arrear	s communications		
I. Re-write arrears letters to harness aspects of reciprocity, loss aversion, social norms, simplification and direct calls to action	High	High	All
II. Use handwritten coloured envelopes to ensure letters are opened	High	High (as package)	As package
III. Include handwritten post-it notes on important letters	High	High (as package)	As package

Idea	Feasibility	Impact	Target group
IV. include messages on the outside of envelopes	High	High (as package)	As package
1.4 Introduce behaviourally-informed incentives to encourage	payment	•	
I. Lottery entry for each month's payment received	High	High	All
II. Have 'money can't buy' prize-draws associated with good payment behaviour, or useful and practical rewards	High	High	All
III. Introduce a 'pro-social' lottery in which good payers win prizes on behalf of friends and family	High	High	All
IV. Introduce 'early bird' discounts for those who pay promptly or ahead of the due date	High	High	All
V. Introduce an escalating 'jam jar reward' - an account in which £10 per month is deposited for on-time payment, paid out at the end of the year if on-time payments are maintained	High	High	All
VI. Prioritise non-essential home upgrades to those who are up- to-date on payments (or those Struggling who demonstrate sustained improvements)	Medium	Medium	Strategic
VII. Introduce a broader tiered service in which good behaviour (including payment) is rewarded with perks	Medium	High	Strategic
VIII. Engender a stronger sense of ownership and attachment to the home, to make eviction less acceptable, for example allowing personalisation and redecorating of the home or personalised features (e.g. letter boxes, door mats)	Medium	Medium	All
1.5 Harness social commitments and personalisation of service	ces		
I. Promote the use of 'monitoring buddies' so that Struggling or less financially capable customers can help each other stick to budgets and manage finances more carefully	Medium	Medium	Struggling
II. Add a photo and biography of the income coordinator to their calling card to engender a sense of personalisation and obligation	High	Medium	All
III. Invite customers to make a public commitment to keep up with rent payments	Medium	Medium	Strategic, Disorganised
1.6 Harness key timely moments	-	•	
I. Emphasize a sense of 'fresh start' following a lapse or other key moments (e.g. New Year, or movement onto UC)	High	Medium	All

Idea	Feasibility	Impact	Target group
II. Use implementation intentions and mental contrasting to help customers set and meet goals and overcome unforeseen obstacles, for example at the key moments noted above	Medium	High	Struggling, Disorganised
III. Work with the available homes team to optimise the early stages in the tenancy	Medium	Medium	All
IV. Identify timely moments near the beginning of a tenancy and provide relevant information	High	Medium	All
V. Have new customers record or write a message (to their future selves) why it is important to their family and their aspirations to take control of their finances (to be shared back in times of financial lapse)	Medium	Medium	Strategic, Disorganised
1.7 Help customers become more financially resilient			
I. Help customers to create a savings buffer	Medium	Medium	Struggling
II. Collaborate with a credit union to offer 'jam jar' accounts to help customers separate rent and other essential budgets from daily expenditure	Medium	High	Struggling, Disorganised

10.1.2 Table 6: Summary of ideas for Direct Debit signup

Idea	Feasibility	Impact	Target group
Part 2: Encouraging Uptake of Direct Debit (DD)			
2.1 Reassure that Direct Debit is a flexible method of payment rat	her than being c	onstraining	
I. Make it really easy for the customer to cancel or suspend the direct debit.	High	High	All
II. Align DD dates with 4 weekly income to make budgeting easier for those who do not get paid on monthly cycles	High	Medium	All
2.2 Make signing up and paying by DD easier			
I. Make payment by DD the default	High	Medium	Struggling
II. Provide phone or face-to-face assistance to help with setting up a DD	High	Medium	All
III. Work with a bank or credit union to incentivise and simplify DD signup	Medium	Medium	All
IV. Offer an automated payment system that confirms direct payment before it is taken	Medium	High	Struggling, Disorganised
V. Confirm by SMS when DD payment has been received to reduce anxiety and uncertainty in customers	High	Medium	All
2.3 Use future discounting to encourage DD sign up			
I. Use future discounting to encourage people to sign up to DD in the future - 'Direct Debit More Tomorrow'	High	High	All
2.4 Introduce behaviourally-informed incentives to encourage DE) sign up		
I. Offer a simple reward for signing up to DD	High	High	All
II. Introduce a 'pro-social' incentive in which DD payers earn an incentive on behalf of friends and family	High	High	All
III. Introduce 'money-can't buy' prize draws associated with DD sign up	High	High	All
IV. Offer a simple discount off rent when people sign up to pay by DD	High	High	All

Idea	Feasibility	Impact	Target group
V. Offer cashback each time a DD debit payment is successful	High	High	All
VI. Introduce a system of DD loyalty or escalating jam jar reward	High	High	All
VII. Offer entry into a lottery for each successful DD payment	High	High	All
VIII. Offer entry into a lottery for each successful DD payment with escalating odds for subsequent payments	High	High	All
IX. Offer entry into a regret lottery, where groups of people are notified that they would have won if they had completed an earlier action.	High	High	All
2.5 Use social proof to encourage DD sign up			
I. Offer rewards when customers refer a friend to DD	Medium	Medium	All
II. Create a social norm about how many other MH customers pay their rent by DD	High	High	All
2.6 Use seasonal communications to encourage DD sign up			
I. Offer a Christmas bonus for signing up to DD	Medium	High	All

10.2 Solution ideas: reducing rent arrears

By applying BIT's EAST framework²²³, when we want to encourage particular behaviours, we should try to make them Easy, Attractive, Social and Timely.

We should also note that many of the ideas presented below are not mutually exclusive and could be combined in various ways. In particular, those ideas centred on including behaviourally informed phrasing into communications could readily be combined with other ideas in the list.

10.2.1 Adjust timing of rent payment

I. Take 13 rather than 12 rent payments to create a rent holiday

By taking a rent payment, equivalent to a full monthly amount, every 4 weeks, over the course of a year a customer would build up a savings buffer to the value of one payment. This would allow the customer to take a rent holiday in December, or provide a savings buffer to be drawn on when they fall into arrears. To make this more compelling, MH could consider offering customers interest on their balances that are in credit, similar to Ovo Energy's offer for customers in energy credit.²²⁴ It could also be made the default payment schedule for new customers.

II. Align rent payment dates with 4 weekly income (or other income pattern).

Explore work with customers suggested some customers (contract workers or Universal Credit (UC) claimants) receive income every 4 weeks but are required to pay rent to MH on a monthly cycle. This small (but significant) difference in timings creates cognitive load for customers and increases the difficulty of managing finances from one pay check to the next. Offering customers the ability to pay their rent or take a DD on four-weekly cycles that align with their incomes would reduce the cognitive load. This approach would align well with suggestion 1.1.I above.

More broadly, there are likely to be advantages to realigning existing customers rent payment dates with their income cycle - where customers are paid monthly (either through employment or UC) this may simply require shifting the rent date forward or backward, meaning their largest outgoing can coincide with their income, reducing the risk of overspending before their rent is due - this may be particularly important for those transitioning to UC who are not accustomed to receiving single large payments each month. For others, this may involve moving customers from monthly to weekly rent payments.

III. Have consistent rent payment dates for all customers in an area to create familiarity / memorability.

If all customers in an estate, area or town have the same rent payment date, it is easier to promote general awareness of rent being due and make it much easier for customers to remember. We recognise this may create income processing challenges for MH, and may also clash with other suggestions, such as aligning rent payments with each tenant's income cycle.

10.2.2 Make the rent payment and arrears process easier

I. Reduce the hold time on inbound calls to make contact easier

MH should try to reduce any frictions that stop people from doing the desired behaviours to pay their rent or resolve arrears situations. In customer Explore work several customers expressed frustration about the challenges in getting through to the income team:

"If you want to get through, ring them at five past eight in the morning and it's pretty good and you get through in about five minutes. But later in the day you have no chance. You can sit there for half an hour to an hour until somebody picks up."

When calling the standard switchboard number (020 3535 3535) customers must first listen to standard messages (such as informing the customer that calls may be recorded) and then are given several options such as reporting a repair, making a payment or speaking to MH staff. It takes over a minute before being placed in a queue. Having to answer several questions before being asked to wait may initially seem trivial, but BIT studies have repeatedly shown the disproportionate impact of small amounts of friction in a process.

Addressing long telephone wait times may require additional investment in telephony systems, but failing to address process frictions for customers who are trying to do 'the right thing' could potentially lead to a 'Last Mile' problem²²⁵ - an issue where actions and intentions are thwarted at the final stage through obstacles and extra frictions that make it too challenging to complete the final stages of an intended action.

A BIT trial to reduce inappropriate calls to the Police 101 number found that increasing hold times by just six seconds significantly reduced the number of inappropriate calls - suggesting that even small increases in hold times can be enough to make many people 'give up'. Giving customers a specific number that bypasses all options to go directly to the queue to speak to someone about rent arrears, and slightly reduce the waiting time is likely to reduce the numbers of people who drop out of the process before speaking to the Income Team.

"If you can get through to people and speak to them, it is normally alright. The trouble is when you can't get through and speak to them".

Furthermore, customers are placed in a queue without any indication of how long they will be required to wait. This is frustrating, and for people on low incomes (with little credit on their phones) they may not feel they can afford to make long phone calls. One customer reported in the Explore work:

"It doesn't seem fair that I've got to ring them when they know I'm Struggling for money. But it's their policy and it's not (D) fault. I can't ring them back because I haven't got credit on my phone, and then I'll get another text a few days later. If I hadn't have had my benefit, I still haven't got credit on my phone."

Unexplained or uncertain waits feel longer and are more stressful and anxiety-inducing than knowing how long the wait will be. Being given an indication of the expected duration of a wait significantly reduces the stress of waiting. Metropolitan could consider investing in call centre technology to tell people the expected wait time, their place in the call queue, or allowing them to arrange a call-back.

Staff Explore work also reported that some elements of the system could feel highly impersonal for example the 'power dialler' automated call system for some P1s. Such processes may not be consistent with MH trying to give customers as sense that they care and are trying to help.

II. Make all payment options as easy as possible by removing friction costs and hassle factors.

MH could offer easy drop off points for customers who wish to pay by cheque. Many people paying by cheque are older customers, who may find telephone or online methods of payment complicated or stressful.

III. Have several specific options for future payment available

This idea works by leveraging implementation intentions. It is likely that an intention-action gap exists in rent arrears: many customers (the Struggling rather than the Strategic) want to meet their obligations but in some cases fail to do so. 'Implementation intentions' help to specify the when, where and how of responses leading to goal attainment. Prompting individuals to form implementation intentions has proven to be effective in closing the intention-action gap in numerous contexts, for example on increasing vaccination rates.²²⁶

When phoning or emailing customers who are in arrears or late with rent payments, MH could prompt them with several options. The options would be to make a payment in 24, 48 or 72 hours - and the customers would select their preferred time frame by pressing 1, 2, 3 or 4 on their phone, or clicking a link in an email. Offering the different timeframes rather than asking customers whether they would like to make a payment suggests payment as a default, rather than doing nothing being the default. Furthermore, pressing a button or clicking a link to take an active decision can create an implementation intention in the customer's mind. In an experiment with bill collecting with a million customers, a similar approach resulted in an 8.6% increase in payments volume and a 10.2% rise in payment value.

IV. Send customers an SMS message the day before rent payment is due, to remind them of the payment date.

These messages could be tailored depending on whether the customer pays by DD. For DD, the message could remind the customer that payment of a specified amount will be taken, and to check that sufficient funds are available. For non-DD customers the message could remind the customer that a specified amount is due, or even remind them of the method they used for their last payment to make it easier to plan. Building on this, the message could use implementation intentions to invite customers to plan how and when they intend to make the payment.

V. Make the arrears process less familiar for people going through it repeatedly.

Staff Explore work suggests a proportion of customers (the 'Strategic' customers) may go through the arrears process a number of times, and are fully aware of the process and how far they are able to go without genuine risk of eviction. By making the evictions communications process less familiar (for example, by changing layout, design or wording of letters) when people enter the process for the second or third time, the different letters could have a de-familiarising effect which could reduce complacency among Strategic repeat arrears customers.

10.2.3 Incorporate behaviourally-informed messaging into arrears communications

I. Re-write arrears letters to harness aspects of reciprocity, loss aversion, social norms, simplification and direct calls to action



We suggest the main focus of the arrears RCT should be to improve the suite of arrears communications sent by MH's Income Team. A number of insights could be incorporated into the arrears letters and SMS messages to make them more behaviourally-informed. BIT has considerable experience to draw on running letter and SMS trials and has achieved significant results using these techniques in areas such as tax compliance and contact rates with mortgage customers in arrears.

The following behavioural insights have yielded strong results in other BIT projects in related contexts. We believe they are strong candidates for consideration in this trial:

- Loss aversion people are more motivated by fear of loss than gains²²⁸
- Social norms explaining that most other people are paying, or emphasising the proportion of people who get out of arrears after falling into arrears²²⁹
- Reciprocity explaining how arrears negatively impacts neighbours, how timely payments benefit the community, or that MH staff are trying to help^{230,231}
- Personalisation and salience putting a 'human face' on the process, and introducing novelty to overcome inaction, for example by using coloured envelopes to encourage recipients to open letters, and including handwritten messages to evoke action²³²

We suggest the core intervention in the arrears reduction trial should be improvements to letters 1, 2, NSP cover letter and 5, as well as the text messages that accompany these letters.

