

A stocktake of applications of behavioural insights to employment policies in G20 countries

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1. Introduction

Policy makers often assume that humans make “rational” decisions and build policy based on this model. However, social context and behavioural biases systematically influence the way people make decisions and often counter to the standard model of rational decision-making. A classic example comes from reforms of private-pension arrangements. When access to employer-provided retirement pensions requires workers to opt in, i.e. make the decision to enrol and fill in the necessary forms, take up is often much lower than what is expected given the potential benefits that would accrue to workers in retirement. This reflects not only myopia in correctly appreciating the long-term benefits of decisions taken today but also some inertia in people’s decision to change their situation if there are some costs involved to do so, even if small. Consequently, based on behavioural insights (BI); reforms to employer-provided pensions were carried out in several countries to shift from an opt-in model to an opt-out model, i.e. workers are automatically enrolled in these schemes but can choose to opt out. This simple and very low-cost type of reform has been very successful in increasing pension coverage rates.

Therefore, policy makers around the world are turning to BI for a clear methodology that generates evidence on how people “actually” behave and on which to base policy reform. The field of BI is fundamentally about analysing policy problems based on lessons derived from the behavioural and social sciences, collecting evidence of which solutions works and which do not, and applying these findings to improving the outcomes of public policy.

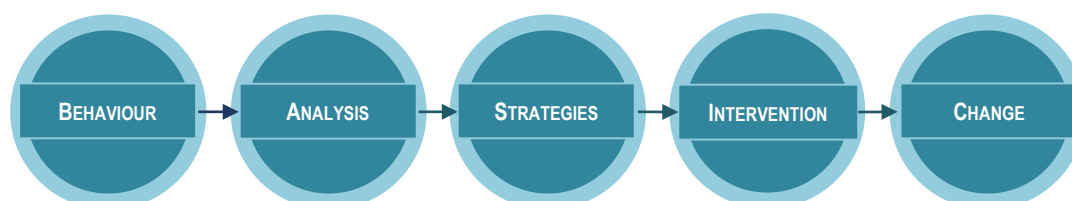
The purpose of this report is to provide an overview of how BI is being used in G20 countries to design and evaluate employment policies. It is still an undocumented area in many G20 countries and so, hopefully, this report will provide useful lessons and valuable mutual learning for policy makers to compare, contrast and be inspired by policy practice in other countries. The rest of the report is structured as follows: Section 2 provides a brief introduction to the BI methodology; Section 3 gives an overview of the BI national case studies that were collected for this report; Section 4 discusses institutional arrangements to manage BI interventions and ethical issues; and Section 5 discusses international networks to provide support to governments in applying behavioural insights

2. The BI approach to policy making

A key feature of the BI methodology is its empirical approach, driven by experimentation and piloting. This allows policy makers to experiment and test solutions at smaller scale to determine the best course of action. This also allows testing multiple solutions at once before committing resources to implementing full policy solutions that would need to be revisited later.

Common elements of how BI is used in designing and evaluating government policy measures are captured in what the OECD has called the BASIC process (OECD, 2019^[1]) This consist of analysing Behaviour, conducting an Analysis, developing Strategies, testing them with Interventions, and scaling up the results for policy Change (Figure 1).

Figure 1. The BASIC Framework



Source: OECD (2019^[1]). *Tools and Ethics for Applied Behavioural Insights: The BASIC Toolkit*, OECD Publishing, Paris, <https://doi.org/10.1787/9ea76a8f-en>.

By understanding how and under what circumstances BI can be applied to cause behaviour change, policymakers are far more likely to design and deliver more effective policies. The BASIC approach to policy making is illustrated in Table 1 using the pension reform example discussed above.

Table 1. Applying BASIC to increasing enrolment in pension plans

Stage	Description	Example
Behaviour	Identify and better understand the policy problem.	Increase pension savings by encouraging more citizens to enrol in pension plans.
Analysis	Review the available evidence to identify the behavioural drivers of the problem.	Individuals tend to stick with defaults and choose inaction over action.
Strategy	Translate the analysis to behaviourally informed strategies.	Change the default. Automatically enrol individuals into pension plans and allow them to opt-out.
Intervention	Design and implement an intervention to test which strategy best addresses the problem.	Test whether allowing individuals to opt-out increases pension savings rather than the current practice of opt-in.
Change	Develop plans to scale and sustain behaviour.	Share results with citizens, apply findings to system-wide reminders and monitor long-term consequences of the intervention.

Source: Adapted from Thaler, R.H. and S. Benartzi (2004), "Save more tomorrow: Using behavioural economics to increase employee saving", *Journal of Political Economy*, Vol. 112(1), University of Chicago.

3. Case studies of BI to employment policy in G20 countries

Annex A of this report contains an inventory of recent country initiatives (country case studies) using BI in the design and evaluation of employment policy measures. For each case study a common structure is used which summarises the **problem** being addressed, the **intervention** that was carried out, the **key results** and the **institutional set-up** involved. These case studies were compiled based on two main sources. The first is the OECD report based on an extensive international survey of BI initiatives across a range of government policy areas (OECD, 2017^[2]). The second source is the G20 BI Survey carried out under the Saudi Presidency expressly for collecting information on recent BI initiatives in employment policy in G20 countries (see Annex B for the survey questionnaire). The support of country officials in supplying valuable information on their country's BI initiatives is greatly appreciated.

Summary of BI case studies

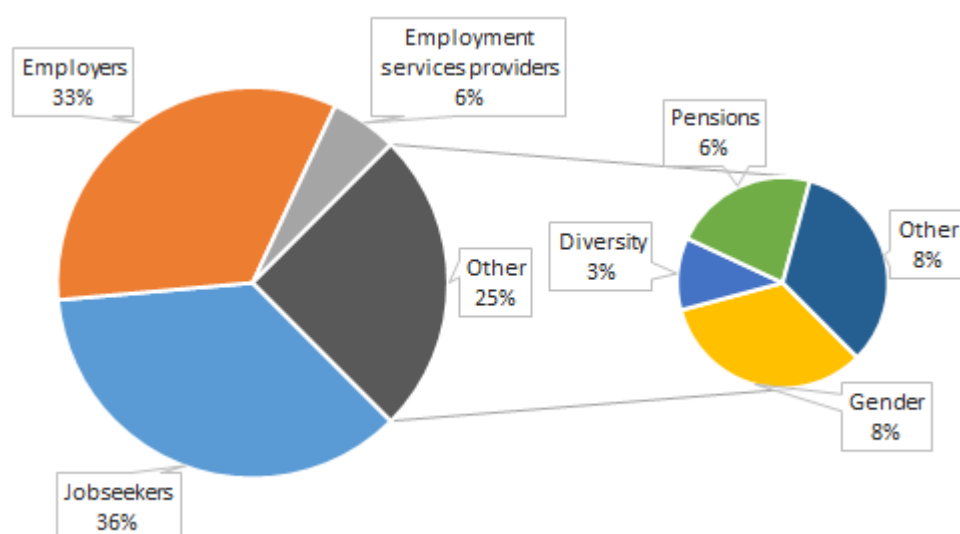
Altogether, 41 case studies are covered in Annex A.¹ Of these, 35 describe interventions based on BI that were designed to change the behaviour of labour market actors. These have been grouped under four headings according to the target group of the intervention (with the percentage share of the replies given in parentheses after each group):

- Jobseekers (36%).
- Employers (33%).
- Public and private providers of employment services (6%).
- Other groups (25%).

¹ Some other examples of interventions were received from countries but not included in the annex because they referred to interventions in other policy areas outside of employment policy or did not appear to involve BI explicitly in their design.

Figure 2. Distribution of BI case studies by target group

Percentages



Note: One case study for Indonesia includes interventions targeted at foreign workers and employers recruiting them. Therefore, it has been counted as one intervention under each group/ (i.e. two interventions in total).

Source: (OECD, 2017^[2]) and G20 Survey of BI Applications to Employment Policy.

As shown in Figure 1, the largest share of case studies related to measures targeted at **jobseekers** to improve their job search behaviour and ultimately their employment chances. These include:

- Helping job seekers to search more effectively for jobs and improve job match (Australia, Canada, China, Indonesia, Singapore, United Kingdom).
- Encouraging participation in re-employment programmes (United States).
- Targeted employment training measures for rural poor (China).
- Simplifying administrative procedures for foreign workers (Indonesia).

A number of common threads in these interventions include focusing on the needs of job seekers rather than on the administrative processes, providing tailored assistance based on these needs, and making communication simple and clear.

Interventions target at **employers** comprise the next largest group and mainly consisted of measures to change their hiring practices. These include:

- Addressing discriminatory behaviour based on gender or ethnic background (France, Saudi Arabia).
- Improving take-up of wage subsidies (Australia)
- Simplifying administrative procedures for recruiting foreign workers (Indonesia).

Several interventions also seek to tackle gender equality more generally in employment including in pay and career progression. This includes through establishing a gender equality index to benchmark employer performance (France, Saudi Arabia).

Some interventions also seek to improve occupational, health and safety at workplaces (Singapore and the United States) or to improve the collection of employer levies (Singapore).

One key message emerging from these interventions targeted at employers is that greater diversity in employer recruitment can be achieved through eliminating references to age, gender and ethnic background in CVs and vacancies. It can also be achieved through peer pressure (e.g. benchmarking of company performance on gender equality). The other messages concern simpler and clearer communications with employers about the benefits of measures such as wage subsidies and complying with occupational health and safety standards and simplifying the associated administrative procedures.

There were relative few examples of measures based on BI to improve the performance of **public or private providers of employment services**. Australia has sought to improve collaboration and information sharing about vacancies across private providers who are responsible for all employment services delivered to job seekers. Russia is experimenting with a new model of public employment services centres.

These interventions point to the importance of improving the motivation of staff of employment services, focusing their efforts on helping job seekers rather than on administrative procedures, and coordinating services and sharing information on vacancies and what works across providers (or agencies).

