

social engine



Applying Behavioural Insights to Rent Arrears  
A trial to encourage council tenants to reduce their  
rent arrears

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## About Social Engine

This report was produced by Social Engine.

Social Engine was founded by Avis Johns and Toby Blume in 2015 to support organisations to adopt an evidenced-based and insight-led approach. We work with charities, local authorities, social enterprises and other social purpose organisations to overcome organisational challenges through engagement, research and the practical application of evidence in practice. We have been leading the application of behavioural insights and social marketing and the use of randomised controlled trials with local authorities and the public sector for several years, winning awards for our ground-breaking trials in local government.

## Executive summary

- The London Borough of Brent appointed Social Engine to develop and test an intervention, using behavioural insights, to encourage council tenants to pay their rent arrears.
- We conducted a randomised controlled trial, randomly assigning tenants due to receive a rent arrears reminder letter each week into treatment and control groups.
- The reminder letter was redesigned to make it simpler and more salient – using accessible language and clearly indicating what the reader needed to do, as well as the consequences of inaction.
- Those in the treatment group were sent a redesigned letter while those in the control group received the standard.
- 2,394 reminder letters were sent out between 4<sup>th</sup> November 2018 and 3<sup>rd</sup> February 2019 - 1,189 to the treatment group and 1,205 to the control group.
- The average results between the two groups were then compared to measure whether or not the intervention increased the likelihood of the account holder taking action to reduce their arrears. Taking action to reduce arrears included either paying off the rent owed or contacting the Council to make arrangements to pay or establish a payment plan.
- We found that our intervention had a positive statistically significant impact on participants contacting the council to discuss their arrears, but had no impact on payment of arrears. The intervention increased calls to the council by 27.6%.
- Covariate analysis showed that account holders aged 31-40 were significantly more likely to pay their rent when they received the intervention and that those aged 70 and above were less likely to do so.
- Although they fell just short of conventional statistically significant thresholds men and BAME account holders were also more likely to pay their debts when they received the redesigned reminder letter.
- Households with the highest levels of rent arrears were statistically more likely to call the council to discuss their debts.
- The Council's primary ambition for the trial was to reduce rent arrears and deliver financial benefits and although this was not realised, the intervention still proved to be effective at achieving the second of our intended outcomes.

## Introduction

Social Engine was commissioned by the London Borough of Brent, through the Local Government Association (LGA) Productivity Experts programme, to develop and test an intervention designed to encourage council tenants to pay their rent arrears.

Brent had identified, in their application for support to the LGA, the opportunity to apply behavioural insights to revenue collection and after discussion with officers, it was agreed to focus this on the area of rent arrears collection.

Tenants that accrue arrears of more than £15 will receive a letter (RA1) from the Council encouraging them to pay their debt. If a tenant does not pay their arrears within a period of approximately two weeks of receiving a first letter then a second reminder letter (RA2) will be sent. If they fail to pay their arrears then they will be sent a 'Notice Seeking Possession' as the third stage of the arrears process. The intention of the project was to reduce the number of people receiving both second stage reminders and a notice seeking possession by encouraging tenants to take action on receiving the first letter.

Action taken by tenants would preferably be paying their arrears, however they may also contact the council to make an arrangement to pay over a longer period of time, or they may be directed to debt advice or a range of other support that the council might be able to offer. In most cases, contacting the council would pause any further recovery action to allow time for tenants to access support or resolve the root causes of payment delays. In any circumstance, tenants taking ownership and material action to in relation to their rent arrears would be considered a positive outcome.

Rent arrears mean the council loses out on important income as well as the considerable financial burden of sending high volumes of sending reminders and recovering the money. As important is the stress and hardship it can place on tenants. Around 10,000 RA1s are issued each year, an average of 829 each month (see Fig.1 below). Only 30 RA2s are sent out on average each month and just 19 notices seeking possession (NOSP).

Month	RA1	RA2	NOSP
Jul-17	885	61	27
Aug-17	852	37	20
Sep-17	808	24	24
Oct-17	979	23	28
Nov-17	754	26	26
Dec-17	576	22	9
Jan-18	1,111	30	13
Feb-18	823	28	25
Mar-18	746	24	10
Apr-18	900	37	11
May-18	805	36	12
Jun-18	708	16	25
<b>Total</b>	<b>9,947</b>	<b>364</b>	<b>230</b>
<b>Average (monthly)</b>	<b>829</b>	<b>30</b>	<b>19</b>

Figure 1 – monthly volume of rent arrears reminder letters sent each year by Brent Council

Given the large volumes of RA1s and the opportunity to intervene at the earliest stage of the rent arrears recovery process, it was agreed to focus on the RA1 letter.