Figure 15 is an example of a more behaviourally-informed version of arrears letter 1.

Figure 15: Prototype letter 1

Dear xxx

Paying your rent to Metropolitan Housing Association

You were one of a small minority of tenantswho fell behind in their rent payments over the last month.

We understand it can be hard to pay all your bills. However, when you signed your tenancy agreement you agreed to pay your rent on time. If you break the terms of your tenancy, Metropolitan Housing can take action.

Please pay the amount owed of £xx within the next seven days.

Your rent is due every Monday and Metropolitan offers several ways to pay your rent to make it easy for you:

- Online
- · By direct debit
- Over the phone
- · In the bank or post office

If you're waiting for Housing Benefit, please contact your local authority's housing benefit department on (<HB_TEL_NUM>) to check that they have received all the information they need, and ask when you will receive a payment. Please contact us to give us an update on 020 3535 3535 with an update within seven days.

If you have any queries about your rent payments, or are experiencing financial difficulties, please contact us on 020 3535 3535 or email income_team@metropolitan.org.uk andask for our Income Team. We give thousands of people advice on managing debt, including rent arrears.

We're here to help you.

Copies of the original letters 1, 2, NSP and 5 are included in Appendix E.

Risk to note: Explore work with MH staff suggested that the standard processes are not consistently applied and staff are given a degree of latitude in tailoring letters or communications to each situation. This is echoed in the customer Explore work where some customers reported not consistently receiving phone calls, SMS or letters when they fell into arrears. Though this may in some circumstances be beneficial (with personalisation of correspondence often leading to better outcomes), this inconsistency does undermine the ability to run a robust evaluation of the impact of our intervention, which will require consistent application of the same communication journeys across all participants in control and intervention groups.

II. Use handwritten coloured envelopes to ensure letters are opened

Explore work suggested that many customers do not open letters from MH. This may be because they do not keep on top of their correspondence (Disorganised customers), take a decision to ignore their post for reasons of plausible deniability (Strategic customers), or find it stressful to engage with financial matters (Struggling customers). Previous BIT trials have found that making official correspondence look more like a personal correspondence such as a birthday card (for example by sending letters in a coloured envelope or with a handwritten message on the outside) increases the number of people who engage with letters they receive.

III. Include handwritten post-it notes on important letters

Similar to the two above ideas, BIT has successfully increased compliance in a number of trials by including a handwritten post-it note attached to a letter. Including a message - like the following - has repeatedly been shown to draw attention to the call to action and increase the numbers of people who respond:

"Neveen

This is really important. Please give me a call and I'll do my best to help.

David 01232 123 1230"

IV. Include messages on the outside of envelopes

A number of BIT trials have tested a handwritten message on the outside of an envelope. For example, we have used a variation of "Neveen, you really need to open this". In repeated trials this intervention has been shown to increase compliance rates.

It should be noted both the above interventions have been shown to have powerful effects but require manual labour in the form of handwriting, so depending on volumes of customers in the intervention group could be time consuming for MH staff to manage.

Staff Explore work suggested that the Notice of Seeking Possession stage (NSP) is often a significant point, and many customers 'wake up' to the reality of the arrears process at this point. The NSP letter could include a message on the outside prominently saying 'Notice of Seeking Possession' to increase the chance of Strategic customers opening their letters.

10.2.4 Introduce behaviourally-informed incentives to encourage payment

The following interventions could be offered through a lottery or some form of prize draw, entry into which would be contingent upon the desired behaviours of consistently paying rent. Such interventions would involve costs, so to echo the point in this document's introduction, MH would need to consider what level of financial investment is appropriate to incentivise. An RCT would help provide evidence for whether these benefits in the form of reduced arrears would justify the costs.

I. Lottery entry for each month's payment received

For each month that a customer pays their rent on time or stays out of arrears, they could be offered entry into a prize draw or lottery. There is a considerable literature indicating that due to our tendency to overweight the odds of winning, lotteries that offer small chance of winning a large prize can be more motivating than the equivalent value of the gamble²³³ (see the forthcoming Literature review document for more detail on financial and non-financial incentive structures).

This lottery could offer increased entry chances for more challenging behaviours. For example, odds could increase with consecutive blocks paid on time (e.g. six or 12 months, with escalating entries into the lottery which 'resets' if a single payment is missed), or 'difficult' months such as September or January paid on time.

A system of incentives would also move customers away from the perception (expressed in the customer Explore work) that MH only gets in touch when customers are doing the wrong thing, but never rewards them for doing the right thing.

II. Have 'money can't buy' prize-draws associated with good payment behaviour, or useful and practical rewards.

MH could offer a highly motivating non-financial incentive for something that a customer would be unable to afford or buy themselves. For example, MH could buy a season ticket in the executive box at a local football club, and single match access could be given as prizes. This could be a highly motivating prize and generate significant awareness and PR around the benefits of paying rent on time.

Alternatively, to encourage the desired payment behaviours MH could offer a practical incentive such as store vouchers (e.g. Amazon, Argos etc.), or food hamper style rewards at Christmas for people who have paid consistently through the year. Although caution is required to ensure fairness, a 'good behaviour score' could be used to prioritise home upgrades such as decorating or new bathrooms or kitchens to customers. Payment record would be one factor in the good behaviour score. Care would be needed with this intervention to ensure it is fairly applied and not leaving those who are genuinely Struggling even further behind.

III. Introduce a 'pro-social' lottery in which good payers win prizes on behalf of friends and family

Leveraging the insight that people can be more motivated to win prizes for others (friends, family or communities) lottery ideas could be applied to winning a prize for someone other than themselves. This variation on the lottery idea could be trialled at some point in the future against a control condition of a 'selfish' lottery (where the entrant wins the prize).

IV. Introduce 'early bird' discounts for those who pay promptly or ahead of the due date

Customers could be contacted at a certain period before rent is due with a scaled discount. For example, customers could be told that by paying now you will receive 5% off or if you pay tomorrow you will receive 4% off. If you pay the day after that you will receive 3% off. Such an intervention would leverage fear of missing out and loss aversion.

Alternatively, this idea could be tested using cash amounts rather than percentages. For example, pay today and receive £50 cashback, tomorrow you'll receive £25 cashback. As another variation, instead of paying the cashbacks directly to the customer, this mechanism could be used to build up a savings pot to spend at Christmas or receive a rent holiday.

To leverage loss aversion and make the offer more motivating in Year 2, customers who did not take advantage of the discounts could be told at the end of the year how much they would have gained if they had paid their rent 5 days earlier each month over the past year.

V. Introduce an escalating 'jam jar reward' - an account in which £10 per month is deposited for on-time payment, paid out at the end of the year if on-time payments are maintained

Give each customer an initial payment of £50 which is 'held' in a 'locked jam jar'. The amount in this jar increases by £10 each month the customers pays their rent on time. MH would send the customer an SMS each month before rent is due as a reminder, and another SMS after payment has been received to thank the customer and confirm the new value of the pot. After 12 months this jam jar will be worth £170, at which point it could be released to the customer as a reward for good payment behaviour. This reward payment could be timed to coincide with an expensive time of year, such as Christmas. If any rent payments are missed, the value of the jam jar goes back down to zero. This means as the year progresses the motivation to keep up with payments will increase.

This idea harnesses loss aversion and the 'endowed progress' effect.²³⁴ People are given the equivalent of five months reward at the very beginning. They will feel averse to losing this amount that they have been endowed with from the beginning, and therefore will be less likely to go into arrears.

This endowment can be framed as 'the first five months of contributions come for free', giving a sense of progress already made and helping overcome the challenge of future discounting. Future discounting might naturally arise when rewarding someone for long-term good behaviour but only paying the reward at the end of the year. With the proposed approach, they are unable to spend the money immediately, but the reward feels like it is 'given' up front.

VI. Prioritise non-essential home upgrades to those who are up-to-date on payments (or those Struggling who demonstrate sustained improvements)

Other than essential maintenance such as boiler servicing or repairing burst pipes, any proactive home maintenance or improvements could be conditional on having a good payment history, or good behaviour score. Though this approach may be quite bold, anecdotally, other housing associations take this approach with success.

VII. Introduce a broader tiered service in which good behaviour (including payment) is rewarded with perks

A 'platinum' or tiered service proposition could be offered for customers who exhibit the desired behaviours. Having a good payment history would be one of the factors. Such customers would be offered preferential service treatment, or put to the front of the queue for maintenance requests.

It is important to recognise that there may be unintended consequences for such an initiative. Customer Explore work suggests some customers do not view arrears issues as a consequence of their own behaviour, instead placing the blame for the situation on MH, or due to issues with HMRC or

UC. For such individuals, there may be a strong sense of injustice from being deprioritised for maintenance work. This could lead to increasing numbers of people withholding rent as protest for lack of maintenance. On the other hand, for those customers making a Strategic decision to not pay rent such a tiered service would be a strong disincentive to this kind of active choice.

It is important any tiered services are framed and structured in an appropriate way. MH are not trying to punish poor payers by making them live in downgraded accommodation that does not meet the decent homes standard. It is about rewarding people with good payment histories. It is important to be sensitive to the nuances of how this idea is messaged and the fairness of its delivery.

VIII. Engender a stronger sense of ownership and attachment to the home, to make eviction less acceptable, for example allowing personalisation and redecorating of the home or personalised features (letter boxes, door mats etc.).

The endowment effect describes the idea that people ascribe a higher value to things that they feel they own. So while most tenants of social housing may not necessarily feel that they 'own' their properties, anything that engenders a stronger emotional sense of ownership of the home might increase their value of it and therefore increase their adversity to losing it. Ideas to cultivate a stronger sense of ownership, which may have an effect in reducing rent arrears over the long term could include:

- personalised doormats
- · sofas or comfortable seating in communal areas
- pot plants or window boxes in communal areas
- giving customers as much freedom as possible over decorating their homes
- mailboxes with customers' names.

Other similar ideas that cultivate a stronger sense of space and ownership may increase the perceived value of customer homes.

10.2.5 Harness social commitments and personalisation of services

 Promote the use of 'monitoring buddies' so that Struggling or less financially capable customers can help each other stick to budgets and manage finances more carefully

Literature in financial capability research suggests that asking someone (such as a friend or relative) to monitor spending and savings behaviours may have powerful motivating effects to make wiser financial decisions. For example, through increasing repayments on loans.²³⁵ Customers could be encouraged to invite a friend or family member to help them monitor their spending and savings patterns.

Having a 'buddy' with a level of oversight over spending decisions may discourage some customers from using their money for unwise spending decisions, such as inappropriately spending the first UC 'windfall' payment.

"if you have got somebody who hasn't had any money for six or seven weeks, and then all of a sudden you put, say £700 in their bank account, are they going to prioritise? Few will and a lot won't, so they will end up getting in a lot worse debt think I'll worry about it tomorrow".

A buddy system may also be more effective than formal financial literacy training, which has been shown to have limited effectiveness (see the forthcoming literature review document for more detail on this).

This idea could be explored by MH's Money Advice team rather than being an RCT intervention.

II. Add a photo and bio of the income coordinator to their calling card to engender a sense of personalisation and obligation.

The customer Explore research suggested some customers are less than positive about the card that is posted through the letterbox when the Income Coordinator visits.

"Or sometimes you get a card through the door from [L] and you haven't got a clue who [L] is and it says I've been round about your rent."

In a BIT trial, text messages sent to jobseekers were signed off by a named person from the jobcentre telling them that they had booked a place at the recruitment event for them. This reciprocity-evoking message increased the turnout rates from 10.5% to 26.8%. Redesigning the card to accentuate the fact that the Income Coordinator is trying to help may elicit greater compliance in return.

To increase the sense of the Income Coordinator genuinely trying to help, MH could include a photo of the IC and a short biography of their experience helping people with problems paying their rent. This should help to establish their expert credentials.

III. Invite customers to make a public commitment to keep up with rent payments

When signing up for tenancy or after customers have exited the arrears process, customers would be invited to make a commitment about keeping to schedule. The power of making a public commitment has been shown in a number of trials. For example, a BIT trial with Jobcentre Plus introduced commitment devices between job seekers and their advisors. Job seekers were asked to write down commitments to job-seeking activities for the coming week and the intervention significantly increased numbers of people coming off benefits.²³⁶

10.2.6 Harness key timely moments

These following five ideas are intended to respond to the feedback from the Explore work that MH are crisis-driven rather than proactively engaging with customers. Our research indicates MH tends to leave it very late to engage with arrears and often only pay attention after problems have emerged.

Additionally, customers are given an overload of information at the move-in date. They are then not contacted again until problems have become severe.

I. Emphasise a sense of 'fresh start' following a lapse or other key moments (e.g. New Year, or movement onto UC).

Discussions with a Housing Services Manager during Explore work suggested that after progressing past a certain point customers may feel helpless and give up. Following an arrears situation, after a customer has got back into a positive situation, a behaviourally-informed 'fresh start' communication could be sent to customers to recognise the customers efforts to get out of arrears, serving to psychologically reward the positive behaviours and reinforce a sense of what is expected in the future.

