

THE
BEHAVIOURAL
INSIGHTS TEAM.

The Behavioural Insights Team

Update report 2013-2015

1. Economic Growth and the Labour Market



Sam Hanes, Head of Growth and Labour Markets

Economists have long known that psychological factors influence the economy. John Maynard Keynes famously referred to the importance of '*animal spirits*' upon the decisions we take – the notion that many of our choices are the result of a '*spontaneous urge to action*' rather than the '*outcome of a weighted average of quantitative benefits multiplied by quantitative probabilities*'.⁶

The Behavioural Insights Team now has a growing programme of work that seeks to understand better the impact of individual's and businesses' behaviours on the economy, in order to find new ways of improving policy in the UK and overseas. For example, the interventions we started in UK Jobcentres two years ago have now been rolled out nationwide and introduced by governments in Singapore and Australia.

Helping people back in to work

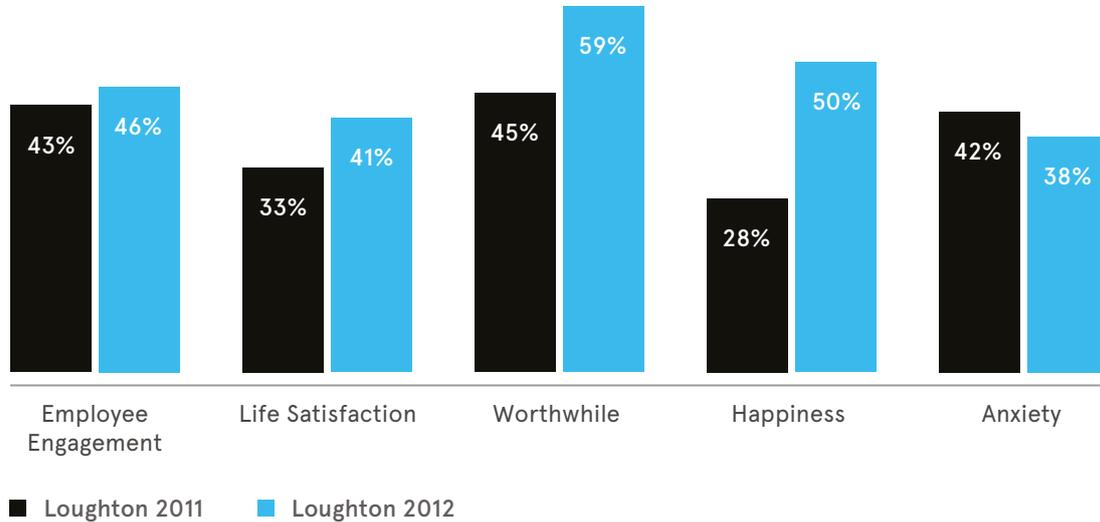
One of the biggest programmes of work that the Behavioural Insights Team has run over the past two years has been with the Department for Work and Pensions and Jobcentre Plus on supporting people back to work. The programme started in a Jobcentre in Loughton, Essex, where we worked with the team of Job Advisors to redesign the process individuals went through when they signed on to receive benefits and began the job searching process.

The core insight was that encouraging claimants to focus on making specific commitments to future activities, linked to their daily routines, helped them to follow through on their job search intentions. The programme drew heavily on the work of Gollwitzer on 'implementation intentions'. This work shows that having a plan to achieve a goal (an 'implementation intention') increases the chance that people will follow it up with actions.

In the original programme in Essex, we ran a small pilot study and measured the difference in employment outcomes between those receiving the new commitment-focused interventions and those operating under the old regime (the control). This showed very promising results: around a five percentage point increase in off-flow rates from benefits, which in this policy area is a very large effect. The pilot also improved staff happiness in the Loughton Jobcentre, as Figure 2.1 shows (the increases in other areas were not statistically significant).

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Figure 1.1 Staff wellbeing in Loughton Jobcentre Plus, before and after intervention (n = 32) (average scores on a survey normalised to percentage)⁷



After the original pilot in Loughton showed promise, the next step was to scale up the intervention. So we ran a large-scale ‘step wedge’ trial in which all the Jobcentres across Essex introduced the intervention over time, so that we could measure the difference in performance between those Jobcentres where the trial had been introduced against those where it hadn’t yet started. Figure 2.2 shows how this worked in practice.