We therefore worked together with Brent Council officers to redesign the initial reminder letter sent to tenants who have fallen into arrears with their rent (the RA1 letter).

In order to determine the effectiveness of our redesigned reminder letter, in comparison with the current reminder letter, we adopted a Randomised Controlled Trial (RCT) methodology. RCTs can help to determine the extent to which impact is the result of the intervention, rather than changes that would have happened anyway without the intervention. What distinguishes RCTs from other evaluation methods is the use of a randomly assigned control group that provides a robust means of comparison between different approaches to addressing a problem.

### **Using a randomised controlled trial methodology**

Randomised Controlled Trials (RCTs) are a well-established and widely used method of testing the impact of changes or refinements to policy and practice in a robust way. They can help to determine whether activities that are commissioned or delivered are having the anticipated effects and can be used to inform the design and delivery of programmes and activity. RCTs can also help address the question of attribution – the extent to which identified impact is the result of our approach rather than changes that would have happened anyway without our intervention.

### **Intervention design**

The aim of our intervention was to encourage Brent’s housing tenants to promptly settle their rent arrears by varying communication sent to them. If achieved, this would reduce the costs to the council of debt recovery and administration as well as helping tenants to avoid the cost, stress and potential hardship arising from falling further into debt.

#### **Review of the standard RA1 letter**

Limited data and resource constraints meant we were unable to identify any clear characteristics of tenants most likely to fall into rent arrears, so we were unable to develop any particular insight about our target audience. We therefore relied on our general understanding of London housing tenants and previous experience of revenue collection behavioural insights trials to inform our intervention design. To inform our intervention design we began by reviewing the current reminder letter used by Brent.