II. Use implementation intentions and mental contrasting to help customers set and meet goals and overcome unforeseen obstacles, for example at the key moments noted above.

It is likely that an intention-action gap exists in rent arrears: many customers (the Struggling rather than the Strategic) want to meet their obligations but in some cases fail to do so. 'Implementation intentions' help to specify the when, where and how of responses leading to goal attainment.

Prompting individuals to form implementation intentions has proven to be effective in closing the intention-action gap in numerous contexts, for example on increasing vaccination rates.²³⁷

Offering customers a structured exercise that includes easy ways to plan the where, when and how of paying their rent may help them to achieve this goal. Such an exercise would involve filling a template such as the below, possibly during a meeting with the Income Coordinator:

Many people find it plan for paying thei	•
When Day of the Week:	TUESDAY
Time:	11:30
How I will pay: ☑ Online ☐ In p ☐ Phone	person (Post office)
Where will I be: ON THE LAPTOP AT HOME	

Many people find it helpful to make a plan for paying their rent:

IF I receive an unexpected bill and can't pay my rent, THEN:

/ WILL CALL MY INCOME SUPPORT OFFICER ON XXX-XXXX-XXXX

Other research has shown that when planning how to achieve a goal, positive thinking alone can be ineffective, even leading to reduced effort and investment in achieving the imagined future.²³⁸

A technique known as 'WOOP' (also referred to as 'Mental Contrasting with Implementation Intentions') specifies four components:

Wish: define your wish/goal

Outcome: imagine the best possible outcome

Obstacle: what holds me back from experiencing that wish / outcome? **Plan:** create an if-then (implementation intentions) plan for the obstacle

Considering the obstacles to certain behaviours and proactively considering responses has been shown to have a positive impact on goal attainment across a range of domains, and could be deployed by MH to help customers with financial planning.

It should be noted this approach is effective for those who are motivated and trying to reach a particular goal, but is likely to be ineffective in those without volition towards a goal. In other words, people cannot be coerced into using this technique. It is therefore more likely to work with Disorganised or Struggling customers rather than the Strategic segment.



III. Work with Available Homes team to optimise the early stages in tenancy

MH should consider ways to establish the right habits early in tenancies. For example, Available Homes or Housing Officers could help establish the desired behaviours early in tenancies.

The sign up appointment is a critical moment in a tenancy, with several important goals: receiving the keys, formalising a commitment to meet the conditions of their tenancy, and completing administrative processes.

These multiple goals may pull in different directions: customers' attention is heavily focused on completing sign up and getting access to the property – 'the keys on the other side of the table'. This might distract attention from the explanation of their obligations to their landlord.

Staff Explore work suggested the sign up pack is currently disorganised and hard to use, with material pulled in from across the business. If this could be better designed and more behaviourally-informed it might be easier for customers to understand their commitments and the arrears process.

MH could consider the structure of the meetings organised by the Available Homes team, and consider moving non-essential information to the a later appointment, focusing time and attention on essentials such as a clear discussion around rent obligations at the sign up appointment.

IV. Identify timely moments near the beginning of a tenancy and provide relevant information

Staff Explore work suggested that Housing Officers currently do 6-weeks-in visits, which serve as an opportunity to refer customers with nascent problems to other teams (such as financial inclusion) as appropriate. However, early in the tenancy customers are often overwhelmed with information or it may also be too early for any issues to manifest themselves.

The first few months of a tenancy are an opportunity to establish lasting positive habits and relationships, and to avoid behaviours which could quickly become entrenched and harder to resolve. Interactions which already take place, such as the 6-week visit, can be a vehicle for improvement without major process changes.

An alternative approach would be for the Income Officer to use the 6-week visit as an opportunity to introduce themselves, establish a human face to the income team (see the 'knowing your income coordinator' idea above) and give a sense of the help available for customers with arrears problems.

Alternatively, after 3-6 months, once the new tenant has established themselves, they may be more receptive to receiving information that would have been overwhelming and consequently ignored at the beginning of the tenancy. A reminder or repeat of information contained in the tenants' handbook (which may have been too much detail to absorb at the beginning of tenancy) may be more readily absorbed 3-6 months into the tenancy.

V. Have new customers record or write a message (to their future selves) why it is important to their family and their aspirations to take control of their finances (to be shared back in times of financial lapse)

New customers (as part of the sign up process) could be asked to write 50 words on why keeping up with the bills and being financially responsible is important to them (they may mention security for their children or wanting to go on holiday). When people fall into arrears this commitment could be sent to them by SMS message. People seek to behave in a way that is consistent with their previous commitments^{239,240}, so just being reminded of a previous declaration could motivate people towards the desired behaviours. Being reminded of previous commitment can be particularly strong when presented with our own words or voice.

10.2.7 Help customers become more financially resilient

Help customers to create a savings buffer

Having a savings buffer will help to reduce the incidence of customers falling into arrears, as they have a pot of savings to draw on when they experience 'rainy days'. Research by a debt charity suggests that half a million households could be prevented from experiencing problem debt by having a savings buffer.²⁴¹ MH could consider helping customers to build up a savings pot in various ways, for example:

- a 'Christmas club' account where an additional £10/month is taken off or paid out in December to fund presents and Xmas festivities
- a similar approach but for withdrawal during costly summer holiday period for those with families
- the additional sum is held in an interest account by MH to draw on when experiencing arrears problems.

Such a savings account idea could be developed in collaboration with a bank or Credit Union (see jam jar idea detailed above), and could be offered as the default payment option to new customers.

II. Collaborate with a credit union to offer 'jam jar' accounts to help customers separate rent and other essential budgets from daily expenditure

Jam jar accounts are designed to allow customers to divide money between different 'jars' within a single account. ²⁴² Income is hypothecated into 'jars' or different accounts to allow customers to specifically allocate income to rent, bills, food, entertainment etc. Credit unions often have fees to operate such accounts, but some social housing landlords and councils have collaborated with credit unions to reduce these fees to customers. ²⁴³ MH could agree an arrangement with local credit unions to offer such a service at reduced cost to customers.

10.3 Solution ideas: increasing sign up of Direct Debit

10.3.1 Reassure that Direct Debit (DD) is a flexible method of payment rather than being constraining

I. Make it really easy for the customer to cancel or suspend the direct debit.

A compromise between confidence and flexibility would help give customers more confidence in DDs. As part of the DD sign up process MH could promise to send customers an SMS two days before each DD will be taken, and this SMS will remind customers to check their balance that day to ensure enough money is available to honour the direct debit. If money is not available, offer customers a simple way to suspend that DD to preclude the chance of a costly failed DD, for example by replying to the text message. MH would need to adjust their process to be able to process these text messages and reduce the DD amount to be taken to £0.

Though it may seem counterproductive to make it easy to cancel direct debits, this option could be offered only to those newly signing up to Direct Debit, rather than those already using it. The idea may be successful at increasing sign up because the customer Explore work suggested that the fear of losing control of the payments is one of the key barriers. This suggestion is rooted in a similar concept to no-quibbles returns policies on bought goods - customers are more likely to buy the goods having this added safety net of being able to return it, but then in reality rarely choose to return the item.

Customer Explore work suggested that those on precarious incomes preferred the certainty of paying rent themselves, but could also see the benefit of not having to worry about paying their bills.

"I like to get it in my hand and pay it that way. I'm probably old fashioned"

"Because it's a large amount, and just with the experience I've had with nearly being evicted. I know that there is nothing that they can do or say if I'm paying it myself."

"All the utility bills are paid by direct debit, and I suppose that is to take out the hassle and possibly not forgetting to pay a bill."

II. Align DD dates with 4 weekly income to make budgeting easier for those who do not get paid on monthly cycles

Explore work with customers suggested some customers (contract workers or UC claimants) receive income every 4 weeks but are required to pay rent to MH on a monthly cycle. This small (but significant) difference in timings creates cognitive load for customers.

"Because when you do a direct debit it's the same date every month. I get paid fortnightly, and when I've done a direct debit I have occurred bank charges because they have taken the money out two days before I got paid. It's easier for me to manage it myself and make sure that the money is in the bank account, and my bank charges me twenty pound. It's five pound a day for going overdrawn, so if

I pay myself I'm not going to go overdrawn because I'm going to wait until I've got my money in my hand."

Offering customers the ability to take a DD on weekly, fortnightly or four-weekly cycles that align with their incomes would reduce this cognitive load and make the idea of DD more attractive.

10.3.2 Make signing up and paying by DD easier

I. Make payment by DD the default

The language and framing of how DD is presented to the customer could be changed, to give a sense that DD is a default. Customers would be required to opt-out of paying by DD, rather than being asked if they would like to pay by DD. This adds a small amount of friction in not paying by DD, and the default can also work to give a sense of social proof or recommendation. Implementing this idea would involve developing a standard script for Available Homes Officers to use when raising the question of DD, and for a robust trial they would be required to consistently use this script.

II. Provide phone or face-to-face assistance to help with setting up a DD

Make DD as easy as possible by offering a service with MH staff supporting customers to sign up for the DD. Staff Explore work suggested that Housing Officers do not discuss DD with customers; this is a subject handled by the Income team. If DD sign up is an organisational priority for MH, a script could be developed in all customer interactions (not just by the Income team) to encourage the idea of signing up for DD. This could also coincide with the 6-week visit (perhaps undertaken by an income officer, as suggested previously) - this may be a particularly timely moment as new customers may feel unready to sign up to DD while their finances are irregular for the first several weeks of a major life change.

III. Work with a bank or credit union to incentivise and simplify DD

MH could collaborate with a bank or credit union to create incentives for DD sign up, or to simplify the process. For example, some banks offer their current account customers a financial reward or cashbacks if they stay in credit and have a minimum number of active DDs. ²⁴⁴ By collaborating with a financial institution and publicising these kinds of accounts MH could create a financial incentive for their customers to pay their rent by DD that is paid for by a different organisations.

IV. Offer an automated payment system that confirms direct payment before it is taken

MH could develop an automated payment system which is not the same as DD but which works along similar lines and is highly automated and easy. MH have customer payment details on record, and each month send the customer a text saying 'your rent is due. We have your payment details. Please reply 'yes' to allow us to take the payment from your account. If for any reason you cannot pay immediately, you must call us on....'. This new system may require technical development work but could help to overcome much of the customer concern about DDs involving a loss of control.

V. Confirm by SMS when DD payment has been received to reduce anxiety and uncertainty in customers

Explore research suggested several people only felt confident that money would be received if they paid manually:

"We do it on the day that my partner gets paid, and I phone up the housing and it is an automated service. I put in my rent payment number, I put in the fee and I get a receipt number. Then I'm fully secure in my mind that they have got the money."

Sending customers an SMS or email when DDs have been successfully processed and the money received by MH would give customers the reassurance that they currently get from paying themselves. If there is a problem with DD, MH could send messages to customers informing them of the problem and give them an easy way to get in touch with the Income team. To reassure customers that they will always know the status of their Direct Debits, customers should be told about confirmation messages as part of the script developed to encourage DD sign up (see idea 2.3.I above).

10.3.3 Use future discounting to encourage DD sign up

I. Use future discounting to encourage people to sign up to DD in the future 'Direct Debit More Tomorrow'

Either at beginning of tenancy or at 6-month point use future discounting to encourage people to commit to a DD at some point in the future. This echoes one of the most famous papers in Behavioural Economics, 'Save More Tomorrow'.²⁴⁵ This achieved strong results in encouraging people to save by inviting them to commit to starting to save money in the future rather than the immediate present. We tend to be present-biased in our choices, preferring rewards in the short term and putting off costs for the long term. Asking someone to take a slightly aversive action that the customer feels may be in their long-term interests (such as agreeing to a DD) may feel more acceptable if you ask them to commit to starting it in six months rather than immediately.

Offering an immediate reward (such as lottery or other incentive) in return for the longer term cost (of DD) could be an effective method of encouraging customers to sign up for DD.

10.3.4 Introduce behaviourally-informed incentives to encourage DD sign up

The customer Explore work gave valuable insights into perceived barriers to using DD, many of which were considered and rational. For example, if a customer's financial situation is precarious and there is a fixed charge for a failed direct debit, it may make sense to maintain control over outgoings from your account. Arguably DD saves time and reduces friction for people who know they will always have sufficient money to pay the rent when it is due.

For this reason we suggest trialling a creative system of incentives to increase DD sign-up. There are two behaviours we wish to encourage: signing up for a DD, and continuing payment by DD (i.e. not cancelling). Therefore, different incentives could reward initial sign-up for DD and ongoing payments.

I. Offer a simple reward for signing up to DD

Front-loading incentives plays on present bias, which is our tendency to value short term gains more than long term costs. Offering a simple reward in the form of a voucher or cash incentive in the short term can help overcome the longer term perceived cost of the DD.

II. Introduce a 'pro-social' incentive in which DD payers earn an incentive on behalf of friends and family

Leveraging the insight that people can be more motivated to win prizes for others (friends, family or communities) customers who sign up to DD could win a prize for someone other than themselves. This variation on the lottery idea could be trialled at some point in the future against a control condition of a 'selfish' lottery (where the entrant wins the prize).