A number of other BI interventions seek to change the behaviour of **other groups** in the labour market. These include measures to:

- Tackle gender stereotypes and overcome gender barriers to labour market participation (Saudi Arabia)
- Increase take-up of private pensions (United Kingdom, United States)/
- Improve completion of adult literacy and numeracy programmes (United Kingdom).
- Encourage youth to participate in community after-school centres (South Africa).

A final group (Other BI-informed studies) consists of six country case studies where no BI intervention was carried out but BI was nevertheless used to collect information for designing interventions in the labour market. These studies included:

- Survey to determine risk and time preferences of jobseekers (France).
- Survey to understand perceived attitudes and barriers of women to work (Saudi Arabia).
- Quantitative and qualitative analysis to better understand care needs and how to address them (United Kingdom)
- Provision of guidance for managing changes in working conditions and work organisation in a changing world of work (France).
- Survey to understand employer expectations and experiences vis-à-vis hiring of young graduates (Saudi Arabia).
- Simplifying administrative procedures and documents (France)

Potential importance of BI in responding to current COVID-19 pandemic

As the positive results in several of the case studies suggest, BI can be a powerful tool for improving labour market outcomes. In some cases this can be achieved at relatively little costs such as re-wording information provided to employers about wage subsidies or removing names and indication of gender from CVs in the hiring process. In other cases, they may imply additional resources such as to provide more personalised counselling for job seekers but ultimately lead to more cost-effective interventions.

None of the case studies collected for this report cover policy responses to the COVID-19 pandemic, given that it is still very recent. However, the results of several BI experiments and interventions reported by the

Behavioural Insights Team (BIT) suggests that there is a strong role for BI in designing measures to mitigate the health and labour market consequences of the pandemic.²

In particular, it is necessary to take into account how people process and respond to the content, framing and presentation of information. This is particularly relevant in the current circumstances given the importance of current public information campaigns to contain the spread of COVID-19 through messages to stay at home and on social distancing and handwashing as well as advice on when and how to contact health services.

There are also important insights that behavioural economics can give employers about managing and supporting their staff during the COVID-19 epidemic. This includes setting an example by for instance working from home instead of at the office, It also involves clear and simple guidance or rules for teleworking as well as facilitating telework, health and safety at work, and taking into account the additional flexibility needed in terms of managing other family responsibilities.³

4. Institutional arrangements and ethical issues

Institutional set up

The case studies in this report point to a wide range of institutional arrangements for using BI to drive the design and evaluation of employment policies. This is consistent with the findings of the OECD's previous international survey of BI initiatives across a range of government policy areas (OECD, 2017_[2]). Based on that survey, three institutional models were identified:

- **Central steering model:** specialised units usually within the Centre of Government (for example, chancellery, president's office, prime minister's or cabinet office) focusing fully or in part on applying, supporting and advocating the use of BI across government; functions that are usually paired with BI are strategic foresight and planning and fostering innovation across the public sector.
- **Specialised model:** existing units within a department or specialised agency at the central government or local government level applying BI.
- **Project model:** BI are used for specific projects and initiatives through specialised teams

These models are not mutually exclusive. For example, the United Kingdom appears to have evolved from a central steering model established with BIT in Cabinet Office in 2010, to a more diffuse model when BIT was moved partly outside of government and providing support to government departments and agencies that have their own BI units or specialised teams. Australia has moved in the opposite direction, starting with diffuse teams in various departments and agencies to a diffuse-plus-central-steering model when different departments came together to resource the BETA unit in the Department of the Prime Minister. Other models include Canada, which has central, diffuse and project models at both the federal and provincial levels, as well as Singapore which has a network of practitioners who support and co-ordinate activities or Germany and the European Commission where behavioural insights is part of strategic foresight within the Chancellery and the Commission's Joint Research Centre, respectively.

² See BIT Blog 23 March 2020. <https://www.bi.team/blogs/bright-infographics-and-minimal-text-make-hand-washing-posters-most-effective/>; and BIT Blog 31 March 2020. <https://www.bi.team/blogs/young-men-are-hardest-to-engage-on-coronavirus-guidance/>.

³ See BIT Blog 12 March 2020. <https://www.bi.team/blogs/covid-19-the-role-of-corporations-in-spreading-or-containing-the-pandemic/>; and BIT Blog 1 April March 2020. <https://www.bi.team/blogs/supporting-employers-and-workers-through-the-pandemic/>.

Ethical issues

Applying BI to public policy can raise specific ethical concerns as BI uses data on individual or group behaviours, as well as experimental methods for testing these theories at small scales before implementing more broadly. As a result, issues related to privacy, consent or the ethics of applying certain solutions to only some groups arise.

While many government interventions raise similar concerns, and not just those using BI, there is a clear need for guidelines and mechanisms to help decide the 'right' course of action when engaging with behaviourally-informed policy processes. Therefore, the OECD has developed a set of guidelines for applying BI responsibly as part of its BASIC Toolkit (see Box 1 for more details)

Box 1. Guidelines for applying BI responsibly

1. General guidelines
 - Always conduct an ethical evaluation of behaviourally informed interventions
 - Public acceptance of BI does not make it always ethically permissible.
 - Carefully consider issues related to consent and awareness
2. Before beginning an intervention
 - Consider establishing an ethical review board
 - Ethical supervision of data collection, use and storage
 - Observe existing ethical guidelines and codes of conduct
3. Specific guidelines by each stage of BASIC (behaviour, analysis, strategy, intervention and change)

Source: OECD (2019^[1]). *Tools and Ethics for Applied Behavioural Insights: The BASIC Toolkit*, OECD Publishing, Paris, <https://doi.org/10.1787/9ea76a8f-en>

5. Providing support to governments in applying behavioural insights

The growth in the use of BI in the design and evaluation of government policy and associated research have spawned a number of networks and communities of practice to share know-how and the results of BI-led initiatives and experiments. The OECD has provided support to various policy networks each applying BI to public policy (see Chapter 1 of OECD (2017^[3])). Each of these has been engaged in hosting events for BI practitioners and policy makers and in supporting research and experimentation in their own policy context.

One such network is managed by the OECD Public Governance Directorate, which has brought together community members from many different policy backgrounds to share new initiatives and good practices, as well as to identify challenges and opportunities for expanding the BI community. For more information, see <http://www.oecd.org/gov/regulatory-policy/behavioural-insights-events.htm>.

More specialised networks have also grown out of this broad community of policy makers, BI practitioners and national and international researchers. One such network is the Financial and Tax Authorities Community of Interest on BI, which seeks to bring together practitioners and policy makers focusing on these policy areas in a dedicated meeting format.

These communities provide an opportunity to understand what tools or research is needed and support the development and expansion of the use of BI in policy making. It is out of these networks that the OECD

(2017^[3]) survey and case study collection and OECD (2019^[1]) BASIC toolkit and ethical guidelines were developed.

Currently, there is no dedicated network on the use of BI for employment policy despite the key importance of BI for a policy area that is highly focused on the decisions that people, employers and public and private employment services are making every day with respect to work and recruitment choices. This would seem to be an opportune area for creating such a network. However, the lessons learned from existing BI networks for ensuring the usefulness and sustainability of such a network include:

- **Demand led:** BI networks seem to function well when there is clear interest from members to exchange ideas and engage with new ways of thinking.
- **Plan for continuity:** One-off meetings can do well to spur interest amongst members, but longevity relies on a clear idea of how the network will continue and “remain relevant” over the years. This includes having the resources and support necessary, for example, from an international organisation, to operate year to year.
- **Consider leadership/organisation:** Operating a network can require an investment of time and build off personal connections to broaden its membership. Having a dedicated but small group of interested members as a bureau or steering group can help serve as champions and provide advice to guide the direction network.

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Annex A: G20 BI case studies

The case studies involving interventions are grouped under four headings according to the target group of the intervention: Jobseekers; Employers; Public and private providers of employment services; and Other groups. A fifth heading (Other BI-informed studies) covers a small number of case studies where no BI intervention was carried out but BI was nevertheless used to collect information for designing interventions in the labour market.

Job seekers

Job search assistance

Snapshot

Country	Australia – Sydney
Target group	Job search assistance and Australian Government employment services
Institution	Former Department of Jobs and Small Business; Applied and Behavioural Economics Section
Start of intervention	May 2017
End of intervention	August 2017
Objective	Improve the quality of job search
Method	An RCT was conducted and randomisation was conducted the job centre site level
Application	Online job search resource trial

Problem

Need to strengthen assistance to job seekers and job search outcomes.

Intervention

Tested whether creating a website (called 'My Job Goals') that compiled a range of job search information into an easy and accessible format could reduce barriers and improve the job search process. It was a simple self-help website, which included resources, such as a resume template and advice on how to customize the search and a cover letter template and advice on how to personalise it.

The intervention used previous fieldwork, literature review and workshops with the partner employment services provider, Advanced Personnel Management (APM), to co-design the trial solutions. Some of the behaviours identified included "superstitious conditioning" (i.e., the phenomenon whereby individuals attach causality to events inappropriately because they happened to be followed by a good outcome once or twice, and can develop when real feedback is unavailable). They also included the "overconfidence effect" (whereby a person's subjective confidence in their judgements is greater than the objective accuracy of those judgements).

Key results and lessons

At the time of writing evaluation remains in progress. See some early findings reported in: <https://www.bi.team/wp-content/uploads/2018/11/TheBehaviouralInsightsTeam-LabourMarketsReport.pdf>

Institutional set-up for interventions using BI

The RCT was run as a partnership between the department, BIT Australia and the job active provider APM.

Job Seeker Survey*Snapshot*

Country	Australia
Target group	Former Indigenous and young job seekers whose response rates to the Job Seeker Survey are generally lower than other groups of job seekers
Institution	Former Department of Jobs and Small Business; Applied and Behavioural Economics Section
Start of intervention	September 2016
End of intervention	December 2016
Objective	Using behavioural economics to improve the response rates of the Job Seeker Survey
Method	Randomised Controlled Trial at the individual level
Application	Methods to improve survey response rates had been used previously in different settings but not in the context of this trial with job seekers in Australian Government employment services.

Problem

Traditionally, the overall response rate of job seekers to the Job Seeker Survey has been fairly high. However, the response rates of former Indigenous and young job seekers are generally lower than other groups of job seekers.