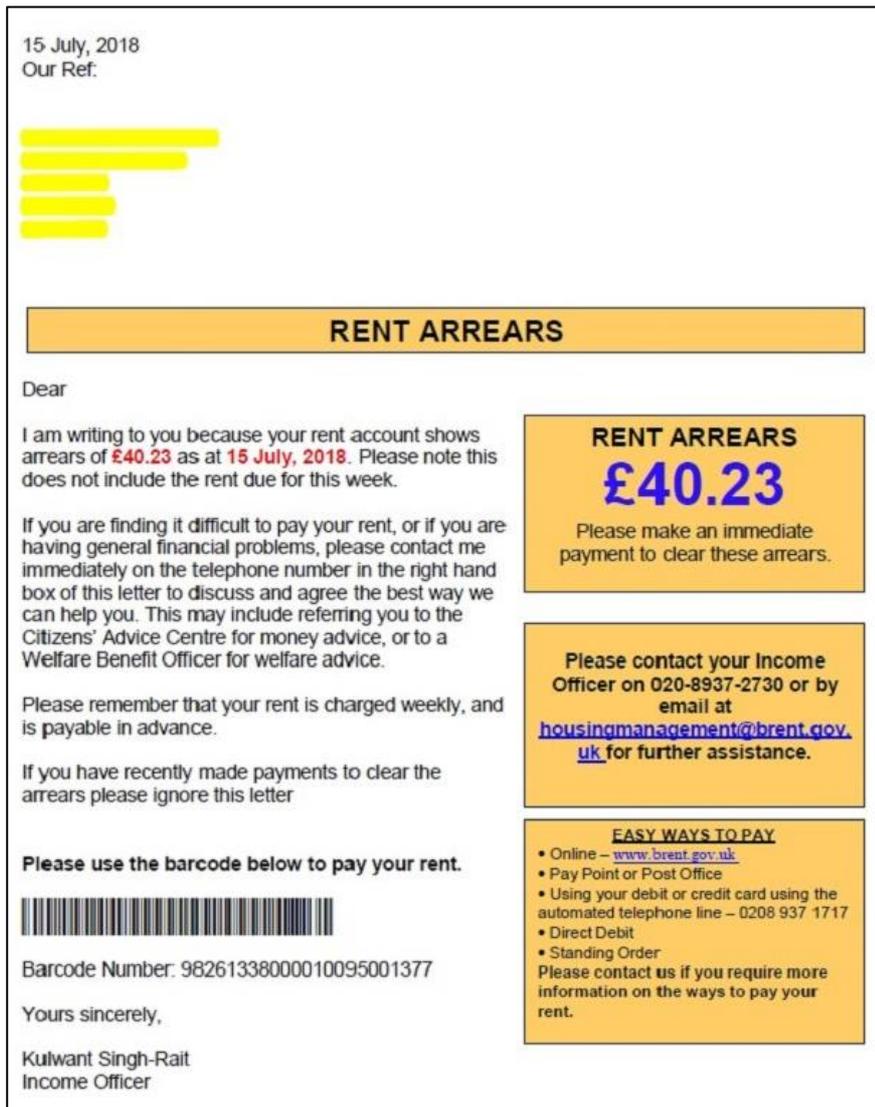


Figure 2 - original rent arrears (RA1) letter

Among our observations of the standard RA1 letter were:

- The banner across the top of the letter ('rent arrears' in black text on orange) is where people's attention will be drawn to. It's the first thing they will see and as such is the '*prime real estate*' in the letter. In addition to the fact it may not be readily understood, rent arrears, is also a somewhat more passive phase than we might wish to have. Replacing this with a call to action – essentially what is the one thing we want people to do as a result of receiving this letter? – could be more effective. Given the desire to encourage people to pay online (rather than other more expensive payment methods) the banner might be used to say 'Pay online at [www.brent.gov.uk](http://www.brent.gov.uk)'
- As a phrase, whilst it may be the correct (technical) term 'rent arrears' is not particularly meaningful for residents and could be reframed to be easier understood. Something more unambiguous and direct such as 'you owe' is more likely to be understood (and therefore acted on).
- The consequences of inaction could be made more visible than at present. Eg "please pay now to avoid...". At present the consequences of not paying off your arrears are framed as being sent another reminder letter. One way which this could be done would be to highlight the fact that a number of people actually lose their homes as a result of not paying their arrears. Without wishing

to cause any undue stress to residents, we want them to realise that this is a possibility, albeit one that they can easily prevent by making a payment, or getting in touch.

- There are currently a large number of different ways to pay listed. The offer of such a varied choice is both potentially confusing and unlikely to direct people to pay through the preferred channel (online or direct debit). We suggest reducing the range of payment methods. Or, if it's deemed essential to include them, then they could be removed from the prominent position in the box and include them in the middle of the letter (towards the end) 'Other ways to pay are also available'. Essentially, if we want them to pay online then we should make this far clearer with other methods much less visible.
- It might help to frame the wording to encourage a greater sense of expectation that people will pay their arrears. This could be done by using phrases like 'when you pay...' rather than 'if' and 'please'.
- It might benefit from the inclusion of some social proof in the letter in order to convey the idea that 'someone else did this and they are okay'. This might be useful for encouraging people to get in touch if they are having difficulties paying, for example 'we've helped xxx people to agree payment plans to reduce their arrears over a period of time' or something along those lines.
- Using the word 'home' might prime people as this is evocative of something tangible and important to people and might encourage them to act by increasing the likelihood of recognising the risks of inaction.
- By opening with a friendly, welcoming sentence thanking people for being a Brent tenant, we can set a positive tone and expectation for the remainder of the letter. Eg 'We like having you as a tenant, but please help us to help you, by paying your rent on time like other Brent tenants'.
- Towards the end of the letter it would be useful to repeat the call to action (from the banner) eg 'Please go online and pay today'.
- Finally, in order to ensure that anyone who is having difficulty paying knows that they should not simply ignore it, we could include something like 'if you can't pay, we can probably help, but we need you to pick up the phone and give us a call'.

### Evidence used to inform our intervention design

Eyetracking research conducted for Royal Mail in 2010 suggests that people generally focus on headings, boxes and images, while detailed text is often ignored. This research also indicated that the front pages of letters receive nearly two and a half times more attention than back pages and that people are more likely to notice actions required if they are placed to the right of the page, above or in line with the headline and if they are in a different colour.



Figure 3 - The lighter colours indicate more time spent focussing on the part of the page, the darker colours less time.

Research by Nobel prize winner, Daniel Kahneman, has shown a number of ways of making messages more persuasive, including:

- not using complex language where simple language will do
- highlighting key information in bold text;

Using colour: bright red or blue is more likely to be believed than middling shades of green, yellow or pale blue (while using too many colours can confuse the audience)

### Designing our intervention using simplification and salience

Our redesign of the RA1 reminder letter drew on eye tracking research carried out by Royal Mail and the work of Daniel Kahneman, which we have successfully applied in previous revenue collection trials we have undertaken<sup>1</sup>. The redesigned letter also incorporated many of the suggestions from our review of the standard RA1 letter (above).