III. Introduce 'money-can't buy' prize draws associated with DD sign up

MH could offer a highly motivating non-financial incentive for something that a customer would be unable to afford or buy themselves. For example, a director's box season ticket for a local football club (see the rent arrears trial section for more detail).

IV. Offer a simple discount off rent when people sign up to pay by DD

Such a discount could be offered to new customers when they sign up to DD. This may be appealing to new customers who are facing a new expense to which they are not yet accustomed and therefore increase the likelihood of signing up to pay by DD.

V. Offer cashback each time a DD debit payment is successful

Framing it as a cashback might make the value more salient compared to just being a discount off the rent.

VI. Introduce a system of DD loyalty or escalating jam jar reward

A succession of successful DD payments (for example 12) could earn a reward. This idea could work in a similar way to the 'Escalating jam jar reward' idea discussed in the rent arrears section of the document - such that the customer would start with some endowed progress and continue accruing loyalty bonus that is lost if they miss a DD (see page 27-28).

VII. Offer entry into a lottery for each successful DD payment

For each successful DD payment, the customer could be offered entry into a prize draw or lottery. There is a considerable literature indicating that due to our tendency to overweight the odds of winning, lotteries that offer small chance of winning a large prize can be more motivating than the equivalent value of the gamble²⁴⁶ (see the forthcoming Literature review document for more detail on financial and non-financial incentive structures).

VIII. Incentivise ongoing DD payments by increasing chances of winning with each DD behaviour.

First DD payment equates to one lottery ticket or chance to win. Second payment equates to two lottery tickets; third payment, three tickets, etc. If a customer misses a payment they are back down to one ticket.

IX. Offer entry into a regret lottery

This variation on the lottery mechanic uses loss aversion to motivate the desired behaviour. A winner at the level of an entire street / neighbourhood / estate is drawn. Anybody within that winning group who had signed up to DD before the draw is given their share of the prize. People within the winning group who had not signed up for DD are informed that they had won, but failed to meet the terms of claiming the prize. This feeling of regret that they did not take the action that would have led to them being allowed to claim the prize that they won may make them more likely to sign up to pay by DD in future.

10.3.5 Use social proof to encourage DD signup

I. Offer rewards when customers refer a friend to DD

Rewards could be offered when customers encourage others customers (such as friends and family) to sign up to direct debit. Each friend can only be referred once, otherwise there is a risk that the incentive might invite gaming of the system (for example get a friend to sign up, take the reward, then they cancel it).

II. Create a social norm about how many other MH customers pay their rent by DD Publicising what proportion of people in the local area or in the UK pay their rent by DD (assuming such data is publicly available) would send a strong signal of social norms. This intervention would echo several BIT studies (for example in tax compliance²⁴⁷) that suggest telling people that most other people are performing the desired behaviour can have significant effects. Making norms more personally relevant, for example by talking about what most people in the local area can be even more powerful.

10.3.6 Use seasonal communications to encourage DD sign up

I. Offer a Christmas bonus for signing up to DD

MH could give customers a discount on their rent at Christmas (e.g. £25 off your rent in December) if they sign up to DD. This harnesses a point in time when the money is needed and may have positive impact on arrears. The messaging around this incentive could be also linked to New Year's resolutions.

11 Appendix E – Intervention letters and SMS

Each version of the behaviourally-informed intervention letters, postcards and SMS messages are reproduced below for reference.

11.1 Direct debit trial

11.1.1 Arm 2





PO Box 10262 Nottingham NG8 9LE Tel: 020 3535 3535 www.metropolitan.org.uk

- <Title First name Surname>
- <%ADD1%>
- <%ADD2%>
- <%ADD3%>
- <%ADD4%>
- <%ADD5%>
- <Day Month Year>

Dear <title Surname>

Paying your rent may not be fun, but it can be easy.

Switch your rent payment to Direct Debit and join thousands of other Metropolitan customers who save time and effort by paying this way. You probably already pay other bills such as your mobile phone or broadband by Direct Debit.

If you sign up over the next four weeks, you'll be entered into a special prize draw to win £1,000.

Don't delay, call us on 020 3535 3535 today and we'll set it up for you over the phone.

When you set up a Direct Debit with your bank, payments are made automatically but you stay in control – you can cancel it at any time.

You can choose to pay over weekly, fortnightly, four-weekly or monthly instalments depending on what works best for you. You can even choose the day that best aligns with your income and start the Direct Debit at any time in the next six months.

And everything is protected by the Direct Debit Guarantee, so you'll get a full refund from your bank if there's ever a mistake.

You can trust your Direct Debit to be secure - so just relax and enjoy the way it frees up your time.

TSC; Customers must set up Direct Death by 14th May to be entered this the prize show. The prize draw will be made in June and we will notify the whose and make payment by 33 July. If the winner's rest account is in arrows, the prize money will be used to clear any sustainantly dest. The winner will recade any difference services in the prize and debt owed.

Metropolish in a lasting provider of integrated housing services, care and support and community regarded in Metropolitan is the braind name for Metropolitan Housing Trust Lambad (MHT Ltd). Registered office: The Crange, 100 High Street, Southgate, Condon MH4 6PW.



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11.1.2 Arm 3





PO Box 10262 Nottingham NG8 9LE Tel: 020 3535 3535 www.metropolitan.org.uk

- <Title First name Surname>
- <%ADD1%>
- <%ADD2%>
- <%ADD3%>
- <%ADD4%>
- <%ADD5%>
- <%ADD6%>
- <Day Month Year>

Dear <Title Surname>

Paying your rent may not be fun, but it can be easy.

Switch your rent payment to Direct Debit and join thousands of other Metropolitan customers who save time and effort by paying this way. You probably already pay other bills such as your mobile phone or broadband by Direct Debit.

If you sign up over the next four weeks, you'll be entered into a special prize draw to win £1,000.

Don't delay, do it today

Fill in the attached form. We've completed most of the form for you already. Just fill in the rest and send it back in the prepaid envelope. Or you can call us on **020** 3535 3535 and we'll set it up for you.

When you set up a Direct Debit with your bank, payments are made automatically but you stay in control – you can cancel it at any time.

You can choose to pay over weekly, fortnightly, four-weekly or monthly instalments depending on what works best for you. You can even choose the day that best aligns with your income and start the Direct Debit at any time in the next six months.

And everything is protected by the Direct Debit Guarantee, so you'll get a full refund from your bank if there's ever a mistake.

You can trust your Direct Debit to be secure - so just relax and enjoy the way it frees up your time.

TBC: Customers must set up Direct Debit by 14th May to be entered into the prize draw. The prize draw will be made in June and we will addity the winner and make payment by 31 July. If the winner's not account to in around, the prize money will be used to clear any outstanding debt. The winner will receive any difference between the prize and debt owed.



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11.1.3 Arm 4

Life's easier when you switch to Direct Debit Desire



Paying your rent may not be fun, but it can be easy.

Switch your rent payment to Direct Debit and join thousands of other Metropolitan customers who save time and effort by paying this way. You probably already pay other bills such as your mobile phone or broadband by Direct Debit.

Don't delay, call us on 020 3535 3535 today and we'll set it up for you over the phone. When you set up a Direct Debit with your bank, payments are made automatically but you stay in control – you can cancel it at any time.

You can choose to pay over weekly, fortnightly, four-weekly or monthly instalments depending on what works best for you. You can even choose the day that best aligns with your income and start the Direct Debit at any time in the next six months.

And everything is protected by the Direct Debit Guarantee, so you'll get a full refund from your bank if there's ever a mistake.

You can trust your Direct Debit to be secure - so just relax and enjoy the way it frees up your time.

11.1.4 Arm 5



Life's easier when you switch to Direct Debit





Paying your rent may not be fun, but it can be easy.

Switch your rent payment to Direct Debit and join thousands of other Metropolitan customers who save time and effort by paying this way. You probably already pay other bills such as your mobile phone or broadband by Direct Debit.

And if you sign up over the next four weeks, you'll be entered into a special prize draw to win £1,000.

Don't delay, call us on 020 3535 3535 today and we'll set it up for you over the phone

When you set up a Direct Debit with your bank payments are made automatically but you stay in control – you can cancel it at any time.

You can choose to pay over weekly, fortnightly, four-weekly or monthly instalments depending on what works best for you. You can even choose the day that best aligns with your income and start the Direct Debit at any time in the next six months.

And everything is protected by the Direct Debit Guarantee, so you'll get a full refund from your bank if there's ever a mistake.

You can trust your Direct Debit to be secure - so just relax and enjoy the way it frees up your time.

TIGE, Confirment ment and up Direct Daily by 14th May to the network the fire price draw. The price above the heads to James and well staffly the science will make payment by 31 July. If the stream's but arranged to the price above the price draw, the price above the James and the price above the price above the price above the James and the price above the price above the price above the James and the price above the price ab

11.1.5 DD SMS messages

Arm 2

Text 1: Dear <first name>, Life's easier when you switch to paying your rent by Direct Debit. Join thousands of other customers who already pay this way. Set up a Direct Debit by 14th May and you'll be entered into a prize draw to win £1,000! Call Metropolitan on 020 3535 3535 and we'll set it up for you today.

Text 2: Dear < first name>, Save time and effort by paying your rent by Direct Debit. Join thousands of other customers who already pay this way. For this week only, set up a Direct Debit and you'll be entered into a prize draw to win £1,000! Call Metropolitan on 020 3535 3535 and we'll set it up for you today.

Arm 3

Text 1: Dear < first name>, Life's easier when you switch to paying your rent by Direct Debit. Join thousands of other customers who already pay this way. Set up a Direct Debit by 14th May and you'll be entered into a prize draw to win £1,000! Call Metropolitan on 020 3535 3535 and we'll set it up for you today.

Text 2: Dear < first name>, Save time and effort by paying your rent by Direct Debit. Join thousands of other customers who already pay this way. For this week only, set up a Direct Debit and you'll be entered into a prize draw to win £1,000! Call Metropolitan on 020 3535 3535 and we'll set it up for you today.

Arm 4

Text 1: Dear < first name>, Life's easier when you switch to paying your rent by Direct Debit. Join thousands of other customers who already pay this way. Call Metropolitan on 020 3535 3535 and we'll set it up for you today.

Text 2: Dear < first name>, Save time and effort by paying your rent by Direct Debit. Join thousands of other customers who already pay this way. Call Metropolitan on 020 3535 3535 and we'll set it up for you today.

Arm 5

Text 1: Dear < first name>, Life's easier when you switch to paying your rent by Direct Debit. Join thousands of other customers who already pay this way. Set up a Direct Debit by 14th May and you'll be entered into a prize draw to win £1,000! Call Metropolitan on 020 3535 3535 and we'll set it up for you today.

Text 2: Dear < first name>, Save time and effort by paying your rent by Direct Debit. Join thousands of other customers who already pay this way. For this week only set up a Direct Debit and you'll be entered into a prize draw to win £1,000! Call Metropolitan on 020 3535 3535 and we'll set it up for you today.

11.2 Out of arrears trial

11.2.1 Letter 1

Payment ref: <%PAY_REF%>

<%TODAY%>



PO Box 10262

Nottingham NG8 9LE

www.metropolitan.org.uk

Tel: 020 3535 3535

- <%TCY_NAME%>
- <%ADD1%>
- <%ADD2%>
- <%ADD3%>
- <%ADD4%>
- <%ADD5%>
- <%ADD6%>

Dear <First Name>,

You are in arrears. Please contact me now so I can help. 020 3535 3535.

I'm writing from Metropolitan's Income Team, and I want to help you get your tenancy back on track before your situation is escalated.

You usually pay your rent but are now in arrears. The vast majority of your neighbours are up to date with their rent. Late rent payments put your home at risk and means we can't fund services and improvements in your neighbourhood.

You can pay weekly, fortnightly, monthly, or by Direct Debit. Please call me on 0203 535 3535 and let's work out the best way for you to pay.

If you have paid in the last few days, thank you, and please ignore this letter

Yours sincerely,

<Single generic and unreadable scanned signature>

<%HOUSING_OFF_NAME%>

Notice of arrears <%TODAY%>

Payment due by <%TODAY% +7>

Arrears amount: <%CURR BAL%>

Call now: 020 3535 3535

Waiting for benefits?

Please contact your local authority's benefits department on (<<HB_TEL_NUM>) to check that they have received all the information they need, and ask when you will receive a payment. Please update us within seven days

Other questions or facing difficulties?

If you have any queries about your rent payments, or are experiencing financial difficulties, please call 020 3535 3535 or email income_team@metropolitan.org.uk and ask for me. I or someone else in my team can give you advice on managing debt, including rent arrears.



Metropolish in a leading provider of integrated housing services, care and support and community regarders on Metropolitan is the brian name for Metropolitan Housing Trust Limited (MHT Ltd.) Registered office: The Grange, 100 High Street, Southgate, London M14 6PW.

MHT Ltd is chamable, registered under the Co-operative and Community Beneft Societies Act 2014, registered No. 183378 and registered with the Hoose and Communities Agency, the register of accist housing, under No. L0726. Metropolitan Housing Trust Limited is authorised and regulated by the Financial Conduct Authority. Our firm's reference number is 723654.

