Applying Behavioural Insights to Labour Markets

How behavioural insights can improve employment policies and programmes

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About this report

Employment is one of the most important policy areas that governments manage. Yet, it is one with ample room for more use of evidence. Due to location and contextual factors, labour market policies are also often tailored to the economic needs of a country or region. For these reasons, continuous rigorous testing is needed to make sure solutions are appropriate for local needs.

This report looks at the available evidence and draws out the broader insights learned from the work that BIT and others have done in this space, with an eye to what is practical and universal. Its objective is to give policymakers and researchers around the world a starting point for future applications of behavioural insights to labour market policies.

We have structured the report around the three main actors in the labour market:

- **Job seekers**: the first section summarises insights from trials aimed at helping job seekers find a job
- **Employers**: the second section focuses on the decision-making processes of employers, with a focus on what affects the hiring and retention of job seekers
- **Intermediaries**: the third section looks at the role of government and other organisations that provide employment services, such as job centres

To end, we present areas where behavioural insights can be applied to the labour markets in the near future.

The Behavioural Insights Team (BIT) is a social purpose company that is jointly owned by the UK Government, Nesta (the innovation charity) and BIT’s employees. BIT was created in 10 Downing Street in 2010 as the world’s first government institution dedicated to the application of behavioural sciences to policy. BIT aims to improve policies and public services by drawing on ideas from behavioural science. BIT usually tests and trials these ideas before they are scaled up, in order to understand what works and (importantly) what does not work.
There is never a guarantee that an intervention will work better than existing practice. This certainly applies to employment policies and programmes. Governments, employers and employment agencies have refined and adapted their practices over decades, and in particular in relation to ‘active welfare policy’ – expecting and encouraging those out of work to actively seek new employment opportunities.

As this report shows, we can now decisively conclude that behaviourally-based interventions can add great value to employment policies. Early small scale solutions and RCTs, were successfully replicated in larger regional trials. These in turn have now been replicated across a number of countries, notably the UK, Australia and Singapore – with effect sizes that have strengthened rather than weakened.

It should be stressed just how important, and relatively unusual, this is. Many promising results fail to replicate at larger scales or secondary sites. This can be due to many factors: later and larger trials may struggle to maintain key aspects of the original intervention; the intervention moves from highly motivated originators to less engaged ‘train-the-trainer’ models; and wider spill-over effects dilute the original effects (e.g.: early small scale positive results could result for one person simply taking a job from another).

The strength and successful replication of these interventions strongly make the case for further scaling, such as to other countries, or closely related areas. The report also helpfully broadens the perspective on employment interventions, by drawing together solutions built around the job seeker, and also look at the issue from the perspective of the employer and job service providers. The report does this by looking at the wider literature alongside BIT trials with our partners. It also seeks to step back still further, situating the individual trials in the wider changes that are occurring in labour markets, and the role that governments can play in shaping this.

Ultimately, we don’t just want people in work. We want that work to be fulfilling and meaningful; decently paid; and with opportunities for progression. We want ‘good employers’, who offer such work opportunities to attract the best candidates and to flourish. In this sense, we need not just to optimise job search activity, but to reduce and remove other behaviourally-based failures that prevent the labour market working in this deeper sense. Fortunately, from what we have seen so far, we have good grounds to think that behavioural science can help us with such issues, to the benefit of all.

Dr David Halpern
CEO of The Behavioural Insights Team and National Advisor of the UK What Works Centre

Helping people back to work has been a focus of BIT efforts since the early days of the team. It is a clear win-win. If we can help people get back to work faster, it benefits them financially and mentally; reduces welfare costs to taxpayers; and helps employers, particularly in a tight labour market.
Acknowledgments

We are grateful to the following people for providing comments on the report: David Halpern, Robbie Tilleard, Lis Costa, Nida Broughton, Rory Gallagher, Zhi Soon, Min-Taec Kim, Kate Glazebrook, Stewart Kettle, Ash Morse, Edward Braden, Tiina Likki, Rony Hacohen, Andy Hollingsworth, Johannes Lohmann, Michael Sanders, Alex Gyani, Samuel Hanes, Nicky Quinn, Elspeth Kirkman, Ben Curtis, and Joanne Reinhard. We would like to thank Ross Haig, Laura Moyce, and Jo Yuen for their assistance on the design and communication of this document.

The trials summarised in this report are the result of the collaboration between BIT and its partners, with whom we had the privilege to collaborate. In particular, we would like to thank the Australian Department of Jobs and Small Business, the UK Department of Work and Pensions, and the Singapore Ministry of Manpower.

Last, but most importantly, we would like to thank the job seekers we interviewed and that took part in our trials, as well as the management teams and frontline staff of the job service providers that have collaborated with us to test these new approaches, including Konekt (previously Mission Providence) and Advanced Personnel Management in Australia, and Jobcentre Plus in the UK.
A job is more than a source of income. It gives you a sense of identity, social inclusion, and contributes to positive health and wellbeing. For societies as a whole, a low unemployment rate can mean greater purchasing power for citizens, and higher political stability, among other benefits. This is why the unemployment rate is considered a key indicator of the economic health of a country. Creating an efficient labour market, however, is not easy. How well the market works depends on the behaviours (and biases) of many stakeholders.