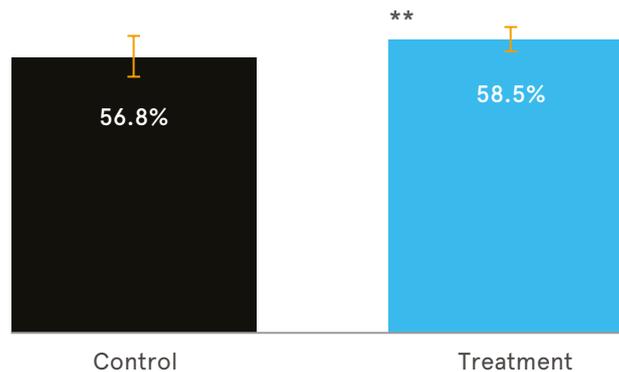
Figure 1.2 The step-wedged trial design for the large scale Essex trial

Site	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Colchester	Control	Treat	Treat							
Chelmsford	Control	Control	Treat	Treat						
Harlow	Control	Control	Control	Treat	Treat	Treat	Treat	Treat	Treat	Treat
Clacton	Control	Control	Control	Treat	Treat	Treat	Treat	Treat	Treat	Treat
Harwich	Control	Control	Control	Control	Treat	Treat	Treat	Treat	Treat	Treat
Canvey	Control	Control	Control	Control	Treat	Treat	Treat	Treat	Treat	Treat
Rayleigh	Control	Control	Control	Control	Control	Treat	Treat	Treat	Treat	Treat
Grays	Control	Control	Control	Control	Control	Control	Treat	Treat	Treat	Treat
Basildon	Control	Treat	Treat	Treat						
Braintree	Control	Treat	Treat							
Witham	Control	Treat	Treat							
Southend	Control	Treat								

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The results showed the interventions worked even when scaled up (see graph below). They also showed an increase in off-flow rates from benefits, albeit with a slightly lower effect than in the original Loughton pilot. In other words, this apparently simple, very low-cost intervention has a real impact on people's ability to find work.

Figure 1.3 Off-flow rates from benefits in Essex 'Stepped Wedged' trial (n = 110,838)



Following the convention of how inferential results are displayed, throughout this report we have used significance stars to indicate p-values (i.e. the level of statistical significance). The number of stars should be interpreted as: no star = $P > 0.05$, * = $P \leq 0.05$, ** = $P \leq 0.01$, *** = $P \leq 0.001$.

On the back of these results, we have worked with the Department for Work and Pensions to scale up the intervention further. We have supported the training of 25,000 Job Advisors, and the commitment devices we developed in Essex are now in all Jobcentres. Over the course of a year, we expect that they will help hundreds of thousands of people back in to work faster.

In addition to the analysis conducted by BIT, which looked at off-flow rates from benefits, DWP analysts also carried out a separate piece of analysis, using administrative data that measured for cycling in-and-out of, or between benefits. This data also found a difference between the treatment and control group, but it was not statistically significant at the 5 per cent level.

Using text messages to prompt people to turn up to recruitment events

Alongside the core Jobcentre Plus programme, we have tested a variety of other, small-scale interventions to see if we can improve parts of the job searching system.

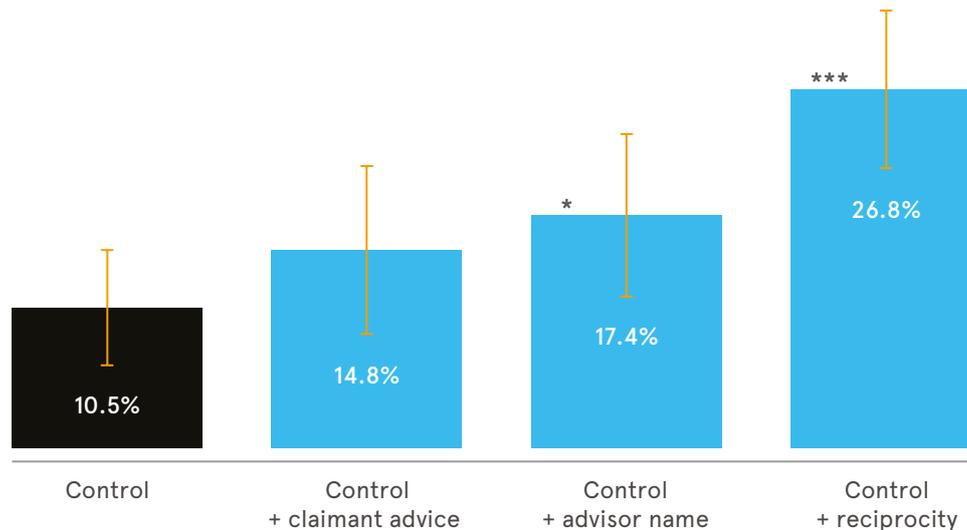
One of these interventions was undertaken with a Jobcentre in Bedford, using SMS messaging to test the effectiveness of encouraging claimants to attend job fairs. The SMS prompts are very simple and work by informing people when job opportunities arise. But because different messages work in different contexts, we tested which were most effective at getting people to attend these opportunities.