Intervention

The intervention builds on qualitative research with job seekers and departmental stakeholders.

The behaviours identified as part of the trial were Cognitive load (which refers to the total amount of mental activity imposed on working memory in any one instant), Loss aversion (which refers to people's tendency to prefer avoiding losses to acquiring equivalent gains), and Altruism (acting with the goal of benefiting another). In this setting, the initiative includes four types of intervention:

1. Modifying the original invitation email and letter to the survey to make it attractive and simple to understand;
2. Intervention 1 + applying the behavioural theory of loss aversion by highlighting in the email and letter the potential for a follow up phone call;
3. Intervention 1 + applying the behavioural theory of altruism by highlighting in the email and letter a \$5 donation to charity;
4. Intervention 1 + applying the behavioural theory of altruism by highlighting in the email and letter a donation to charity of an unspecified amount.

Key results and lessons

Although results are in the process of write up, qualitative indications are that identification of cognitive load led to the simplification of letter and making it more attractive; identification of loss aversion led to highlighting in the email and letter the potential for a follow up phone call. Finally, identification of altruism led to highlight in the email and letter the donations to charity.

Early findings reported in:

<https://www.bi.team/wp-content/uploads/2018/11/TheBehaviouralInsightsTeam-LabourMarketsReport.pdf>

Improving survey response rates to evaluate work experience programme for youth

Snapshot

Country	Canada
Sector	Employment and Labour
Institution	Employment and Social Development Canada (ESDC)
Start of intervention	September 2017
End of intervention	December 2017
Objective	Improve response rates to outcome survey of participants in Canada Summer Jobs programme.
Method	Randomised Controlled Trials testing and comparing various BI informed invitation emails to take the survey.
Application	Results from the trial have raised response rates to the survey and thereby improved the basis for the future design of the Summer Jobs programme to provide young people with work experiences to help them transition into the labour market.

Problem

As part of the Youth Employment Strategy (YES) , the Canada Summer Jobs programme aims to create quality summer work experiences for young people aged 15-30 years to help them transition into the labour market. In 2015, an evaluation survey obtained low response rates among youth following their placements, which made evaluation and potential improvements to the programme challenging. The programme was evaluated through phone interviews with participants, which was costly and only covered a very small sample.

Intervention

BI was applied using various methods and processes. This included conducting a literature review and research to understand the Canada Summer Jobs history, its potential barriers, enablers for survey completion, as well as lessons learned from related international programs.

Based on the information obtained, the BI team designing the intervention recommended doing an email based survey which would provide more robust data on reasons for the low response rates from youth and different ways to increase their response rates. The BI team designed several versions of email invitations with different messaging approaches using behavioural insights principles. These emails were used in two randomised controlled trials involving the 2016 and 2017 cohorts of Canada Summer Jobs participant and inviting them to complete an online survey for the purpose of program evaluation and monitoring.

Trial 1 included nudges that highlighted prosocial motivation and deadlines. Trial 2 included nudges that highlighted social norms and deadlines. These nudges were inspired by the work of the United Kingdom (UK) BI team

Trial 1 -- Canada Summer Jobs 2016 Cohort: The intervention applied was 4 versions of BI-informed invitation email that were tested and compared to see which email would be the most effective in nudging respondents to complete the survey. All emails had clickable button requesting participants to respond to the survey:

- Emails 1, 3, and 4 included call-to-action nudges such as buttons that said "Tell us about your experience!" and similarly with email 2 which said "Complete this quick survey now!".
- Emails 3 and 4 included a statement just above the button that highlighted prosocial motivation which said "Help us improve summer job experiences for thousands of Canadian youth" and a soft deadline, "We're looking for responses by [date]".

In total, 11,120 emails were sent to participants who provided their emails to the programme. 9,542 comprised of the 4 versions of BI-informed invitation emails were successfully delivered and randomly assigned to participants. The same email reminder was sent to all groups two weeks after receiving any of the 4 versions of BI-informed invitation emails.

Trial 2 -- Canada Summer Jobs 2017 Cohort

The second trial focused on 3 versions of BI informed invitation emails that were tested and compared:

- All emails included a clickable button with a call-to-action nudge that says "Tell us about your experience!".
- Emails 1 and 2 added a nudge statement just above the button that leveraged social norms that says "Last year, 9 out of 10 Canadian youth had the opportunity to develop stronger communication skills in their Canada Summer Job".
- Emails 1 and 2 maintained similar deadline that says "We're looking for responses by [date]".
- Email 3 only included the call-to action nudge, similar to email 1 in the first trial.

In total, 9,541 e-mails were sent to participants who provided their emails to the program. 8,045 comprised of the 3 versions of BI-informed invitation emails were successfully delivered and randomly assigned to participants. The same email reminder was sent to all groups two weeks after the participants received the invitation emails.

Results and Impact

Trial 1

There were 817 participants who responded to the survey (8.5% response rate) and provided valuable feedback for the Canada Summer Jobs program.

Emails 1, 3, and 4 did not differ from one another in statistically significant ways, while e-mail 2 had a statistically significant lower response rate.

The BI inspired interventions (nudges) did not cost more to implement than the status quo (i.e., no surveys).

Trial 2

There were 1181 participants who responded to the survey (14.6% response rate).

Compared to the control email 3, highlighting social norms increased survey response rate significantly while providing a deadline decreased the response rate significantly.

Overall conclusions

An important take-away from these trials is that it's important to use a variety of methods in the exploration stage to gather various perspectives, including behavioural science literature, program expertise, and clients' perspectives. This experiment included focus groups with students working in the Innovation Lab who were the same age as Canada Summer Jobs participants. Their advice influenced the tone of the email, and perspectives on which of the BI nudges would be most effective for youth. It is equally important, to test and compare trials to ensure evidence-based results.

In addition, the time lags and gaps from completing the program and the release of survey invitations could have an impact on the response rates. For instance, the 2016 Canada Summer Jobs cohort respondents received the email inviting them to complete the survey over a year after they completed the programme, and 2015 respondents was over 2 years post completion. It is difficult to know if the time lag would have an overall positive or negative effect on response rates. Going forward, it would be best to survey the respondents soon after the summer and all at the same time to control for these effects.

Finally, it is difficult to get information about the subpopulations of youth who are participating in the Canada Summer Jobs programme, as the reported numbers are not necessarily accurate. For example, there are many reasons why youth with disability might choose not to identify as such.

Institutional set-up for interventions using BI

The Department of Employment and Social Development Canada (ESDC), the Innovation Lab (BI team) and the Skills and Employment Branch (SEB) collaborated to use and apply BI interventions to the Canada Summer Jobs Survey to increase overall response rates. The BI team's primary responsibility is to explore, use and apply BI interventions to improve government program and service outcomes as well as provide expertise in BI.

Improving the take-up of job-matching services

Snapshot

Country	Canada
Sector	Employment and Labour
Institution	Employment and Social Development Canada (ESDC)
Start of intervention	April 2015
End of intervention	February 2016
Objective	Improving the take-up of job-matching services.
Method	Weekly rotation of nudges on Job Bank Job posting pages applied to all users (750,000 per week).
Application	Re-designing the way in which the Job Match link is posted on the Job Bank's job posting pages.

Problem

How can jobs and job-seekers be better matched?

Job Match (JM) is a component of the Job Bank service, the Government of Canada's main source for jobs and labour market information across Canada. Job Match allows job seekers to find jobs that more closely fit their skills, experiences and knowledge and helps them actively connect with the right employers. To take advantage of the Job Match service, interested Canadians need to go through a two-phase process that requires them to first create an individual account and then to create their user profile.

Employment and Social Development Canada (ESDC), the department of the Government of Canada responsible for social programmes and the labour market at the federal level, found that there was a relatively low take-up of the service. In fact, at the time when this study started, approximately 50 per cent of Canadians who have created their JM account did not actually complete and activate their user profiles and therefore cannot be matched to available jobs.

Intervention

ESDC set out to test whether and to what extent **nudges** based on behavioural insights principles could be used to improve the overall take-up of the Job Match service, with a particular focus on account creation.

Staff from the Behavioural Economics and Service Innovation Research Unit of the EDSC, in close collaboration with the Skills and Employment Branch, designed an intervention which involved introducing behavioural insights principles into the Job Bank's Job Posting pages, to test whether and which nudges would be effective in influencing Job Bank users and to create a Job Match user account.

Trial 1 -- Randomised Controlled Trial to encourage jobseekers to complete their online profile on JobBank

The intervention applied 5 different emails that were tested and compared to see which email is the most effective in nudging account holders to complete their profile on the JobBank.ca website. The e-mails included nudges that were designed based on one or two BI principles:

- Call-to-action: "Connect with employers looking for your skills and experience now!"
- Framing: "Completing your Job Match profile will connect you with employers looking for your skills and experience and cut down on job search time by suggesting jobs that match your profile"
- Sense of commitment: "You are only one step away from being matched with an employer looking for your skills and experience"
- Priming/Salience: Connect with employers looking for your skills and experience!
- Social norms: "Thousands of Canadians have already completed their Job Match profiles and are being matched to new job opportunities".

The targeted population in this project are Job Match users who have incomplete profiles and therefore have not yet activated the Job Match function. A group of 3,784 users were randomly selected to be in the experiment. A base email inviting users to complete their profiles, not informed by BI, was used as the control condition.

Trial 2 -- Randomised Controlled Trial to encourage jobseekers to complete their online profile on JobBank by combining nudges

The 1st trial suggested that introducing nudges to emails sent to account holders with incomplete profiles can be an effective way for promoting the completion of their account profile. In the 2nd trial, the BI team sought to explore the impact of this approach further and to examine whether combining nudges can enhance their effectiveness.

A different group of users with incomplete profiles was identified for this trial, and they were randomly assigned to one of seven groups:

- Group 1 received no emails (the control group)
- Groups 2 to 4 received emails that were similar to those used in trial 1;
- Group 5 received both the call-to-action and the social norm nudges in the same email;
- Group 6 received both the call to action and the commitment nudges in the same email; and
- Group 7 received all three nudges (call to action, social norm, and commitment) in the same e-mail.