To improve employment outcomes from a microeconomic perspective, governments have historically relied on two approaches: (i) incentives, such as relocation vouchers for job seekers or wage subsidies for employers; and (ii) penalties, such as the removal of unemployment benefits in case of job seekers’ non-compliance.

As employment is one of BIT’s longest standing areas of work, we have seen how behavioural insights can improve these existing approaches, and offer alternative solutions that place people and their decision-making at the heart of the system.

One of the key lessons from our work is that to design effective employment policies, governments must improve their understanding of how job seekers and employers make decisions, and how they interact in the labour market, including through job service providers.

**What works:**

**Job seeker**
Personalise assistance and communication based on job seekers’ needs and preferences

**Employer**
Increase employers’ transparency by releasing salary ranges, allow workers to rate employers, and encourage a culture of continuous learning and upskilling for those in work

**Job service providers**
Design the right mix of financial and social incentives for employment advisors, and leverage on market design principles to encourage greater openness in the job service market
For most job seekers, unemployment is not a choice. There can be many reasons for this. Some are specific to the individual, such as their personal skill level or their history of unemployment. Other reasons might be unforeseen, such as the sudden loss of a job due to restructures or failures of an employer. Unemployment also affects different people in different ways, depending on individual circumstances (e.g. family wealth) or the available government safety nets. It is also affected by the behaviours of the individual, such as their level of resilience. Whatever the reasons, solutions must be timely to place job seekers into employment quickly and prevent them entering a spiral of social exclusion.

Employment policies that focus heavily on job seeker compliance, rather than successful job placements, can contribute to this demotivation spiral. They can cause the job seeker-employment advisor relationship to become negative and unproductive. Similarly, other bad experiences can have a dampening effect on motivation, such as repeated unsuccessful job applications, or non-constructive feedback from interviewers.

In this section, we examine how a better understanding of the experiences and behaviours of job seekers, and their interactions with employment services, can help improve policy outcomes. Whilst unemployment experiences differ among job seekers, for simplicity, we have summarised results based on the typical ‘journey’ of an unemployed person, from the first meeting with an employment advisor to retaining a job over time.

Key lessons learned:

1. **Focus on people, not processes:** Shift the focus of employment services from administration to relationship building, and from compliance to job goals.

2. **Make communications simple and clear:** Design simple, but effective prompts using existing communication channels to improve job seekers’ job search behaviour.

3. **Give tailored assistance to job seekers:** Tailor the intensity and type of assistance (e.g. online vs offline) depending on the job seeker’s preferences and needs, and use administrative data to draw preferences and barriers (e.g. time constraints).
Improve job seekers’ motivation to look for work

For many people, personal and professional networks are the best way to access new job opportunities. For many others, specifically those who are more disadvantaged, some form of assistance from an employment advisor can be a helpful way to become job ready, improve their job applications, and connect with would-be employers.

As a result, the interaction between a job seeker and their employment advisor is very important, particularly for maintaining job seekers’ motivation. This is true despite differences in how labour markets are designed in different countries, and whether employment services are delivered by government agencies or private providers.

The support job seekers receive can be effective if the focus is on employment goals. But due to the local policy context, the role of an employment advisor can become focused on monitoring job seekers’ compliance. Often this is driven by equity concerns, to ensure only those who are most deserving receive unemployment support, but it can harm those genuinely in need of assistance.

A number of studies have linked goal-orientation and productive job seeking behaviours. These studies also found that job seekers with high goal-orientation had higher levels of job seeking ‘intensity’, leading to an increased likelihood of finding employment. Other studies have found that participation in workshops designed to develop goal-orientation increased reports of positive job-search intentions, and engagement in job-search behaviours. Similarly, studies have found that extensive processing times significantly reduced long-term workforce participation and earnings for applicants applying for disability benefits.

In a trial in Jobcentre Plus in the UK we demonstrated that focusing on goal-orientation and reducing administrative processes can be beneficial. Our intervention was designed to re-focus job seeking meetings from penalty avoidance to job attainment. This is supported by the evidence around the positive effects of ‘performance-approach’ goals. By shifting the focus to job attainment, employment prospects become more important than the need to focus on penalty avoidance. Key elements and results of this trial are summarised in case study 1 on page 8.

While there are differences in the way job services are delivered around the world, almost all share similarities. For example, most of them provide support through ‘job centre’ style facilities, where job seekers meet regularly with employment advisors to discuss job opportunities. As a result, we felt that the key elements of our intervention in the UK could be used with some adaptation in a different context.

One example of this is a trial done in partnership with the Singaporean Ministry of Manpower and the Singaporean Work Development Agency. In this project, we tested the ‘commitment pack’ at a Community Development Centre. In addition, we also redesigned the physical environment in which the jobseeker and employment advisor met. For example, we put up a chart displaying the number of successful job seekers who found employment through the centre, to leverage on social norms.