We found out that messages that draw on reciprocity are the most effective. These work by informing job seekers that the Job Advisor has done something specifically for them (in this case booking them an appointment) and wishing them luck from a named individual.

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These messages significantly outperform messages that simply tell people where the appointments are taking place, as well as those that solely rely on the personal message with no reciprocity element. DWP are exploring how to implement behavioural approaches to SMS text design in a cost neutral way as part of their SMS text strategy.

Figure 1.4 Percentage turning up to recruitment events following different SMS prompts (n = 1,224)



The Growth Vouchers programme

In 2014, we were asked by the Treasury and the Department for Business to support one of the biggest trials (by funds) ever run in the UK. The Departments wanted to test a variety of Government interventions, aimed at helping small businesses to grow.

The Growth Vouchers programme offered up to £20 million of support, which businesses could apply for to help subsidise the cost of obtaining expert advice on topics such as: HR, web development or how they could increase productivity by upskilling their leadership teams. The programme was also designed to test the effectiveness of different delivery mechanisms such as carrying out an analysis of the business' support needs in person or through an online questionnaire.⁸

After a business had applied for the programme the application route they followed was determined randomly with 75 per cent receiving a face-to-face needs analysis, and the remaining 25 per cent completing the same process online. Rather than handing out the financial support to everyone (which would make it difficult to measure the impact), after their needs had been analysed, businesses were randomly assigned to one of two groups: (i) businesses received a Growth Voucher, which they could then use to pay for half the expert advice; and (ii) businesses received no voucher, but were given the same information about experts that could support them should they wish to pay themselves.

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The trial will take a while to be evaluated, because it takes time for the main effects of the intervention to be measured (ultimately whether a business grows or not as a result of the Vouchers). But alongside the impact of the programme itself is the broader lessons that can be learnt by policymakers – namely that it is possible to run a large scale trial in order to test a strategically important, complex new policy.

Some early evaluation has already taken place and further results of this programme will be published on the BIS website at regular intervals over the next 2-3 years.⁹ As the next example shows, we also ran other trials to test new ways of encouraging businesses to take up programmes in the first place.

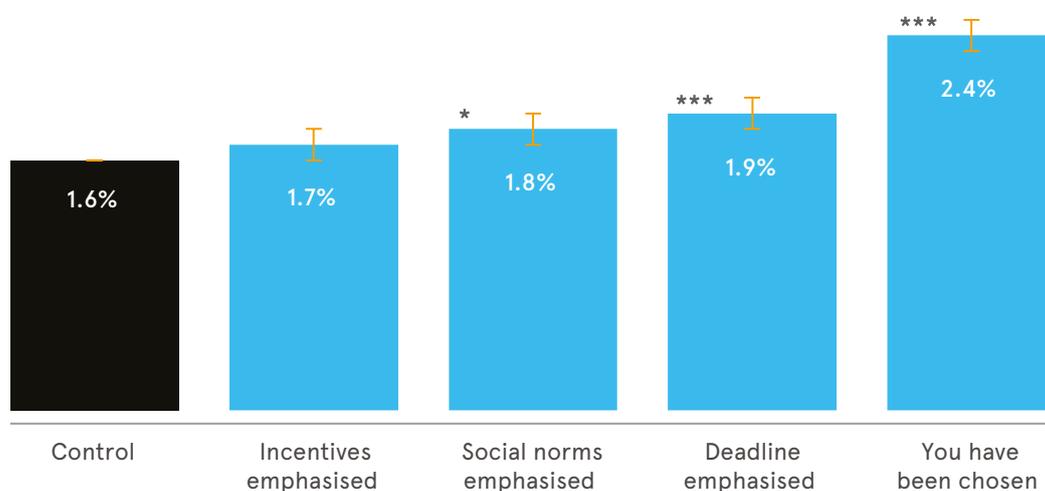
Using government email channels to increase uptake of programmes

Over the past year, we have done a lot of work with HMRC looking at how we can encourage small businesses to make use of government programmes that they can benefit from. One area that we have investigated has been how HMRC can use existing communication channels to prompt and inform small businesses when already contacting these companies about other matters (such as VAT returns). There was some concern that providing extra information might detract from the core HMRC message, so we ran a trial to see what happened when different types of messages were used.