The targeted population in this project are Job Match users who have incomplete profiles and therefore have not yet activated the Job Match function. A group of 13,615 users were randomly selected to be in the experiment.

Trial 3 - Quasi-experiment to promote Job Match on job posting webpages.

In the 3rd trial, the BI team sought to promote Job Match on job posting webpages. This touch point was identified due to the high traffic on these pages; in particular the job postings pages were viewed around 2.4 million times every week.

The BI team aimed to test the effectiveness of different nudges in this context. The nudges were adapted from those used in the trials 1 and 2:

- Urgent call-to action, "Sign up now!"

- An urgent call-to-action paired with reframing of the Job Match benefits, "cut down on your job search time by allowing employers to find you!"
- Priming/Salience, "connect with employers looking for your skills and experience!"
- Social norm, "thousands of Canadians have already completed their Job Match profiles and are being matched to new job opportunities".

The targeted population for this trial are online job seekers who may benefit from the Job Match function. During the course of the trial, the number of sessions with job posting views was around 750,000.

A baseline control message was presented for 4 weeks that says "Sign up to Job Match". BI principles were not explicitly considered in the design of this message. The nudges were rotated with each being present for 1 week at a time and adding up to at least 3 weeks each.

Trial 4 - Quasi-experiment to improve completion rate of account sign up in the Job match website

In the 4th trial, the BI team tested the effect of introducing nudge statements throughout the account sign-up process, with the goal of completing the account sign-up information in the Job Match website. One of the requirements needed to sign-up for a Job Match account is to enter one's Social Insurance Number (SIN). This can be a significant barrier for some users.

To reduce the risk of users dropping out because of the barrier of having to provide the SIN, the nudge introduced in this trial was a pop-up window that communicated the information needed to complete the account (including the SIN) at the beginning of the sign-up session. The purpose of this nudge was to ensure that users know what to expect and are ready with their SIN.

The relevant population are users who want to apply for a new Job Match account. The sample size for this trial was a total of 24,043, who started to apply for Job Match during a continuous 6-week period and whose completion rate was monitored. In the 3 weeks before the nudge was posted, 21,522 users started the sign-up process.

Trial 5 - Quasi-experiment to increase profile completion rate

The 5th trial focused on the profile completion stage, in which users need to enter their education, experience, etc., with the goal of increasing profile completion rate.

Nudge statements were presented in a light blue box on each page of the process to encourage users to complete their profiles:

- Nudge at the "Preferences" stage: "Providing additional locations could increase your number of job matches."
- Nudge at the "Experience & Skills" stage: "Job Match allows you to cut down on your job search time by allowing employers to find you!"
- Nudge at the "Education" stage: "All the information you are providing improves the quality of your job matches."
- Nudge at the "Credentials" stage: "Once your profile is completed, you could be receiving your first Job matches in the hour!"

The relevant population for this trial is for all Job Match users who have yet to complete their profiles and have some intention to do so. The profile completion rate was monitored for 4 consecutive weeks. The control group consisted of the number of users who completed their profiles in the 2 weeks prior to the introduction of nudges.

Results and Impact

Trial 1

E-mail recipients were followed for three weeks using Google Analytics and Job Bank administrative data. Within this time period, 840 out of 3,784 users with incomplete profiles (22%) clicked on the embedded link in the e-mail. Among the users who clicked on the link, 24% also completed and activated their profile activating their Job Match profile and began receiving automatic job matches with potential employers (i.e., 194 which represents 5% of the total population of interest).

All nudge emails were statistically significantly better than the standard email, but the nudge emails themselves were not always significantly better than each other.

The BI inspired interventions (nudges) did not cost more to implement than the status quo (i.e., control groups).

Trial 2

Among the users who received an email, 486 (4%) completed and activated their profile while of the users who did not receive any email, only 14 (0.72%) activated their profiles. This demonstrates the substantial impact in incorporating messages designed based on BI principles in emails to users with incomplete profiles which effectively increased the number of clicks to the website and the number of profiles activated.

The best performing nudges were the call-to-action paired with salience (25.66%), the call-to-action paired with commitment (24.27%), the call-to-action paired with the social norm (23.55%), and the call-to-action paired with both the commitment and the social norm (22.93%). These four nudges performed equally well in terms of prompting users to return to the Job Match website, and they significantly outperformed both the social norm (15.37%) and the commitment nudges (9.46%).

On profile activation, there was no statistically significant difference, but pairing the call to action with the commitment nudge seemed to be most effective as 5.71% of the recipients of that email ended up completing and activating their profiles. When the call-to-action was paired with both the commitment and the social norm, it resulted in 4.52% of recipients completing and activating their profiles. This suggests that when it comes to nudges, more is not always better. The remaining nudges led to profile activation rates ranging between 3.44% and 3.96%.

Taken together, trials 1 and 2 offer compelling evidence for the value of using BI principles to enhance the effectiveness of Job Match's correspondence with users. Overall, pairing the commitment nudge with the call-to-action seemed to be most effective. Job Match has since implemented the use of this email to nudge users with incomplete profiles.

Trial 3

Because a randomised control trial was not feasible in this context, there are some limitations to the weekly rotations approach that the BI team had to employ in this trial. When looking at the weekly results for each nudge, some nudges perform better in some weeks than others. The data collected does not allow to precisely examine time effects on the nudges and the underlying reasons for these variations. For example, it is possible that the characteristics of users changes over time (e.g., more students looking for jobs as the summer approaches).

The average nudge click rate stood around 0.7% or 5,500 clicks per week. These clicks led to an average of 354 potential new user accounts per week or a new Job Match user account rate of 6.6% per week. Overall, even the lowest performing nudge (the urgent call to action) of the four nudges improved the click rate by at least 67% over the control.

The highest performing nudge (Priming/Salience) generated 122% more clicks than the baseline. Despite limitations, the overall results provided solid evidence that nudges were more effective than the baseline

call-to-action button for inviting people to sign up for Job Match on the Job Bank website. A behaviourally informed call-to-action increased the uptake of Job Match among visitors of the job posting pages on the Job Bank website. As a result, Job Match implemented the framing nudge to promote the service on these webpages.

Trial 4

In the 3 weeks before the nudge was posted, 6,800 users (31.60%) finished the account sign-up. In the 3 weeks after the introduction of the nudge, 7,120 users (31.61%) finished the account sign-up. Therefore, the nudge used in this trial was not effective in increasing the overall account sign-ups completed.

Trial 5

Overall, the percentage of users proceeding through every step of the process was the same before and after the introduction of the nudges. Thus, the nudges used in this trial were not effective in encouraging users to follow through with the profile completion process. The nudges used in this trial focused on highlighting the impact of complete information on the outcome of the job matching process (specifically, the quality and efficiency of the match).

Our findings concluded that these nudges were ineffective which points to other potential bottlenecks that are keeping 25% of users from completing their profiles that they had started.

Institutional set-up for interventions using BI

ESDC has been using behavioural insights to support departmental strategic directions and priorities related to service delivery, employment, labour market information, post-secondary education, and social development.

Behavioural insights are also contributing to help address sub-optimal take-up and use of key departmental programmes. Formal thinking and concrete applications of behavioural insights are still fairly new for the department, and mostly concentrated in the area of programme and service delivery research, although some concrete programme design changes based on behavioural insights have already occurred.

ESDC has a research unit dedicated to behavioural insights, from the Service Research Division in the Service Strategy and Policy Branch which leads the implementation of the department's nudge trials. It has also created an Innovation Lab, which plays a central role in developing innovations in service improvements and policy ideas across the department.

The department also has an internal community of interest on behavioural insights called the ESDC Nudge Team which consists of members from across the portfolio, including from its service delivery organization, Service Canada. The Nudge Team meets quarterly to share information on BI related advancements inside the Department and externally. ESDC has started to develop small scale relations and contracts with external academics from the University of Toronto to support internal work.

Significant interconnections with other researchers and analysts across the Government of Canada also exist. In particular, ESDC, together with the Privy Council Office, co-chairs the Behavioural Insights Community of Practice (CoP), which convenes a horizontal community of BI practitioners across the federal government to exchange advises and on best practices. It regularly participates in and hosts conferences and workshops on behavioural insights, co-hosting Canada's first ever Behavioural Economics Conference for the Public Sector in March 2016 which brought together public servants at all levels, academics and practitioners for a discussion on the application of behavioural insights to public policy, programmes and service delivery.

Employment targeting

Snapshot

Country	China
Target group	Employment measures targeted to disadvantaged households
Institution	Ministry of Human Resources and Social Security (MOHRSS),
Start of intervention	2017
End of intervention	n.a.
Objective	Support poverty alleviation through employment
Method	Clustered
Application	Poor in rural areas

Problem

Address intergenerational poverty and lift poor families out of poverty by using targeted training as a long-term measure to help that at least one family member becomes employed.

Intervention

Adopt different training methods for different groups. Vocational and technical colleges adopted the "training before employment" model to train recent middle and high school graduates from rural poor families with the method of long-term labour preparatory training. Employers adopted the "employment before training" model to train newly recruited human resources from rural poor areas with the method of short- to medium-term pre-job skills training. Human resources agencies adopted the "training and employment in parallel" model to train newly recruited human resources from rural poor areas with employment intentions with the method of short-term "order-based training". Various training institutions adopted the "demand reserve oriented training" model to train young and adult human resources from rural poor areas with transferred employment willingness with the method of "short, adaptable and fast" targeted training.

Key results and lessons

Targeted training can effectively shorten the distance between training and employment.

Institutional set-up for interventions using BI

Feedbacks from the application of behavioural insights influenced policy choice.

Youth employability

Snapshot

Country	China
Target group	Youth employability
Institution	Ministry of Human Resources and Social Security (MOHRSS)
Start of intervention	n.a.
End of intervention	n.a.
Objective	Smoothen the transition to employment of graduate students
Method	n.a.
Application	Use behavioural insights to better guide college graduates in the search of a job

Problem

Need to encourage college and university students to change their expectations on career opportunities so to ensure that they look for vacancies that more realistically match their education curriculum. Although most college graduates in China are motivated, they lack autonomy and the resilience needed to search for a job in a competitive environment. Over 50% of college graduates are ill equipped to manage the transition to the labour market.