The trial found that 49.4% of job seekers in the intervention group found work, whereas only 32% of the control group did (a 7.4 percentage point, or 23% difference). If implemented across Singapore and if the impact remained similar, our intervention would lead to an estimated 4,000 more successful job placements within three months. This result further supports the evidence that these approaches can be effective when replicated in very different system and cultural contexts.
In 2012, we worked with Jobcentre Plus in Loughton, Essex (UK) on a project aimed at getting job seekers into work faster.

Through fieldwork, we discovered that the relationship between job seekers and employment advisors was focused on compliance. This was the case from their first meeting, and it was clear that over time this caused job seekers to lose motivation and begin to put in the minimum required effort to comply rather than look for work.

To change this, we shifted the emphasis of the job seeker-employment advisor relationship to finding employment. As initial contact with a service shapes later perceptions, we made sure their first meeting was outcome-focused. We did this by streamlining administrative tasks and asking employment advisors to move their computers to one side to make interactions more personable.

In addition, we helped job seekers set stretching, but achievable job search goals. Previously, these meetings were centred on paperwork documenting that job seekers were completing a minimum of three job search activities over the past week or fortnight. Drawing on the research on implementation intentions, we designed a ‘commitment pack’ that focused on encouraging job seekers and coaches to work together to agree on specific goals in the immediate future. This meant that rather than just retrospectively reporting behaviour anchored on minimum requirements, job seekers instead created specific and actionable forward-looking goals. We also used resilience-building exercises to combat difficulties with maintaining motivation, such as self-identifying personal strengths.

We tested this set of interventions on a small scale trial in one job centre in Loughton, and then scaled up the commitment packs across 12 job centres in Essex (n=110,838). We found that more than 1,880 job seekers in the treatment group across these 12 centres became independent of income support faster than the control group (a 3% - or 1.7 percentage point - improvement) over the 11 months of the trial.

On the back of these results, we worked with the Department for Work and Pensions to scale up the intervention. We worked with Job Centre staff in the North-East of England to make sure that these tools could be integrated into nationwide business as usual systems, through the creation of ‘My Work Plans’.

We then supported the training of 25,000 work coaches through a train-the-trainers model, to ensure staff across the UK could deliver these new behaviourally-informed techniques effectively. Roughly 800,000 people are claiming unemployment benefits in the UK at any one time, so these tools have now supported millions of job seekers in the UK to look for and find work.
Increase attendance at recruitment fairs

If a regular meeting with an employment advisor can be challenging for job seekers, talking to prospective employers can be even more daunting, especially for those who have not attended a job interview in a long time.

In the UK, job centres often hold recruitment events in partnership with large employers who hire in bulk, making the likelihood of finding a job at an event high. Despite this, job seeker attendance at these events is often low. We ran a trial to test whether personalised text message reminders can increase attendance at such events. As shown in case study 2 on page 10, a behaviourally-informed text message outperformed a more fact-based message by more than twofold.

Both one-off and ongoing text-message reminders have been shown to be effective across a broad range of policy domains, such as health,9 court attendance,10 and voter turnout.11 Manipulating certain features of text reminders, such as how much they are personalised12, can increase their effectiveness compared to a more generic messages.

Another indicator of the efficacy of a text message reminder is what happens when a text is missed by a job seeker. In Australia, most job seekers who provide a mobile number to their job service provider are sent a text message reminder one day before their regular appointment with their employment advisor, having received a formal notification previously. Due to an unanticipated text message outage in late 2016, approximately 55,000 reminders were not sent. This outage allowed for a statistically significant natural experiment, and analysis by the Australian Department of Jobs and Small Business showed that the outage led to an average increase in the ‘Did Not Attend’ rate of 8 percentage points (from 18% to 26%). This confirms previous studies on the habituation of text messages, but is also evidence of their importance, especially from a cost-benefit point of view.
We worked with the UK Bedford Job Centre to increase attendance at recruitment events and help more job seekers connect to potential employers. In our trial, we tested different versions of a text message reminder sent to 1,224 job seekers the day before their appointment. The variations tested were:

<table>
<thead>
<tr>
<th>Group</th>
<th>Message</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>A simple fact-based message</td>
</tr>
<tr>
<td>Treatment 1</td>
<td>The control message personalised with the job seeker’s name</td>
</tr>
<tr>
<td>Treatment 2</td>
<td>The control message personalised with the job seeker’s name and the job advisor’s name</td>
</tr>
<tr>
<td>Treatment 3</td>
<td>The control message personalised with the job seeker’s name, the job advisor’s name, and a ‘good luck’ message.</td>
</tr>
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</table>

We found that, compared to an automated fact-based message, a personalised, behaviourally informed text that incorporated reciprocity (the tendency to respond to a positive action with another positive action) by including “I’ve booked you a place. Good luck” increased attendance at job fairs from 10.5% to 26.8%, improving employment prospects.

**Example:** Hi Elspeth, 8 new Picker Packer jobs are now available at Pro FS. Come to Bedford JobCentre on Monday 10 June between 10am and 4pm and ask for Sarah to find out more. I’ve booked you a place. Good luck, Michael.