The trial used almost 400,000 HMRC emails to communicate to SMEs about programmes they might benefit from (such as the Growth Vouchers programme – see above – or the Broadband Vouchers programme). Businesses were randomly allocated to two groups: (i) those that received the old type of email message; and (ii) those that that received the new email message, which contained information on government programmes. A variety of ways of conveying information within the email messages were also used.

The trial showed that simplifying the messages (in line with our 'Make it Easy' principle) worked very effectively. But we also found that some messages were more effective than others. Informing firms that their type of organisation had been chosen to receive information on the programmes was the most effective of all. The sheer number of emails also significantly increased sign-ups to the programmes, demonstrated by the peaks in demand in the period following the release of emails.

Figure 1.5 Click-through rates for different HMRC emails (n = 376,738)



4. Skills and Youth



Elspeth Kirkman,
Head of Skills & Youth
(and Director of ASK)



Zhi Soon, Principal
Advisor and incoming
Director of ASK

Over the past year, the Behavioural Insights Team has undertaken considerably more work on skills and youth programmes. Most notably, BIT has set up its first Behavioural Research Centre in partnership with the Department for Business, Innovation and Skills.

The Behavioural Research Centre for Adult Skills and Knowledge (ASK) provides us with funding in four financial years to run trials that can further the evidence-base around the acquisition of basic skills in adulthood. It was

run by Elspeth Kirkman, but Zhi Soon has now taken over as Director, as Elspeth heads to New York to establish our North America office.

We have also undertaken a variety of other work programmes in partnership with the Department for Education, including further investigations into the way that social workers make decisions. And in partnership with the Cabinet Office, we have conducted some of the most sophisticated evaluations yet undertaken to understand better the efficacy of youth volunteering programmes.

The Behavioural Research Centre for Adult Skills and Knowledge (ASK)

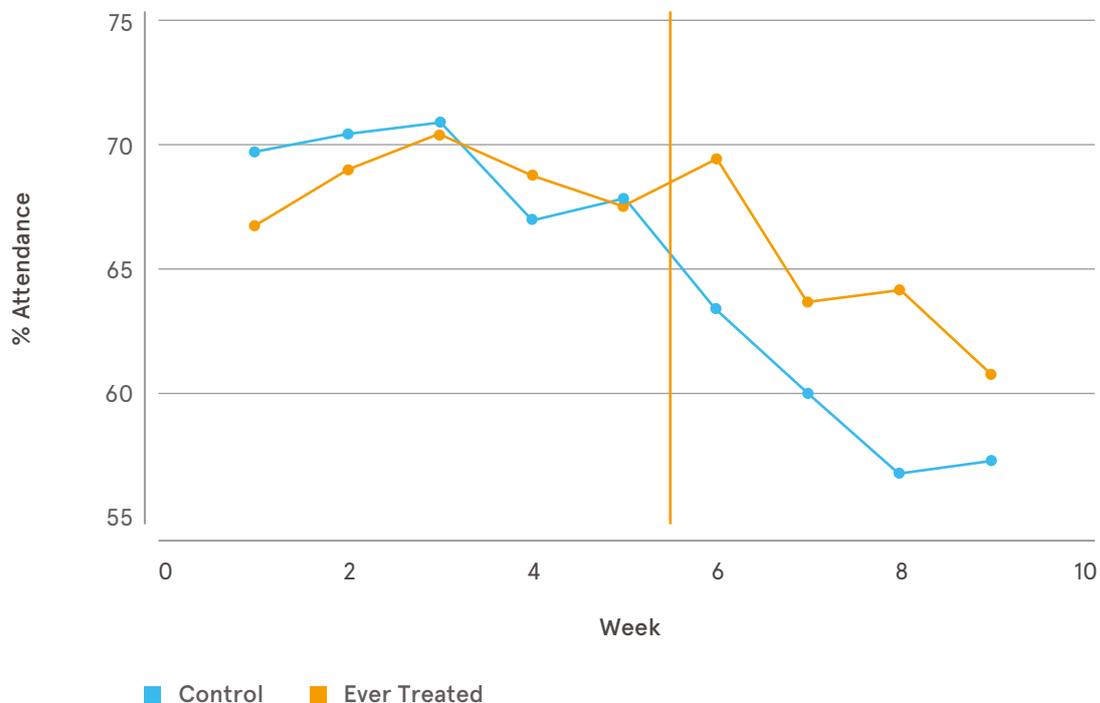
Adults who lack literacy and numeracy skills tend to be less productive at work, earn lower wages, are more likely to suffer from ill health and experience social exclusion. The Behavioural Research Centre for Adult Skills and Knowledge, or ASK for short, was officially opened on 17 September 2014 to conduct research in this important policy area.

