

# Behavioural Insights, Tax, and TEST and Build

Michael Sanders and Miranda Jackman

# Introducing the Behavioural Insights Team

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THE  
BEHAVIOURAL  
INSIGHTS TEAM ♦



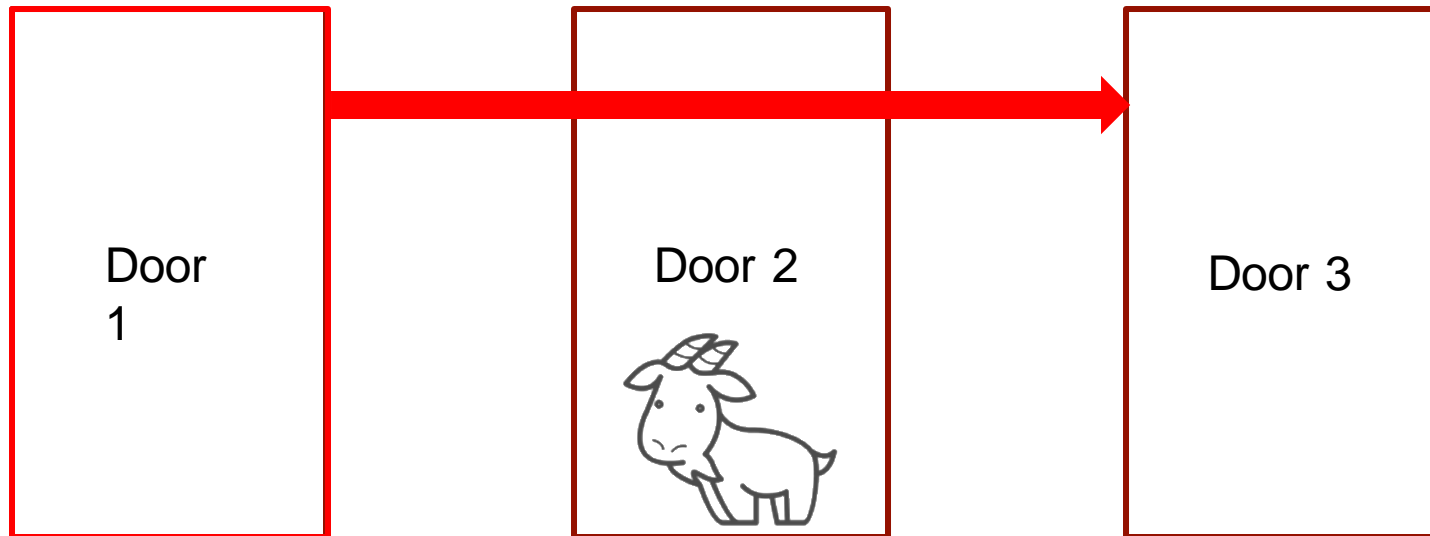
# Most policy concerns behaviour...

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## A quick example

Behind one door is a car. Behind the other two doors are goats.



Let us imagine you  
choose door 1

I tell you there's a  
goat behind door 2

**Would you switch  
to door 3?**

## A more everyday example

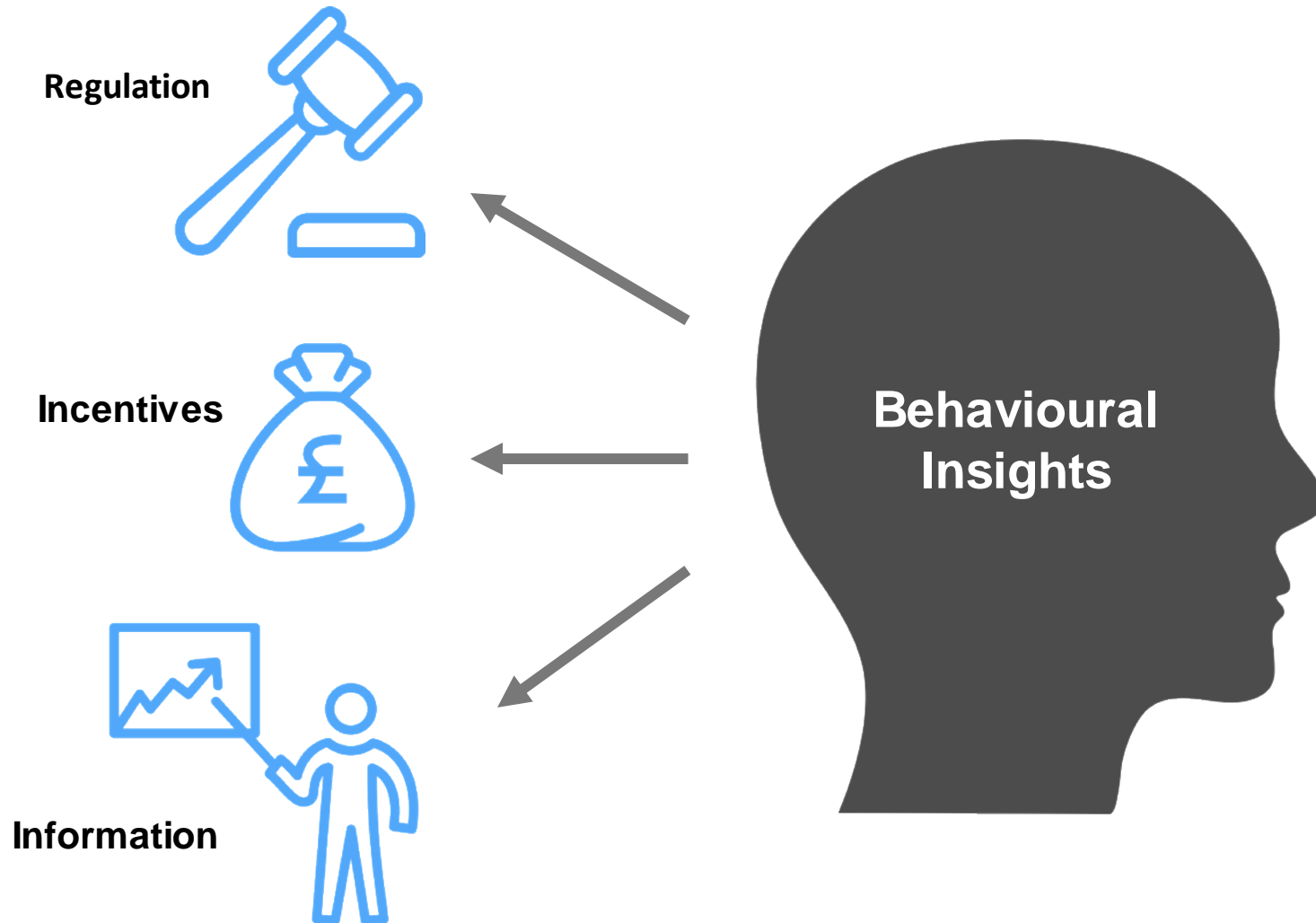
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How many of you have ever been late to something you  
didn't want to be late to?

So what?



## Traditional policy levers



How can you  
encourage  
**late taxpayers**  
pay their tax?



HM Revenue  
& Customs



030006 0000011 001\_001

030006 0000011:001 999

YVONNE STANVER  
ROOM 201  
KELLSALL HOUSE  
STAFFORD COURT  
STAFFORD PARK  
TELFORD  
TF3 3BD

Debt Management & Banking  
Mr R Harding  
HMRC London South  
2nd Floor Southern House  
Wellesley Grove  
Croydon Surrey  
CR9 1WW

Dear Sir/Madam

Please pay £9999999999.99

Our records show that your Self Assessment tax payment is overdue.

Nine out of ten people pay their tax on time.

It is easy to pay. Please call the phone number above to pay by debit card, credit card, or Direct Debit.

You can also pay using internet and telephone banking. For more information on when and how to pay, go to [www.hmrc.gov.uk/payinghmrc](http://www.hmrc.gov.uk/payinghmrc)

If you don't believe that this payment is overdue, please contact us on the number above.

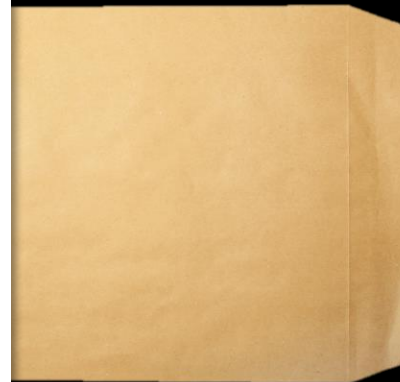
If you have already paid, thank you. If not, please act now.

Yours faithfully

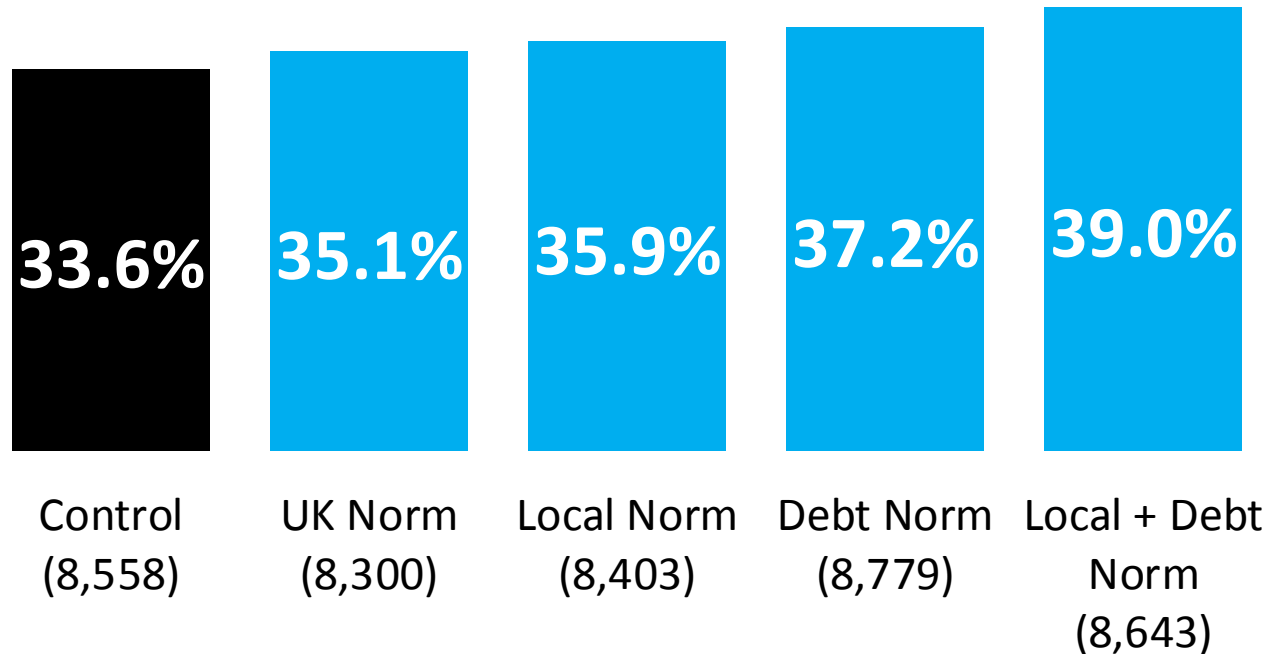
Officer of Revenue and Customs

IDMS99P HMRC 10/10

Nine out of ten people pay their tax on time.



## Social norms to increase tax payment rates within 23 days



With HMRC, our  
tax trials brought  
forward  
**£200million**  
months.

01006 0000011 281 001

030006.00000011.001 990 Debt Management & Banking

YVONNE STANLEY  
8208 201  
KESALL HOUSE  
STAFFORD COURT  
STAFFORD PARK  
TELFORD  
TF3 3BD

XXXX  
XXXX  
XXXX  
XXXX XXXX XX

Dear Sir/Madam

Please pay £385555555555 99

Our records show that your Self Assessment tax payment is overdue.  
Nine out of ten people pay their tax on time.  
It is easy to pay. Please call the phone number above to pay by debit card, credit card, or Direct Debit.  
You can also pay using internet and telephone banking. For more information on when and how to pay, go to [www.hmrc.gov.uk/payinghmrc](http://www.hmrc.gov.uk/payinghmrc).  
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If you have already paid, thank you. If not, please act now.

Yours faithfully

Officer of Revenue and Customs

ICM566P HMRC 10/10

# Applying Behavioural Insights to increase Council Tax collection in Medway

# Council Tax first reminder letters

Issue Date  
13-FEB-2015

Medway Council, Gun Wharf,  
Dock Road, Chatham, Kent ME4 4TR  
Email: [ctax@medway.gov.uk](mailto:ctax@medway.gov.uk)

Re:

Account No:

**COUNCIL TAX REMINDER NOTICE**  
Please do not ignore this notice as it is a legal document

Your latest instalment payment is overdue by at least 10 days and you are currently in arrears by the sum of £ 50.00

The above arrears plus any amount that falls due within the next 7 days from the date of this notice means that you need to pay £ 50.00 within the next 10 days. Details on how to pay are shown overleaf

Why not avoid receiving these letters being sent in future by paying by direct debit? Join over 65,000 Medway residents by simply completing the online direct debit form at [www.medway.gov.uk/dp](http://www.medway.gov.uk/dp)

If you cannot pay the full sum shown above in bold or have any queries about this letter, please contact the Council as a matter of urgency.

If you do not pay the amount within 10 days or contact the Council to make an agreed arrangement, then your instalment arrangement will be cancelled. This is extremely important because it means that you would have to pay the balance of the year's council tax in full. This currently stands at £ 50.00. You would also then have to pay this amount within a further 7 days and if you failed to do this we could start court proceedings which may incur additional costs.

For information - if you have other council tax debts for this account they are not included in this notice but for information are:

- Subject to Court Proceedings = £ 300.12
- Outstanding from Other Years = £ 0.00

20000041528

01 20000941528 848035717096 30

Standard reminder letter

Medway Council, Gun Wharf,  
Dock Road, Chatham, Kent ME4 4TR  
Email: [ctax@medway.gov.uk](mailto:ctax@medway.gov.uk)

Re:

Date: [date]  
Account No: [account no]

**COUNCIL TAX REMINDER NOTICE**

Dear [insert name]

You are behind with your Council Tax payments. Please pay [XXXX] within the next 7 days. See below and overleaf for details of how to pay.

96% of Medway Council Tax is paid promptly. You are currently in the very small minority of people who have not paid on time.

Direct debit is the simplest and safest way to pay. Sign up today at [www.medway.gov.uk/pay](http://www.medway.gov.uk/pay)

If you do not pay by the [insert date] then the balance of [full years amount balance] for the year's Council Tax will be due by the [date]. If you cannot pay please contact the Council as a matter of urgency.

Social norm letter

Medway Council, Gun Wharf,  
Dock Road, Chatham, Kent ME4 4TR  
Email: [ctax@medway.gov.uk](mailto:ctax@medway.gov.uk)

Re:

Date: [date]  
Account No: [account no]

**COUNCIL TAX REMINDER NOTICE**

Dear [insert name]

You are behind with your Council Tax payments. Please pay [XXXX] within the next 7 days. See below and overleaf for details of how to pay.

You are currently at the reminder notice stage of the process:

```
graph LR; A[Bill issued] --> B[Reminder notice  
Amount due  
£X]; B --> C[Final notice  
Full amount due  
£XXX]; C --> D[Court Summons  
Full amount due  
+ Summons costs];
```

Direct debit is the simplest and safest way to pay. Sign up today at [www.medway.gov.uk/pay](http://www.medway.gov.uk/pay)

If you do not pay by the [insert date] then the balance of [full years amount balance] for the year's Council Tax will be due by the [date]. If you cannot pay please contact the Council as a matter of urgency.

Diagram letter

# Social norm letter

## COUNCIL TAX REMINDER NOTICE

Please do not ignore this notice as it is a legal document

Your latest instalment payment is overdue by at least 10 days and you are currently in arrears by the sum of £ XXX.