![2.5x higher attendance rate at a job fair](chart.png)
Encourage better job search behaviours

To achieve a more equitable welfare system, and to encourage job seekers to find a job as soon as possible, governments have historically relied on sanctioning policies, in the form of unemployment benefit cuts. Recent evidence, however, suggests that these types of policies are unlikely to have a sustainable effect. Studies have found that in certain countries job seekers look harder for work when they know their income support is about to be reduced, but once that happens, they slowly re-adapt their lifestyle to their new income and return to previous, low effort, job search strategies. This suggests that a more holistic approach that reflects when and how job seekers actually look for work can help improve policies.

The past two decades have also seen the job ads market almost completely transition from offline (e.g. newspapers, word of mouth) to online. One study has found that job seekers who search for employment online are re-employed 25% faster than comparably qualified job seekers who use only traditional search methods (e.g. newspapers). As other researchers argued, online job boards provide a wider and easier search, more up-to-date information, and can even facilitate job seeker and vacancy matches by drawing attention to relevant candidates or positions. The online environment, however, only grants access to a broader set of job opportunities. If a person’s job search strategies are poor, simply using the internet won’t necessarily improve employment outcomes.

For example, in a project in partnership with a City Region in the North of England, we investigated job seekers’ attitudes towards various job search tasks. Many of the tasks that employment advisors and policymakers would identify as crucial to successfully finding employment, such as making speculative applications and contacting recruitment agencies, were not spontaneously identified as important by many job seekers.

In Australia, we have found that expectations and job search strategies are similarly misplaced. Job seekers often have a limited understanding of the importance of their CV and cover letter, and they do not access resources online or offline to look for jobs.

“'It takes a lot of time to write and refine a customised cover letter for every job application.'"

Australian job seeker, female 50+ years old

We also found evidence of other maladaptive strategies, including repeatedly cold-calling businesses, and sending out generic or out-of-date resumes. Case study 3 on page 12 provides a summary of a successful online trial we ran in Australia that helped job seekers find employment.

The online environment also offers other opportunities to nudge job seekers. A study done at the University of Edinburgh found that using an online platform to show job seekers vacancies related to their career interests that they might have missed led to a 50% increase in call backs for job interviews. Interestingly, this effect was even more pronounced for people who had been unemployed for longer and searched more ‘narrowly’.18
To help job seekers find work, we partnered with the Australian Department of Jobs and Small Business, and an Australian job service provider in Sydney. Together with their employment advisors, we created a website called ‘My Job Goals’. It contained instructions and templates for creating a CV and cover letter, and 10 job search tips. We tested the impact of these online resources by emailing around 4,000 job seekers a link to the website, putting up posters at the provider sites and encouraging employment advisors to bring it up during regular appointments.

We found that the website was most effective for the least disadvantaged job seekers. In this group, our intervention increased the number of job seekers finding employment during the 4 months of the trial by 45%, a 3.1 percentage-point advantage over the control group. Assuming this treatment effect is scalable across all offices of the employment services provider, our intervention could help more than 26,000 extra job seekers find a job every four months.

This result has substantial implications for rethinking how governments deliver services and assistance to clients. For example, job centres can provide assistance to some job seekers online, freeing up time and resources to help more disadvantaged job seekers in person. A study of unemployed, highly disadvantaged youth in France found that group counselling raised workforce participation by 7% within two months. Six months later this effect dropped to 4%, but it is nevertheless an impressive result considering the challenging nature of employment.17 Considered together with our findings, this suggest that job seekers might need more tailored assistance depending on their needs, and that online and offline communication channels can be complementary strategies to achieve similar objectives.
The importance of improving job seekers’ health and wellbeing

The results of some of these low-cost trials demonstrate how new technologies can be used to improve employment opportunities. However, a holistic approach may still be necessary, particularly for job seekers struggling with the secondary effects of long-term unemployment, such as poor mental health and chronic stress.19

There is strong evidence that employment has considerable positive impacts on physical and mental health,20 while spells of unemployment put people at risk of developing ill-health. With this in mind the UK Department for Work and Pensions (DWP) designed an intervention that BIT helped to test: the Health and Work Conversation (HWC). We helped train 100 DWP staff to deliver face-to-face training to employment advisors, which gave them the skills to have supportive first conversations with new benefits claimants.

DWP is now offering the training to all work coaches, and there have been around 300,000 total HWC participants as of 2017/18. Early reactions during the rollout have been positive, with staff describing the HWC as a “powerful engagement tool”, with many claimants asking for follow-up sessions.
Employers

Economists often think about the job application process as a ‘signalling game’. Job seekers signal their qualities to potential employers through a tailored application (e.g. cover letter, resume, and job interview), while employers signal the quality of the job offer, such as salary and other benefits, to attract the best candidates. In this ‘game’, however, both sides are forced to rely on limited available information, which means that small cues can lead both sides to make decisions that are not in their best interests. This has important implications for policies aimed at improving employment outcomes for all.

Job growth is also a function of the decision-making processes of employers, who are essentially a group of individuals making decisions more or less collectively, and can be affected by the same biases and heuristics that guide their choices as individuals. We still know very little about when and how employers decide to expand their workforce. In any economy there is a ‘hidden job market’, where companies choose to hire new workers through informal referrals, without advertising the position. Understanding the decision-making processes of employers can help to better target employment policies.