Please note calls to and from Metropolitan may be recorded for call quality and training purposes.

11.2.2 Letter 2

Payment ref: <%PAY REF%>

<%TODAY%>



PO Box 10262 Nottingham NG8 9LE Tel: 020 3535 3535 www.metropolitan.org.uk

<%TCY_NAME%> <%ADD1%>

<%ADD2%>

<%ADD3%>

<%ADD4%> <%ADD5%>

<%ADD8%>

Dear <First Name>,

Warning – you are in arrears and must pay now

I wrote to you on <enter date of last letter> to tell you that your rent was in arrears, and that you needed to pay within seven days.

You still have not cleared your arrears. We have taken your previous lack of response as an oversight, but if you don't pay or get in touch we will now treat this as an active choice

When you signed your tenancy agreement you agreed to pay your rent regularly.

If you don't clear your arrears or contact me to discuss and agree a payment plan, we will serve you with a Notice of our Intention to Seek Possession. This is the first stage in the legal repossession of your home.

<first name>, if you can't clear the full balance straight away, I can still help. If you contact me immediately we can arrange a way for you to clear your arrears in instalments

Please contact me on 0203 535 3535 to avoid the risk of losing your home.

If you have paid your arrears in the last few days, thank you, and please ignore this letter.

Yours sincerely.

<Single generic and unreadable scanned signature>

<%HOUSING_OFF_NAME%>

Reminder of arrears <%TODAY%>

Payment due By <%TODAY% + 7>

Arrears amount: <%CURR BAL%>

Call now: 020 3535 3535

Waiting for benefits?

Please contact your local authority's benefits department on <HB_TEL_NUM> to check that they have received all the information they need, and ask when you will receive a payment. Please update us within seven days.

Other questions or facing difficulties?
If you have any queries about your rent payments, or are experiencing financial difficulties, please call
020 3535 3535 or email income_team@metropolitan.org.uk and ask for me. I or someone else in my team can give you advice on managing debt, including rent arrears.



Metropolism is a lasting provider of integrated housing services, care and support and community regarention. Metropolism is the braind name for Metropolism Pouring Trust Limited (MHT List). Registered office. The Grange, 190 High Street, Southgate, Condon N14 6PW.

MHT Ltd is charitable; registered under the Co-operative and Community Benefit Societies Act 2014, registered No. 16337H and registered with the Homes and Communities Agency, the regulator of social housing, under No. 10726. Metropolitan Housing Trust Limited is authorised and regulated by the Financial Conduct Authority. Our firm's reference number is 723654.

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11.2.3 Low level arrears letters

Payment ref: <%PAY REF%>

<%TODAY%>



PO Box 10262 Nottingham NG8 9LE Tel: 020 3535 3535 www.metropolitan.org.uk

<%TCY NAME%>

<%ADD1%>

<%ADD2%>

<%ADD3%>

<%ADD4%>

<%ADD5%>

<%ADD6%>

Dear <First Name>,

Warning - you are in arrears and must pay now

I wrote to you on <enter date of previous letter> to tell you that your rent was in arrears, and that you needed to pay the outstanding amount within seven days.

If you don't pay or get in touch we will now treat this as an active choice.

When you signed your tenancy agreement you agreed to pay your rent regularly.

<first name>, if you can't clear the full balance straight away, I can still help. If you contact me immediately we can arrange a way for you to clear your arrears in instalments.

Please contact me on 020 3535 3535 to avoid the risk of losing your home.

If you have paid your arrears in the last few days, thank you, and please ignore this letter.

Yours sincerely,

<Single generic and unreadable scanned signature>

<%HOUSING_OFF_NAME%>

Reminder of arrears <%TODAY%>

Payment due by <%TODAY% + 7>

Arrears amount: <%CURR BAL%>

Call now: 020 3535 3535

Waiting for benefits?

Please contact your local authority's benefits department on <HB_TEL_NUM> to check that they have received all the information they need, and ask when you will receive a payment. Please update us within seven days.

Other questions or facing difficulties?

If you have any queries about your rent payments, or are experiencing financial difficulties, please call 020 3535 3535 or email income_team@metropolitan.org.uk and ask for me. I or someone else in my team can give you advice on managing debt, including rent arrears.



Metropolitan is a labding provider of integrated housing services, care and support and community regeneration. Metropolitan is the brand name for Metropolitan Housing Trust Lambed (MHT Ltd.). Registered office: The Grange, 100 High Street, Southgate, London N14 6PW.

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11.2.4 **NSP** letter

Payment ref: <%PAY REF%>

<%TODAY%>



PO Box 10262 Nottingham NG8 9LE Tel: 020 3535 3535 www.metropolitan.org.uk

<%TCY_NAME%>

<%ADD1%>

<%ADD2%>

<%ADD3%>

<%ADD4%>

<%ADD5%> <%ADD6%>

Dear <First name>,

Your home is at risk of repossession. You must pay immediately.

I am writing to advise you that a Notice of Intention to Seek Possession has been served because of the rent and charges you owe.

If you do nothing, you may lose your home.

Please contact me as soon as possible on 020 3535 3535. I can help you find ways to pay your arrears in full or in instalments, and we can talk about how to avoid legal action.

This Notice is the first stage in the legal process to repossess your home. If you cannot agree a payment plan or pay in full, Metropolitan will apply to the County Court for a Possession Order.

This isn't just about losing your home. If the Court makes an order against you, you may find it difficult find somewhere else to live in the future, and to obtain credit, a mortgage, bank or building society accounts.

Please contact me on 020 3535 3535 or email income_team@metropolitan.org.uk.

It's not too late for me to help you sort this out, but to avoid the risk of losing your home you need to get in touch with me as soon as possible.

Yours sincerely,

<Single generic and unreadable scanned signature>

<%HOUSING_OFF_NAME%>

Notice of seeking possession <%TODAY%>

> Payment due immediately

Arrears amount: <%CURR BAL%>

Call now: 020 3535 3535

Waiting for benefits?

Please contact your local authority's benefits department on <HB_TEL_NUM> to check that they have received all the information they need, and ask when you will receive a payment. Please update us within seven days.

Other questions or facing difficulties?
If you have any queries about your rent payments, or are experiencing financial difficulties, please call
020 3535 3535 or email income_team@metropolitan.org.uk and ask for me. I or someone else in my team can give you advice on managing debt, including rent arrears.



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Please note calls to and from Metropolitan may be recorded for call quality, security and training purposes

11.2.5 Letter 5

Payment ref: <%PAY REF%>

<%TODAY%>



<%TCY_NAME%> <%ADD1%>

<%ADD1%>

<%ADD3%>

<%ADD4%>

<%ADD5%>

<%ADD6%>



PO Box 10262 Nottingham NG8 9LE Tel: 020 3535 3535 www.metropolitan.org.uk

Dear <First Name>,

Final warning: we are starting possession proceedings



We served you a Notice of Seeking Possession on <insert date>. Your account is currently in arrears by £<AMOUNT>.

You need to clear your rent arrears or come to an agreement to pay in instalments. If you do not clear the arrears or contact me to agree a payment plan within seven days, we will apply to the County Court for possession of your home. Please note that you may also be liable for court costs.

This could be your final chance to avoid losing your home.

It's not too late for me to help you sort this out, but you need to get in contact with me immediately on 020 3535 3535.

If you are evicted due to your rent arrears, your local council may not have an obligation to rehouse you.

Yours sincerely,

<Single generic and unreadable scanned signature>

<%HOUSING_OFF_NAME%>

Final Warning Before Court <%TODAY%>

Payment due immediately

Arrears amount: <%CURR BAL%>

Call now: 020 3535 3535

Waiting for benefits?

Please contact your local authority's benefits department on <HB_TEL_NUM> to check that they have received all the information they need, and ask when you will receive a payment. Please update us within seven days.

Other questions or facing difficulties?

Other questions of racing unfortunes:
If you have any queries about your rent payments, or are experiencing financial difficulties, please call
020 3535 3535 or email and ask for me. I or someone else in my team can give you advice on managing debt, including rent



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11.2.6 Out of arrears SMS messages

SMS1t – "Dear <%TCY_NAME%>. We wrote to you recently because you are in rental arrears. Please get in touch immediately. Please don't put your home at risk - call me on 020 3535 3535 and I'll try to help you find a solution. <%HOUSING OFF NAME%>"

SMS2t – "Dear <%TCY_NAME%>. You are in rental arrears and must pay within 7 days. Please get in touch immediately. Don't put your home at risk - call me on 020 3535 3535 and I'll try to help you find a solution. <%HOUSING OFF NAME%>"

NSP where IC has had face-to-face contact but not resolved the situation

SNP1 stage – "Dear <%TCY_NAME%>. As we talked about today, you are in rental arrears and we have started the legal process. This is still avoidable. Don't put your home at risk - I'll try to help you find a solution. <%HOUSING_OFF_NAME%> "

NSP where IC has not had face-to-face contact

SNP2 stage – "Dear <%TCY_NAME%>. You are in rental arrears and we have started the legal process. This is still avoidable. Don't put your home at risk - call me on 020 3535 3535 and I'll try to help you find a solution. <%HOUSING OFF NAME%>

L5t – text to read "Dear <%TCY_NAME%>. You are in rental arrears and we have started the legal process. This is your final opportunity to avoid losing your home. Don't put your home at risk - call me on 020 3535 3535 and I'll try to help you find a solution. <%HOUSING_OFF_NAME%>"

Wording on outside of NPSt envelope - "Neveen, you really need to open this"

11.3 Out of arrears trial

SMS sent during week 1 of trial

Hi <name>, your rent is due each Monday. Most of our tenants pay on time. Please pay your rent today. Thanks, John at Metropolitan. 0203 xxxxx

Revised to the following on 23/04/2018

Hi <name>, your rent is due each Monday. Most of our tenants pay on time - thank you if you're one of them. Please pay your rent today. Thanks, John at Metropolitan. 0203 xxxx

References and Endnotes

- ¹ See qualitative research summary in Appendix B
- ² Ordinary Least Squares regression controlling for observable characteristics of customers such as age and length of tenancy.
- ³ Email from Lee Orridge, 17 April 2018
- ⁴ Customer arrears status is defined by the Rentsense algorithm, with customers in arrears given a priority from 1 to 5.
- ⁵ Ordinary Least Squares regression controlling for observable characteristics of customers such as balance at the start of the trial, size of household etc.
- ⁶ Additionally, customers who signed up for DD or ceased to be tenants during the trial period were excluded.
- ⁷ This number is slightly lower than would be expected due to customers who complained, or who ceased to be MH customers during the trial period, for example as a result of deaths or moving home.
- Metropolitan Housing, (2015). Beyond Bricks and Mortar. Retrieved from https://www.metropolitan.org.uk/images/Beyond-Bricks-and-Mortar-Report-Sept20151.pdf
- ⁹ Dale, J, (2013) What can housing providers do to help those most at risk of debt during welfare reform? Retrieved from https://www.jrf.org.uk/blog/what-can-housing-providers-do-help-those-most-risk-debt-during-welfare-reform
- ¹⁰ DCLG, (2014). English Housing Survey 2012-13
- ¹¹ Ipsos-MORI/CCHPR, (2013). Impact of welfare reform on housing associations 2012 Baseline report For the National Housing Federation
- ¹² Taylor, M. P., Pevalin, D. J., & Todd, J. (2007). The psychological costs of unsustainable housing commitments. *Psychological medicine*, 37(7), 1027-1036.
- ¹³ Duygan-Bump, B., & Grant, C. (2009). Household debt repayment behaviour: what role do institutions play? *Economic Policy*, *24*(57), 108-140.
- ¹⁴ Holl, M., Dries, L., & Wolf, J. R. (2016). Interventions to prevent tenant evictions: a systematic review. *Health & social care in the community*, 24(5), 532-546.
- ¹⁵ Atkinson, A., McKay, S., Collard, S., & Kempson, E. (2007). Levels of financial capability in the UK. *Public Money and Management*, 27(1), 29-36.
- ¹⁶ OECD, (2016). International Survey of Adult Financial Literacy Competencies.
- ¹⁷ Atkinson, A., & Messy, F. A. (2016). OECD/INFE International Survey of Adult Financial Literacy Competencies. *Education. Paris: OECD.*
- ¹⁸ Money Advice Service (2015a). Financial Capability and Wellbeing: A qualitative report. Retrieved from https://www.moneyadviceservice.org.uk/files/financial-capabilityand-wellbeing.pdf
- ¹⁹ Disney, R., & Gathergood, J. (2013). Financial literacy and consumer credit portfolios. *Journal of Banking & Finance*, 37(7), 2246-2254.
- ²⁰ Benartzi, S., & Thaler, R. H. (2007). Heuristics and biases in retirement savings behavior. *The journal of economic perspectives*, 21(3), 81-104.
- ²¹ Choi, J. J., Laibson, D., Madrian, B. C., & Metrick, A. (2002). Defined contribution pensions: Plan rules, participant choices, and the path of least resistance. *Tax policy and the economy*, volume 16 (pp. 67-114) MIT Press.
- ²² Cole, S. A., & Shastry, G. K. (2008). If You are So Smart, why Aren't You Rich? The Effects of Education, Financial Literacy and Cognitive Ability on Financial Market Participation. Cambridge, MA: Harvard Business School.
- ²³ Fernandes, D., Lynch Jr, J. G., & Netemeyer, R. G. (2014). Financial literacy, financial education, and downstream financial behaviors. *Management Science*, 60(8), 1861-1883.
- ²⁴ Drexler, A., Fischer, G., & Schoar, A. (2014). Keeping it simple: Financial literacy and rules of thumb. *American Economic Journal: Applied Economics*, 6(2), 1-31.