<sup>1</sup> See: <https://laria.org.uk/wp-content/uploads/2015/07/innovation-zone-Lambeth-LGA-case-study-final.pdf> and

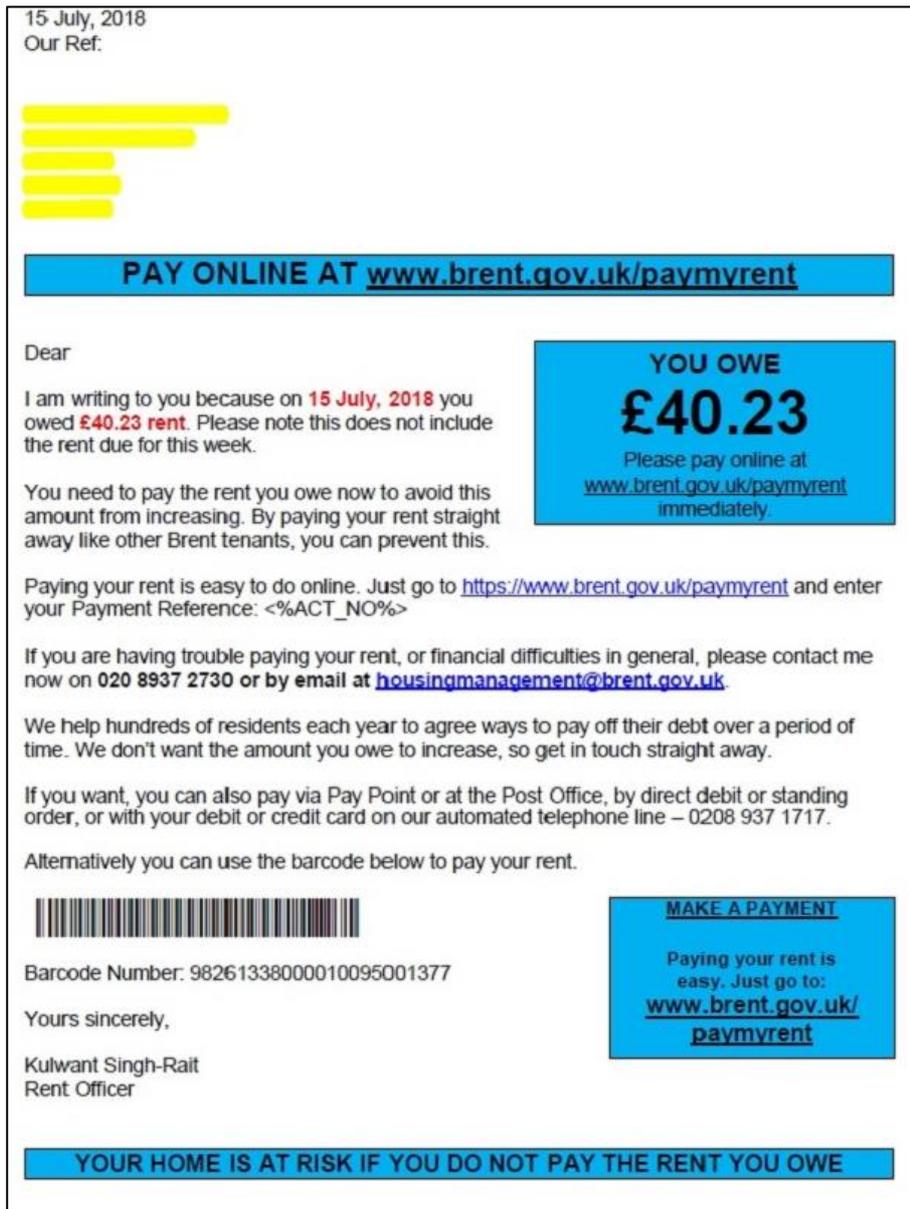


Figure 4 - redesigned rent arrears (RA1) letter

## Experimental design

The experiment design was based on our *seven questions* RCT design methodology (see appendices for more detail). Many, though not all, of these steps are common to developing a well-designed policy evaluation.

Each week all tenants with rent arrears due to be sent an RA1 letter were randomly assigned to either the treatment group or the control group. Those in the treatment group were sent the redesigned RA1 letter while those in the control group received the standard RA1.