Intervention

Prepare graduate students to smoothen their transition from education to employment. The intervention takes into account group characteristics of college graduates and their employment behaviour.

Key results and lessons

No evaluation made so far.

Institutional set-up for interventions using BI

Use behavioural insights to develop targeted policies to allow college graduates to access first jobs that match the competences acquired while in education.

Foreign workers⁴*Snapshot*

Country	Indonesia
Target group	Providing services for foreign worker utilization permit; better control of tax payment by companies that use foreign workers
Institution	Ministry of Manpower of the Republic of Indonesia
Start of intervention	2016
End of intervention	Still continuing
Objective	Development of an online web application, TKA
Method	Stratified, randomly assigned, after intervention
Application	BI applied to simplify services

Problem

This application was developed both to simplify the services for foreign worker, access to visas and work permits, but also to control the payment of levies from company who utilize foreign workers

Intervention

BI used as a tool for simplification

⁴ For the purposes of this stocktake, this initiative has been counted as two interventions: one for job seekers and one for employers as Interventions were targeted at both groups. However, the description of the initiative has only been included once in this annex under the job seeker heading

Key results and lessons

Number of submission of foreign workers increased: 2016: 80,375 persons; 2017: 85,974; 2018: 95,335; 2019: 109,546. <https://karirhub.kemnaker.go.id>

Institutional set-up for interventions using BI

BI principles used to simplify foreign workers' access to services, such as the applications to working-visa/stay-permit. As well, BI applied to assess the levies payment from companies to country treasury fund as non-tax state revenue by integrating related system in the both ministries (Ministry of Manpower and Ministry of Finance)

Labour market information*Snapshot*

Country	Indonesia
Target group	Job seekers and employers, create an integrated information system across ministries; help employment data analysis; make employment policy
Institution	Ministry of Manpower of the Republic of Indonesia
Start of intervention	February 2020
End of intervention	Still continuing
Objective	Creation of an online web application, "Karir Hub", to enhance the labour market information system as a tool to improve job matching
Method	Stratified/clustered, convenience; after intervention
Application	BI was applied through Artificial Intelligence to labour market matching

Problem

Creation of a web application, "Karir Hub", to obtain and disseminate high quality employment information with respects to job seeker, employers, job opportunities by integrating systems to related ministries; help employment data analysis; make employment policy.

Intervention

BI used to provide timely job vacancy information to job seeker and match with company's needs.

Key results and lessons

This application remains under development. Presently, it is used for detailed-job-matching only. Next year, the government plan to expand its functionalities to guide the job seekers to obtain the job or training that suits their needs.

<https://karirhub.kemnaker.go.id>

Institutional set-up for interventions using BI

BI was applied through Artificial Intelligence to match the needs of company and job seekers based on self-skills, training certification, educational background, working experiences and domicile residence.

Changing attitudes to women working

Snapshot

Country	Saudi Arabia
Target group	Female labour force participation
Institution	Ministry of Human Resources and Social Development (MHRSD), the Human Resource Development Fund (HRDF) in collaboration with Harvard Kennedy School - Evidence for Policy Design (EPOD). Evidence for Policy Design (EPOD) is a team led by Harvard research faculty that brings data and economic insights to the design and implementation of public policies in countries around the world
Start of intervention	September 2018
End of intervention	2018
Objective	Understanding and Shifting Social Norms of Female Labour Force Participation in Saudi Arabia
Method	Long-Term Labour Supply Outcomes were tracked through a Follow-up Survey. Researchers surveyed a sample of 500 Saudi married men, aged 18–35, regarding their beliefs on female employment
Application	Misperceptions about opinions held by other men negatively impact support and acceptance of women's employment. The findings from this study show that providing information about female employment beliefs can increase female labour force participation.

Problem

In Saudi Arabia, less than 20% of the working age Saudi female population aged 15 and above was employed in 2018. Anecdotal evidence suggests that societal norms are a key constraint on female employment. However, men's misperceptions about norms surrounding female employment may dissuade them from expressing their positive attitudes or supporting their spouse to enter the labour market. By providing women with more opportunities to contribute economically, policymakers can help lower the country's high unemployment rate and create enormous economic growth.

Intervention

When men learn that they have overestimated public censure of women working, it can make a real difference in women's lives. More of their wives apply for jobs and work. In the 3-5 months following the information intervention, researchers found: 1) the percentage of participants' wives who applied for a job outside the home increased from 5.8% to 16.2%, 2) the share of wives who interviewed for an outside job increased from 1.1% to 5.8%, 3) rates of employment outside of the home increased from 7.4% to 9.4%, and 4) the share of participants who would sign their wives up for driving lessons increased from 65.2% to 76.4%, as shown in the figure above.

Key results and lessons

Young men substantially underestimate the level of support for female employment by other men. The findings suggest that the information provided about beliefs can lead to changes extending beyond increased employment.

Nearly 87% of the men agreed that women should be allowed to work outside of the home. Despite this, 72% of survey participants underestimated how many other participants with similar geographic and social backgrounds agreed with the same statement and supported female employment. Once men realize the level of support among their peers, their own level of support changes, and is reflected in their wives'

increased labour force participation. Among men who received the information, more of their wives applied for a job, interviewed, became employed, and registered for driving lessons.

Married men's willingness to let their wives join the labour force increases when they learn the majority of other men also support female employment. Men who received feedback on the responses of other participants were 9 percentage points more likely to sign up their wives for a job matching mobile application. Researchers conducted a similar nationally-representative survey of 1,500 men, and found similar results.

Changing labour market expectations of women

Snapshot

Country	Saudi Arabia
Target group	Female Employment
Institution	Ministry of Human Resources and Social Development (MHRSD), the Human Resource Development Fund (HRDF) in collaboration with Harvard Kennedy School - Evidence for Policy Design (EPOD). Evidence for Policy Design (EPOD) is a team led by Harvard research faculty that brings data and economic insights to the design and implementation of public policies in countries around the world
Start of intervention	November 2018
End of intervention	2018
Objective	Developing Career Readiness in Higher Education
Method	Survey of Saudi undergraduate female students at a large public university about their educational experiences, beliefs about the labour market, and education and employment expectations.
Application	The team exposed different sub-groups of respondents to information, and remind their family within some sub-groups in order to measure the importance of the role played by the family.

Problem

Labour force participation among women in Saudi Arabia in early 2020 was about 25%, among the lowest in the world.

Intervention

To better understand the reasons for low female labour force participation, a research team surveyed around 900 Saudi undergraduate female students at a large public university about their educational experiences, beliefs about the labour market, and education and employment expectations. The team exposed different sub-groups of respondents to information, and called to mind their family within some sub-groups, in order to measure how these different stimuli affected responses.

Details of groups:

- Control group: did not receive information.
- Info group: received information.
- Info and parents group: received information and were reminded of their parents.

<https://epod.cid.harvard.edu/sites/default/files/2019-07/Ganguli%20-%20Career%20Readiness%20in%20Higher%20Edu.pdf>

Key results and lessons

Current female university students surveyed have much higher expectations of working than the actual female labour force participation among older generations. The reported likelihood of working at the age of 25 among those surveyed was 69.4%.

Exposure to information about the labour market, peer behaviour, and employment support programmes raises the likelihood of expected employment. Respondents who received information about labour market outcomes and aspirations of their female peers had slightly higher expectations of working full time (3.5 percentage points more) than those who received no such information.

Those who received information about the unemployment assistance programme, Hafiz, expressed a 4.5 percentage point higher likelihood of expecting to enroll in the programme (41.8%), than those who didn't (37.3%).

Respondents who received the information and were reminded of their parents reported much higher expectations to work. To remind students of their parents, they were asked a question about whether they wanted to share their survey responses with them. Regardless of the answer, the question served as a "mental prime", calling to mind a respondent's family. While 61.2% of respondents who received neither stimuli reported an expectation to work full-time, that rate increased to 67.7% for respondents who received both.

Results show that likelihood of working full-time is significantly higher for the group who received information and were reminded of their parents, group who received information only is closely behind.

As to working full time for participants whose mothers never worked, results are very close for the info group and for the info and parents group.

Finally for working full time for participants whose mothers have worked, results show that prospects are almost double for the info and parents group those of the info group

Both labour market information and social norms have sizable impacts on intended labour market participation. These should be accounted for and perhaps leveraged when designing policies to increase female employment. In particular, involving parents in discussions about students' career aspirations may be beneficial. Employment counsellors in universities could encourage students to share their labour market aspirations with their families to gauge their support and receive advice. Additionally, universities can launch information campaigns disseminating information about employment opportunities and trends. Increased awareness of these issues may also encourage female students to enter the labour market upon their graduation. Whether such interventions can impact actual labour market behaviour remains an open question.

Changing perceptions about employment barriers for women

Snapshot

Country	Saudi Arabia
Target group	Female employment
Institution	Ministry of Human Resources and Social Development (MHRSD), the Human Resource Development Fund (HRDF) in collaboration with Harvard Kennedy School - Evidence for Policy Design (EPOD). Evidence for Policy Design (EPOD) is a team led by Harvard research faculty that brings data and economic insights to the design and implementation of public policies in countries around the world
Start of intervention	2015
End of intervention	2015
Objective	To assess how information about rising Saudi female employment can influence male and female perceptions about the barriers that limit female employment
Method	Survey field experiment among beneficiaries of the unemployment benefits programme Hafiz. Hafiz is a national unemployment assistance programme, which provides employment support services and financial assistance to Saudi jobseekers
Application	Male and female beneficiaries in four sectors — Financial Services, Education, Manufacturing, and Retail. Control and treatment groups

Problem

Analysis suggests that Saudi job seekers are not fully informed of the extent of female labour force participation in Saudi Arabia. Therefore, a targeted information intervention on the increased rates of female participation in various sectors may change their perception of job prospects for women. Female job seekers may, as a result, increase their job search and explore more sectors than they traditionally do, given a lack of complete information.