In its first year, ASK has focused on the impact of relatively low-cost interventions in colleges, workplaces and with charities. Over the course of the next two years, ASK will scale up the interventions, and will run much bigger interventions across the country.

One of the first of these trials has explored how we can encourage adults, with low English and maths skills, to stick with educational programmes. This has been identified as a key problem, with many college programmes experiencing high rates of attrition at key moments. Using a unique dataset, the ASK team found that attendance rates in these programmes deteriorate by 20 per cent over a 10 week span. In the programmes analysed, we found that deterioration is largest after the one week break in the middle of the programmes.

We therefore tested whether we could make small changes to reduce attrition through a large-scale field experiment in which we send encouraging text messages to students. These simple text messages lead to a 7 per cent increase in attendance relative to the control group.

Figure 4.1 Percentage attendance following simple text messages (intervention) (n = 1,632)



More encouragingly still, we see that drop-out (that is to say those who never come back after the mid-term break) decreases by 36 per cent in our treatment group relative to the control. The results of this trial have been received well across the sector, with a number of colleges looking to implement a similar text message regime.

ASK has also conducted a trial in which variants on a CV were used in over a thousand job applications. This provides empirical evidence on the signalling value of different skills, demonstrating that employers value GCSE grade C significantly more than they value Functional Skills Level 2 for low-skilled jobs. Once the final analysis of the results have been completed, ASK will provide a note to BIS including recommendations on how the findings could be incorporated in to government policy.

Finally, we have conducted two further trials using messaging on employee payslips to test the latent levels of interest in improving numeracy and literacy through work. Early indications suggest levels of interest are extremely low.

These trials are just the first of what will ultimately become one of the biggest collections of trials ever run in relation to adult skills and knowledge. In the coming year, we will be launching a series of trials across Children's Centres in the UK designed to test the way in which different types of incentives can motivate parents to improve their skills. This work has considerable cross-departmental involvement with the Department for Education, the Department for Business Innovation and Skills, the Department for Work and Pensions and the Treasury all involved in its development.

4. Skills and Youth

Social worker decision making

In April 2014, the Department for Education published BIT's report on the clinical judgement and decision making processes of children's social workers.²⁴ This was commissioned by the Secretary of State for Education and the Prime Minister. The specific focus was the 'front door' process, which is the entry point for children coming in to contact with the Child Protection System. BIT undertook a literature review and numerous site visits before drawing on the behavioural science literature to identify a number of recommendations.

The analysis suggested that there was an overarching problem that there was very little evidence that social workers could draw on around 'what works' in particular contexts. And there were four key behavioural factors that complicate or reduce the efficiency of social workers' ability to make often highly complex, challenging decisions. We made four recommendations to address these issues:

- develop quantitative, predictive modelling to identify effective practices;
- introduce feedback loops to help social workers learn from past decisions;
- improve the inputs to the system, by developing simpler systems for filtering out irrelevant information; and
- develop heuristic tools and/or checklists to guide decision-making without the complexity of actuarial tools.

As a follow-up action, the Department for Education commissioned us to undertake two further pieces of work:

- A data analytics task whereby we take all data held by four Local Authority Children's Services Departments at individual case-level to analyse patterns in decision making and identify opportunities for intervention; and
- A further piece of qualitative research into the Adoption matching process and the behavioural factors at play.