The above arrears plus any amount that falls due within the next 7 days from the date of this notice means that you need to pay £ XXX within the next 10 days. Details on how to pay are shown overleaf.

Why not avoid receiving these letters being sent in future by paying by direct debit? Join over 65,000 Medway residents by simply completing the online direct debit form at [www.medway.gov.uk/pay](http://www.medway.gov.uk/pay)

If you cannot pay the full sum shown above in **bold** or have any queries about this letter, please contact the Council as a matter of urgency.

If you do not pay the amount within 10 days or contact the Council to make an agreed arrangement, then **your instalment arrangement will be cancelled**. This is extremely important because it means that you would have to pay the balance of the year's council tax in **full**. This currently stands at £ 50.00. You would also then have to pay this amount within a further 7 days and if you failed to do this we could start court proceedings which may incur additional costs.

For information – if you have other council tax debts for this account they are not included in this notice but for clarification are:

- Subject to Court Proceedings = £
- Outstanding from Other Years = £

Standard reminder letter

## COUNCIL TAX REMINDER NOTICE

Dear [Insert name]

You are behind with your Council Tax payments. Please pay [£XXX] within the next 7 days.

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Social norm letter

# Diagram letter

## COUNCIL TAX REMINDER NOTICE

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Standard reminder letter

## COUNCIL TAX REMINDER NOTICE

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**You are behind with your Council Tax payments. Please pay [£XXX] within the next 7 days.** See below and overleaf for details of how to pay.

You are currently at the reminder notice stage of the process:

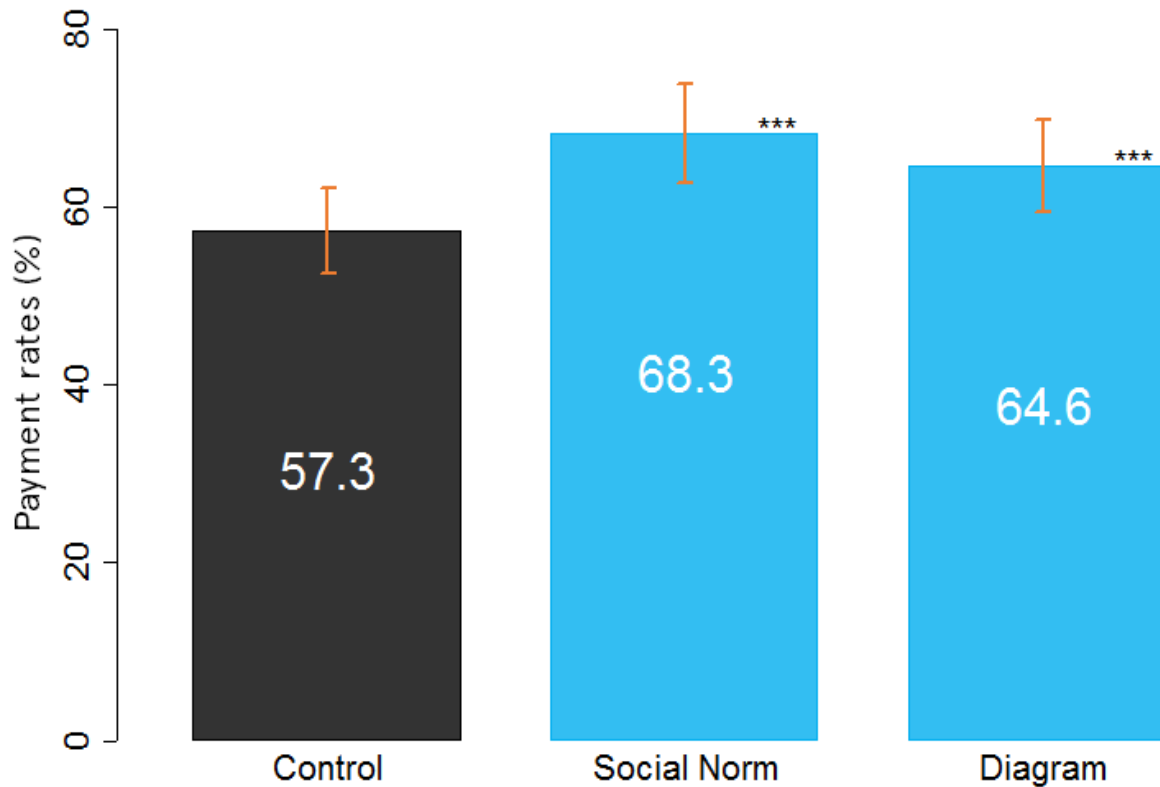


Direct debit is the simplest and safest way to pay. Sign up today at [www.medway.gov.uk/pay](http://www.medway.gov.uk/pay).

If you do not pay by the [insert date] then the balance of [full years amount balance] for the year's Council Tax will be due by the [date]. If you cannot pay please contact the Council as a matter of urgency.

Diagram letter

## Payment rates of Council Tax

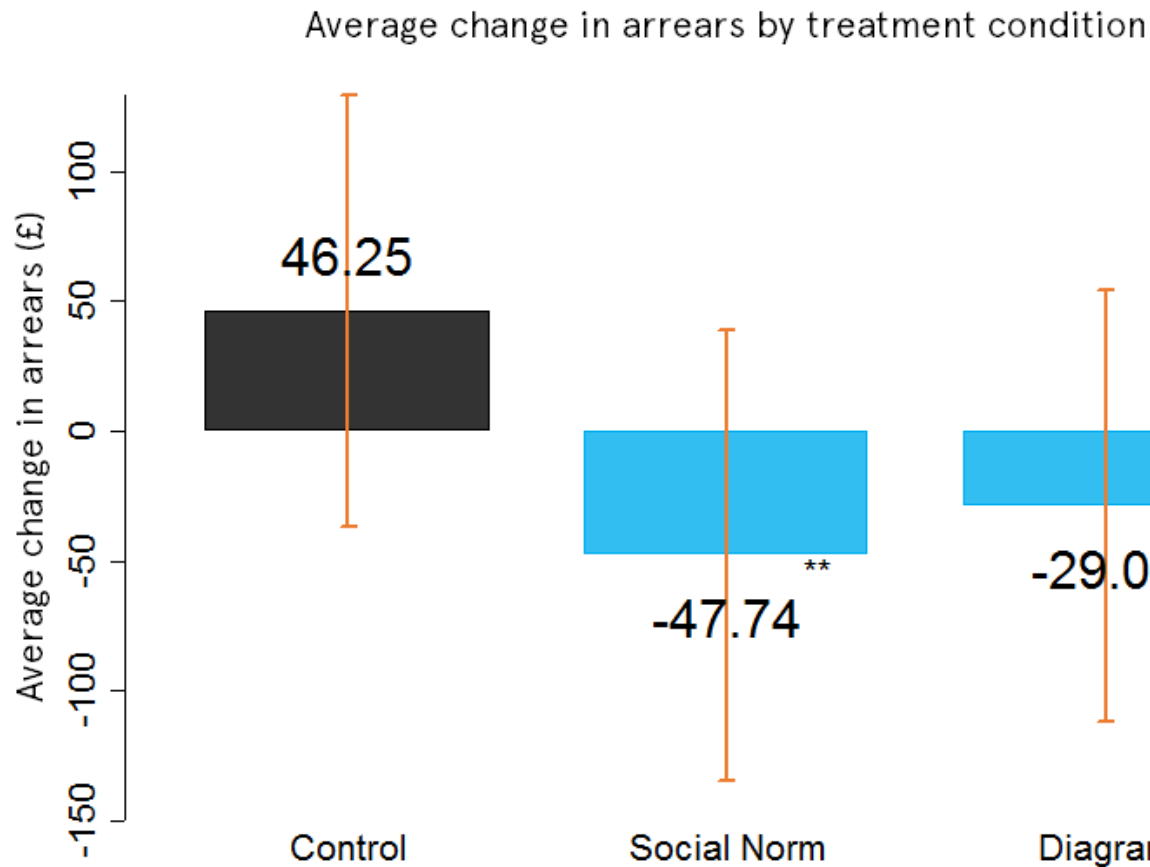


Total N=9,134

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$



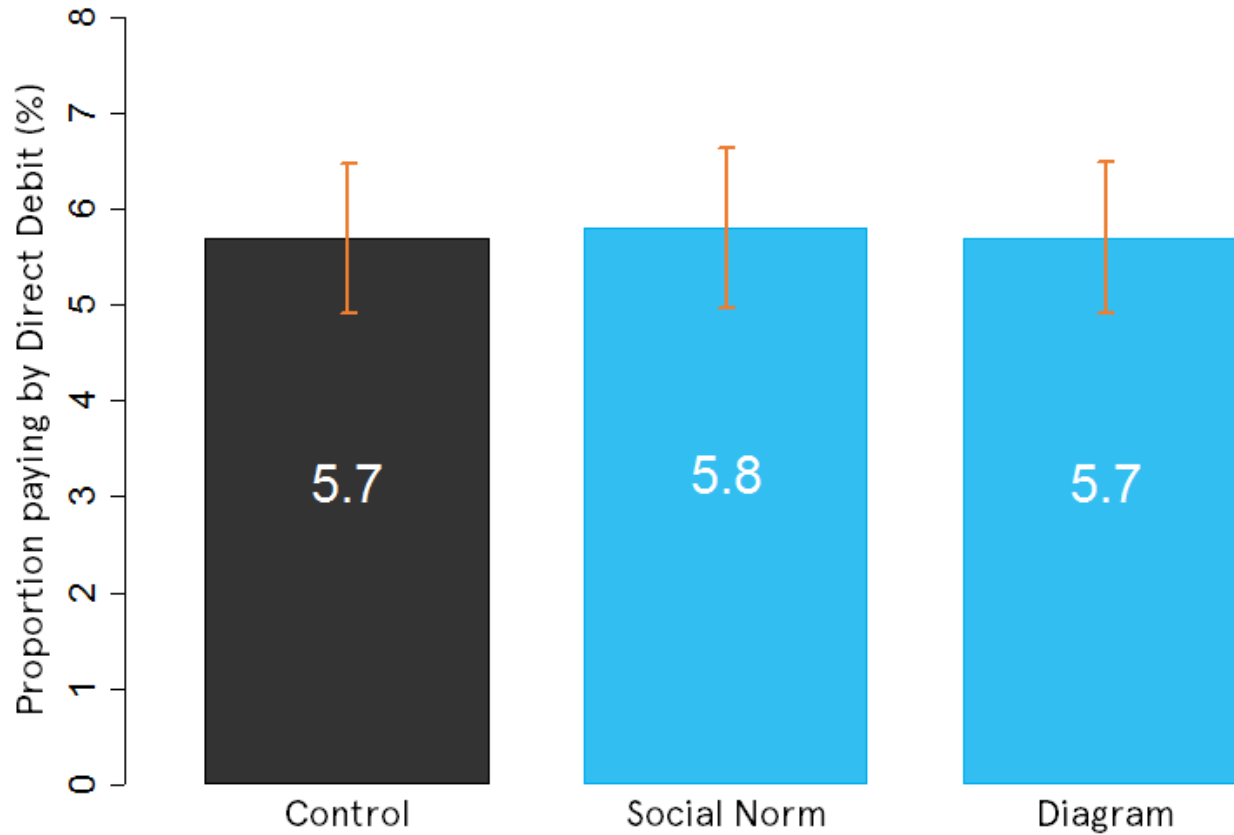
## Average change in arrears



Total N=9,069

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

## Payment by Direct Debit



Total N=9,700

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

## Recommendation – social norm letter

Medway Council, Gun Wharf,  
Dock Road, Chatham, Kent ME4 4TR  
Email: [ctax@medway.gov.uk](mailto:ctax@medway.gov.uk)

Re:

Date: [date]  
Account No: [account no]

**COUNCIL TAX REMINDER NOTICE**

Dear [insert name]

**You are behind with your Council Tax payments. Please pay [XXXX] within the next 7 days.**  
See below and overleaf for details of how to pay.

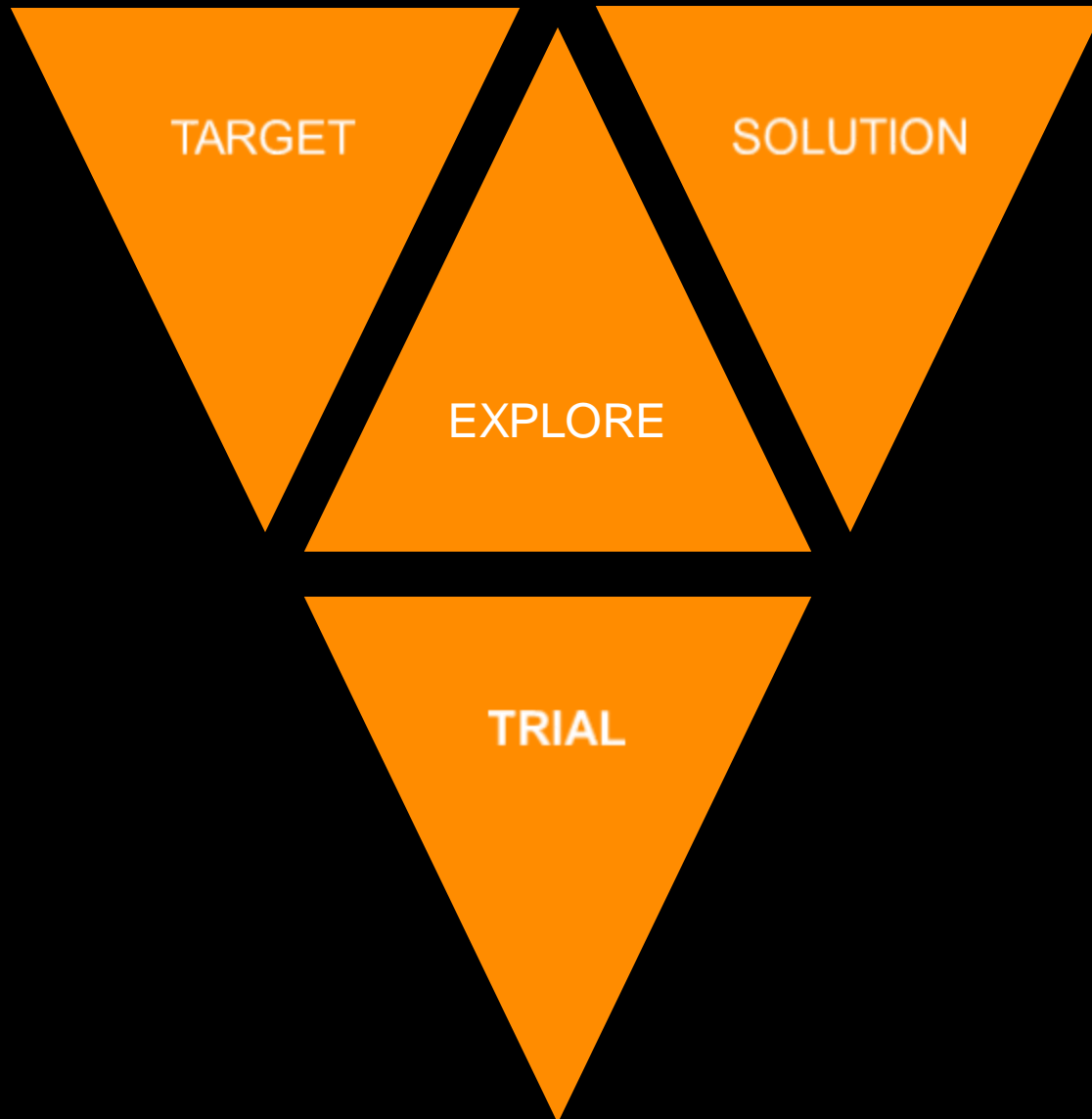
96% of Medway Council Tax is paid promptly. You are currently in the very small minority of people who have not paid on time.