In this section we examine why it’s important for policymakers to understand the steps employers take in advertising and filling job vacancies, and how this information can be used to design more inclusive labour markets.

Key lessons learned:

1. Greater transparency on job ads can empower job seekers: information displayed in job offers, including information that is seemingly irrelevant, influences who applies, gets the job, and what conditions they can negotiate.

2. Blinding recruitment makes it fairer for all: helping employers to hire based on merits and skills, rather than less relevant information (e.g. name and age), can make labour markets more inclusive and meritocratic.

3. Policymakers should encourage employers to invest in learning and development for their workforce: maintaining a skilled workforce through ongoing training can help prevent shocks to the labour market, such as technological disruptions.
The way employers advertise jobs matters

Researchers and policymakers do not know enough about what factors lead business owners to hire new workers, and the decision-making processes that take place from the decision to hire to the filling of a vacancy. A significant proportion of jobs available in an economy are filled through informal networks, such as through families and friends, in what can be defined as a ‘hidden labour market’ that goes unmeasured, making it difficult to design data-driven employment policies. Further, it can lead to informal labour contracts that do not protect the worker.

In some contexts, most employers advertise for candidates by posting a vacancy on an online job search platform or in a local newspaper. In these cases, how job advertisements are written can also change the applicants they attract. A study in Zambia found that job ads that made career incentives salient attracted more qualified health workers, compared to pro-social messages.21 In addition to biasing who applies, how job advertisements are written can also give applicants ‘permission’, for example, to negotiate working conditions. A study conducted in collaboration between Monash University and the University of Chicago manipulated whether job advertisements included a statement indicating that salary was negotiable.22 When it explicitly invited negotiation, women were slightly more likely than men to negotiate their salary, whilst the absence of such statement led mostly men to negotiate. A simple sentence can therefore nudge women to seek a higher starting salary, helping to reduce the gender pay gap over time.

We ran a trial with Chattanooga Police Department (CPD) in Tennessee, U.S.A, to increase diversity when hiring new recruits. We designed new job advertisements that systematically varied the salience of certain aspects of police work and sent them out on postcards to more than 10,000 households across the city.

We found that postcards featuring traditional police recruitment messages about ‘serving’ and ‘having an impact’ did not attract any more applicants than not sending the postcard at all. In contrast, postcards that emphasised the ‘challenging’ nature or career prospects of the job tripled the number of applicants.

Women and people of colour were also most affected by these behavioural-insights informed postcards. This study demonstrates how small changes to the ‘signals’ given out by employers can not only increase the number of applications for a job vacancy, but also change the demographic makeup of the applicant pool.

**Police recruitment practices in the United States**

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Reduce employers’ biases in hiring

To respond to a job ad, job seekers are often asked to submit a CV and a cover letter, but the information provided in an applicant’s resume can often cause hiring managers to make biased judgements, reducing their ability to hire the best candidates.

In a field experiment, Harvard University researchers sent 5,000 resumes to employers in Boston and Chicago, varying only the name of the applicant to sound traditionally African-American or white. Resumes with white-sounding names were 50% more likely to be called for an interview than equivalent resumes with an African-American name, an advantage equivalent to approximately 8 additional years of working experience. This gap also increased with resume quality – high quality resumes were more beneficial for applicants with white names, suggesting that white applicants were judged more on their merits than black applicants. Name-based discrimination is persistent, even when the applicant’s resume signals English language proficiency, or when the vacant position relies heavily on unrelated skills. Other studies showed that applicants face more barriers to finding a job if they have Middle-Eastern names in the US, ‘foreign-sounding’ names in Canada, and Middle-Eastern, Chinese, and Indigenous names in Australia. Policymakers can design more inclusive and merit-based labour markets by encouraging employers to pre-empt biases with small changes to their recruitment processes, which in turn would help them identify the true best candidate for the role.

Case study 5 on page 17 shows the benefits this approach can bring, as tested on a platform initially developed by BIT.

Encourage employers to employ disadvantaged job seekers

Names are not the only cue that can bias recruiters. In a project in Argentina, BIT found that job seekers from a relatively low income area are often rejected from employment on the basis of the address on their CV.

Another negative signal that job seekers can often struggle to address in their job applications is large gaps in their employment history, which is a problem particularly for those who have been on income support for extended periods. This may be because employers assume that the applicant has been interviewed by other companies, and if they were qualified, they would already have been hired. To help overcome this barrier, governments often offer financial incentives to hire disadvantaged job seekers, such as wage subsidies. In these cases, understanding employers’ biases is important to the effectiveness of the programmes. In case study 6 on page 18 we show how we used behaviourally-informed solutions to overcome these barriers in a trial in Australia.

Prevent unemployment by improving job flexibility

The challenges of being out of work frequently or for extended periods of time do not only affect job seekers on income support, but also workers who might have been out of a job due to family commitments (e.g. maternity or carer’s leave), physical or mental health issues, or those trying to enter the labour market for the first time. Evidence suggests that longer employment contracts, even in the case of temporary jobs, lead to a virtuous cycle with increased probabilities of permanent employment. Understanding how these transitions in and out of work occur can inform policies to make work arrangements more flexible, improving long-term outcomes. In a trial in Australia we applied a set of interventions to increase the return to work rate of injured teachers, as summarised in case study 7 on page 19.