Letters were sent out to the treatment and the control group each week over a 14 week period between 4<sup>th</sup> November and 3<sup>rd</sup> February<sup>2</sup>. A total of 2,394 reminder letters were sent out, 1,189 in our treatment group and 1,205 in the control group.

<sup>2</sup> No letters were sent for a 2 week period over Christmas and New Year

Results were measured at the individual household, whether or not each account holder took action to reduce their arrears in order to determine whether our intervention has been effective. Taking action to reduce arrears included either paying off the rent owed or contacting the Council to make arrangements to pay or establish a payment plan. Not taking action would mean no activity on account or progressing to the subsequent stage (e.g. second reminder letter or Notice Seeking Possession).

This approach allowed us to include any behaviour to address the arrears as a positive outcome and preferable to the process escalating towards a Notice Seeking Possession being issued.

In order to determine whether a tenant had taken action on receiving the RA1 – and to avoid the risk of other factors or aspects of the rent recovery process influencing behavior - we captured data for each week's sample 2 weeks after the reminder letter was sent (at the point when the second stage reminder letter would be issued).

At every data capture point, data for each household was recorded determining whether they had:

- Paid
- Not paid (2<sup>nd</sup> reminder letter – RA2 – issued)
- Telephoned the council about their arrears.

## Results

Our analysis aggregated the results of our two groups – treatment and control – and compared the results across our two outcome measures: payment of arrears and contacting the council.

We found that our intervention had a positive statistically significant impact on participants contacting the council to discuss their arrears (Fig. 6), but had no impact on payment of arrears (Fig. 5). The intervention increased calls to the council by 27.6%.

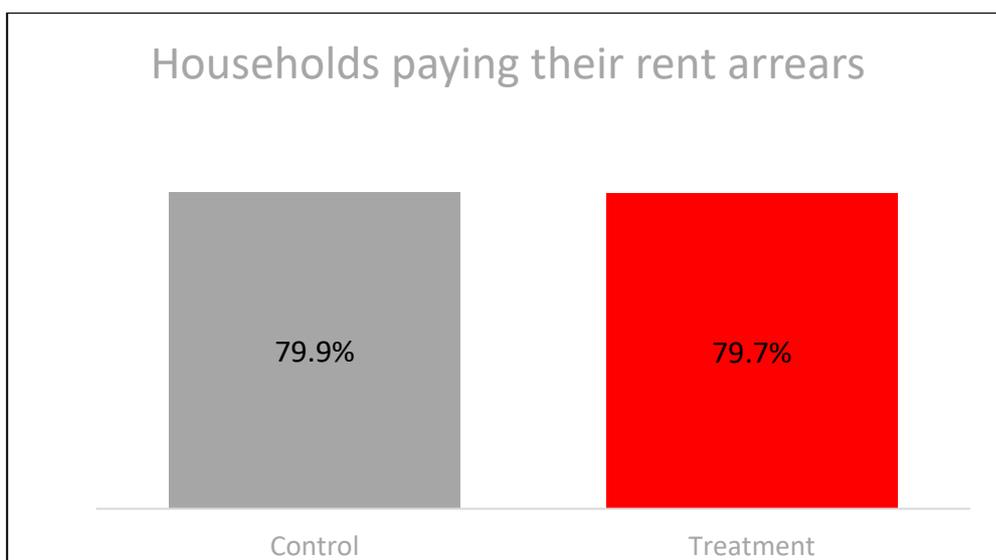


Figure 5 - proportion of households paying their rent arrears after receiving an initial reminder (RA1). Difference between treatment and control is not significant. Treatment n=1,189 and Control n=1,205.