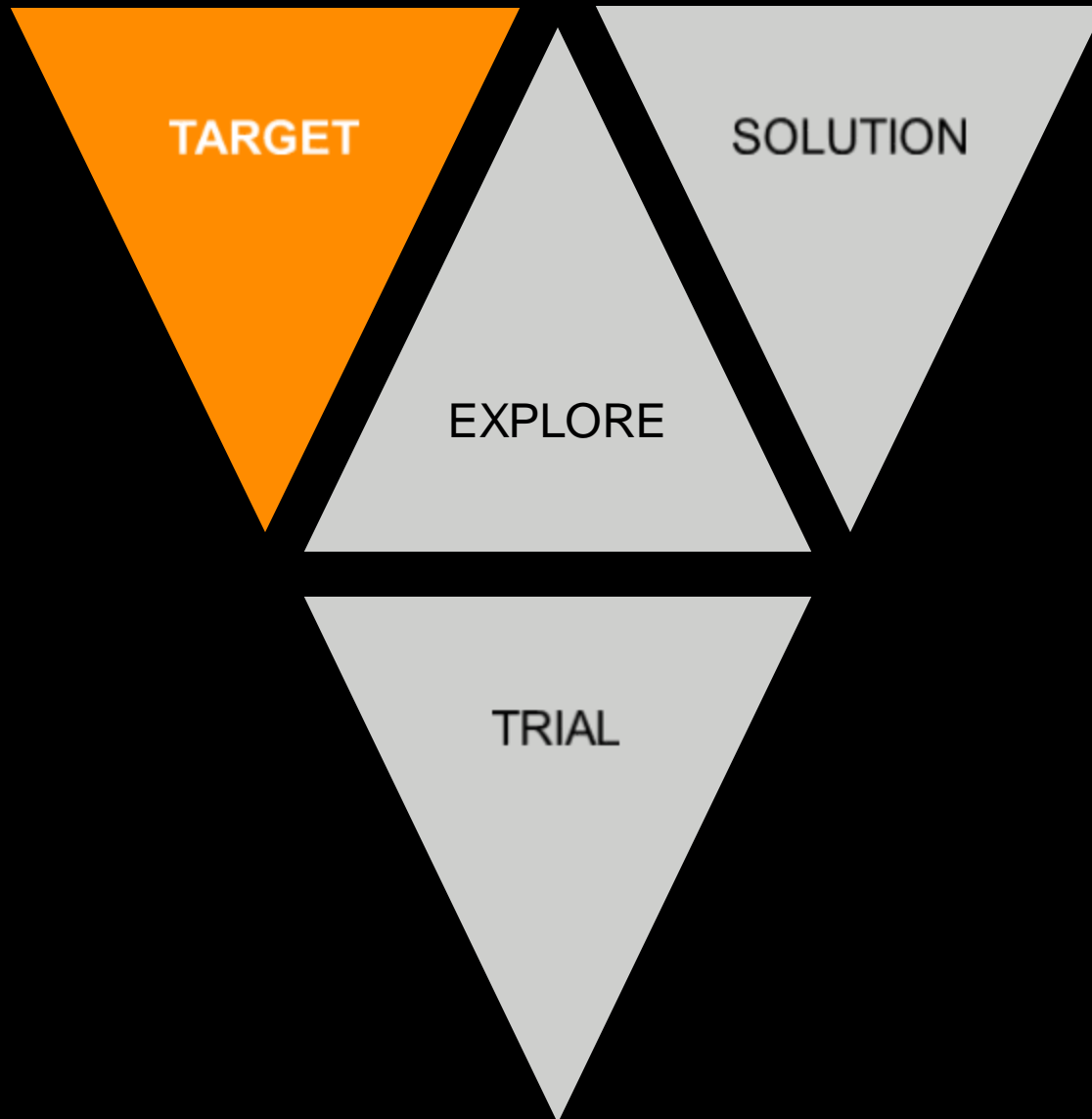
Direct debit is the simplest and safest way to pay. Sign up today at [www.medway.gov.uk/pay](http://www.medway.gov.uk/pay).

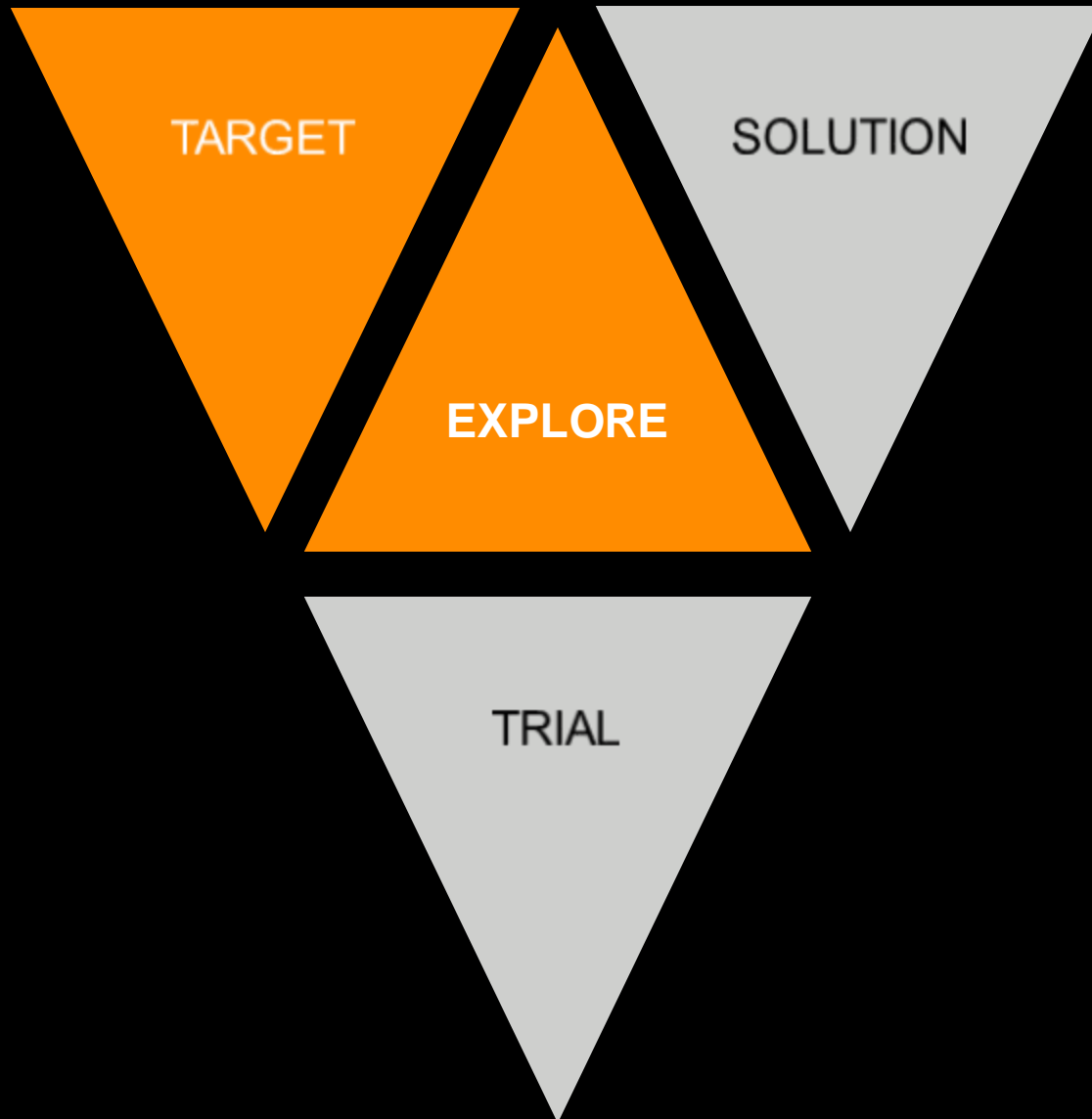
If you do not pay by the [insert date] then the balance of [full years amount balance] for the year's Council Tax will be due by the [date]. If you cannot pay please contact the Council as a matter of urgency.

- Increase in payment rates of 11.0 percentage points
- Reduced household's average debt
- An extra £2,774,320 would be brought forward per year if all first reminder letters were replaced