This trial demonstrates how closer collaboration between public and private sector organisations can help identify cost-effective solutions to improve job retention rates, often without the need for more radical policy changes. By taking a more human-centred approach, employment policies can be more inclusive and attentive to the specific needs of the worker or the job seeker.
Applied is an evidence-based online recruitment platform that was initially developed by BIT, which has now spun out as its own business. It is designed to overcome key biases in the hiring process by, for example, anonymising candidate applications, having assessors focus on their skills not their profile, and reshaping how assessors review candidates to mitigate contextual noise and groupthink. It also helps to make job descriptions more inclusive by removing gendered language. Experiments done on the platform have shown positive results. Comparing the performance in the job interview of a pool of applicants who applied through either Applied or by simply submitting their CV, we found that there was a positive, statistically significant correlation between how candidates performed in the Applied sift and their scores in the interview, but no discernible correlation between the quality of their CV and the interview. It seemed like having an impressive CV wasn’t a good predictor of being successful in relevant job selection tasks.

Equally important, unsuccessful candidates receive automatic feedback on their application from Applied. This feedback mechanism can dramatically improve their performance in future job applications.

Providing feedback to unsuccessful applicants, by showing them how they compared to others who applied, can help them identify their strengths and weaknesses. This can help them improve, reducing the time spent applying for unsuitable jobs and improving the quality of future applications.

“Thank you, one of the worst parts of not being chosen for a position is not understanding why or how I can improve myself. This is incredibly useful feedback.” – Job Applicant

Meta-analyses have found that changing implicit biases is not only very difficult, but rarely leads to any meaningful change in behaviour. Behavioural-insights informed platforms like Applied, which remove biasing factors from the hiring process, instead force employers to consider only relevant aspects of a job seeker’s application. The use of Applied is supported by other studies demonstrating that in some job applications bias against female and non-White job seekers can be controlled by removing identifying information.28

**Relationship between Applied and CV scores, and final interview score (n=160)**

![Graph showing relationship between Applied and CV scores, and final interview score](image-url)
In 2016, BIT and the Australia Department of Jobs and Small Business ran a trial to improve the uptake of wage subsidies. During the period of the trial, Australian businesses could receive a wage subsidy of up to AUD$6,500 for hiring eligible job seekers. Despite the availability of incentives, use was relatively low. Our fieldwork found that this was driven by a series of behavioural bottlenecks from both employers and providers.

Both employers and job seekers reported concerns with the use of the incentive: it appeared that offering the subsidy was sometimes perceived by a potential employer that the job seeker was of poor quality. This was exacerbated by the forms that employers were asked to complete, which had unattractive titles such as, "Long-term Unemployment and Indigenous Wage Subsidy Agreement". This prompted employers to wonder why the job seeker’s wage is subsidised, and to be wary.

To help overcome these biases, we worked with the Australian Department of Jobs and Small Business (then the Department of Employment) and a job service provider to run an RCT in South West Sydney to increase subsidy uptake by redesigning elements of the promotional and administrative processes. We paid particular attention to opportunities for bias, and for example, removed terms such as ‘young parent’ and ‘long-term unemployed’ from contract titles, and made it easier for employers to sign the agreements with an electronic signature.

Our intervention positively contributed to an increase in uptake of the subsidies among 620 employers in the trial, and significantly reduced the time frontline staff spent administering the program. This shows how behavioural insights can complement traditional policy levers, such as financial incentives, to increase their effectiveness and improve employment outcomes.
In another trial in Australia, we collaborated with the New South Wales Department of Education, the Department of Premier and Cabinet, and the insurance company Allianz to help injured teachers return to work faster.

In our fieldwork, we observed various issues with the return to work processes and policies:

- Both of the Departments and Allianz required the claimant’s doctor to provide the same information in different forms.
- Claimants received duplicate information from Allianz and the Department, and some letters would cite a piece of legislation with no further explanation.
- Communications focused on the ‘injured’ state of the claimant, potentially triggering a feeling of helplessness.33

In addition, teachers were also relatively passive throughout the process – for example, they played a very limited role in the development of their injury management plan with their allocated case manager.

To address these issues, we collaborated with Allianz and the Departments on improving communications and service delivery. Claimants in a treatment group received a single co-branded personalised letter, with clear instructions that shifted the focus from injury to recovery (e.g. ‘injury management’ became ‘help you get back to work as quickly and safely as possible’). They further simplified the process by holding joint teleconference calls with the treating doctor. We also involved the worker in the creation of the injury management plan, which included a commitment device that encouraged planning.

Our intervention (n= 1,403) was successful, with workers in the treatment group returning to work 27% faster than those in the control group in the first 90 days following the claim. This trial shows how working with different stakeholders to simplify processes and improving goal setting can help injured workers transition back to full employment. Furthermore, a simplified and more human-centred approach also helped case managers and injured workers to shift from compliance focus to goal oriented collaboration.