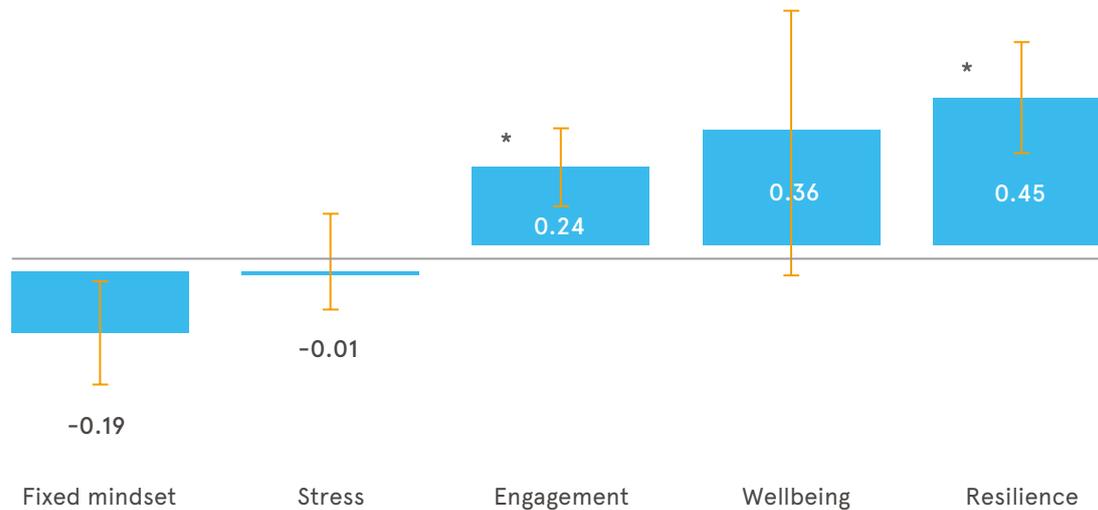
West Sussex County Council fostering

Beyond the work with the Department for Education, we also undertook a project with West Sussex County Council's Children's Services Department in which we analysed issues relating to the Adoption and Fostering Service and ran a trial aimed at getting existing Foster Carers to take on more challenging placements. To do this, we focused on improving some of the non-cognitive skills that Foster Carers need in order to keep going when things get tough and to take on increasingly challenging placements.

We designed a course aimed at addressing mindsets, resilience skills, stress reduction, engagement and a sense of community. We used a Train-the-Trainer model, teaching social workers how to run the course for Foster Carers, and ran a randomised control trial in which we allocated 50 Foster Carers to receive the training and 50 to the control group. In pre and post surveys, we see significant improvements for engagement and, most encouragingly, resilience.

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Figure 4.2 Impact of training on foster carers: survey results (n = 34) (average scores on a survey normalised to percentage)



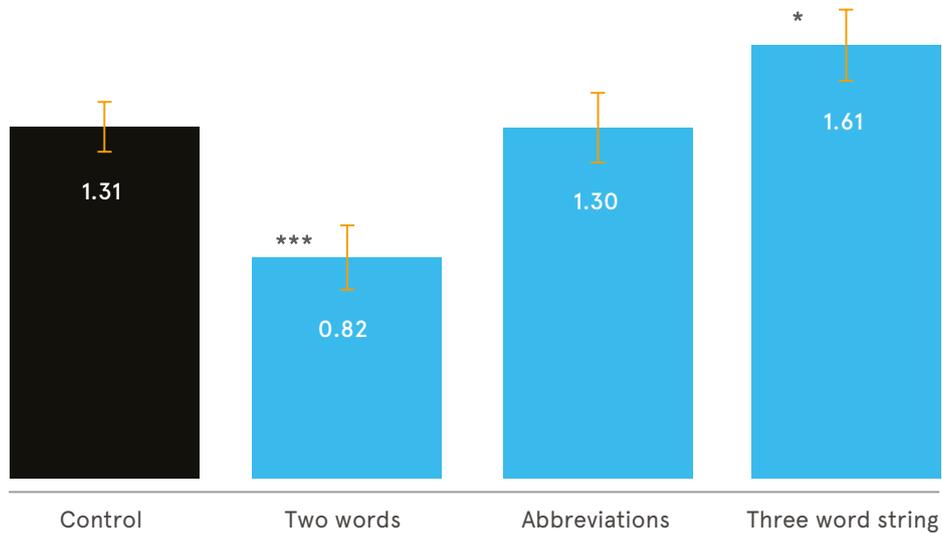
Youth Social Action Fund

The Cabinet Office's Social Action Team asked BIT to support an evaluation of a range of different programmes aimed at building the skills and aspirations of young people. In particular, we were asked to find ways to measure the impact of taking part in social action on key skills for work and adult life.