## Methodology - TEST







## Lessons from the field

**1) Personally  
experience as much as  
you can**





## Lessons from the field

### 2) Draw on fieldwork



# Lessons from the field

## 3) Use your data

```
*****
//Primary Analysis//
*****

//Changing Directory for the log file to exported//
cd "/Users/davidnolan/Google Drive/LEGACY GIVING/DATA & STATA/Cleaned Data"

//Interactions between treatment and other regressors//

capture log close _all
set linesize 90
log using "Primary Outcome Analysis.log", replace

/*-----Else-----*/

eststo elsebasic: reg give_or_no elsetreat if trial==1, robust
eststo elsecontrol: reg give_or_no elsetreat `covariates_1' if trial==1, robust

qui log off

g else_nochil = cond(children==0 & elsetreat==1, 1, 0)
g else_chil = cond(children==1 & elsetreat==1, 1, 0)

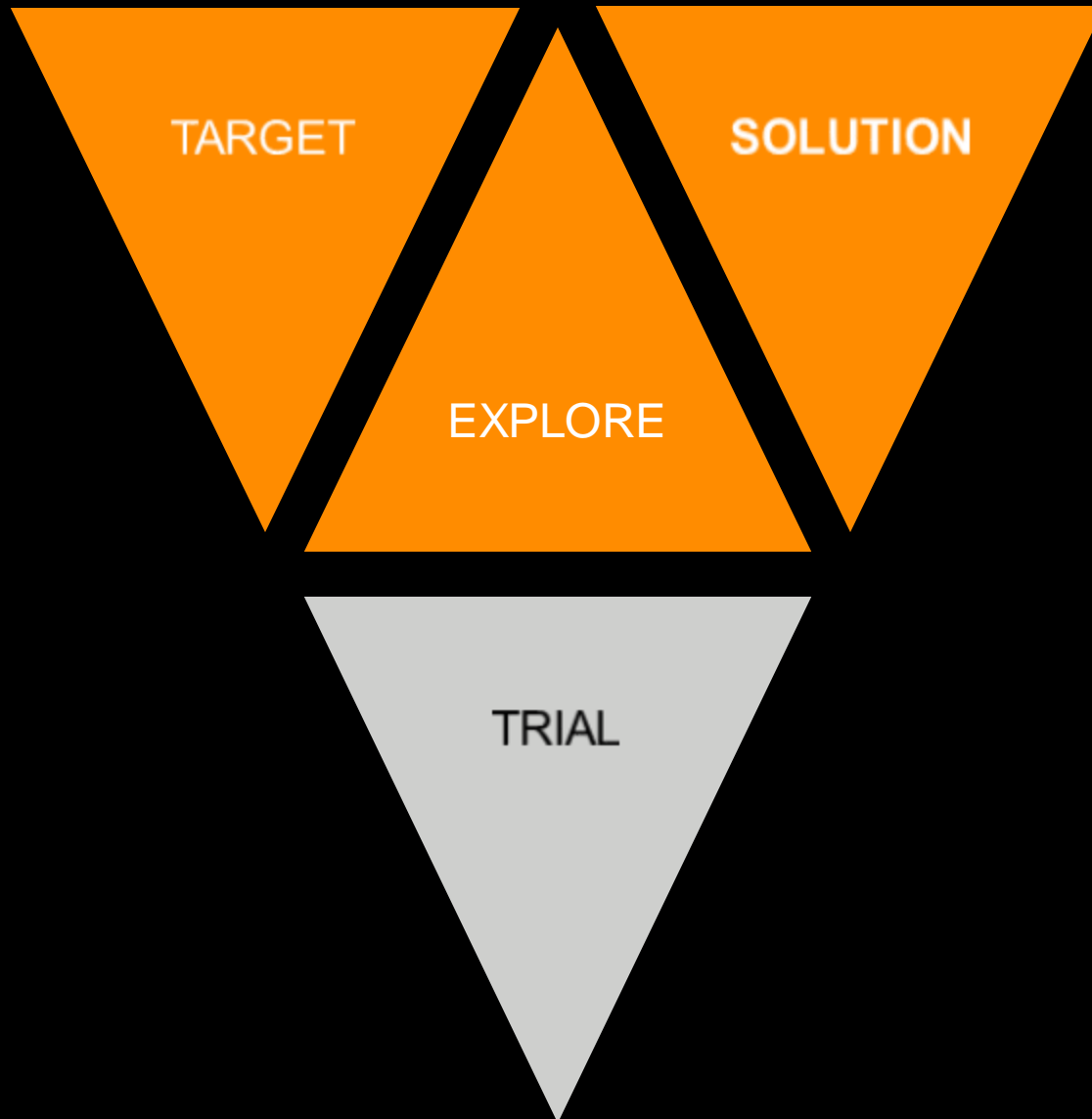
g else_free = cond(binary_payment==1 & elsetreat==1, 1, 0)
g else_paid = cond(binary_payment==0 & elsetreat==1, 1, 0)

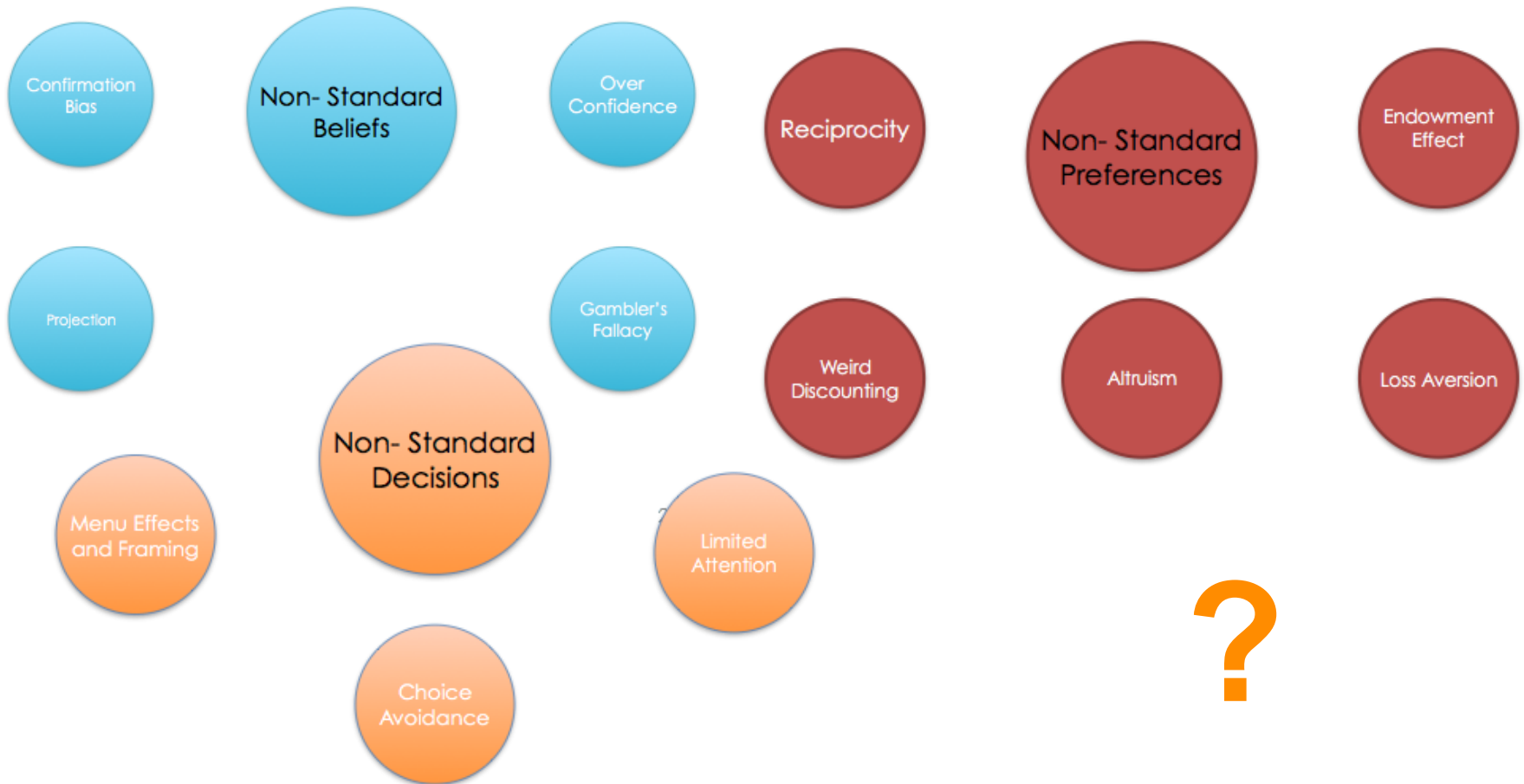
g else_first = cond(first_will==1 & elsetreat==1, 1, 0)
g else_notfirst = cond(first_will==0 & elsetreat==1, 1, 0)

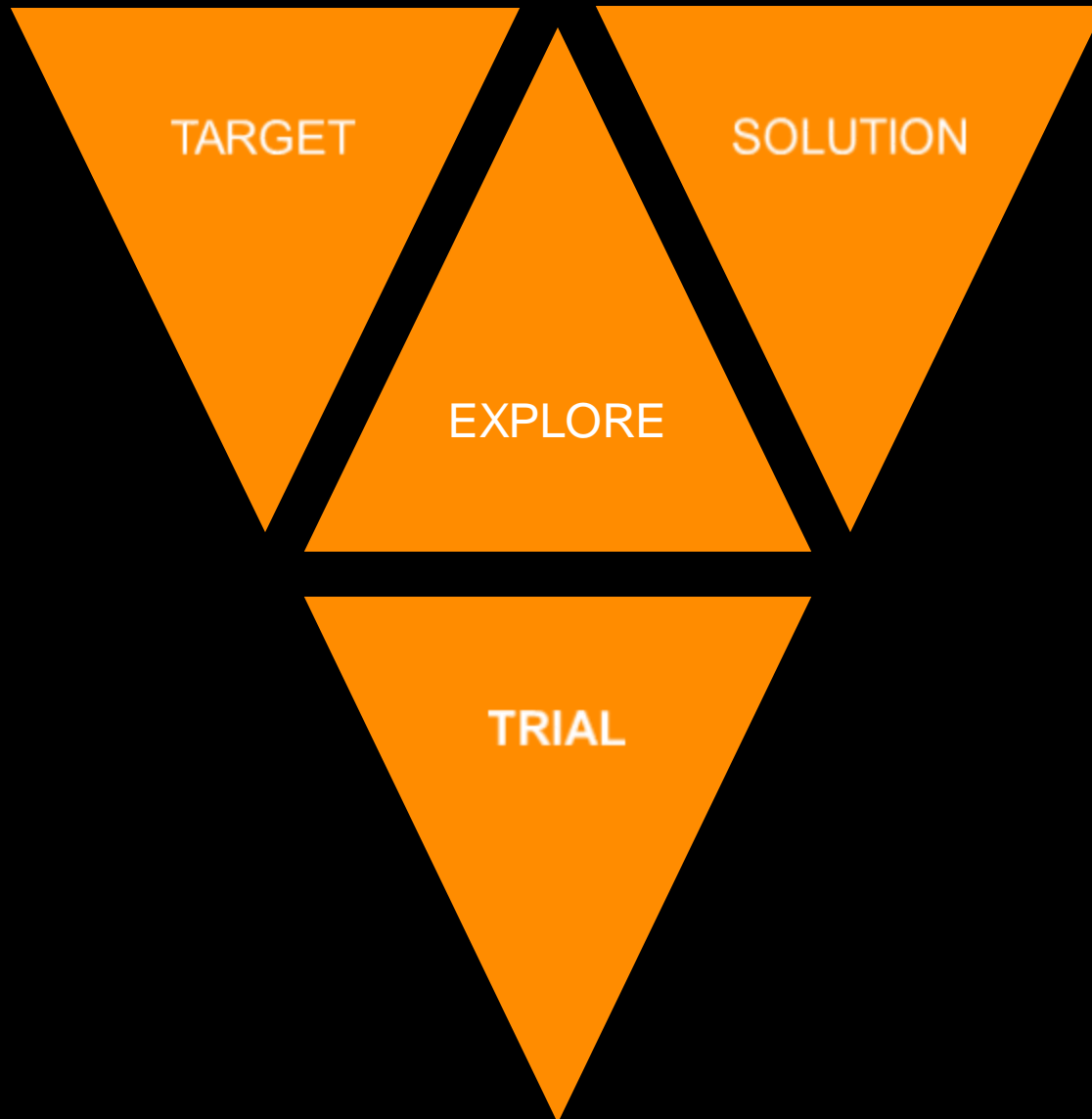
qui log on

eststo elsechildren: reg give_or_no else_chil else_nochil `covariates_1' if trial==1, robust
test else_nochil=else_chil
eststo elsefree: reg give_or_no else_free else_paid `covariates_1' if trial==1, robust
test else_free=else_paid
eststo elsefirst: reg give_or_no else_first else_notfirst `covariates_1' if trial==1, robust
test else_first = else_notfirst

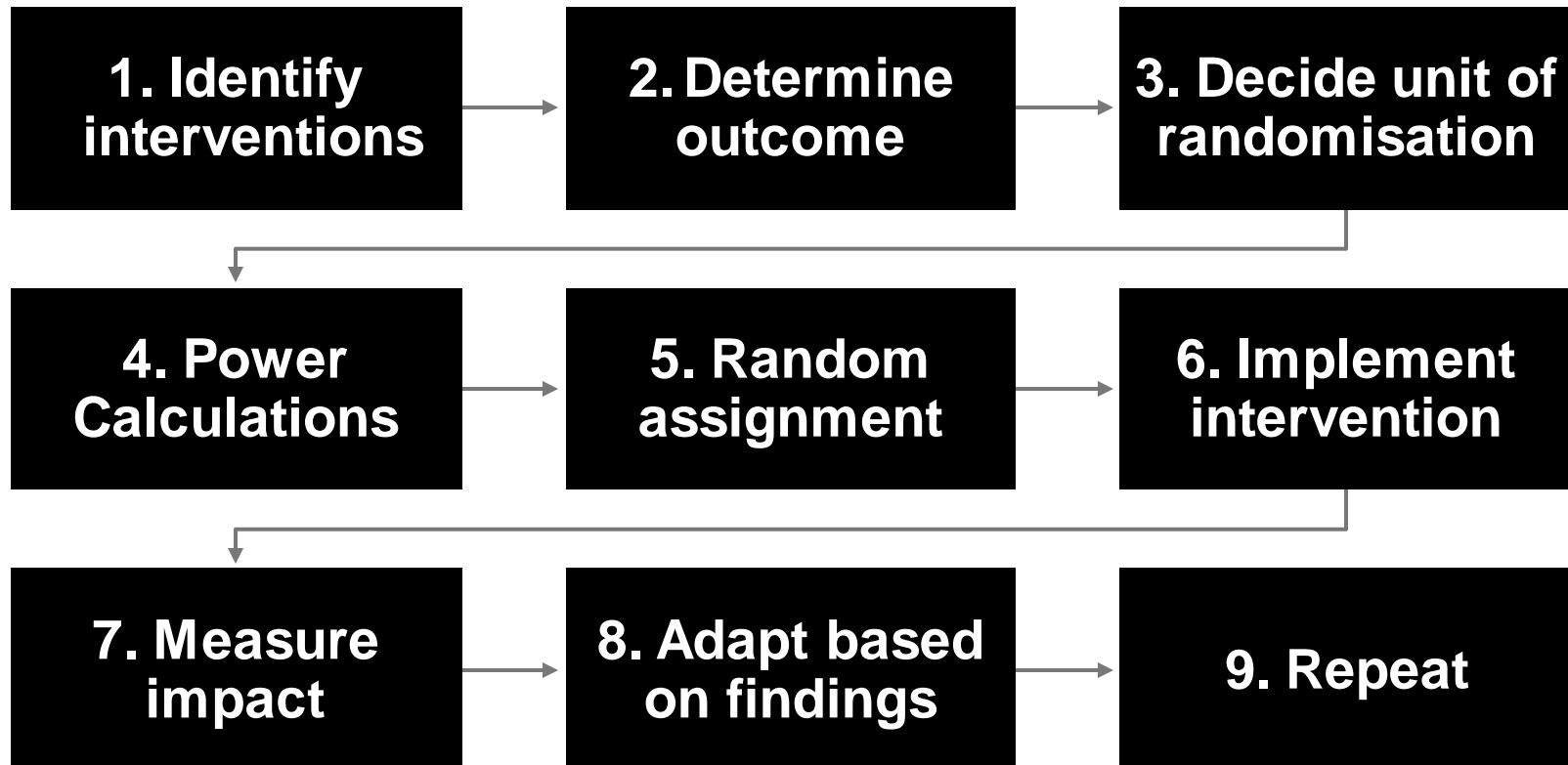
qui esttab _all using "Tables/else.rtf", ///
    replace ///
    label ///
    star(* 0.10 * 0.05 ** 0.01 *** 0.001) ///
    cells(b(star fmt(%9.3f)) se(par)) ///
    ar2 ///
    nodep ///
    nobase ///
    nomti ///
    title("Else") ///
```



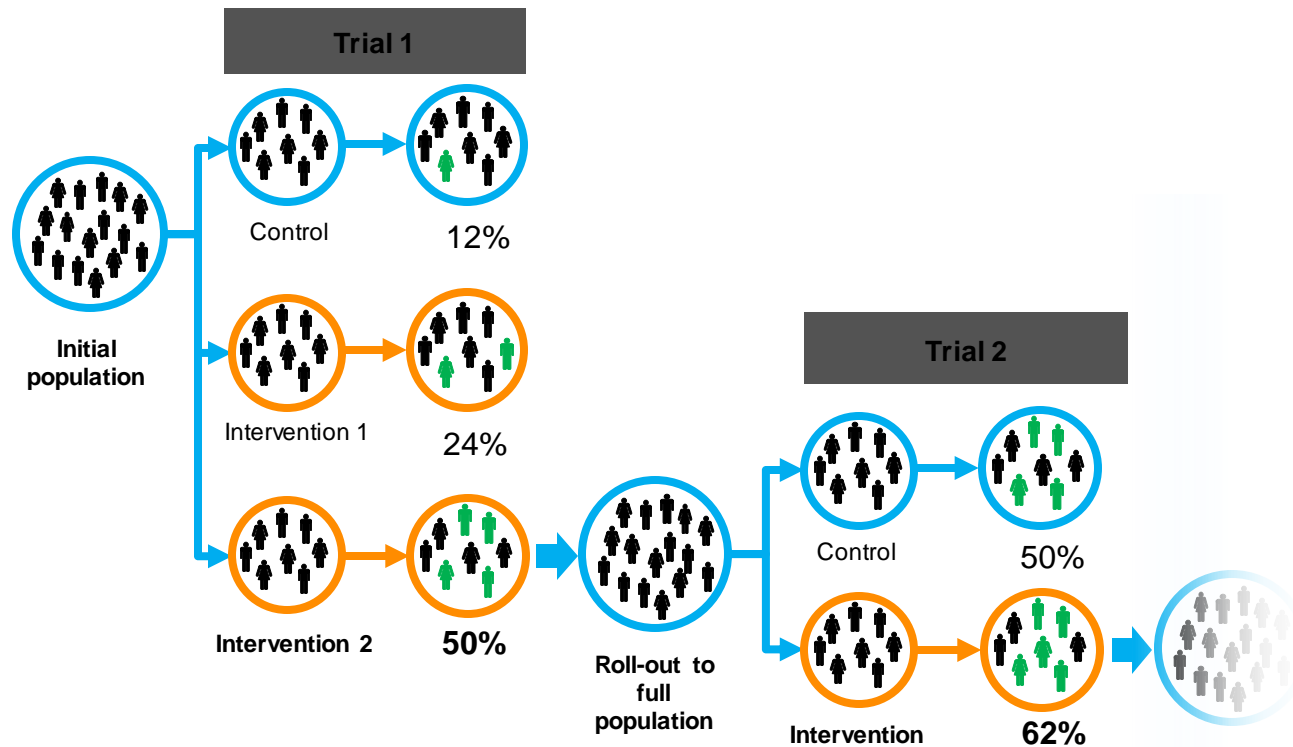




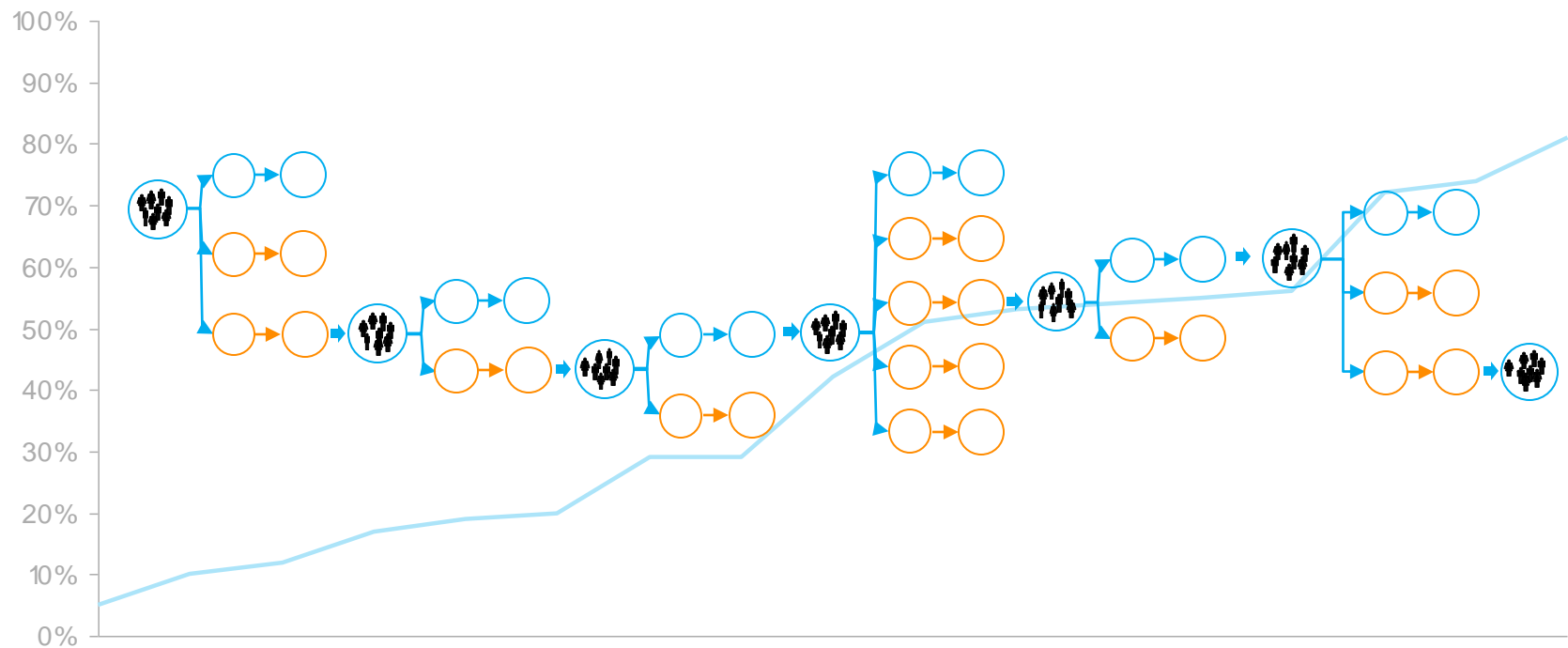
# 9 stages of an RCT



# Test Learn Adapt: 'Winner Stays On'



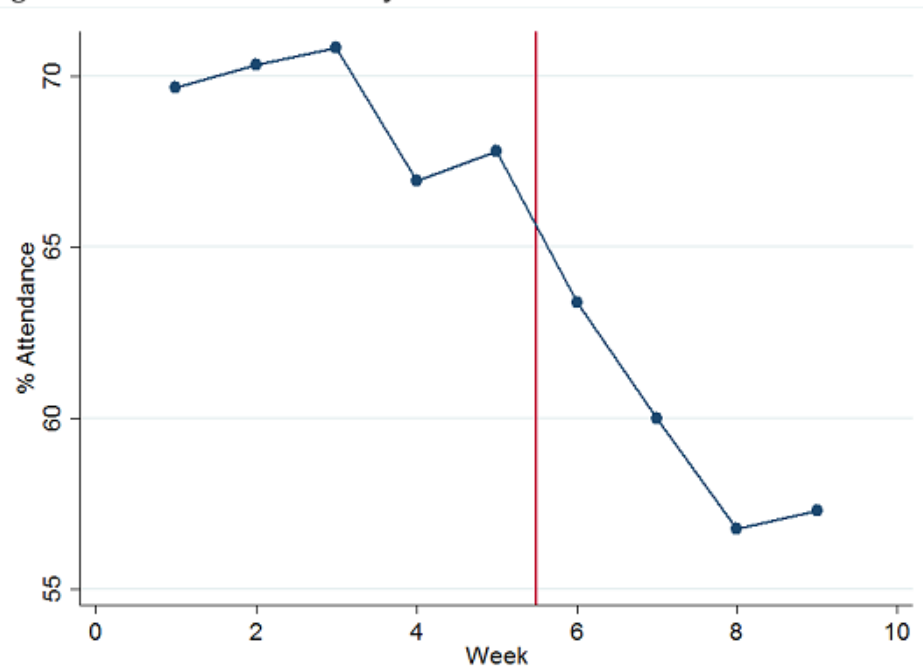
# Test Learn Adapt: 'Winner Stays On'