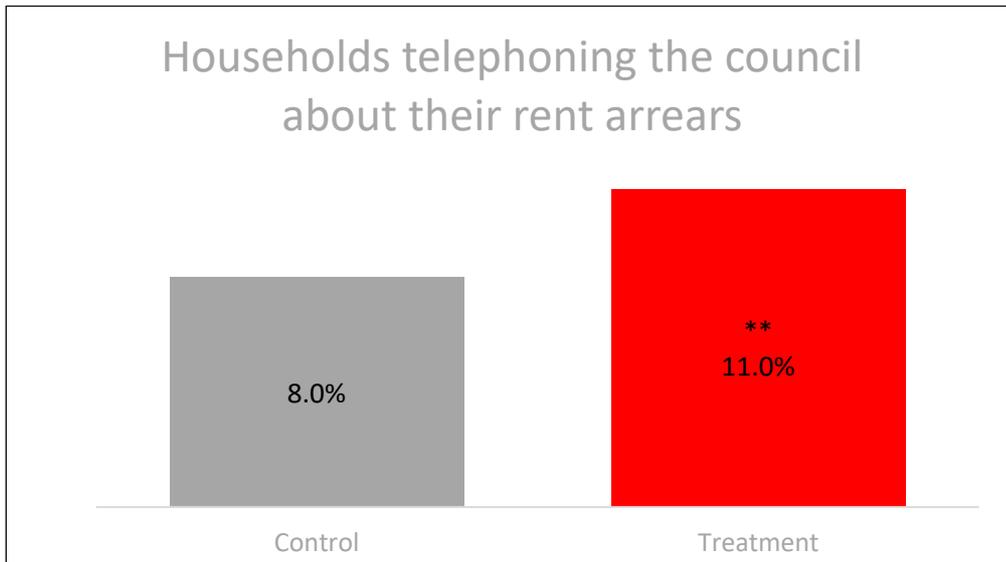


Figure 6 - proportion of households contacting the council about their rent arrears after receiving an initial reminder (RA1). \*\*= statistically significant. Treatment n=1,189 and Control n=1,205.

### Subgroup analysis

In order to determine whether the effects of the intervention were different among different groups we conducted covariate analysis. This allows us to understand whether, beneath these headline findings, there were any significant variations between responses of particular groups. We looked at a range of covariates including age, ethnicity, gender and the size of rent arrears.

With all these demographic data available to us, the information recorded only the main account holder and not the whole household.

We found that the age of the account holder did make a difference in how they responded to the redesigned RA1 letter, with those aged 31-40 being more likely to pay their arrears when they received our intervention, while those over 70 years of age were less likely to pay their debts. This result is statistically significant, and can be seen in Figure 7 below.

When we analysed the effect of the intervention according to gender and ethnicity we found a strong indication that the redesigned RA1 was effective among particular groups. Men were more likely to respond to the redesigned RA1 by paying their debt (at  $p=.054$ ) and BAME account holders were also more likely to respond by paying their debt (at  $p=.056$ ). Although neither of these passed conventional tests for statistical significance (which means we cannot rule out the possibility of these results being mere coincidence) they are very close to achieving this benchmark and therefore offer a strong indication of a positive effect.

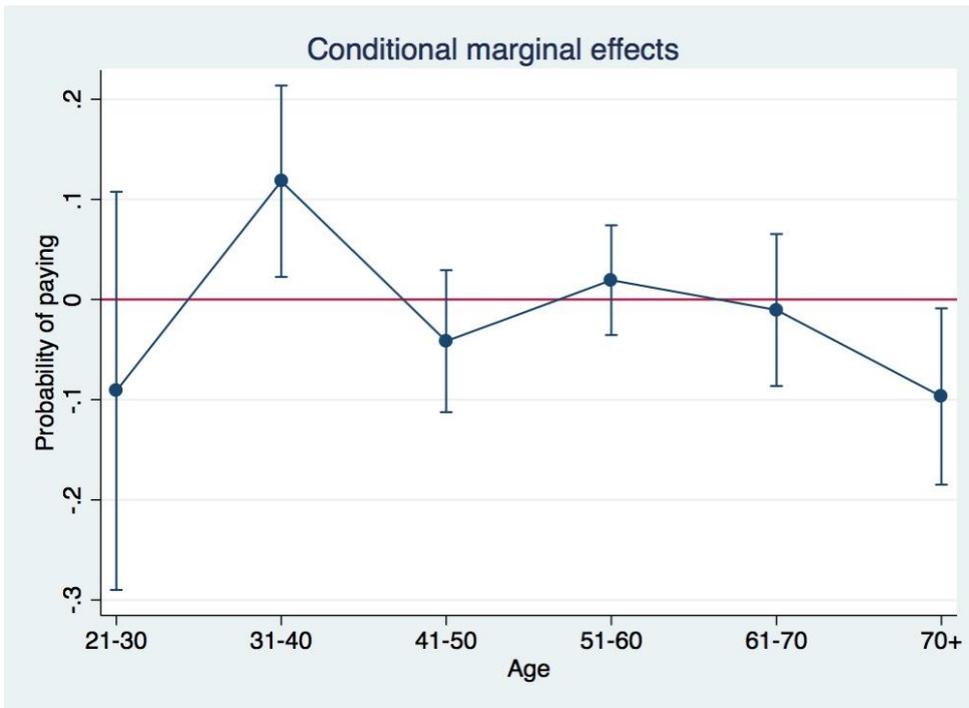


Figure 7 – effect of the redesigned RA1 letter on the likelihood of paying their rent arrears on different households according to age band.