“I’m noticing from my conversations with injured workers that they actually give us some great information that we can use as goals and actions without even asking for them, we just need to listen more. The new process has really opened my mind and ears up to what these workers say and how we can work with them” – Case Manager

27% faster return to work by teachers in the trial
Job services

Design the right mix of financial and social incentives for employment advisors, and leverage on market design principles to encourage greater openness in the job service market.

Job seekers and employers are not the only players in a labour market. A number of intermediaries also play a crucial role in connecting the demand and supply of employment in an economy. These include online job search platforms, job service providers, government agencies, NGOs and education providers.

Among these, job service providers, whether government agencies (often known as job centres) or contracted organisations (job service providers), are often responsible for the implementation of government policies to help unemployed citizens find work. Their role is therefore crucial, but despite this, it probably hasn’t received enough attention from researchers and policymakers.

We argue that a better understanding of the behaviour of staff at job centres and job service providers can have important implications for labour market reforms. In the same way that teachers are the necessary intermediaries to implement national curriculum reforms, employment advisors can be the key to achieve the intended objectives of labour market policies.

Key lessons learned:

1. **The motivation of job centre staff matters**: skills and motivation of staff at employment agencies can influence the effectiveness of employment policies.

2. **Greater collaboration among job service providers is beneficial**: it is important to consider the right balance of competition and collaboration among job service providers, as well as their social and financial incentives to implement policies.

3. **Market design principles can improve matching**: governments can help create platforms for employers and job seekers to meet and match in a thick and safe marketplace.
**Motivate job service provider staff**

The efficacy of interventions aimed at improving employment outcomes depends on employment advisors and other employees at job centres. If they are averse to a new process, it is unlikely it will be implemented properly and sustainably, reducing the likelihood of success. We therefore need to understand how our interventions affect job advisors’ wellbeing and job satisfaction.

Recalling our trial in Loughton in the UK (see case study 1 on page 8), we asked job centre staff to complete a short survey about their job satisfaction before and after the trial. The survey suggested that the intervention improved not just employment outcomes for clients, but also staff happiness. We recorded positive directional trends around workers’ anxiety, engagement and life satisfaction, and perceptions that their jobs were worthwhile.

This suggests that simplifying processes and increasing job-related support for job seekers may also benefit employment advisors. This may be because their roles changed from being heavily administrative, to more social-outcome focused, reflecting the original purpose of their roles.

Happier employment advisors may also benefit job seekers. Other studies found that experiences of ‘incivility’ can negatively affect job-search self-efficacy, reducing motivation, and therefore time and effort looking for work. Preventing such negative experiences from happening on the front line may go a long way to maintaining job seeker motivation.

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**Benefiting job seekers and employment advisors – survey results from the Loughton trial**

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Job motivation also means higher productivity. In the case of frontline staff at job centres, this can translate into better outcomes for job seekers. Employment advisors are professionals driven by intrinsic motives, such as the possibility to help unemployed fellow citizens. However, it can often be hard for an employment advisor to understand the extent to which they make a difference to a job seeker’s life, and it is likely that negative experiences with some difficult job seekers are more salient than positive results.

In partnership with the Australian Department of Jobs and Small Business and a job service provider, we devised an intervention based on the literature on employee motivation and social feedback nudges. Our intervention tested the impact of an online activity tracker that allowed the job service provider staff to record their job placement activities. Throughout the trial, participants also received weekly feedback about how they performed relative to a target.

In the first phase, we randomly allocated whole job sites to receive the tracker. We found that the tracker successfully increased job placements by encouraging employment advisors to increase their work effort. Sites whose staff received an activity tracker placed more job seekers (1.8% vs 2.1%) into employment. This equates to approximately 440 more job placements over the 8 weeks of the trial.

In the second phase, we tested different types of individualised weekly feedback. One group received a weekly email update on their performance; another received ‘comparative feedback’ – that is, their performance compared to the top-performer in their area; and a final group received an email including comparative feedback that was sent from their line manager.

Interestingly, the group that received weekly feedback that contained only their individual performance engaged in the most work-related activities. This conflicts with perceptions that close oversight is sometimes an effective way to motivate employees, especially when they might be driven by intrinsic motives.

As usage was optional, we found that only around 30% of staff continuously used the tracker. Those sites that had a higher proportion of people using the tracker recorded better outcomes. This is consistent with previous studies on the role of self-monitoring on job performance, suggesting that the right mix of incentives can help motivate employment advisors.
Improve the design of the job service market

The labour market is a two-sided market in which agents cannot just ‘buy’ what they need. Instead, ‘sellers’ and ‘buyers’ must choose each other. Also called ‘matching markets’, these markets have been modelled and optimised in systems where exchanging money would be impossible, such as live kidney donation, and placements in high schools. This approach is therefore relevant to job centres that could do more to improve the quality of the matches between job seekers and vacancies. However, friction can arise if job centres operate in a competitive environment, or when technological and logistical barriers prevent proper exchange of information to identify the best matches.

In some countries like Australia, job service providers operate in a competitive environment where they are paid based on sustainable job placements that they have successfully secured. This system has the advantage of encouraging providers to seek more vacancies for the job seekers in their caseload, but it might make collaboration among providers less attractive. This means that the most suitable job seeker for a vacancy might be registered with another provider, but the lack of incentives to collaborate prevent this match from happening.