Our analysis provides compelling and robust evidence that young people who take part in social action initiatives develop skills for employment and adulthood and boost their wellbeing in the process. Using randomised controlled trials, and drawing on a mature field of research linking specific character skills to hard outcomes, such as employability, the research demonstrated that – for those programmes we have evaluated – investment in social action leads to benefits for young people taking part as well as for the intended beneficiaries.

The research also provided the first robust evidence for an unanswered question around volunteering – whether volunteering in one environment crowds in or out donations of time and money later. As part of the RCT evaluating the Citizenship Foundation's Youth Social Action Programme, we found that young people were also more likely to express an interest in volunteering to help their community later on. They were also given a chance to donate a small amount of money to charity, and we found that donations to the charity decreased in the treatment – suggesting that donations of time are habit forming, but that these might crowd out donations of money at least in young people.²⁵

Figure 6.5 Password strength across treatments²⁹ (password recall remained constant) (n = 572)



Secondly, BIT was commissioned by the Office of Cyber Security and Information Assurance (in the Cabinet Office) to conduct a short project assessing policy implications for cyber security, drawing on insights from the behavioural sciences. The project report focused on target behaviours for individuals and SMEs based around objectives drawn from the Cyber Streetwise campaign.

Finally, as a member of the Home Office Crime Prevention Panel, BIT was engaged in supporting the National Society for the Prevention of Cruelty to Children (NSPCC) in developing a guide for professionals who work with young people to help them understand what constitutes abusive behaviour online,³⁰ the consequences of that behaviour, and where they can get help to deal with this. BIT assisted by describing several behavioural principles that can be applied to the activities of organisations fighting to stop online bullying and abuse, particularly amongst young people.

9. Energy and Sustainability



Marcos Pelenur,
Former Head of Energy
& Sustainability



Elisabeth Costa,
Current Head of
Energy & Sustainability

Many of the most intractable issues relating to energy and sustainability have a strong behavioural component. Our response to climate change is made all the more complex by the fact that the environmental costs appear far into the future and are (in the present) relatively intangible. Similarly, energy use is an abstract concept for most, resulting in a real disconnect between intention and action.

Despite the challenges, many of the changes that governments around the world want to encourage – such as recycling or consumers engaging more in energy supply markets – require individuals to make active choices that require effort and changes to their routines.

For these reasons, BIT has a long-established programme of work looking at ways in which we can encourage individuals to undertake activities – such as insulating their homes, switching energy suppliers and making more sustainable transport decisions – that both save money and help to reduce carbon emissions.

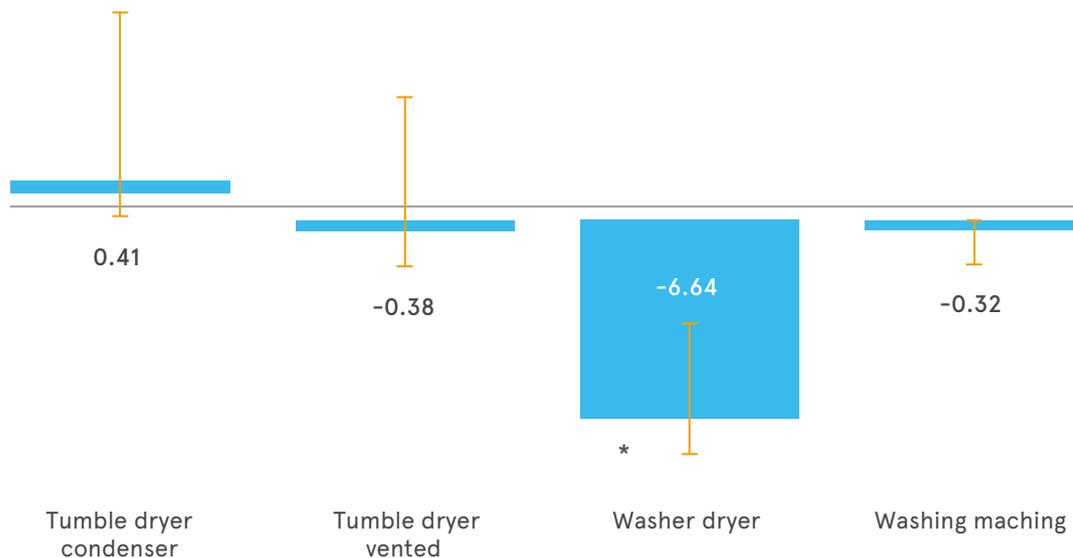
Energy efficiency labels

In 2014, the Department of Energy and Climate Change asked BIT to support a programme of work that tested different ways of presenting energy information on tumble dryers, washing machines and washer-dryers sold in John Lewis stores.³⁶