We also looked at whether the size of a household’s rent arrears made any difference to the effect of the intervention. We found that those with the largest level of debt (those with rent arrears of £106 or more) were significantly more likely to contact the council when they received the redesigned RA1 letter as shown in figure 8 below. There was no significant difference among households with smaller levels of debt.

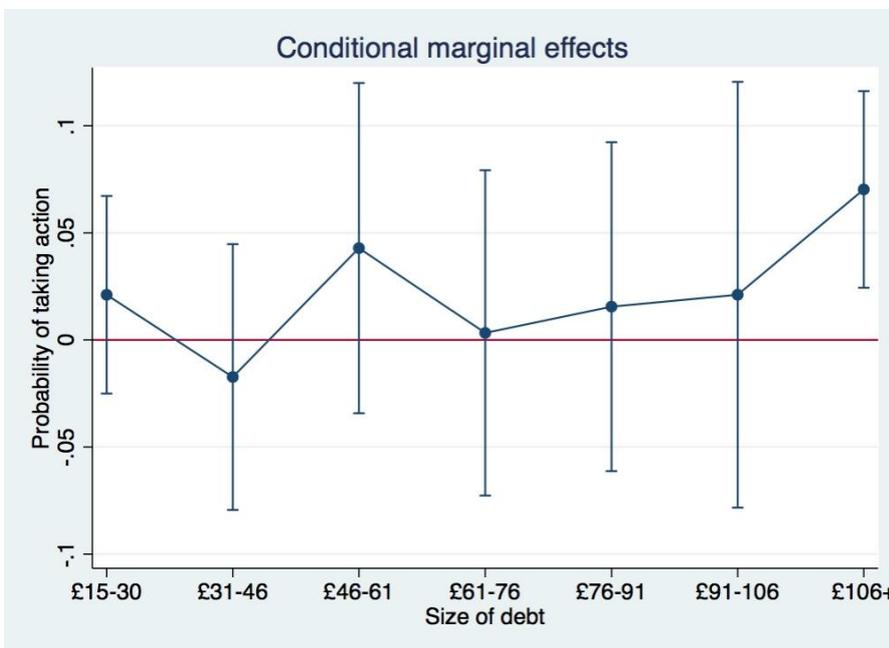


Figure 8 – effect of the redesigned RA1 letter on the likelihood of contacting the council on different households according to size of debt.

## Conclusions and recommendations

The Council's primary ambition for the trial was to reduce rent arrears and deliver financial benefits and although this was not realised our intervention still proved to be effective at achieving the second of our intended outcomes.

When a tenant falls into rent arrears the cost – both to them and to the Council – of not taking action can be significant, leading to further administration and processing costs, reducing the value of rent that is eventually collected and potentially putting people's homes at risk (which may well ultimately place a further burden on the State – either at a local or national level – or charities and community groups). As such, contacting the Council to discuss options, arrange a payment plan or to be signposted to further sources of advice and support, can avoid significant downstream costs, stress and hardship.

Data on the precise nature of the call from tenants on receiving the reminder letter are not logged in a way that enables easy reporting; notes on each call would need to be looked at individually in order to establish this. A council officer undertook a manual review of a sample of notes from calls made to the customer service centre but the results were inconclusive; the calls were about a range of issues, and no material themes were identified. As a result, it is not possible to draw conclusions from this, excepting that in the vast majority of instances, any call made can reasonably be expected to be a better outcome than ignoring the letter or taking any other action.

Whilst we have not sought to quantify the value of this outcome for the Council (or the individual household), further analysis of payment records and tenancy sustainment could be undertaken in order to determine the estimated impact. It is of particular interest that those with the highest levels of debt – that one imagines are at greatest risk of the situation becoming a significant problem – were most likely to contact the council when receiving the redesigned RA1 letter.

During the course of the trial it became apparent that the Council's data collection and analysis systems relating to rent collection had some limitations which impeded the ability to accurately interrogate these data to extract insights about tenants. These limitations pose a challenge to applying behavioural insights more widely in the future and the Council's plans to address some of these that are already underway are a positive step.

We believe the redesigned reminder letter has demonstrated sufficient impact on encouraging tenants to take action on their rent arrears to warrant adoption as the standard RA1 letter. However, the findings from the covariate analysis, highlighting the differences in response among younger account holders (and potentially with BAME and male account holders) warrants further consideration of a more tailored and segmented approach to communications from the council.. We believe that these refinements could deliver further benefits to the Council, particularly in achieving positive impact on the payment of rent arrears.