- ²⁵ Gigerenzer, G., Gaissmaier, W., Kurz-Milcke, E., Schwartz, L. M., & Woloshin, S. (2007). Helping doctors and patients make sense of health statistics. *Psychological science in the public interest*, *8*(2), 53-96.
- ²⁶ Bertrand, M., & Morse, A. (2011). Information disclosure, cognitive biases, and payday borrowing. *The Journal of Finance*, *66*(6), 1865-1893.
- ²⁷ Evans, G., & McAteer, M. (2011). Does debt advice pay? A business case for social landlords. *The Financial Inclusion Centre*, *London*.
- ²⁸ Citizens Advice, (2017). Measuring Financial Capability.
- ²⁹ Hayhoe, C.R., Leach, L. & Turner, P.R. (1999). Discriminating the number of credit cards held by college students using credit and money attitudes. *Journal of Economic Psychology*, 20, 643–656
- ³⁰ Norvilitis, J.M., Szablicki, P.B. & Wilson, S.D. (2003). Factors influencing levels of credit-card debt in college students. *Journal of Applied Social Psychology*, 33, 935–947
- ³¹ Webley, P. & Nyhus, E.K (2006). Parents' influence on children's future orientation and saving. *Journal of Economic Psychology*, 27, 140–164
- ³² Joireman, J., Kees, J. & Sprott, D. (2010). Concern with immediate consequences magnifies the impact of compulsive buying tendencies on college students' credit card debt. *Journal of Consumer Affairs*, 44, 155–178
- ³³Ottaviani, C. & Vandone, D. (2011). Impulsivity and household indebtedness: Evidence from real life. *Journal of Economic Psychology*, 32, 754–761
- ³⁴ Brown, S., Garino, G. & Taylor, K. (2013). Household debt and attitudes toward risk. *Review of Income and Wealth*, 59, 283–304
- ³⁵ Seaward, H.G.W., & Kemp, S. (2000). Optimism bias and student debt. New Zealand Journal of Psychology, 29, 17-9
- ³⁶ Watson, J.J. (2003). The relationship of materialism to spending tendencies, saving and debt. *Journal of Economic Psychology*, 24, 723–729
- ³⁷ Donnelly, G., Iyer, R. & Howell, R.T. (2012). The Big Five personality traits, material values, and financial wellbeing of self-described money managers. *Journal of Economic Psychology*, 33, 1129–1142
- ³⁸ Goldberg, L. R. (1992). The development of markers for the Big-Five factor structure. *Psychological assessment*, *4*(1), 26.
- ³⁹ Parise, G, Peijnenburg. K. (2017), Understanding the Determinants of Financial Outcomes and Choices: The Role of Noncognitive Abilities, CEPR Discussion Paper No. 11900.
- ⁴⁰ Sheeran, P. (2002). Intention —behavior relations: A conceptual and empirical review. *European Review of Social Psychology*, 12(1), 1-36.
- ⁴¹ Loewenstein, G. (1996). Out of control: Visceral influences on behavior. *Organizational behavior and human decision processes*, 65(3), 272-292.
- ⁴² Bernheim, D., Ray, D., & Yeltekin, S. (2015). Poverty and self control. Econometrica, 83(5), 1877–1911.
- ⁴³ Banerjee, A., & Mullainathan, S. (2010). *The shape of temptation: Implications for the economic lives of the poor* (No. w15973). National Bureau of Economic Research.
- ⁴⁴ Kidd, C., Palmeri, H., & Aslin, R. N. (2013). Rational snacking: young children's decision making on the marshmallow task is moderated by beliefs about environmental reliability. *Cognition*, 126(1), 109–114.
- ⁴⁵ Bandura, A. (1982). Self-efficacy mechanism in human agency. *American psychologist*, 37(2), 122.
- ⁴⁶ Lown, J.M. (2011). Development and Validation of a Financial Self-Efficacy Scale. *Journal of Financial Counseling and Planning*, 22(2), 54-63.
- ⁴⁷ Metropolitan Housing Association (2015). *Bricks and Mortar*.
- ⁴⁸ Feinstein, L., Lupton, R., Hammond, C., Mujtaba, T., Salter, E., & Sorhaindo, A. (2008). *The public value of social housing: a longitudinal analysis of the relationship between housing and life chances.* The Smith Institute.
- ⁴⁹ Ghosal, S., Jana, S., Mani, A., Mitra, S., & Roy, S. (2016). *Sex workers, self-image and stigma: evidence from Kolkata brothels* (No. 302). Competitive Advantage in the Global Economy (CAGE).
- ⁵⁰ Ghosal, S., Jana, S., Mani, A., Mitra, S., & Roy, S. (2016). Sex workers, self-image and stigma: evidence from *Kolkata brothels* (No. 302). Competitive Advantage in the Global Economy (CAGE).
- ⁵¹ Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. Psychological monographs: General and applied, 80(1), 1.
- ⁵² McGee, A., & McGee, P. (2015). Search, effort, and locus of control. Effort, and Locus of Control. Retrieved from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2317135

- ⁵³ Perry, V. G., & Morris, M. D. (2005). Who is in control? The role of self-perception, knowledge, and income in explaining consumer financial behavior. *Journal of Consumer Affairs*, 39(2), 299-313.
- ⁵⁴ Davies, E., & Lea, S. E. (1995). Student attitudes to student debt. *Journal of Economic Psychology*, 16(4), 663-679.
- ⁵⁵ Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68
- ⁵⁶ Festinger, L., & Carlsmith, J. M. (1959). Cognitive consequences of forced compliance. *The Journal of Abnormal and Social Psychology*, *58*(2), 203.
- ⁵⁷ Frey, B. S., & Oberholzer-Gee, F. (1997). The cost of price incentives: An empirical analysis of motivation crowding-out. *The American Economic Review*, 87(4), 746-755.
- ⁵⁸ Sortheix, F., Chow, A., & Salmela-Aro, K. (2015). Work values and the transition to work life: A longitudinal study. *Journal of Vocational Behavior*, 89, 162–171.
- ⁵⁹ Vansteenkiste, M., & Van den Broeck, A. (2015). Understanding the Motivational Dynamics among Unemployed Individuals: Refreshing Insights from the Self-Determination Theory Perspective. In The Oxford Handbook of Job Loss and Job Search. Medicine: US.
- ⁶⁰ Behavioural Insights Team, (2013). Applying behavioural insights to charitable giving. Cabinet Office.
- ⁶¹ Church, A. H. (1993). Estimating the effect of incentives on mail survey response rates: A meta-analysis. *Public Opinion Quarterly*, *57*(1), 62-79.
- ⁶² Webb, T. L., & Sheeran, P. (2006). Does changing behavioral intentions engender behavior change? A metaanalysis of the experimental evidence. *Psychological Bulletin*, 132(2), 249.
- ⁶³ 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.
- ⁶⁴ The Behavioural Insights Team, (2016). Update Report 2015-16
- ⁶⁵ Soman, D., & Zhao, M. (2011). The fewer the better: Number of goals and savings behavior. *Journal of Marketing Research*, 48(6), 944-957.
- ⁶⁶ Citizen's Advice, (2017). Understanding Money Skills.
- ⁶⁷ Institute for Social & Economic Research, (2011). Financial capability, income and psychological well being.
- ⁶⁸ Holkar, M. (2017). Seeing through the fog: how mental health problems affect financial capability. Money and Mental Health Policy Institute.
- ⁶⁹ Department of Health, (2011). No health without mental health: a cross-government mental health outcomes strategy for people of all ages.
- ⁷⁰ Department of Health, (2011). No health without mental health: a cross-government mental health outcomes strategy for people of all ages.
- ⁷¹ Feinstein, L et al. (2008). The public value of social housing: a longitudinal analysis of the relationship between housing and life chances. Smith Institute.
- ⁷² Beaumont, J. & Lofts, H. (2013) Measuring National Well-being Health. ONS.
- ⁷³ Holkar, M. (2017). Seeing through the fog: how mental health problems affect financial capability. Money and Mental Health Policy Institute.
- ⁷⁴ Holkar, M. (2017). Seeing through the fog: how mental health problems affect financial capability. Money and Mental Health Policy Institute.
- ⁷⁵ Kahneman, D. (2011). *Thinking, fast and slow*. Macmillan.
- ⁷⁶ Mani, A., Mullainathan, S., Shafir, E., & Zhao, J. (2013). Poverty impedes cognitive function. Science, 341(6149), 976–980.
- ⁷⁷ Mani, A., Mullainathan, S., Shafir, E., & Zhao, J. (2013). Poverty impedes cognitive function. *science*, 341(6149), 976-980.
- ⁷⁸ Lunn, P., & Lyons, S. (2010). Behavioural Economics and "Vulnerable Consumers": A Summary of Evidence. *Dublin: Economic and Social Research Institute*.
- ⁷⁹ Lunn, P., & Lyons, S. (2010). Behavioural Economics and "Vulnerable Consumers": A Summary of Evidence. *Dublin: Economic and Social Research Institute*.
- ⁸⁰ Yesilkayali, H., Can, S., & Mutlu H. (2011) Procrastination and future discounting. *The Journal of International Social Research*, 7-30.

- ⁸¹ Laibson, D. (1997). Golden Eggs and Hyperbolic Discounting. *The Quarterly Journal of Economics*, 112(2), 443–477.
- ⁸² Samuelson, W., & Zeckhauser, R. (1988). Status quo bias in decision making. *Journal of Risk and Uncertainty*, 1(1), 7–59.
- ⁸³ Fischer, C. (1999) Procrastination with time in-consistent preferences. *Resources for the Future* Discussion Paper, 99-20.
- 84 A Ellis & W Knaus (1977) Overcoming Procrastination. New York: Institute for Rational Living.
- 85 Ranyard, R. (2017) Economic Psychology. Chichester, England: Wiley.
- ⁸⁶ Laibson, D. (1997). Golden Eggs and Hyperbolic Discounting. *The Quarterly Journal of Economics*, 112(2), 443–477.
- ⁸⁷ Shui, H., & Ausubel, L. M. (2004). Time inconsistency in the credit card market. 14th Annual Utah Winter Finance. Retrieved from http://papers.ssrn.com/sol3/Papers.cfm?abstract_id=586622
- ⁸⁸ Meier, S., & Sprenger, C. (2010). Present-Biased Preferences and Credit Card Borrowing. *American Economic Journal. Applied Economics*, 2(1), 193–210.
- ⁸⁹ Eisenhauer, J. G., & Ventura, L. (2006). The prevalence of hyperbolic discounting: some European evidence. *Applied Economics*, 38(11), 1223–1234.
- ⁹⁰ Can, B., & Erdem, O. (2013). Present-Bias in Different Income Groups (No. 03). Research and Business Development Department, Borsa Istanbul. Retrieved from http://ideas.repec.org/p/bor/wpaper/1303.html
 ⁹¹ Joshi, P.D. & Fast, N.J. (2013) Power and reduced temporal discounting. *Psychological Science*, 24(4), 432-438.
- ⁹² Eisenstein, E. M. (2006). Psychological Processes in Financial Decision-making: A Consumer Perspective. Advances in Consumer Research. *Association for Consumer Research*, 33, 403.
- ⁹³ Shui, H., & Ausubel, L. M. (2004). Time inconsistency in the credit card market. 14th Annual Utah Winter Finance. Retrieved from http://papers.ssrn.com/sol3/Papers.cfm?abstract_id=586622
- ⁹⁴ Trope, Y., & Liberman, N. (2010). Construal-level theory of psychological distance. *Psychological Review*, 117(2), 440.
- ⁹⁵ Jachimowicz, J. M., Chafik, S., Munrat, S., Prabhu, J. C., & Weber, E. U. (2017). Community trust reduces myopic decisions of low-income individuals. *Proceedings of the National Academy of Sciences*, 201617395.
- 96 Thaler, R. (1990) Anomalies: Saving, Fungibility, and Mental Accounts. *Journal of Economic Perspectives* 4
 (1): 193–205
- ⁹⁷ Another well-known study demonstrated increased savings for future healthcare needs in rural Kenya simply by providing a lockable box to put money in having a dedicated place for a health fund seemed to reduce the fungibility of the money: Dupas, P. & Robinson, J. (2013) Why don't the poor save more? Evidence from health savings experiments. American Economic Review, 103-4 pp1138-1171
- ⁹⁸ Soman, D., & Cheema, A. (2011). Earmarking and partitioning: increasing saving by low-income households. *Journal of Marketing Research*, 48(SPL), S14-S22.
- ⁹⁹ Tversky, A., & Kahneman, D. (1985). The framing of decisions and the psychology of choice. In *Environmental Impact assessment, technology assessment, and risk analysis* (pp. 107-129). Springer, Berlin, Heidelberg.
- ¹⁰⁰ Ranyard, R. & Craig, G. (1995). Evaluating and budgeting with instalment credit: An interview study. *Journal of Economic Psychology*, 16, 449–467
- ¹⁰¹ Kahneman, D., & Tversky, A. (1984). Choices, values, and frames. *American psychologist*, 39(4), 341.
- ¹⁰² Fryer Jr, R. G., Levitt, S. D., List, J., & Sadoff, S. (2012). *Enhancing the efficacy of teacher incentives through loss aversion: A field experiment* (No. w18237). National Bureau of Economic Research.
- ¹⁰³ Castro, L., & Scartascini, C. (2015). Tax compliance and enforcement in the pampas evidence from a field experiment. *Journal of Economic Behavior & Organization*, *116*, 65-82.
- ¹⁰⁴ Fellner, G., Sausgruber, R., & Traxler, C. (2013). Testing enforcement strategies in the field: Threat, moral appeal and social information. *Journal of the European Economic Association*, *11*(3), 634-660.
- ¹⁰⁵ Thaler, R. H., & Benartzi, S. (2004). Save more tomorrow™: Using behavioral economics to increase employee saving. *Journal of political Economy*, *112*(S1), S164-S187.
- ¹⁰⁶ Irish Revenue (2013). Survey of Small and Medium Sized Business Customers. Retrieved from: http://www.revenue.ie/en/about/ publications/business-survey-2013.pdf