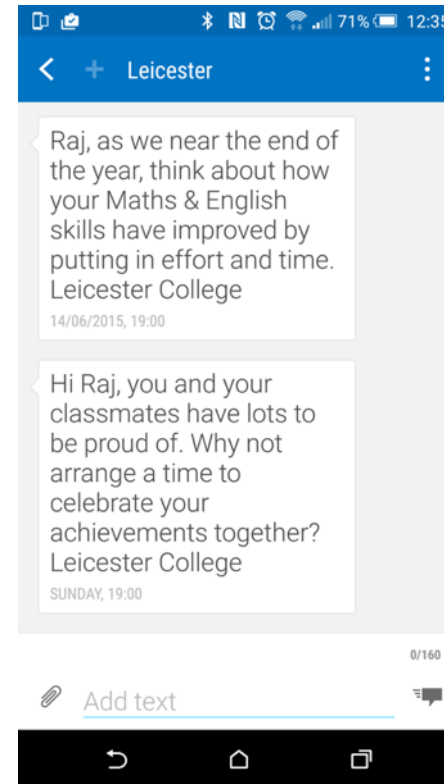
# Control Group Attendance (Interim)

Figure 2: Baseline Attendance by Week



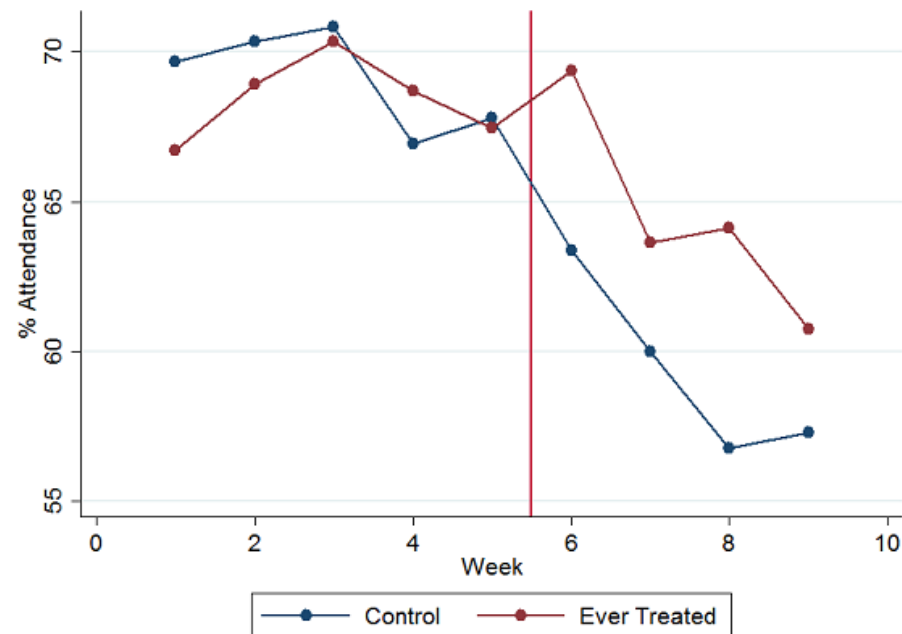
# Underpinnings

- This is important...
- I can succeed...
- Practice matters...
- I belong...
- Advanced planning also helps

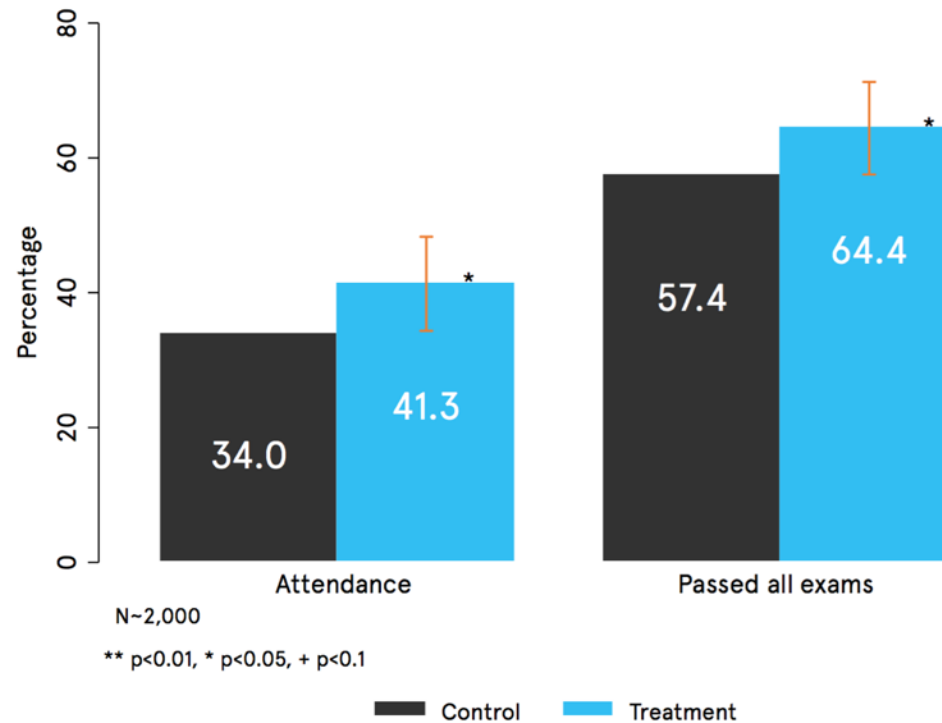


# Interim results...

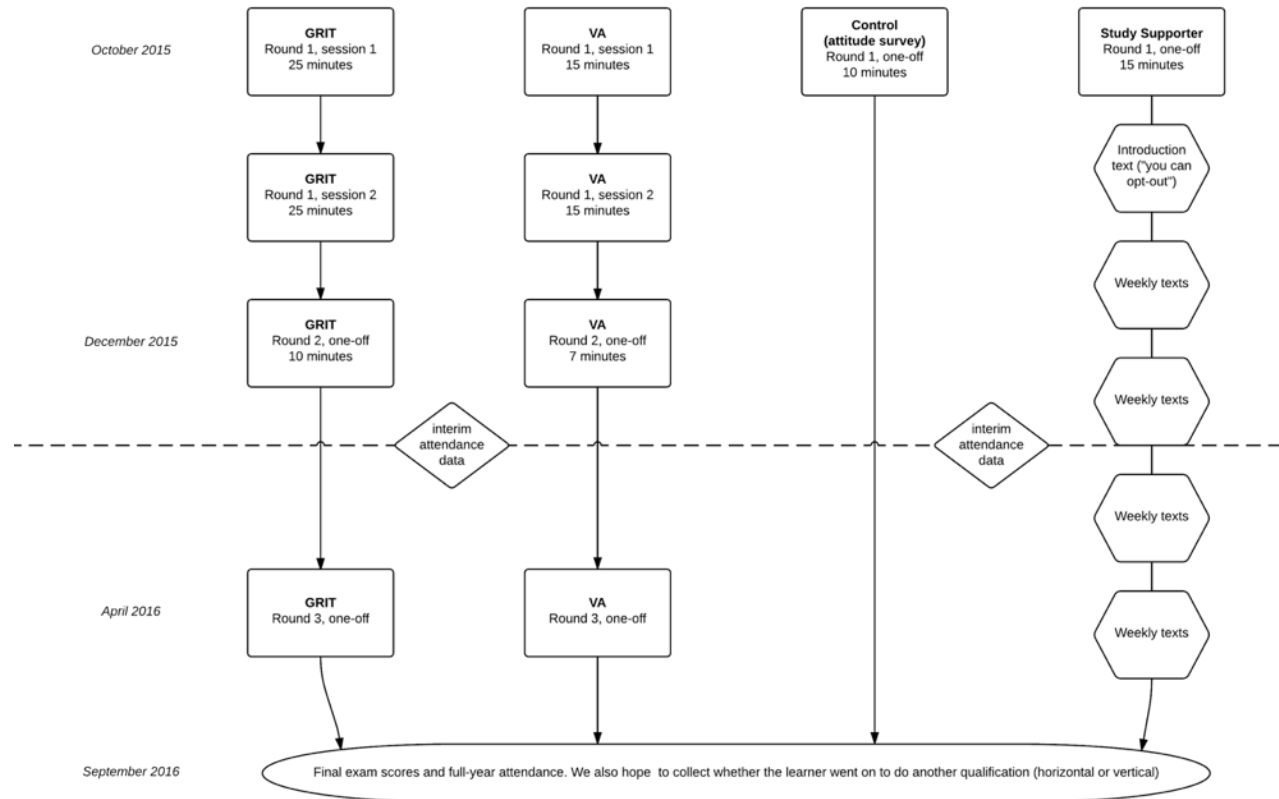
Figure 3: Impact of Intervention on Attendance



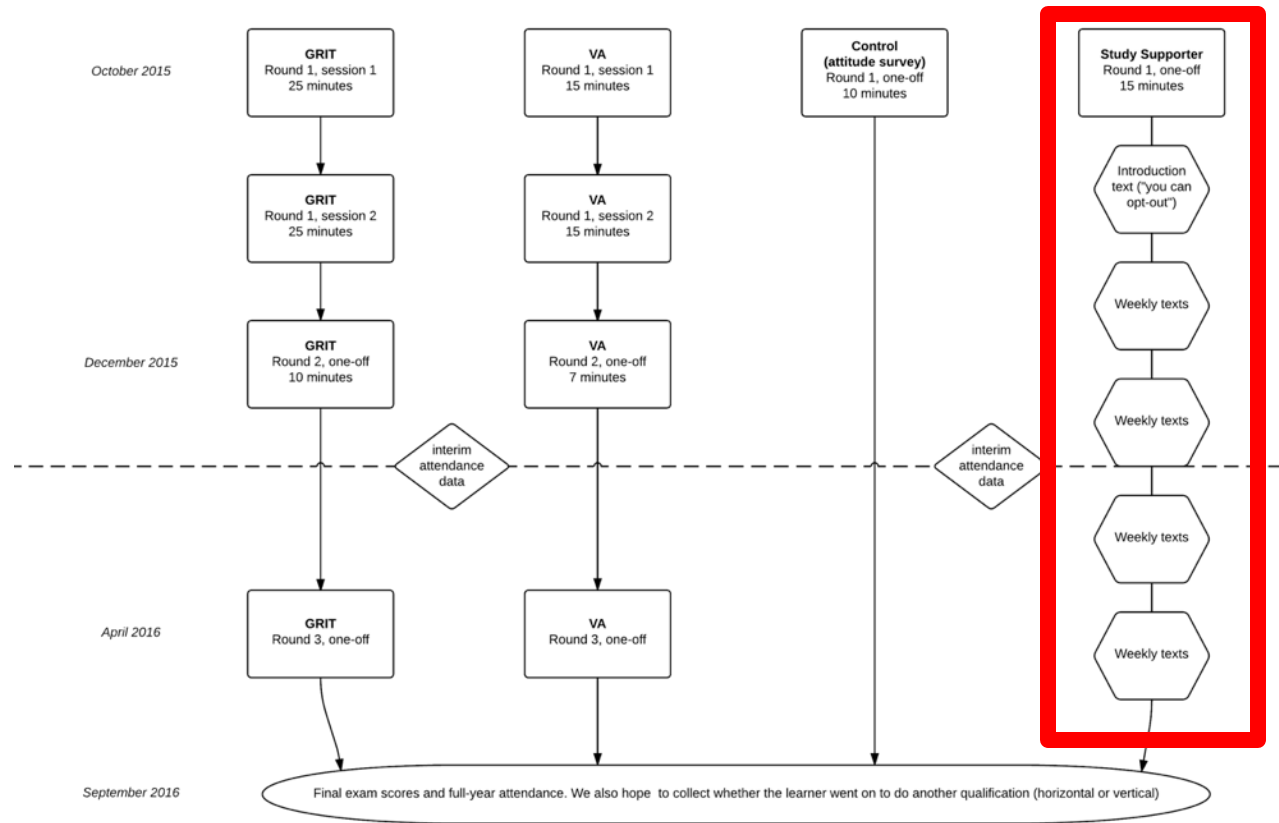
## ...and full results



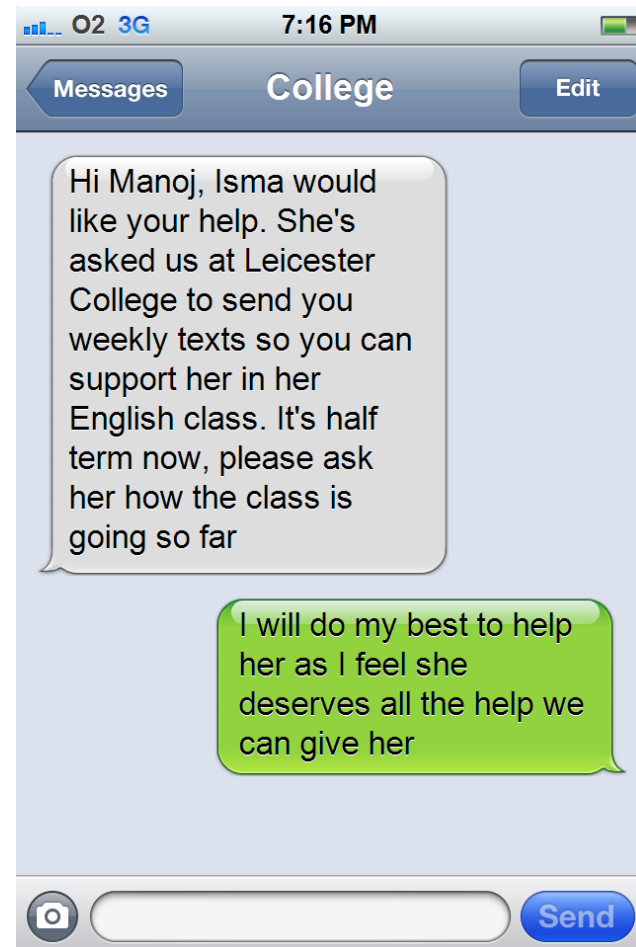
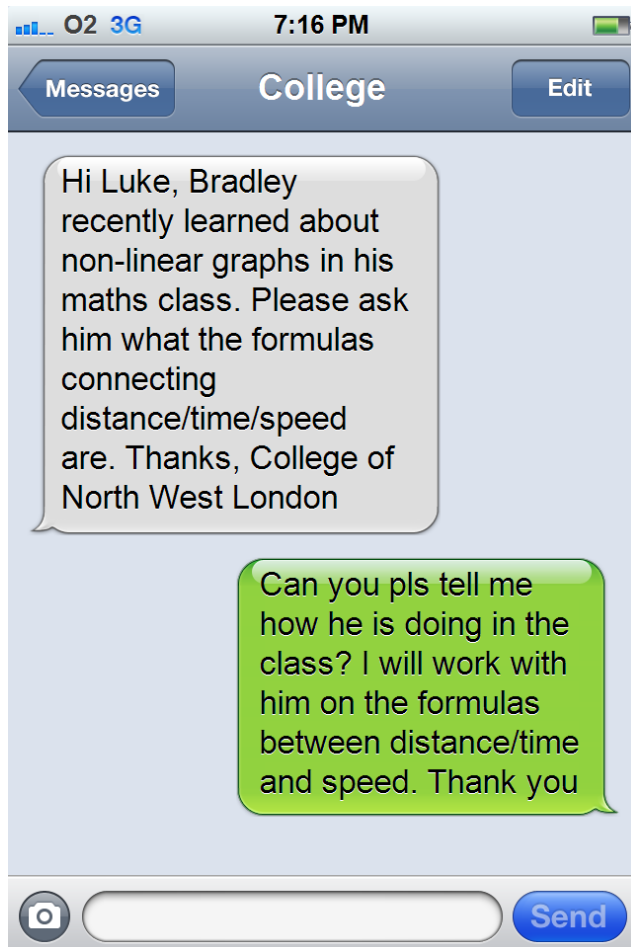
## ASKFEST: implementation in an FE College