Intervention

Hafiz beneficiaries, male and female, were presented with the percentage of females employed in four different sectors in 2010 — Financial Services, Education, Manufacturing, and Retail — and asked to specify what they believed the share had become by 2015. Many respondents underestimated the share of women in each sector. Significant misperceptions were seen in the Retail and Education sectors, where 57% and 76% of respondents underestimated the share of women in each sector in 2015, respectively.

A random sample of respondents were subsequently informed that the share of women in each sector had increased between 2010 and 2015; others did not receive this information. The survey then asked all respondents to rate the importance of four potential barriers to female entry into the job market: “Firms prefer hiring men;” “Women are not qualified to work in the sectors that have vacancies;” “Saudi society does not approve of working women;” “Firms do not provide separate work spaces for men and women.” The barriers were rated on a four point scale from “not at all important” to “very important.”

<https://epod.cid.harvard.edu/sites/default/files/2019-06/Perceived%20Barriers%20-%20Hanna%20Pande.pdf>

Key results and lessons

Hafiz beneficiaries that received information on increased female employment trends changed their beliefs so as to perceive lowered barriers to female employment. Female Hafiz beneficiaries were more likely than

their male counterparts to believe that Saudi society does not approve of working women and that firms do not provide separate working spaces for men and women. They are also less likely to believe that firms prefer to hire men. In all cases, women shown information on female employment trends rated all four barriers to be less important than those women not shown the increased share of women in each sector. For example, the largest change was on belief that “Saudi society does not approve of women working” and “Firms do not provide separate working spaces for men and women,” where there was a 6.1% and 4.4% change in perception, respectively. For male Hafiz beneficiaries, effects are similar, but tend to be smaller.

The results show that the male and female treatment groups that were shown information perceived employment issues as less of barriers than the control groups.

Improving youth employability

Snapshot

Country	Saudi Arabia
Target group	Youth employment
Institution	Ministry of Human Resources and Social Development (MHRSD), the Human Resource Development Fund (HRDF) in collaboration with Harvard Kennedy School - Evidence for Policy Design (EPOD). Evidence for Policy Design (EPOD) is a team led by Harvard research faculty that brings data and economic insights to the design and implementation of public policies in countries around the world
Start of intervention	November 2018
End of intervention	2018
Objective	Leveraging peer effects to motivate job search among youth
Method	Pilot randomized control trial
Application	Beneficiaries of the Hafiz Saudi unemployment assistance programme to explore the impact of peer effects in motivating job search

Problem

Need to promote new and more effective ways to encourage job search

Intervention

Researchers surveyed participants before the groups convened, and three months after, regarding their job search behaviour. They also surveyed a “control” group of youth who were not part of a peer group, but completed the same baseline and endline surveys.

Ten groups of 20 individuals each from the same gender and institution were involved in the study. Groups interacted via the social media app WhatsApp for three months. Group coordinators sent messages encouraging job search, validating participants’ concerns, and providing information about jobs and search tips, such as how to improve CVs and complete online skills training course. Coordinators also promoted messaging between group members by offering prizes to those who participated in group discussions and provided job search updates.

Key results and lessons

Youth who participated in peer groups submitted more job applications and received more job offers than those who did not participate. Peer groups played two key roles that led to a higher job search effort. The

first is as an information conduit regarding job availability, search tips, and sharing of experiences. The second is their ability to influence attitudes and mindsets regarding different aspects of the job market.

The information provided by the group coordinators may have raised awareness of job opportunities and effective search strategies, and led to an increase in the number of applications group participants submitted. Results show that after 3 months, the number of applications submitted for the treatment group is almost 3 times more than the control group.

Helping Job Seekers Find Employment

Snapshot

Country	Singapore
Sector	Employment and Labour
Institution	Ministry of Manpower (MOM)
Start of intervention	August 2013
End of intervention	February 2014
Objective	Increasing the job placement rate of the Workforce Development Authority's career centres.
Method	Observations; Interviews; Randomised Controlled Trial (sample of 777 job seekers)
Application	Redesign of the employment facilitation process in Singapore.

Problem

The Singapore Workforce Development Agency was a statutory board of the Ministry of Manpower (MOM)⁵ Inspired by successful trials the UK's Behavioural Insights Team had conducted in job centres in the UK, the Ministry set out to redesign its own employment facilitation process, with the aim of increasing the job placement rate for job-seekers in Singapore.

Through observations of the employment facilitation process and interviews with career consultants and job seekers, the researchers found that there were four key barriers for job seekers in finding employment:

- Reliance on career consultants to find jobs – Job seekers tended to be very passive in the job search process and relied on career consultants to look out for and arrange job interviews for them.
- Poor commitment to the job search process – Job seekers did not turn up for the training sessions or job interviews arranged by the career consultants.
- Unrealistic job goals: Some job seekers were only willing to accept jobs that commanded the same or higher pay.
- Lack of motivation and self-esteem – Some job seekers became demoralised if they were unable to find jobs after multiple attempts.

Based on these findings, the MOM's Behavioural Insights and Design Unit set out to investigate if it could alter job seeker behaviours by applying insights taken from behavioural science to the employment facilitation process they would go through.

⁵ In 2016, WDA was reconstituted into a new statutory board, Workforce Singapore, under the Ministry of Manpower.

Intervention

A two-arm trial was conducted at a career centre, where a sample of 777 job seekers was randomly allocated to career consultants in two different groups. One group (the control) went through the existing employment facilitation process where they met their career consultants once or twice to discuss their job search plans and progress. The career consultants would contact the job seekers if there were openings and interviews they deemed suitable for them.

The other group were invited to join a job search programme where they had to commit to take ownership to work out their job search plans and meet their career consultants up to five times. The programme utilised the following behavioural science techniques:

- **Commitment device** – Job seekers were given job booklets (in their preferred language) where they signed on the cover page to indicate their commitment to the job search programme.
- **Chunking** – The job search booklet guided job seekers to plan the specific job search activities they would undertake in the next one to two weeks before their next meeting with the consultant. This broke down the job search process into a series of smaller tasks that would eventually lead to securing a job. They were required to review their accomplishments with their consultants, and in the process received feedback that helps to reinforce their positive behaviour.
- **Incentive** – To create a sense of progress, those who successfully completed each session were awarded a stamp. Upon completing five sessions, or finding a job, whichever was earlier, they received a \$100 voucher.
- **Social norms and priming** – The consultant rooms for the intervention group were also re-designed to 'prime' job seekers with subtle motivational messaging. The rooms used stars to visually represent the number of people who succeeded in finding jobs through the career centre and included a board for job seekers to write down their commitment to the job search process. It also included salient information on 'hot jobs', statistics of the top job vacancies and average salary ranges to nudge job seekers into adopting more realistic job expectations.

Results were assessed by measuring and comparing the percentage of job seekers in each group who found jobs within three months of visiting the Workforce Development Agency's redesigned career centre.

Results and Impact

The rate of job placements was significantly higher for those job-seekers enrolled on the job search programme informed by behavioural science techniques, compared to those who went through the standard employment facilitation process.

Three months after visiting the career centres, **49% of job seekers** who had gone through the updated programme had found work, whereas only 32% of those who had experienced the normal, existing employment facilitation process were in jobs.

This demonstrates that motivating job seekers to take greater **ownership** of their search process, reframing activities in the job search process to make the job search more **manageable**, increasing **morale**, and assisting job seekers to set more **realistic** job **expectations** is effective in helping more people to find work.

Beyond improving job placement rates, it appeared that the increase in frequency of meetings and the structured job search process had nurtured stronger and more positive relationships between career consultants and job seekers. The qualitative feedback from job seekers indicated that they felt their consultants cared for them and were genuine in helping them with their job search.

Moreover, the trial revealed the benefits of co-design, as it involved manual interventions in which career consultants had to interact with the job-seekers in different ways. In order for them to do this, it was important to engage the consultant themselves by training them on basic BI concepts and to involve them in co-designing the interventions to ensure strong commitment and support, as well as smooth implementation of the trial.

Further, although the career consultants were concerned initially that the job seekers would misplace their booklets or fail to bring them to their meetings, the trial revealed that all the job seekers in the treatment group developed a sense of ownership and accountability and always had their job search booklets with them when they arrived for career consultations. This highlights the significance of using behavioural insights interventions to test pre-existing assumptions about what does and does not work.

If implemented across all five of the Workplace Development Authority's career centres in Singapore, redesign of the employment facilitation process in the manner applied in the trial could potentially translate to **4,000 more job seekers per year** finding work within three of months of visiting the centres.

Institutional set-up for interventions using BI

The Ministry of Manpower (MOM) is a ministry of the Government of Singapore, which is responsible for developing a productive workforce and progressive workplaces for Singaporeans to have better jobs and a secure retirement. The Ministry has been using behavioural insights as tool of evidence-based policy design, to design and implement policies and services that better meet user needs based on a deeper understanding of customers' behaviours and decision making environment. The practice of testing to discover what works in behavioural insights also helps the Ministry ensure efficient use of its resources.

The Ministry possesses a central unit called Behavioural Insights and Design Unit, through which behavioural insights are applied across the institution. The unit consists of officers from diverse disciplines including design, accounting, economics, business, sociology and psychology. The Ministry also partners with private consultancies and academic institutions to tap into different expertise in behavioural insights.

Reducing dependence on income support

Snapshot

Country	United Kingdom (UK)
Sector	Labour Market
Institution	Behavioural Insights Team (BIT)
Start of intervention	January 2013
End of intervention	January 2014
Objective	Reducing the number of people needing unemployment benefits.
Method	Stepped Wedge Cluster Randomised Controlled Trial; sample of 110,838 jobseekers.
Application	Applying behavioural science to JobCentre Plus processes to increase the number of people able to find employment.

Problem

In June 2016 there were more than 700 000 jobseekers claiming unemployment benefits in the UK. The purpose of JobCentre Plus is to help those without jobs in the UK find employment, and, as a consequence, to eliminate the need for those individuals to receive unemployment benefits, which are known as 'JobSeekers Allowance' (JSA) from the UK government.