- ¹⁰⁷ Dolan, P., Hallsworth, M., Halpern, D., King, D., Metcalfe, R., & Vlaev, I. (2012). Influencing behaviour: The mindspace way. *Journal of Economic Psychology*, 33(1), 264-277.
- ¹⁰⁸ Deaton, A. (2011). The financial crisis and the well-being of Americans: 2011 OEP Hicks Lecture. *Oxford economic papers*, 64(1), 1-26.
- ¹⁰⁹ Thompson, S., Michaelson, J., Abdallah, S., Johnson, V., Morris, D., Riley, K., & Simms, A. (2011). 'Moments of Change'as opportunities for influencing behaviour.
- ¹¹⁰ Soman, D., Xu, J., & Cheema, A. (2010). Decision points: A theory emerges. *Rotman Magazine*, 64-68.
- ¹¹¹ Behavioural Insights Team. (2014) EAST: Four simple ways to apply behavioural insights.
- ¹¹² Shu, L. L., Mazar, N., Gino, F., Ariely, D., & Bazerman, M. H. (2012). Signing at the beginning makes ethics salient and decreases dishonest self-reports in comparison to signing at the end. *Proceedings of the National Academy of Sciences*, *109*(38), 15197-15200.
- ¹¹³ Authority, F. C. (2014). Consumer credit and consumers in vulnerable circumstances. *London: Financial Conduct Authority*.
- 114 www.quickquid.co.uk/10-minutes.html
- ¹¹⁵ www.poundstopocket.co.uk/10-minute-transfer-loans.html
- ¹¹⁶ Beshears, J., Choi, J. J., Laibson, D., & Madrian, B. C. (2009). The importance of default options for retirement saving outcomes: Evidence from the United States. In: *Social security policy in a changing environment* (pp. 167–195). University of Chicago Press.
- ¹¹⁷ Madrian, B. C., & Shea, D. F. (2001). The Power of Suggestion: Inertia in 401(k) Participation and Savings Behavior. *The Quarterly Journal of Economics*, 116(4), 1149–1187.
- ¹¹⁸ Madrian, B. C., & Shea, D. F. (2001). The Power of Suggestion: Inertia in 401(k) Participation and Savings Behavior. *The Quarterly Journal of Economics*, 116(4), 1149–1187.
- ¹¹⁹ National Audit Office (2015). Automatic enrolment to workplace pensions.
- ¹²⁰ National Audit Office (2015). Automatic enrolment to workplace pensions.
- ¹²¹ Beshears, J., Choi, J. J., Laibson, D., & Madrian, B. C. (2009). The importance of default options for retirement saving outcomes: Evidence from the United States. In Social security policy in a changing environment (pp. 167–195). University of Chicago Press.
- ¹²² Johnson, E. J., & Goldstein, D. (2003). Do defaults save lives? *Science*, 302(5649), 1338-1340.
- ¹²³ Abadie, A., & Gay, S. (2006). The impact of presumed consent legislation on cadaveric organ donation: a cross-country study. *Journal of health economics*, *25*(4), 599-620.
- ¹²⁴ Park, C. W., Jun, S. Y., & MacInnis, D. J. (2000). Choosing what I want versus rejecting what I do not want: An application of decision framing to product option choice decisions. *Journal of Marketing Research*, 37(2), 187-202.
- ¹²⁵ Johnson, E. J., Bellman, S., & Lohse, G. L. (2002). Defaults, framing and privacy: Why opting in-opting out. *Marketing Letters*, *13*(1), 5-15.
- ¹²⁶ Madrian, B. C., & Shea, D. F. (2001). The Power of Suggestion: Inertia in 401(k) Participation and Savings Behavior. *The Quarterly Journal of Economics*, 116(4), 1149–1187.
- ¹²⁷ Choi, J. J., Laibson, D., Madrian, B. C., & Metrick, A. (2003). Active Decisions: A Natural Experiment in Savings.
- ¹²⁸ Agnew, J. R., & Szykman, L. R. (2005). Asset allocation and information overload: The influence of information display, asset choice, and investor experience. *The Journal of Behavioral Finance*, *6*(2), 57-70.
- ¹²⁹ Camerer, C., Babcock, L., Loewenstein, G., & Thaler, R. (1997). Labor supply of New York City cabdrivers: One day at a time. *The Quarterly Journal of Economics*, *112*(2), 407-441.
- ¹³⁰ Choi, J. J., Haisley, E., Kurkoski, J., & Massey, C. (2012). *Small cues change savings choices* (No. w17843). National Bureau of Economic Research.
- ¹³¹ Beshears, J., Choi, J. J., Laibson, D., Madrian, B. C., & Milkman, K. L. (2015). The effect of providing peer information on retirement savings decisions. *The Journal of finance*, *70*(3), 1161-1201.
- ¹³² BIT, (2014). East: Four simple ways to apply behavioural insights.
- ¹³³ Hallsworth, M., List, J. A., Metcalfe, R. D., & Vlaev, I. (2015). The Making of Homo Honoratus: From Omission to Commission (No. w21210). National Bureau of Economic Research.
- ¹³⁴ Bacon, R. (2013). *Conundrum: Why Every Government Gets Things Wrong-And What We Can Do About It.* Biteback Publishing.

- ¹³⁵ Kaplan, S., & Berman, M. G. (2010). Directed attention as a common resource for executive functioning and self-regulation. *Perspectives on Psychological Science*, *5*(1), 43-57.
- ¹³⁶ Hackman, D. A., & Farah, M. J. (2009). Socioeconomic status and the developing brain. *Trends in Cognitive Sciences*, *13*(2), 65-73.
- ¹³⁷ Mullainathan, S., & Shafir, E. (2013). Scarcity: Why having too little means so much. Macmillan.
- 138 https://www.theguardian.com/business/2017/mar/03/zero-hours-contracts-uk-record-high
- ¹³⁹ Chernev, A., Böckenholt, U., & Goodman, J. (2015). Choice overload: A conceptual review and meta-analysis. *Journal of Consumer Psychology*, *25*(2), 333-358.
- ¹⁴⁰ Iyengar, S. S., & Kamenica, E. (2010). Choice proliferation, simplicity seeking, and asset allocation. *Journal of Public Economics*, *94*(7), 530-539.
- ¹⁴¹ Karlsson, N., Loewenstein, G., & Seppi, D. (2009). The ostrich effect: Selective attention to information. *Journal of Risk and uncertainty*, *38*(2), 95-115.
- ¹⁴² Sullivan, P. S., Lansky, A., Drake, A., & HITS-2000 Investigators. (2004). Failure to return for HIV test results among persons at high risk for HIV infection: results from a multistate interview project. *JAIDS Journal of Acquired Immune Deficiency Syndromes*, *35*(5), 511-518.
- ¹⁴³ Galai, D., & Sade, O. (2006). The "ostrich effect" and the relationship between the liquidity and the yields of financial assets. *The Journal of Business*, *79*(5), 2741-2759.
- ¹⁴⁴ Dana, J., Weber, R. A., & Kuang, J. X. (2007). Exploiting moral wiggle room: experiments demonstrating an illusory preference for fairness. *Economic Theory*, *33*(1), 67-80.
- ¹⁴⁵ Custers, A. (2015). Not Opening the Envelope: The Role of Emotions and Information Avoidance in Debt Management. *Advances in Consumer Research Volume 43*.
- ¹⁴⁶ Interviewee on BBC Radio 4 Today programme, 18 October 2017 http://www.bbc.co.uk/programmes/b098bsy2
- ¹⁴⁷ Cialdini (2003) Crafting normative messages to protect the environment. *Current Directions in Psychological Science* 12:105–109.
- ¹⁴⁸ M Deutsch & H Gerard (1955) A study of normative and informational social influences upon individual judgment. *The Journal of Abnormal and Social Psychology*, 55-3, pp629-636.
- ¹⁴⁹ Cynamon, B. Z., & Fazzari, S. M. (2008). Household debt in the consumer age: source of growth–risk of collapse. *Capitalism and Society*, 3(2), 1-30.
- ¹⁵⁰ Duflo, E., & Saez, E. (2003). The role of information and social interactions in retirement plan decisions: Evidence from a randomized experiment. *The Quarterly Journal of Economics*, *118*(3), 815-842.
- ¹⁵¹ Behavioural Insights Team, (2012). Applying behavioural insights to reduce fraud, error and debt. *Cabinet Office, London*.
- ¹⁵² Jacobsen, C., Fosgaard, T. R., & Pascual-Ezama, D. (2017). Why Do We Lie? A Practical Guide To the Dishonesty Literature. *Journal of Economic Surveys*.
- ¹⁵³ Ardener, S. (1964). The comparative study of rotating credit associations. *The Journal of the Royal Anthropological Institute of Great Britain and Ireland*, 94(2), 201-229.
- ¹⁵⁴ Ardener, S. (2014). Credit unions and money clubs (ROSCAs). *Anthropology Today*, 30(4), 3-6.
- ¹⁵⁵ Steele, C. M., & Aronson, J. (1995). Stereotype threat and the intellectual test performance of African Americans. *Journal of personality and social psychology*, *69*(5), 797.
- ¹⁵⁶ Tine, M. & Gotlieb, R. (2013). Gender-, race-, and income-based stereotype threat: the effects of multiple stigmatized aspects of identity on math performance and working memory function. *Social Psychology of Education*, 16(3), 353–376.
- ¹⁵⁷ Spencer, B., & Castano, E. (2007). Social class is dead. Long live social class! Stereotype threat among low socioeconomic status individuals. *Social Justice Research*, *20*(4), 418-432.
- ¹⁵⁸ Sheehy-Skeffington, J. (2015). Behavioural insights in the age of austerity. Angle Journal. Retrieved from http://anglejournal.com/article/2015-12-behavioural-insights-in-theage-of-austerity-how-research-on-the-psychology-of-poverty-can-help-us-tostay-focused-on-so/
- ¹⁵⁹ Hall, C. C., Zhao, J., & Shafir, E. (2014). Self-affirmation among the poor: Cognitive and behavioral implications. *Psychological Science*, *25*(2), 619-625.
- ¹⁶⁰ www.behaviouralinsights.co.uk/trial-results/behavioural-insights-and-home-affairs/
- ¹⁶¹ Granovetter, M. S. (1973). The Strength of Weak Ties. The American Journal of Sociology, 78(6), 1360–1380.