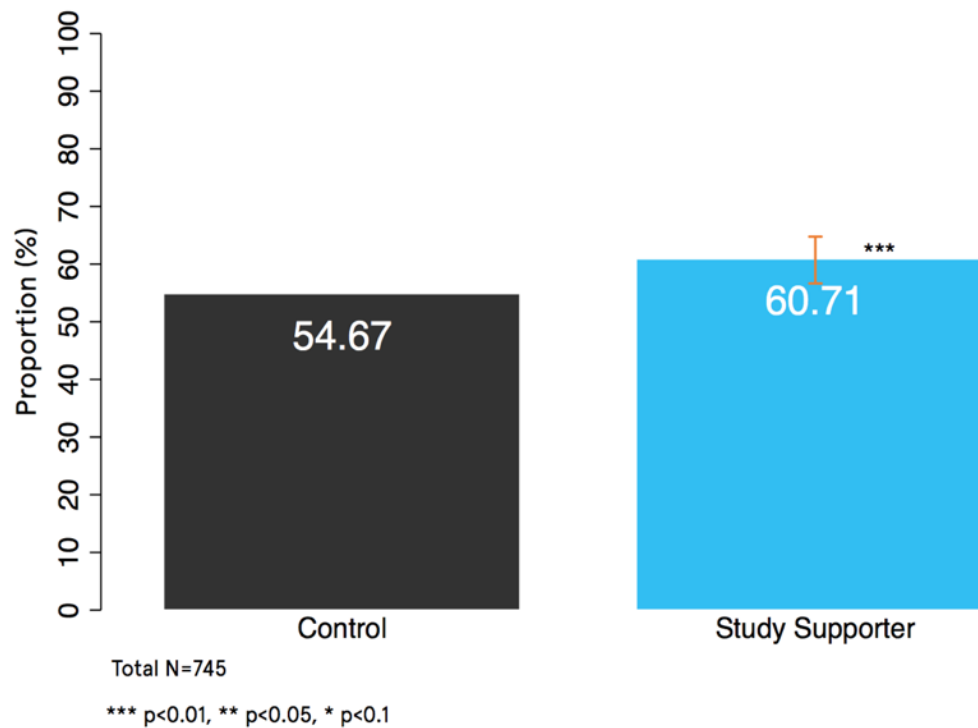
## ASKFEST: implementation in an FE College



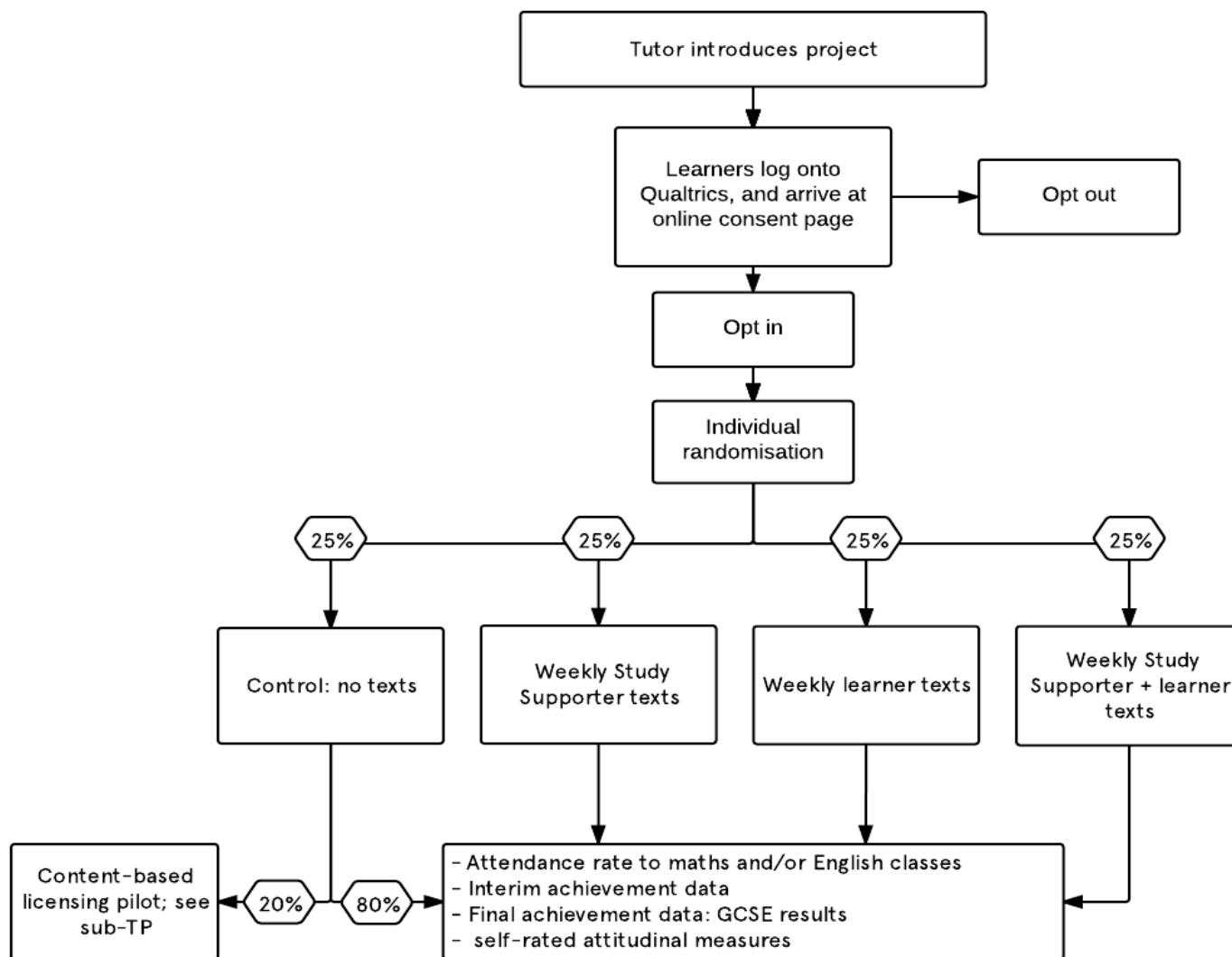
# Study Supporter: leveraging the learner's social network