The UK Behavioural Insights Team (BIT) conducts a number of trials to help enhance the effectiveness of government policy initiatives using insights taken from behavioural science. BIT set out to explore whether

applying these insights to the processes used by JobCentre Plus to help people find work could improve their chances of succeeding.

Intervention

BIT conducted a trial in 12 Job Centres in Essex, modifying the ways in which the Centre offered its visitors support in their search for employment using methods adopted from behavioural science.

The intervention involved the **simplification** of job search processes, and the introduction of a **planning** aid to encourage people to search for work.

It took the form of a stepped-wedge trial, in which 110,838 jobseekers were randomly selected to receive the treatment informed by behavioural science when visiting JobCentre Plus, whilst a control group continued to receive the 'business as usual' model used in JobCentre Plus.

The intervention involved two tranches of changes to this model:

1. **Simplification:** The first appointment in JobCentrePlus was streamlined, with jobseekers building a relationship with their advisor and discussing their job search from the start
2. **Planning aid:** Based on the wide range of evidence on planning aids and 'implementation intentions', a commitment pack was developed. This pack encouraged jobseekers to plan their job search activities with their advisors by specifying where, when and how they were going to complete their job search activities. The commitment pack was completed prospectively by asking jobseekers to plan their job search and then carry it out, rather than the previous document, which simply required that jobseekers document what they had done retrospectively.

The trial took the form of a stepped-wedge cluster randomised controlled trial, in which JobCentres were grouped into nine clusters. Over time, these clusters switched from offering 'business as usual' support to jobseekers (control group) to the behaviourally informed intervention (treatment group). The order in which the clusters made this switch was randomised. In total, 110,838 jobseekers were either in the treatment or control group.

Results were assessed by measuring the off-flow from benefits after 13 weeks, which is the numbers of recipients of benefits who were no longer receiving those benefits after 13 weeks, of those jobseekers who received the updated treatment relative to the numbers of those who experienced the business as usual model when visiting JobCentre Plus.

Results and Impact

BIT found that applying the interventions informed by behavioural insights to JobCentre Plus processes resulted in a **1.7 percentage point** increase in the proportion of people flowing off of benefits in 13 weeks relative to the business as usual model.

This suggests that simplifying processes, focusing on job search rather than meeting minimum requirements, and planning aids were successful at supporting jobseekers to find employment.

These interventions have subsequently been rolled out nationally in England in JobCentre Plus. Similar interventions have since been trialled in Australia and have also proven to be successful.

Institutional set-up for interventions using BI

The United Kingdom's Behavioural Insights Team (BIT) is a social purpose company, jointly owned by the UK Cabinet Office, employees and the innovation charity Nesta. It was set up within the UK government as the world's first government institution dedicated to the study and application of behavioural sciences. Its purpose is to apply behavioural insights to government policy in the UK, and to evaluate what works through the use of rigorous research methods.

The BIT is made up of experts from a mixture of disciplines, with expertise in behavioural science and economics a common qualification. It also retains an Academic Advisory Panel, made up of other Academic Experts who collaborate on trials and provide peer-reviews. In addition, BIT engages a number of PhD students who work with the team as Research Fellows.

The Behavioural Insights Team works across entire policy spectrum and also collaborates with other government departments and agencies to undertake projects with a specific policy agenda.

Helping UI claimants back into work

Snapshot

Country	USA, Michigan
Target group	Unemployment Insurance; Reemployment
Institution	U.S. Department of Labour's (DOL) Chief Evaluation Office (CEO) in collaboration with the Employment and Training Administration (ETA) contracted with Mathematica Policy Research and ideas42
Start of intervention	Fall 2015
End of intervention	
Objective	Assess whether a series of low-cost emails informed by behavioural science could encourage more UI claimants to schedule, attend, and complete their REA programme sessions
Method	Study sample consisted of UI claimants who were assigned to participate in the REA programme by the Michigan UIA and were referred to Michigan Works! Southwest. Randomly assignment at the individual level. Before intervention. Some cost analysis was completed on costs saved but not a full analysis of intervention costs.
Application	DOL CEO in collaboration with ETA and Michigan Works! to assess whether a series of low-cost emails informed by behavioural science could encourage more UI claimants to schedule, attend, and complete their REA programme sessions. CEO has dedicated staff and resources specifically focused on applying and testing the application of BI in labour programmes.

Problem

Fewer than half of the Unemployment Insurance (UI) claimants assigned to participate in the Reemployment and Eligibility Assessment (REA) programme at Michigan Works! Southwest scheduled their first mandated REA session in the first quarter of 2015. The REA programme has been shown to reduce UI benefit claim durations. The Department of Labour (DOL) funded a study to determine whether simple, low-cost emails informed by behavioural science could improve participation rates in this effective programme in Michigan.

Intervention

In the pilot process we tested a series of emails sent to programme participants to encourage attendance to mandatory REA courses. We structured all the emails to accommodate receipt of the emails on mobile devices as well as on a computer screen. We paid particular attention to the subject line as well as those sections of the email that are visible even prior to an email being opened, using MailChimp's preview mode which allows users to see how an email will look when delivered to different email platforms. We made sure that these elements of the email included language that was intended to prompt action. All emails also included instructions explaining how an individual could unsubscribe from further emails.

Key results and lessons

The email series increased the number of UI claimants who engaged with and completed the REA programme. The emails led to a 15 percentage point increase in the proportion of claimants who scheduled their first REA session. There was also a 14 percentage point increase in the proportion who completed the programme. See the reports below for further details.

Technical Report: <https://www.dol.gov/sites/dolgov/files/OASP/legacy/files/13-50291-UIREA-FinalTechnicalReport-20170517.pdf>

Final Project Brief: <https://www.dol.gov/sites/dolgov/files/OASP/legacy/files/14-50291-UIREA-FinalBrief-20170511.pdf>

Institutional set-up for interventions using BI

Many psychological principles were used based on insights taken from literature review and behavioural scientists' review. A full list can be found in the final report but they include:

- Discouragement and avoidance of unpleasant tasks. Claimants may perceive a punitive tone in the UIA notification letter and may respond negatively. They may not read the entire letter or further engage with the REA programme.
- Inattention, procrastination, or forgetfulness. Claimants may not notice the UIA notification letter, or they may delay and forget to schedule their REA session.
- Misunderstanding. Claimants may not understand or may underestimate the potential value of the REA programme because the UIA notification letter provides few details about the programme.
- Personalization
- Setting deadlines
- Simplification
- Planning prompts and reminder emails

The design was informed by previous research but the exact application was new.

The application of BI heavily influenced the intervention and lead to many changes in the programme messaging.

Employers

Take-up of wage subsidies

Snapshot

Country	Australia – South West Sydney
Target group	“Job active” national employment services network (Australia's mainstream public employment service)
Institution	Former Department of Jobs and Small Business; Applied and Behavioural Economics Section
Start of intervention	July 2016
End of intervention	November 2016
Objective	Apply behavioural economics to Increase the Take-Up of Wage Subsidies
Method	Stepped-wedge trial design, randomised at the cluster level applied to a sample size of 163-620 (depending on regression and outcome measured)
Application	Wage subsidies under Australian Government employment services

Problem

The early research phases of the project on the take up of wage subsidies identified three main areas for improvement: (i) administrative complexities for both job active providers and employers; (ii) financial incentives for employers not being framed correctly; and (iii) social incentives not being taken into consideration as a complement to the payments.

Intervention

The trial foresaw a number of interventions, which included but were not limited to:

- Design and production of a one-page flyer on benefits for employers and job seekers, and key eligibility information;
- Improvement of the wage subsidy agreement form so that key messages are more salient, the terms and conditions easier to understand, and hiring biases minimised;
- Possibility for the employers to sign the wage subsidy agreement electronically (with paper version available if preferred);
- Creation of a new standardised payment structure as the default option, with earlier and back-loaded payments.

Key results and lessons

The intervention resulted in an increase of the number of agreements signed per day and a significant increase of promotional activities (by 60 per cent), along with a decrease of the time taken to sign an agreement from an average of 17 days to 11 days. Departmental report: <https://docs.employment.gov.au/documents/applying-behavioural-economics-increase-take-wage-subsidies>

Institutional set-up for interventions using BI

The behaviours targeted as part of the trial were from surveys and qualitative research. The design trial was novel, with BI playing an instrumental role in the design of the intervention.

Discrimination in hiring based on ethnic background*Snapshot*

Country	France, Paris region
Target group	Policy against discrimination in hiring
Institution	Prime Minister Services (Centre d'Analyse Stratégique, which has now become France Stratégie)
Start of intervention	September 2006
End of intervention	December 2006
Objective	To address the question as to whether young French jobseekers of ethnic immigrant origin are discriminated against
Method	Randomised resumé rotation system. Correspondence test. Fictitious candidates. Assessment based on a controlled experiment conducted in two professions: accountants and waiters.
Application	1097 resumes sent in reply to 140 job vacancies advertised at the end of 2006. Intervention cost: About € 30 000

Problem

Measuring discrimination in hiring for young people of ethnic minority origin from the underprivileged suburbs of the Paris area.

Intervention

There are two behavioural insights foundations used in this application to underpin labour market discriminations: Becker's theory of preference-based discrimination; and the Arrow-Phelps model of information-based discrimination.

One of the four applicants had a French sounding surname.

This experiment was the first one in France to measure the effect of ethnic origin and place of residence in hiring discrimination. Numerous studies have been done since then.

An article has been published in *Annals of Economics and Statistics*, 99/100, July-December 2010. <https://halshs.archives-ouvertes.fr/halshs-00809665/document>

Key results and lessons

Significant gap in the call back rate between applicants. Significant discrimination on the basis of ethnic origin and place of residence.

Based on these results, the French government launched a large-scale experiment in 2010 to test the practice of anonymous resumé with the idea of generalising it if proved successful (<https://www.aeaweb.org/articles?id=10.1257/app.20140185>). In this experimentation of about 10 months, the Public employment services offered 1,000 firms that were looking to hire, the opportunity to receive only anonymised resumé to remove any implicit information on ethnic origin or place of residence.