- ¹⁶² Smith, S. S. (2012). Why Weak Ties' Help and Strong Ties' Don't: Reconsidering Why Tie Strength Matters. Retrieved from https://escholarship.org/uc/item/15p921r5.pdf
- ¹⁶³ Varekamp, I., Knijn, T., der Gaag, M. van, & Bos, P. (2015). Social capital and job search behaviour of long-term welfare recipients. *The International Journal of Sociology and Social Policy*, 35(11/12), 738–755.
- ¹⁶⁴ Baumberg, B. (2016). The stigma of claiming benefits: a quantitative study. *Journal of Social Policy*, 45(02), 181–199.
- ¹⁶⁵ Rainwater, L. (1982). Stigma in Income-Tested Programs. In Income-Tested Transfer Programs (19–65). Elsevier.
- ¹⁶⁶ Hernanz, V., Malherbet, F., & Pellizzari, M. (2004). Take-Up of Welfare Benefits in OECD Countries.
- ¹⁶⁷ Bertrand, M., Mullainathan, S., & Shafir, E. (2004). A behavioral-economics view of poverty. *The American Economic Review*, *94*(2), 419-423.
- ¹⁶⁸ Aldridge, H., Kenway, P., MacInnes, T., and Parekh, A. (2012) Monitoring Poverty and Social Exclusion 2012, New Policy Institute, York: Joseph Rowntree Foundation.
- ¹⁶⁹ Finn, D., & Goodship, J. (2014). Take-up of benefits and poverty: an evidence and policy review. *London: CESI*.
- 170 http://benefittosociety.co.uk/
- ¹⁷¹ Terrion, J. L. (2006). Building Social Capital in Vulnerable Families: Success Markers of a School-Based Intervention Program. *Youth & Society*, 38(2), 155–176.
- ¹⁷² Hashima, P. Y., & Amato, P. R. (1994). Poverty, social support, and parental behavior. *Child Development*, 65(2 Spec No), 394–403.
- ¹⁷³ Benin, M., & Keith, V. M. (1995). The Social Support of Employed African American and Anglo Mothers. *Journal of Family Issues*, 16(3), 275–297.
- ¹⁷⁴ Webster-Stratton, C., & Hammond, M. (1997). Treating children with early-onset conduct problems: a comparison of child and parent training interventions. Journal of Consulting and Clinical Psychology, 65(1), 93–109.
- ¹⁷⁵ Fram, M. S. (2003). Managing to Parent: Social Support, Social Capital, and Parenting Practices Among Welfare-participating Mothers with Young Children. University of Wisconsin--Madison, Institute for Research on Poverty.
- ¹⁷⁶ Bradley, R. H., Convyn, R. F., Burchinal, M., McAdoo, H. P., & Coll, C. G. (2001). The home environments of children in the United States part II: relations with behavioral development through age thirteen. *Child Development*, 72(6), 1868–1886.
- ¹⁷⁷ Gratz, J., Nation, S. O., Schools, S. O., & Kurth-Schai, R. (2006). The impact of parents' background on their children's education. *Educational Studies*, 268, 1–12.
- ¹⁷⁸ Brown, S. (2015). Household repayment behaviour and neighbourhood effects. *Urban Studies*, *52*(6), 1169-1188.
- ¹⁷⁹ Breza, E., & Chandrasekhar, A. G. (2015). *Social networks, reputation and commitment: Evidence from a savings monitors experiment* (No. w21169). National Bureau of Economic Research.
- ¹⁸⁰ Jachimowicz, J. M., Chafik, S., Munrat, S., Prabhu, J. C., & Weber, E. U. (2017). Community trust reduces myopic decisions of low-income individuals. *Proceedings of the National Academy of Sciences*, 201617395.
- ¹⁸¹ Kuo, F. E. (2001). Coping with poverty impacts of environment and attention in the inner city. *Environment and Behavior*, 33(1), 5–34.
- ¹⁸² Winson, A. (2011). Flourishing trees, flourishing minds: nearby trees may improve mental wellbeing among housing association tenants, translated by Johnston. M. and Percival, G., Birmingham, UK: Forestry Commission, 94-103.
- ¹⁸³ Kuo, F. E., & Sullivan, W. C. (2001). Aggression and violence in the inner city effects of environment via mental fatigue. *Environment and Behavior*, 33(4), 543–571.
- ¹⁸⁴ Hygge, S., Evans, G. W., & Bullinger, M. (2002). A prospective study of some effects of aircraft noise on cognitive performance in schoolchildren. *Psychological Science*, 13(5), 469–474.
- ¹⁸⁵ Halpern, D. (1995). *Mental Health and the Built Environment: More Than Bricks and Mortar?*. Taylor & Francis.
- ¹⁸⁶ Schroeder, H. E. (1991). New Directions in Health Psychology Assessment. Taylor & Francis.

- ¹⁸⁷ Evans, G. W., Maxwell, L. E., & Hart, B. (1999). Parental language and verbal responsiveness to children in crowded homes. *Developmental Psychology*, 35(4), 1020–1023.
- ¹⁸⁸ Alhola, P., & Polo-Kantola, P. (2007). Sleep deprivation: Impact on cognitive performance. *Neuropsychiatric Disease and Treatment*, 3(5), 553–567.
- ¹⁸⁹ Bornstein, M. H. (2005). Handbook of Parenting: Volume 4 Social Conditions and Applied Parenting. Taylor & Francis.
- ¹⁹⁰ Wachs, T. D. (1992). The Nature of Nurture. SAGE Publications.
- ¹⁹¹ Halpern, D. (2005). Social Capital. Polity.
- ¹⁹² Timperio, A., Crawford, D., Telford, A., & Salmon, J. (2004). Perceptions about the local neighborhood and walking and cycling among children. *Preventive Medicine*, 38(1), 39–47
- ¹⁹³ Evans, G. W. (1978). Human spatial behavior: The arousal model. *Human response to crowding*, 283-303.
- ¹⁹⁴ Sherrod, D. R. (1974). Crowding, Perceived Control, and Behavioral Aftereffects. *Journal of Applied Social Psychology*, *4*(2), 171-186.
- ¹⁹⁵ Ross, M., Layton, B., Erickson, B., & Schopler, J. (1973). Affect, facial regard, and reactions to crowding. *Journal of Personality and Social Psychology*, *28*(1), 69.
- ¹⁹⁶ Baum, A., Bell, P., Fisher, J. D., & Greene, T. C. (1984). Environmental psychology. *New York, CBS College*.
- ¹⁹⁷ Sundquist, K., Frank, G., & Sundquist, J. A. N. (2004). Urbanisation and incidence of psychosis and depression. *The British Journal of Psychiatry*, *184*(4), 293-298.
- ¹⁹⁸ Lederbogen, F., Kirsch, P., Haddad, L., Streit, F., Tost, H., Schuch, P., ... & Meyer-Lindenberg, A. (2011). City living and urban upbringing affect neural social stress processing in humans. *Nature*, *474*(7352), 498.
- ¹⁹⁹ Ineichen, B., & Hooper, D. (1974). Wives' mental health and children's behaviour problems in contrasting residential areas. *Social Science & Medicine* (1967), *8*(6), 369-374.
- ²⁰⁰ Tunstall, R., Bevan, M., Bradshaw, J., Croucher, K., Duffy, S., Hunter, C., ... Wilcox, S. (2013). The links between housing and poverty: an evidence review. JRF Report, York: Joseph Rowntree Foundation. Retrieved from https://www.jrf.org.uk/report/linksbetween-housing-and-poverty
- ²⁰¹ Amérigo, M., & Aragonés, J. I. (1990). Residential satisfaction in council housing. *Journal of Environmental Psychology*, *10*(4), 313-325.
- ²⁰² Hartman, C. W. (1963). Social values and housing orientations. *Journal of Social Issues*, *19*(2), 113-131.
- ²⁰³ Byrne, D. S. (1986). *Housing and health: the relationship between housing conditions and the health of council tenants*. Gower Publishing Company, Limited.
- ²⁰⁴ Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychological review*, *84*(2), 191.
- ²⁰⁵ Nettleton, S., & Burrows, R. (1998). Mortgage debt, insecure home ownership and health: an exploratory analysis. *Sociology of health & Illness*, *20*(5), 731-753.
- ²⁰⁶ Festinger, L., Back, K. W., & Schachter, S. (1950). *Social pressures in informal groups: A study of human factors in housing* (Vol. 3). Stanford University Press.
- ²⁰⁷ Caplow, T., & Forman, R. (1950). Neighborhood interaction in a homogeneous community. *American sociological review*, *15*(3), 357-366.
- ²⁰⁸ Willmott, P. (1963). *The Evolution of a Community: A Studies of Dagenham After 40 Years*. Routledge & Kegan Paul.
- ²⁰⁹ Baum, A., & Valins, S. (1979). Architectural mediation of residential density and control: Crowding and the regulation of social contact. *Advances in experimental social psychology*, *12*, 131-175.
- ²¹⁰ Baum, A., & Davis, G. E. (1980). Reducing the stress of high-density living: An architectural intervention. *Journal of Personality and Social Psychology*, *38*(3), 471.
- ²¹¹ Newman, O. (1973). Defensible space: Crime prevention through urban design. *Ekistics*, 325-332.
- ²¹² Yancey, W. L. (1971). Architecture, interaction, and social control: The case of a large-scale public housing project. *Environment and Behavior*, 3(1), 3-21.
- ²¹³ Baum, A., Aiello, J., & Davies, G. (1979). Neighbourhood determinants of stress symptom perception. Cambridge: Cambridge University.
- ²¹⁴ Halpern, D. (1995). *Mental Health and the Built Environment: More Than Bricks and Mortar?* Taylor & Francis.

- ²¹⁵ Ebbesen, E. B., Kjos, G. L., & Konečni, V. J. (1976). Spatial ecology: Its effects on the choice of friends and enemies. *Journal of Experimental Social Psychology*, *12*(6), 505-518.
- ²¹⁶ https://medium.com/@trinovantum/rent-arrears-and-the-sweet-science-v-02-605362b2190f
- ²¹⁷ https://www.mobysoft.com/products/rentsense
- ²¹⁸ https://www.gov.uk/government/statistics/english-indices-of-deprivation-2015
- ²¹⁹ It should be noted that many variables are correlated as housing tenants contribute to local area characteristics and rental levels are also determined in part by these characteristics.
- ²²⁰ Friedman, J.H. (2001). Greedy function approximation: a gradient boosting machine. *The Annals of Statistics*, 29(5), pp. 1189-1232.
- ²²¹ Brown, S. "Household Repayment Behaviour and Neighbourhood Effects". Sheffield Economic Research Paper Series, accessed at: https://www.sheffield.ac.uk/polopoly-fs/1.369917!/file/serps-2014007.pdf.
- ²²² Brown, S., Ghosh, P. and Taylor, K.B. (2014) The Existence and Persistence of Household Financial Hardship: A Bayesian Multivariate Dynamic Logit Framework. *Journal of Banking and Finance*, 46. pp. 285-298.
- ²²³ Behavioural Insights Team (2014). EAST: Four simple ways to apply behavioural insights.
- ²²⁴ www.ovoenergy.com/blog/ovo-news/the-ovo-3--interest-reward.html
- ²²⁵ Soman, D. (2015). *The Last Mile: Creating Social and Economic Value from Behavioral Insights*. University of Toronto Press.
- ²²⁶ 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.
- ²²⁷ www.forbes.com/sites/elizabethharris/2017/03/31/a-better-way-to-collect-bills-from-customers-without-alienating-them
- ²²⁸ Kahneman, D. & Tversky, A. (1984) Choices, Values, and Frames. American Psychologist 39-4
- ²²⁹ Deutsch, M. & Gerard, H. (1955) A study of normative and informational social influences upon individual judgment. *The Journal of Abnormal and Social Psychology*, 55-3, pp629-636
- ²³⁰ Behavioural Insights Team (2013). Applying behavioural insights to charitable giving. Cabinet Office.
- ²³¹ Axelrod, R. (1984). The evolution of cooperation. New York: Basic Books.
- ²³² Newman, R.S. (2005). The cocktail party effect in infants revisited: Listening to one's name in noise. *Developmental Psychology*, 41(2), 352–362.
- ²³³ http://www.behaviouralinsights.co.uk/uncategorized/using-prize-draws-as-an-incentive/
- ²³⁴ Nunes, J. C. and Dreze, X. (2006). The endowed progress effect: how artificial advancement increases effort. *Journal of Consumer Research*. 32, 504-512.
- ²³⁵ Karlan, D. S. (2007). Social connections and group banking. The Economic Journal, 117(517).
- ²³⁶ Behavioural Insights Team (2014). EAST: Four simple ways to apply behavioural insights.
- ²³⁷ 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.
- ²³⁸ Oettingen, G., & Gollwitzer, P. M. (2010). Strategies of setting and implementing goals: Mental contrasting and implementation intentions. In J. E. Maddux & J. P. Tangney (Eds.), *Social psychological foundations of clinical psychology* (pp. 114-135). New York: Guilford.
- ²³⁹ Dolan, P., Hallsworth, M., Halpern, D., King, D., & Vlaev, I. (2010). MINDSPACE: influencing behaviour for public policy.
- ²⁴⁰ Lokhorst, A. M., Werner, C., Staats, H., van Dijk, E., & Gale, J. L. (2013). Commitment and behavior change: A meta-analysis and critical review of commitment-making strategies in environmental research. *Environment and Behavior*, *45*(1), 3-34.
- ²⁴¹ https://www.stepchange.org/Mediacentre/Pressreleases/Actionplanonproblemdebt.aspx
- ²⁴² Thaler, R, (1990) Anomalies: Saving, Fungibility, and Mental Accounts. *Journal of Economic Perspectives* 4 (1): 193–205
- ²⁴³ https://www.moneyadviceservice.org.uk/en/articles/managing-your-money-using-the-jam-jar-approach
- ²⁴⁴ For example the Santanader 123 account: http://www.santander.co.uk/uk/current-accounts/123-current-account

²⁴⁵ Thaler, R., & Benartzi, S. "Save more tomorrow™: Using Behavioral Economics to Increase Employee Saving." *Journal of Political Economy* 112.S1 (2004): S164-S187.

 $^{^{246}\} http://www.behaviouralinsights.co.uk/uncategorized/using-prize-draws-as-an-incentive/$

²⁴⁷ Behavioural Insights Team (2014). EAST: Four simple ways to apply behavioural insights.