The aim of the trial was simple: we wanted to know whether the way energy labelling information is displayed would encourage more people to purchase energy-efficient products. Specifically, we wanted to know whether telling people the full lifetime running costs of a tumble dryer, washing machine or washer-dryer would lead people to buy more energy-efficient appliances. Energy efficient machines often cost more upfront, but save the consumer money in the long term as a result of lower energy bills. A similar trial had been run in Norway, which showed a positive effect.

The trial, which was run nationally across all John Lewis stores, showed a positive net effect in relation to washer-dryers, but no effect in relation to washing machines and tumble dryers. This may be largely because the difference between an energy inefficient and efficient washer-dryer is much more pronounced (and the savings to be made are starker) than is the case with the other appliances. As a consequence of the trial, John Lewis are now planning to roll out a modified version of the label across all their white goods.

Figure 9.1 Average net change in energy consumption of different appliances (kWh per year), (n = 120,980)



Heating controls trial

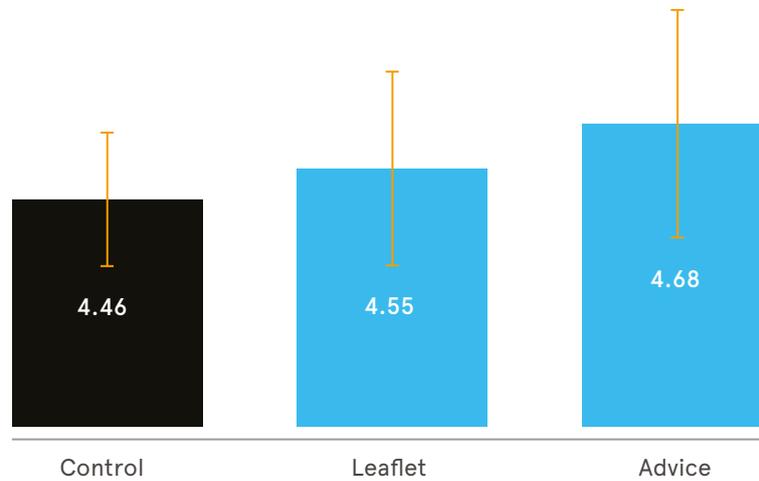
BIT also supported a programme of work led by the Department of Energy and Climate Change looking at whether it would be possible to encourage homeowners to make more efficient use of their home heating controls.³⁷ The premise of this project was that individuals already have lots of sophisticated equipment for controlling the way that they use heat in the home (thermostats on boilers and thermostatic radiator valves), but many people are not always aware of how to use these systems effectively.

Therefore, we partnered with Newcastle City Council to test whether boiler engineers (as trusted messengers) could show social housing tenants how to save energy by using their home heating controls better.

The trial had three arms. In the first, boiler engineers carried out their usual winter checks on boilers, but otherwise did nothing else. In the second, the boiler engineers gave tenants advice on how to use their heating controls. And in the third, the boiler engineers left behind a leaflet.

Surprisingly, the trial showed that none of these interventions had an effect on energy use. While it would have been nice to see a positive effect, the broader lesson is that it is very important to test and trial interventions like this before rolling them out across the country. Ultimately, the results of this trial will allow the Department of Energy and Climate Change to focus its efforts on things that will help reduce carbon emissions in the most cost effective way.

Figure 9.2 Energy use under different conditions, kWh per heating degree day (n = 1,264)



The Green Deal

Over the past two years, BIT has worked with DECC on various aspects of the Government's home energy efficiency programme, the Green Deal. The main area of support is through an evaluation project to assess the impact of £2m of additional Private Rental Sector funding to four Green Deal Communities projects analysing the success of door knocking and letter dropping marketing and incentive approaches in engaging landlords and tenants to uptake energy efficient measures in these areas from September 2014 – January 2016. Analysis will involve quasi-experimental difference-in-difference regression analysis with pairwise matching in addition to qualitative research with landlords, tenants and stakeholders.