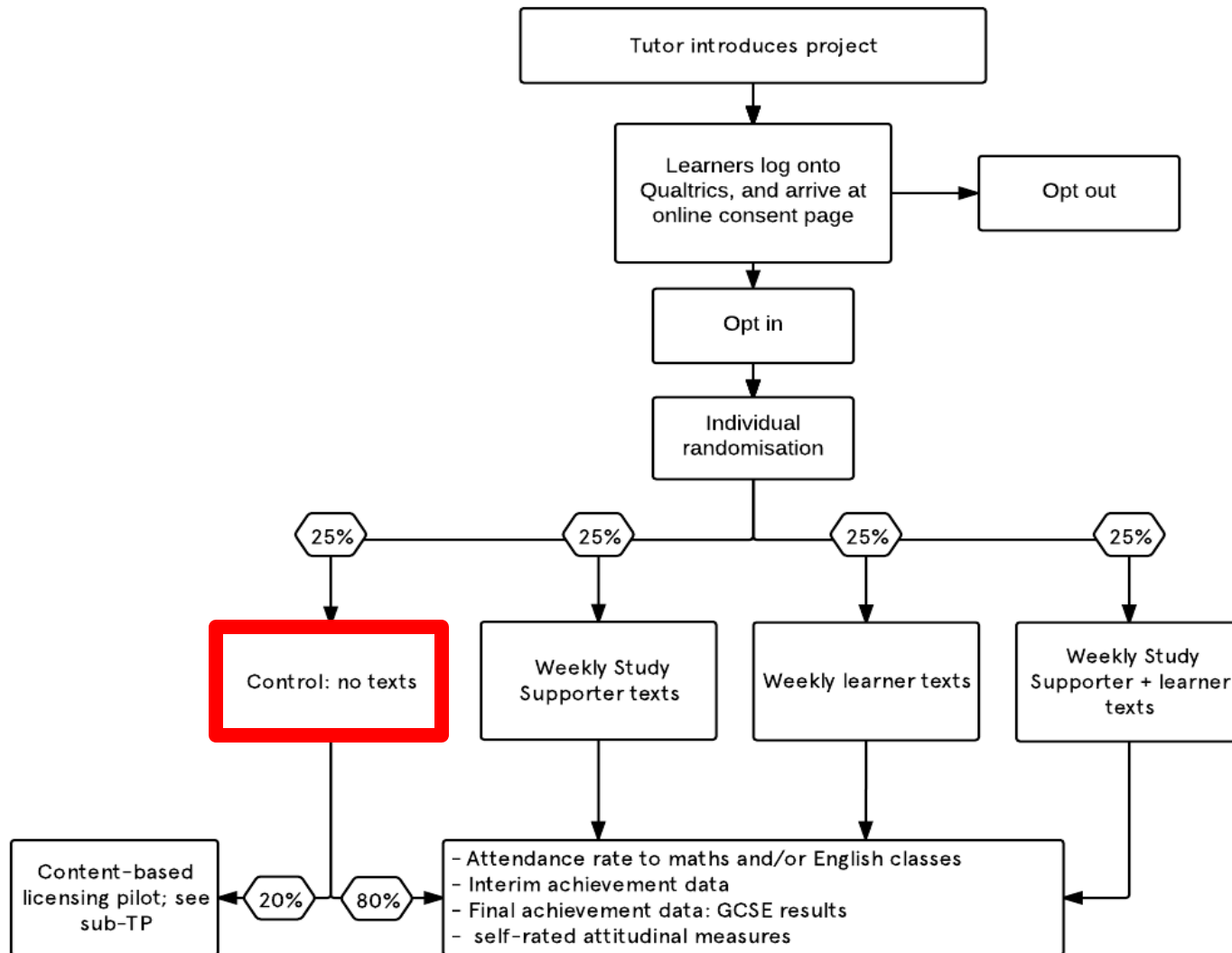


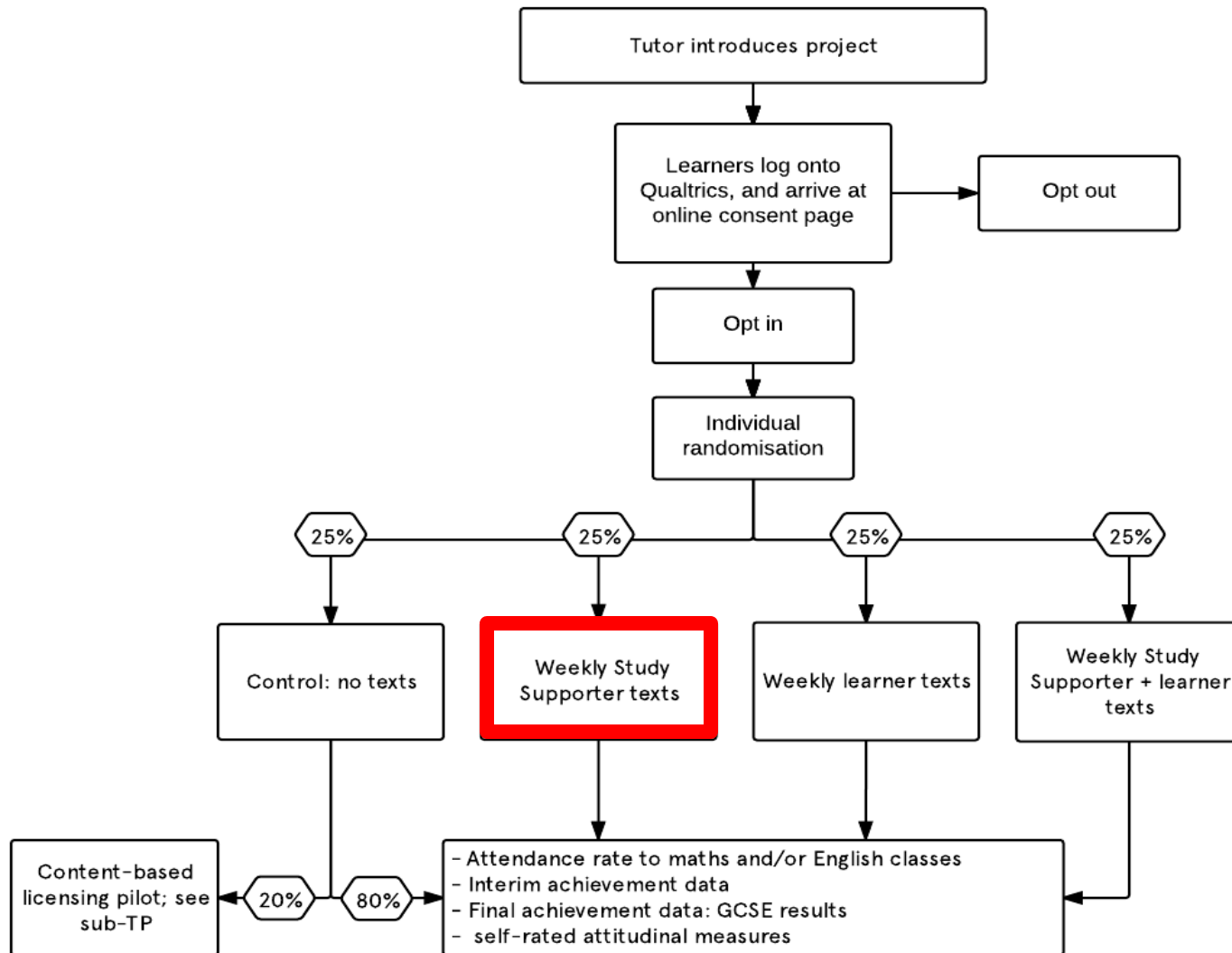
# Study Supporter

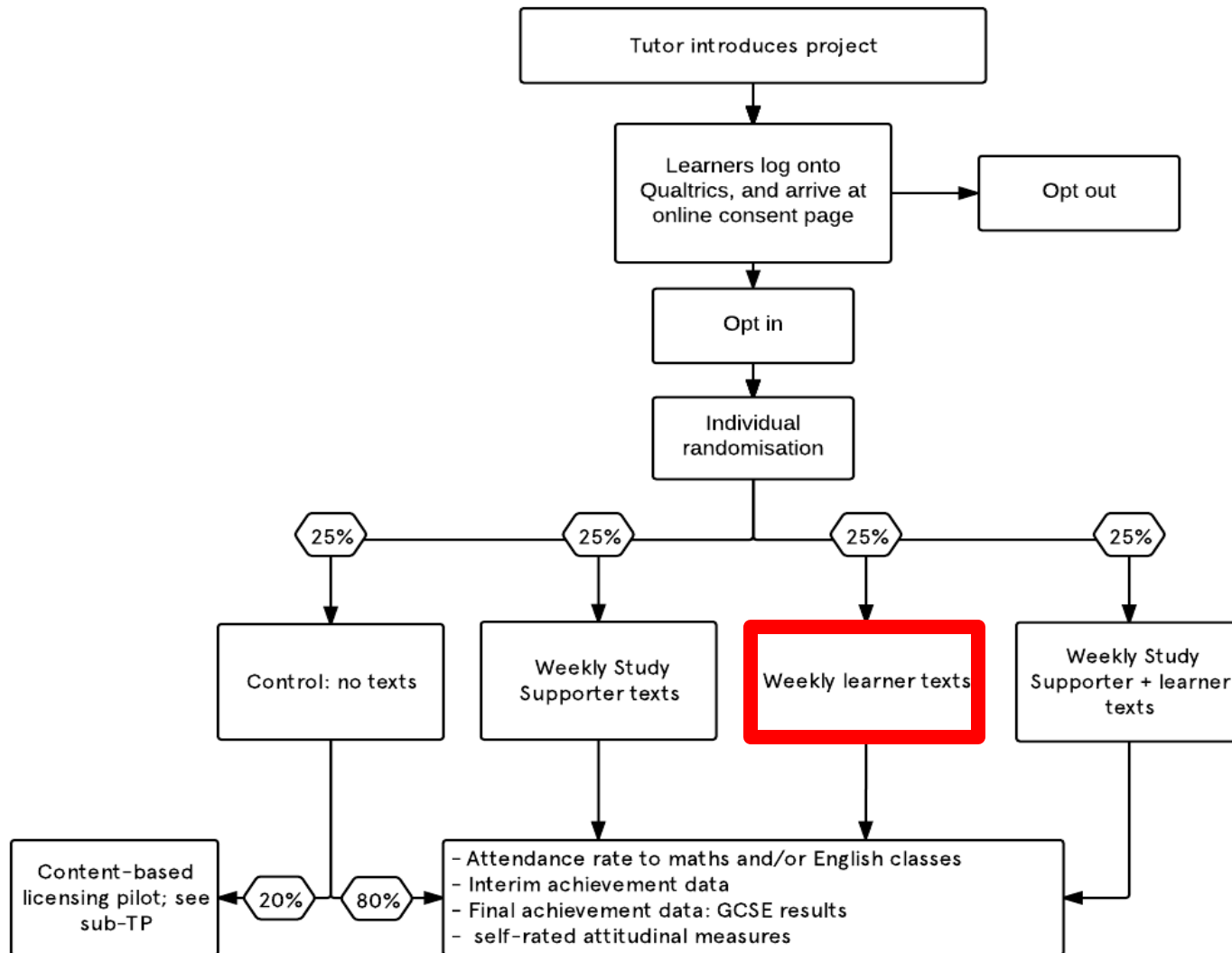


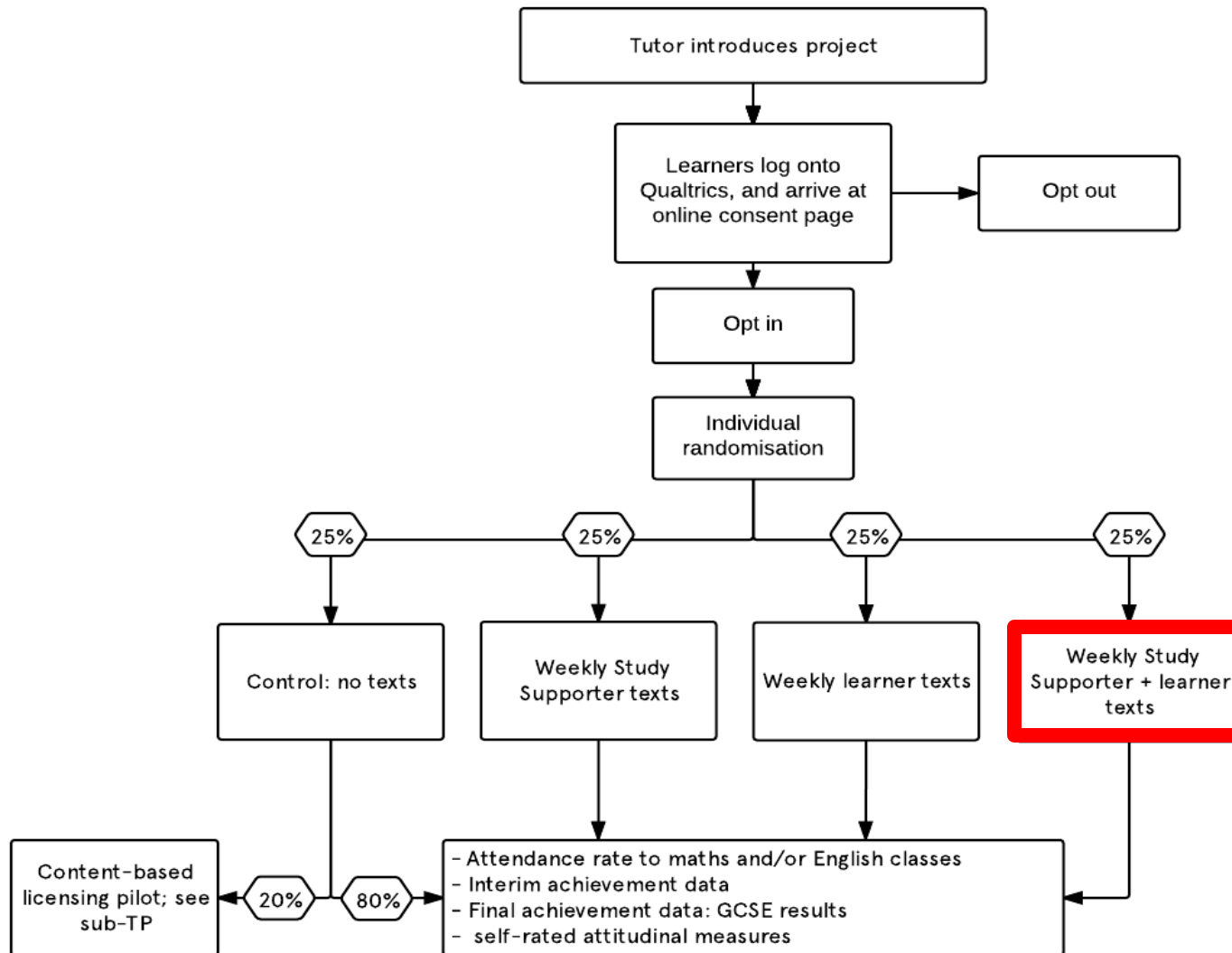


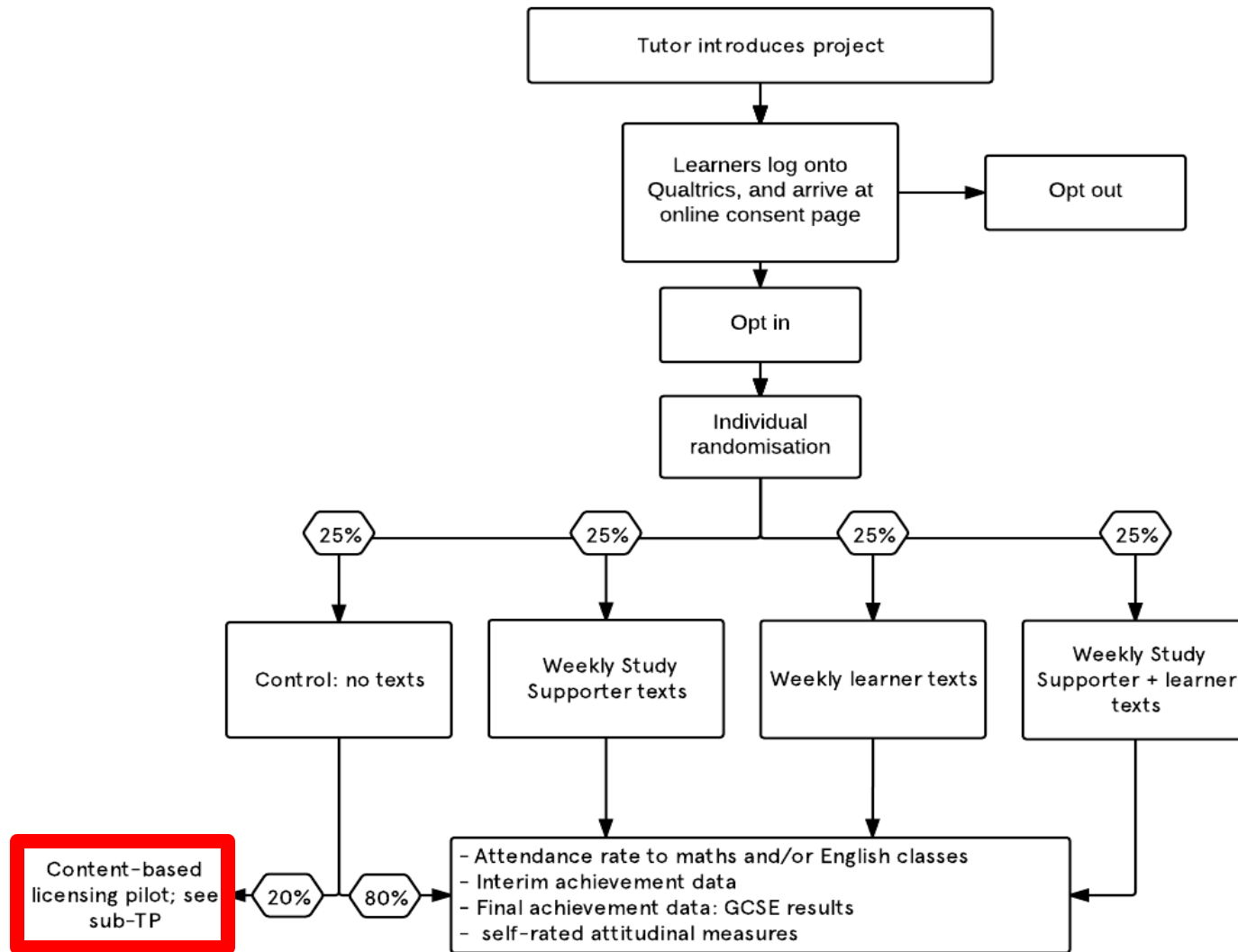






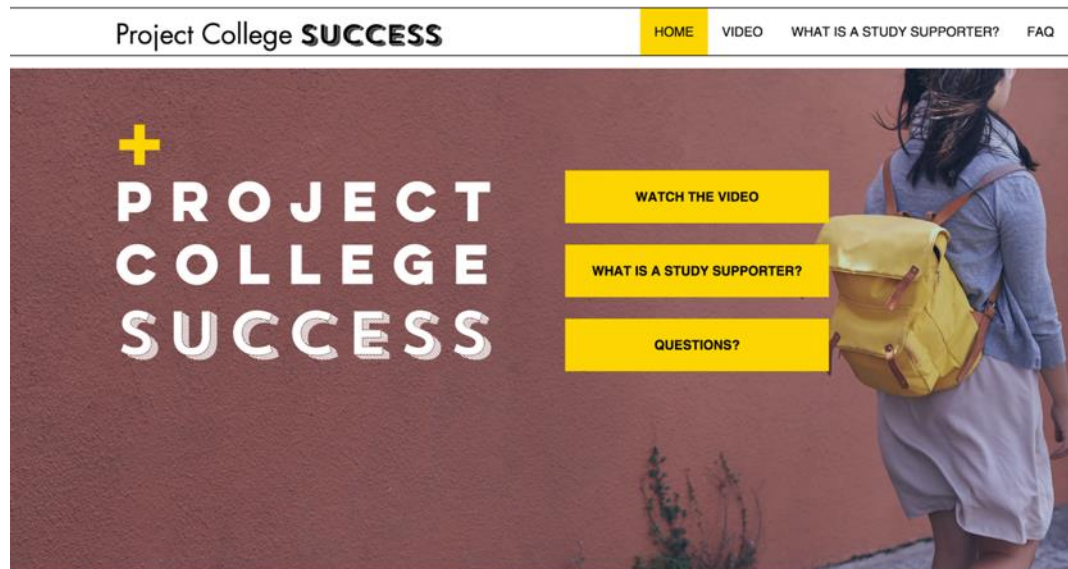






# Project Success

THE  
BEHAVIOURAL  
INSIGHTS TEAM



Introducing Project Success

# Content based licensing pilot

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Bibi,

Michael has been reading the Hunger Games as part of class today. Ask him who died in the section they've just read, and why it was significant. Text back the name to win cinema tickets!

Project Success

Michael,

Bibi has been sent a competition message about the Hunger Games. Talk to her about the section you're reading to win cinema tickets!

Project Success



# Taking to scale

---

- We have now conducted over 400 randomised trials
- A great many of these have been in the error of taxation, either at local or national level
- We've shown that Behavioural Insights can boost tax compliance
- Not universally successful (!)
- The process thus far has been fairly intensive.
- Can we make this easier?
- Can we make this cheaper?

# Test Build

Michael Sanders  
Miranda Jackman

- BI Ventures use behavioural insights to build scalable products with a social impact.
- We set up BI Ventures because we realised that often the solution to a social issue is a product – not a government policy or intervention delivered by BIT consultants.

## What is Test+Build ?

---

- Test+Build™ is a digital platform that supports organisations in the design and implementation of their own behavioural science interventions and randomised controlled trials.
- **Online:** The platform takes the customer through methodologies developed by BIT and provides materials introducing them to some of the key theories underpinning behavioural science.
- **Offline:** BIT staff are on hand to design the trial, conduct analysis and provide the final, quality assured report, as well as offer support throughout the process.

## Why are we building it?

---

- BIT has run more than 400 trials, with extensive work in tax, debt and fraud.
- We want to provide a cost-effective way for organisations to apply behavioural science to their communications that draws on our years of experience running trials and knowledge of behavioural insights.
- Many local authorities can't, or won't, pay full price for consultancy services.
- Working with many local authorities intensely could mean a huge team, dedicated to just tax work.

## How does it work?

---

**Test+Build** takes users through the 4 components of BIT's TEST framework:



**T**arget : *set an objective for your project*



**E**xplore : *understand the context*



**S**olution : *design your interventions*



**T**rial : *run an RCT to test your designs*

How does it work?