Introducing a financial incentive to collaborate, however, can be risky: some providers might collude in an otherwise competitive market, or worse, it can introduce a perverse incentive to share only difficult to place job seekers or hard to fill vacancies. Because providers also work hard to secure new partnerships with employers, they value vacancies more than job seekers, who are instead automatically allocated to them by the government agency. The experiment presented in case study 10 on page 24 shows how a rating system can increase trust among providers without affecting the competitive nature of the market.

Like other matching markets, the role played by the ‘matchmaker’ is crucial to connect both sides in a safe, transparent and useful way. To paraphrase the 2012 Economics Nobel Laureate Alvin Roth, labour markets, like other matching markets, can operate efficiently if they are:

1. **Thick** – that is, they bring together a large enough proportion of job seekers and employers to increase the likelihood of stable matches.

2. **Safe** – that is, job centres and employers need to feel comfortable in sharing important information, as shown in our case study in Australia.

3. **Congestion-free** – that is, both employers and job seekers need to have enough time and a user-friendly choice architecture, to make the right decisions of which jobs to apply for or which job seekers to hire.

Our research suggests that employment policies around the world can pay more attention to these market rules, and be more focused on improving the matching process, linking job seekers and employers. Our trials and fieldwork research show that job centre staff play a key role in this matching process, but that this topic has not perhaps received enough attention.
Collaboration and information sharing about vacancies and job seekers among providers can only be effective in the presence of clear financial incentives and trust. To understand how these incentives can complement each other, we worked with Monash University and the Australian Department of Jobs and Small Business to recruit 500 employment advisors across multiple job service providers in Australia to take part in an online framed field experiment.

In this experiment, each advisor was asked to complete six tasks that reflected scenarios that might arise in their daily job. In each task, they could earn real money by either keeping a job seeker or a vacancy, or by sharing it with a competitor. When they shared a job seeker, they also had the opportunity to ‘steal’ the employer from the competitor to place more job seekers of their own case load in the future.

We observed that a financial incentive to collaborate, in the form of a 50/50 split in reward for placing a job seeker, increased collaboration. However, this incentive also led more providers to ‘steal’ employers, suggesting that financial incentives could be only a temporary solution.

To promote trust among providers, we tested the impact of social incentives in the form of a feedback mechanism, where job advisors could rate each other based on previous collaborations. With this information available, providers were less likely to ‘steal’ employers, but still equally likely to collaborate. This suggests that in order to improve how markets function, such as the market for employment services, it is important to take into account the behaviour of all stakeholders, including frontline staff. Our experiments also showed how financial and social incentives can be strategic complements to ensure sustainable employment outcomes.
This report shows how behavioural insights and robust evaluation can improve employment policy. This evidence points to the importance of designing policies that take into account the decision-making of all key players: job seekers, employers, and job centre (or job service providers) staff. A better understanding of the behaviour of these three actors, and how they interact, will help governments design more cost-effective policies that can complement, or sometimes substitute, more radical labour reforms.

Whilst many advanced economies are still recovering from the global financial crisis, working to address issues of unemployment, underemployment, and low pay, new challenges are arising from technological advancements, such as automation, and new forms of labour, such as the gig economy, that are reshaping the way we live and work. Looking forward, we see three areas as vital to improve employment policy and create better functioning labour markets.

First, the use of experimentation in policymaking should increase.
The labour market is changing quickly. Policymakers need to take a proactive approach to understanding and managing change. This requires building experimentation into policy design, iterating on policy and, once proven, taking successful interventions to scale. Importantly, as a major employer, government itself can break new ground and trial approaches aimed at improving access to high quality work. This might include, for example, encouraging new workplace practices (like flexible working) or the introduction of standardised quality metrics (such as measures of work-life balance and opportunities for progression) on online job boards that allow job seekers to compare employers before they apply.

Second, data should be used to better target policy and empower job seekers and workers.
Governments can explore further collaboration with private sector organisations to increase access to high quality jobs. For example, data from online job boards could be used to identify the changing patterns of local labour markets and users’ job search behaviours. Similarly, new data on employer performance based on clear quality indicators should be collected to empower job seekers and workers with valuable information for their job search.

Third, policymakers should proactively work to build the skills and resilience of workers.
Advanced economies are struggling to deal with the consequences of globalisation and rapidly changing technology. Behavioural science can help address this challenge in three areas: (i) promoting an internal mindshift among job seekers towards new jobs or careers; (ii) broadening the search for opportunities of job seekers; and (iii) motivating job seekers and employers to engage in the practical steps needed to improve skills and resilience.

In sum, this report aims to illustrate how behavioural science can shape employment policies and labour markets. With labour markets evolving rapidly, the time is right to ensure that policy makers adopt new tools and approaches that will mean all citizens have the opportunity to find meaningful work.


30 There is evidence that wage subsidies can have a ‘crowding-out’ effect on other applicants in favour of subsidised applicants (Card, D., Kluve, J., & Weber, A. (2010). Active labour market policy evaluations: A metaanalysis. The Economic Journal, 120(548), F452-F477.). However, in Australia, wage subsidy eligibility criteria are designed to avoid such unintended negative consequences.


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