Since our intervention was limited to redesigning the reminder letters sent to tenants, we were not able to influence the interactions tenants have with Council staff when calling about their arrears. This 'touch point' offers a further opportunity to apply behavioural insights that could encourage tenants to take action to reduce their rent arrears in future.

We recognise that the intervention's lack of demonstrable impact on reducing rent arrears is likely to have a bearing on the appetite within the Council to begin applying behavioural insights more widely. Achieving a tangible financial return would make it easier for officers and Members to feel confident and enthused in adopting further innovative practice. Nonetheless, we feel the trial results offer a credible first step towards that aim and hope that the Council will continue to seek innovation in rent arrears communications and practice to support this.

## Appendices

### Statistical Analysis

	treat		
paid	0	1	Total
0	242	242	484
	20.08	20.35	20.22
1	963	947	1,910
	79.92	79.65	79.78
Total	1,205	1,189	2,394
	100.00	100.00	100.00

Pearson chi2(1) = 0.0271 Pr = 0.869

	treat		
T- Action	0	1	Total
0	1,109	1,058	2,167
	92.03	88.98	90.52
Telephone call from c	96	131	227
	7.97	11.02	9.48
Total	1,205	1,189	2,394
	100.00	100.00	100.00

Pearson chi2(1) = 6.4901 Pr = 0.011

**Interaction models for payment of arrears, probits**

VARIABLES	(1)	(2)	(3)	(4)	(5)
Treat	0.423 (0.225)	0.0725 (0.0721)	0.0645 (0.0759)	0.00267 (0.0752)	-0.0586 (0.0768)
Age	0.0111*** (0.00291)				
Age*treat	-0.00838* (0.00408)				
Sex		0.139 (0.0877)			
Sex*treat		-0.238 (0.123)			
White			0.249* (0.110)		
White*treat			-0.289 (0.151)		
Black Caribbean				-0.136 (0.110)	
Black Caribbean*treat				-0.0355 (0.153)	
Black African					-0.0203 (0.104)
Black African*treat					0.185 (0.147)
Constant	0.247 (0.160)	0.792*** (0.0504)	0.776*** (0.0533)	0.868*** (0.0533)	0.843*** (0.0548)
Observations	2,336	2,387	1,898	1,898	1,898

Standard errors in parentheses

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

**Interaction models for taking action in response to communication, probits**

VARIABLES	(1)	(2)	(3)	(4)	(5)
Treat	0.00957 (0.222)	0.185* (0.0889)	0.0790 (0.0936)	0.216* (0.0893)	0.190* (0.0957)
Age	0.0333 (0.0398)				
Age*treat	0.0457 (0.0541)				
Sex		0.0173 (0.110)			
Sex*treat		-0.00736 (0.150)			
White			-0.160 (0.141)		
White*treat			0.300 (0.184)		
Black Caribbean				-0.0747 (0.147)	
Black Caribbean*treat				-0.319 (0.208)	
Black African					0.108 (0.130)
Black African*treat					-0.110 (0.176)
Constant	-1.526*** (0.164)	-1.417*** (0.0658)	-1.360*** (0.0678)	-1.383*** (0.0666)	-1.430*** (0.0709)
Observations	2,336	2,387	1,898	1,898	1,898

Standard errors in parentheses

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

## Seven Questions public policy RCT design methodology

Our approach to RCT design is based on close collaboration with officers (and/or elected members) to co-design the trial and treatments.

Our Seven Questions – which we introduce as part of a half day training workshop - help guide the design process to enable those with little or no previous knowledge of RCTs to contribute to experimental design.

The process is also intended to build the skills and capabilities of Council staff to use RCTs and behavioural insights.

- 1. What question do I want to answer through my RCT?**
- 2. What units will I measure the results in?**
- 3. How large is my sample size? Is it big enough?**
- 4. What will the treatments be?**
- 5. How will I randomise?**
- 6. What is the outcome I want to observe and how will I measure it?**
- 7. Are there any ethical or data protection issues? If so how will I address them?**

A close-up, grayscale photograph of a turbine engine compressor section. The image shows several rows of compressor blades, with the most prominent row in the foreground showing the detailed, serrated leading edges of the blades. The lighting creates strong highlights and shadows, emphasizing the curved, aerodynamic shape of the blades.

social engine

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