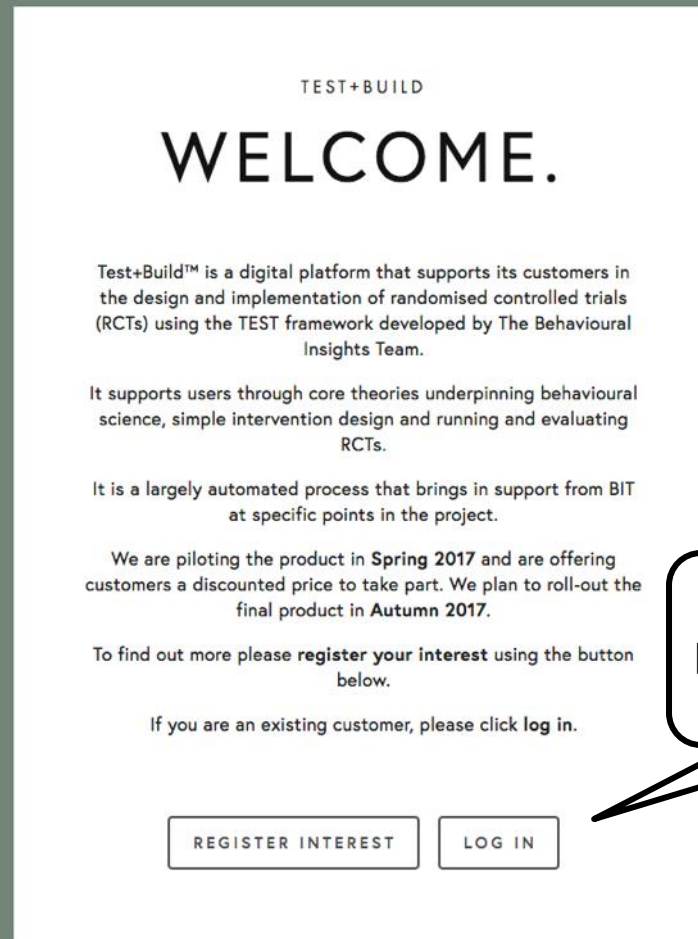
---

**Test+Build** takes users through the 4 components of BIT's TEST framework:



**T**arget : *set an objective for your project*

# Logging on



The customer project lead will log in to the site





# Target

# Test+Build

Test+Build™

[Log in](#) [About us](#) [Navigation](#) [Userguide](#) [Get in touch](#)



The first section on the site is the **Target** section

## What is your area of interest?

1) Adapting existing communications

2) Exploring something new

3) I'm not sure yet

Customers will be prompted to answer specific questions to draw out what it is they would like to explore in the project

How does it work?

---

**Test+Build** takes users through the 4 components of BIT's TEST framework:



**T**arget : *set an objective for your project*



**E**xplore : *understand the context*



# Explore

# Test+Build

Test+Build™

[Log in](#) [About us](#) [Navigation](#) [Userguide](#) [Get in touch](#)



## BI Case Studies

The second section on the site is the **Explore** section

### Understanding court fines

During an early project on the payment of court fines, we used data to understand where the bottlenecks were and identify potential bottlenecks. We then spent time with court officials and bailiffs to learn about the process and how it was recovered. We accompanied bailiffs on early morning home visits and discovered that people who owed fines were routinely ignoring reminder letters, which piled up next to their front door. And even if they did open them, they often didn't understand the implications of the letter due to the complex language. We also spent time in the Courts Service and learned that court officials were occasionally using text messages to contact defendants, but were frustrated by the lack of personalisation the system allowed. These insights, developed through the EXPLORE phase of a project, led to a randomised controlled trial that found text messages to be an effective prompt to encourage people to pay their court fines. We were able to personalise the content of the text message to further improve its effectiveness.

[Learn More](#)

Customers will receive information on BIT methodologies, examples of our previous work and guides on research methods that have been developed by the team

## How does it work?

---

**Test+Build** takes users through the 4 components of BIT's TEST framework:



**T**arget : *set an objective for your project*



**E**xplore : *understand the context*



**S**olution : *design your interventions*



# Solution

Test+Build

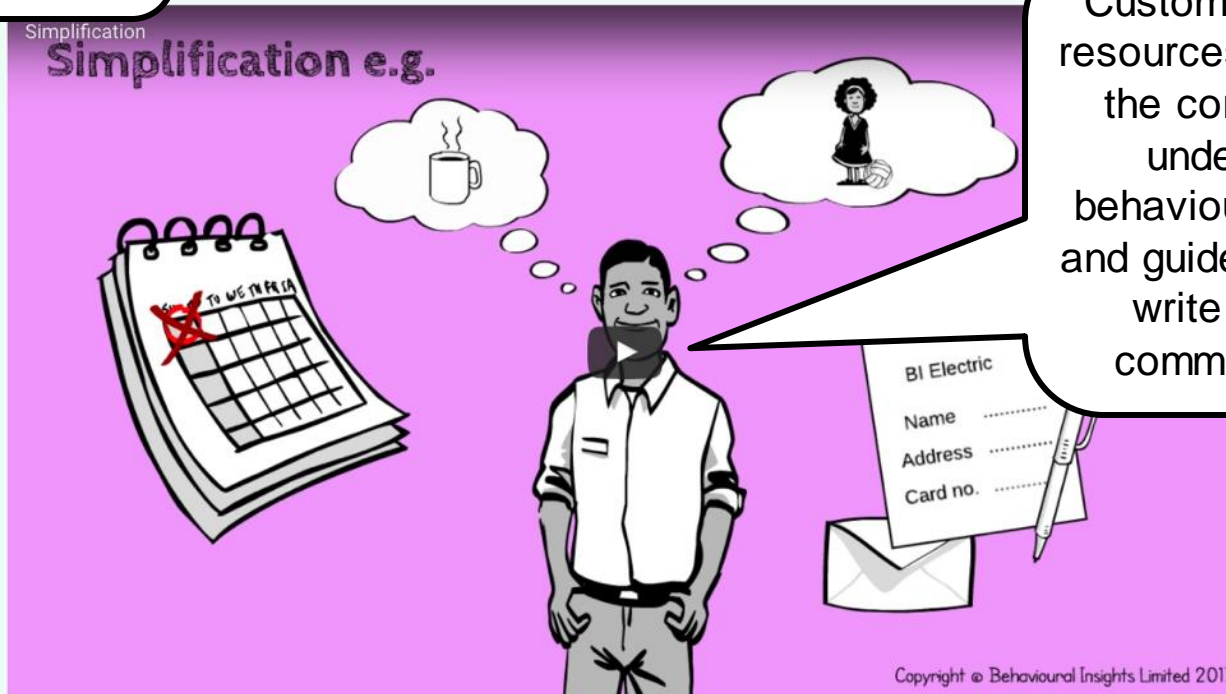
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The third section on the site is the **Solution** section

Example of Make it Easy: **Simplification**



Customers receive resources on some of the core theories underpinning behavioural science and guides on how to write effective communications

Test+Build takes users through the 4 components of BIT's TEST framework:



**T**arget : *set an objective for your project*



**E**xplore : *understand the context*



**S**olution : *design your interventions*



**T**rial : *run an RCT to test your designs*

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Lastly, you will go through the **Trial** section.



## Randomisation

Now it's time to upload your sample to be randomised. Please be sure to pick an identifier that can be used to link up your data later.

Once you have uploaded your data we will randomise it and it email it back to you with a link to the next page.

Clicking on the button below will generate an email to your contact at BIT. They will then send you a secure link via Ki for you to upload your data to.

[UPLOAD DATA](#)

In this section, you will learn how to run a simple RCT and send out your intervention.

Now please identify the date you will be sending out your letter/email/text message.

Email Address

Send out date

# Test+Build pilot

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- We have been piloting Test+Build with three customers.
  - Two local authorities and one enforcement agency.
  - We have results from one of the trials which we ran with Medway Council.





**Target:** *set an objective for your project*

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To convert **5%** of Medway Council taxpayers that are not currently signed up for Direct Debit to **sign up** for it **within one month** of the annual billing notice.





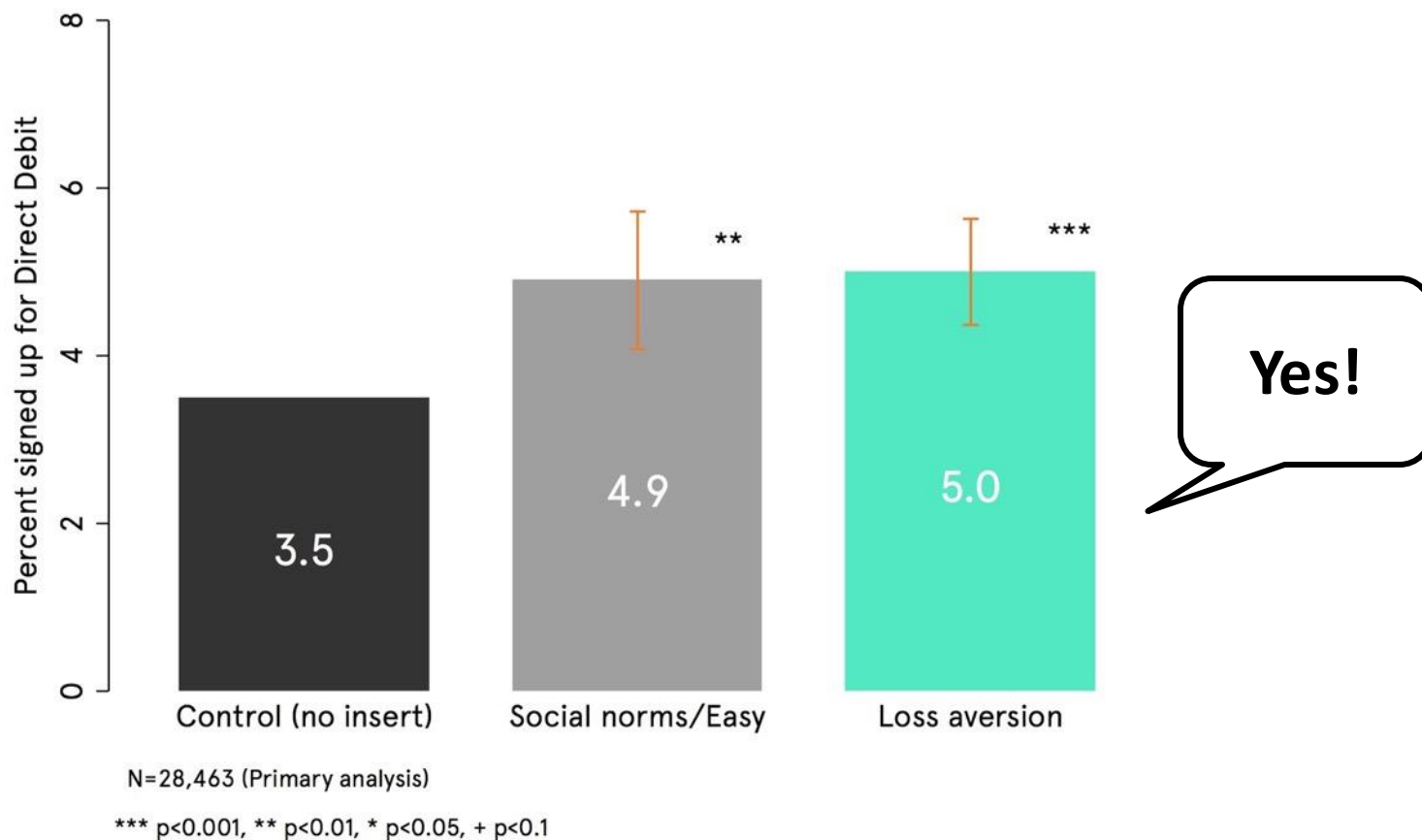
**Solution:** design your interventions

Test  Build

- Medway designed two letter inserts to go out with their annual billing reminders being sent to their tax payers.
- One insert drew on the idea of social norms and highlighted how many citizens in Medway paid their council tax via direct debit.
- The other insert used loss aversion to highlight the potential risks and costs involved with missing a council tax payment.
- Both drew on the EAST methodology developed by BIT.

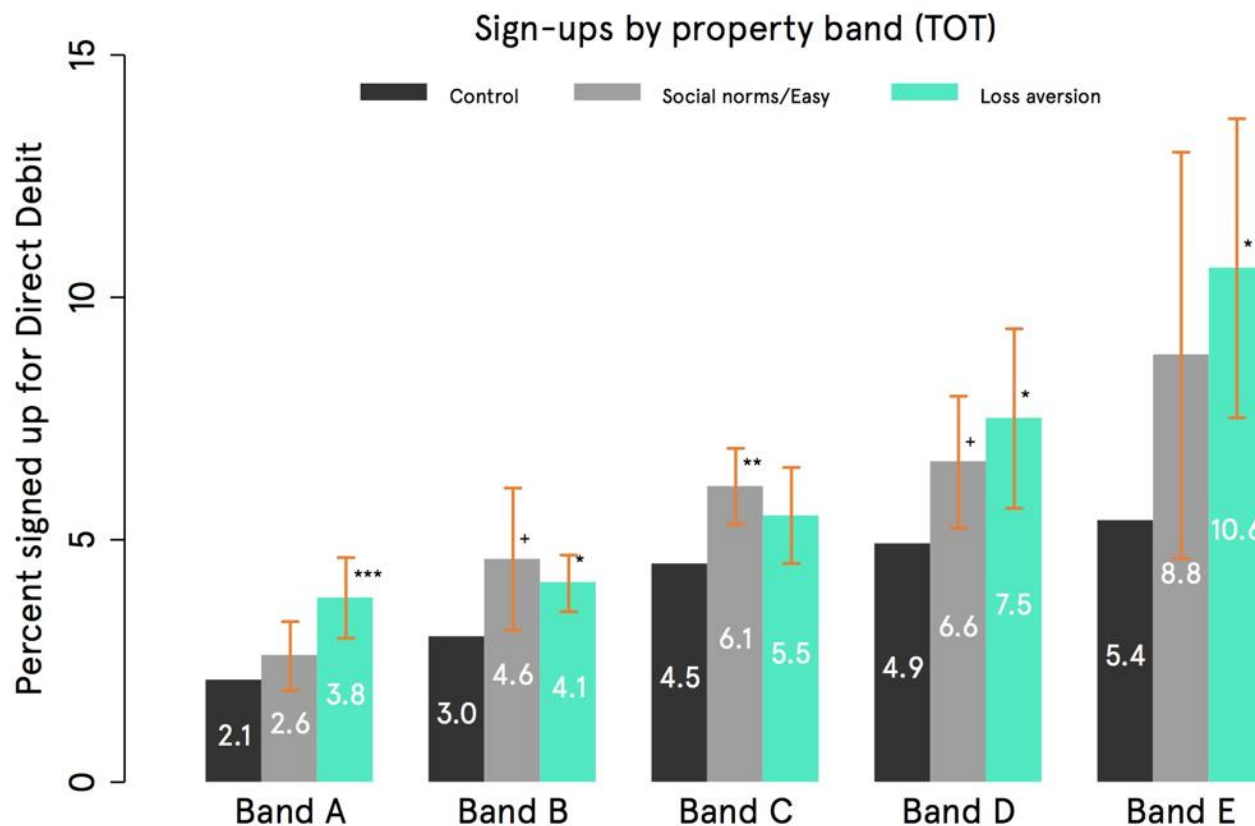


## Primary analysis: Did we get 5% of taxpayers to switch?





## Secondary analysis: How did effects differ by property band?



N=27,832 (Secondary analysis)

\*\*\*  $p < 0.001$ , \*\*  $p < 0.01$ , \*  $p < 0.05$ , +  $p < 0.1$  (comparisons are within bands)

*“The Test+Build platform was so easy to use and so informative. It helped us clearly define our project objective and design the interventions. Additionally, the Test+Build team provided excellent support, sage advice and carried out the complex analysis giving us confidence that the excellent results were real and not just a mere coincidence.”*

**Patrick Knight**, Finance Operations Systems Manager  
at Medway Council



# What next for Test+Build?

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- We hope to have results from the two other projects in the next couple of months.
- We will be having another pilot of the product in mid-July.
- We are offering local authorities a discounted price of £15,000 to take part.

# Test Build

**Thank you!**

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