The results were surprising, minority applicants were worse off under this scheme; they were less likely to be interviewed. Consequently, the government abandoned the idea of generalising this practice. The main

explanation of such result is that it was a voluntary experiment so there was an overrepresentation of firms who tend to hire workers from minority backgrounds (selection bias). Receiving anonymous resumés prevented them from positive discrimination behaviour, which resulted in fewer applicants from minority background to be hired. This is an interesting result to share because it shows the importance of experimentation and how it can be informative on implementation issues in policy making.

Since then, other experiments were conducted including one by the French Ministry of Labour (<https://dares.travail-emploi.gouv.fr/IMG/pdf/2016-076.pdf>) that aimed at measuring origin-related discrimination in the recruitment process of 40 large companies during 3 to 4 months. It revealed that the call-back rate for jobseekers with north-African sounding names was 11 points lower than for candidates with French-sounding names. Both men and women, employees and managers were subject to discrimination. This experiment created the opportunity to initiate a dialogue with the companies around their recruitment practices and to invite them to take corrective measures to guarantee equal treatment of candidates. Based on their experience sharing, a guide of good practices was published (<https://dares.travail-emploi.gouv.fr/IMG/pdf/gbp.pdf>). Out of the 12 incriminated enterprises, the name of the two that did not comply with HR improvement measures were publicly given by the Labour Ministry (name & shame process). A more recent experiment was conducted in 2019 (see the following initiative under the name DREAM).

Discrimination in hiring

Snapshot

Country	France
Target group	Policy against discrimination in hiring - DREAM (<i>Discriminations dans le recrutement des grandes entreprises : une approche multicanal</i>)
Institution	Ministry of Housing
Start of intervention	November 2018
End of intervention	January 2019
Objective	Measuring discrimination in the hiring process
Method	Controlled experiment, using the correspondence test technique. Fictitious candidates. Control group.
Application	40 large firms, among the 120 largest firm in France Intervention cost: About € 150 000

Problem

Measuring discrimination in the hiring process of 40 large firms, among the 120 largest firm in France.

Intervention

5,329 discrimination tests in access to employment, corresponding to more than 15,000 messages sent in 2018-2019. This resulted in a dataset of 17,643 observations representative of the biggest French companies.

There are two behavioural insights foundations used in this application to underpin labour market discriminations: Becker's theory of preference-based discrimination; and the Arrow-Phelps model of information-based discrimination.

One of applicants is a control reference, with a French sounding surname and a neutral location.

We implemented a randomized resumé rotation system.

Four test methods were used, combining on the one hand application forms and requests for information prior to an application, and on the other hand responses to job offers published by companies and spontaneous requests addressed to companies without them having been solicited. This multi-channel test procedure made it possible to produce a data set of unprecedented scope and consequently to explore the determinants of discrimination at the firm level.

A research report has been published. <http://www.tepp.eu/doc/users/268/bib/dreamrr11.pdf>

Key results and lessons

The study reveals significant and robust discrimination based on ethnic origin against the presumed French North African candidates in all the regions that were tested. Discrimination related to the place of residence was less significant. Discrimination towards the North African applicants appears to be higher in larger firms with sales revenue above the median. However, the variation in discrimination based on ethnic origin by sector and city of location is more limited. While not significant at the aggregate level, we find significant discrimination related to place of residence in the industrial sector and in Paris.

The results of the experiment have been used by the Government to encourage businesses to strengthen their measures to prevent discrimination, including the naming and shaming of companies identified by this testing as having discriminatory practices.

Another wave of testing is to be implemented in 2020 by the Government to follow firms' actions to prevent discrimination in hiring.

Tackling discrimination against job applicants from deprived neighbourhoods

Snapshot

Country	France
Target group	People living in deprived neighbourhood
Institution	Ministry of housing; Research Federation "Theory and Evaluation of Public Policies" (TEPP).
Start of intervention	April 2018
End of intervention	May 2019
Objective	Evaluate effectiveness of policy to prevent discrimination in hiring against people living in deprived neighbourhood
Method	The measurement of discrimination in recruitment is based on a correspondence test. Experiment using correspondence tests (or testing) in three occupations with four fictitious applicants. Heterogeneity accounted by occupations, skill level and location,
Application	Impact of policy assessed through three waves of testing, before, during and after the launch of the policy. A little over 2,430 job offers tested. Around 9,740 observations collected (2,430 job offers x 4 profiles).

Problem

Evaluate the effectiveness of *emplois francs*, a new French policy, in addressing discrimination in hiring faced by job seekers residing in deprived neighbourhoods (QPV).

Intervention

Four fictitious candidates were located in three departments of Ile-de-France (Paris region) that were piloting the *emplois francs* scheme, which gives a hiring bonus to employers hiring a person residing in a deprived neighbourhood.

The measurement of discrimination in recruitment is based on a correspondence test. The impact of *emplois francs* through three waves of testing, before, during and after the launch of the policy.

The project consisted of deploying this test protocol starting in the first quarter of 2018, before implementation of the policy in April 2018 with a repetition every six months. The second wave took place between October and December 2018. The third phase of testing took place between February and May 2019. Overall, this arrangement allowed the obstacles to employment experienced by job seekers from disadvantaged neighbourhoods (QPV) to be compared before and after the implementation of the *emplois francs* policy and to measure how they changed.

Four similar fictitious applicants (CVs and application letter) were created which either came from deprived neighbourhoods (their residence address) or a neutral neighbourhood and with a difference in the presumed origin (North African or French origin). We sent these four profiles to apply to the same job offers.

The project is available in a working paper, which is in the process of being evaluated by a peer-reviewed journal. <http://www.tepp.eu/doc/users/268/bib/documentdetravailartefact1.pdf>

Key results and lessons

In Wave 1, i.e. before implementation of the *emplois francs* scheme, there appears to be discrimination against ethnic origin in the responses, but it cannot be concluded that there is discrimination against place of residence. The response rate to the candidates of North African origin is significantly lower by 10 percentage points than to the candidates of French origin, after taking into account all the control variables. In relative term, it means that the candidates of North African origin received almost 40% less positive responses than the French candidates. On the other hand, there is no significant overall difference in the response rate to candidates residing in the QPV and candidates residing in the neutral neighborhood. In Wave 2, there was no significant difference for the candidate of North African origin compared to Wave 1. However, the response rate of the candidate living in QPV increases by 3.3 percentage points compared to the candidate living in a neutral neighborhood. The discrimination against the QPV applicants in Wave 1 is eliminated and in Wave 2 this even becomes an advantage for them over applicants living in a neutral neighbourhood. This striking result may be a result of the programme, but the effect is not long-lasting since the difference in favour of the QPV candidates is not maintained in the third wave. Discrimination returns to its initial level in Wave 3, i.e. one year after the start of the deployment of the *emplois francs* scheme. This reduction in residential discrimination limited to the second wave of test can be linked to the volume of *emplois francs* job offers, which reaches a peak in October 2018, at the beginning of the second test.

The deployment of the *emplois francs* scheme has not been accompanied by a long-term improvement in employment opportunities for QPV residents. This result is not due to insufficient information held by employers on the scheme. When the fictitious candidate provides explicit and clear information on the functioning of *emplois francs* directly to the employer, his chances of success do not improve significantly. The low *emplois francs* effect is probably mainly due to the low volume of the programme. The effectiveness of the programme is also limited by the current low level of residential discrimination. This means that mechanisms other than residential discrimination should be addressed in order to substantially increase employment in deprived neighbourhoods. For example, finding a way to reduce ethnic discrimination may be more effective in increasing employment in these areas.

At the end of an experimental phase conducted between 1 April 2018 and 31 December 2019, a decree of 26 December 2019 generalised the *emplois francs* scheme for a period of one year to all the priority neighbourhoods (QPVs).

Promoting gender equality in the workplace

Snapshot

Country	France
Target group	Gender equality in the workplace
Institution	Prime Minister, Ministry of Labour, Secretary of State for equality between women and men
Start of intervention	
End of intervention	
Objective	Achieve gender equality in the workplace through a reporting obligation for companies.
Method	
Application	The government introduced the gender equality index (5 indicators), which is a simple tool allowing companies to measure where they stand in terms of gender equality in the workplace.

Problem

Achieve gender equality in the workplace through a reporting obligation for companies.

Intervention

The government introduced the gender equality index (5 indicators), which is a simple tool allowing companies to measure where they stand in terms of gender equality in the workplace. The better they perform across the 5 indicators, the more points they will earn. Each company depending on its size, has a deadline to publish its results on its website and if the score is lower than 75, it will have 3 years to apply corrective measures. Companies that have not closed the pay gap within the 3 years would have to pay a fine (up to 1% of the total payroll).

Key results and lessons

The index results show a high commitment of companies (81% of large companies published their index after 1 year, 71% of medium-sized companies after 6 months), and a better performance of companies in terms of gender equality in 2020 compared to the year before (+5% for large companies, +4% for medium-size companies).

<https://travail-emploi.gouv.fr/actualites/l-actualite-du-ministere/index-egalite-professionnelle-tendances2020-resultats-grandes-entreprises>

The choice of one single index that has to be published fosters transparency on two levels: within the company since the social partners will have access to detailed results available for each indicator; and on a broader scale as it will increase transparency about whether a company is committed to being inclusive and making progress in terms of gender equality in the workplace. Behavioural studies show that transparency can be a powerful tool to achieve the desired results. The more information is put into a comparative context, the more people are able to understand it.

The published results of the index are used by the Government to urge companies to strengthen their measures to close the gender gap. The Government uses the name and shame tool targeting companies with low performance in terms of gender equality along with a financial penalty.

Promoting Occupational Safety & Health (OSH) compliance

Snapshot

Country	Singapore
Sector	Employment and Labour
Institution	Ministry of Manpower (MOM)
Start of intervention	March 2017
End of intervention	January 2018
Objective	Encouraging construction companies to take greater ownership of workplace safety and health.
Method	Randomised Controlled Trial of construction companies, with intervention designed following interviews with employers, employees, safety officers and inspectors.
Application	Use of BI principles to inform interventions pre-, during and post-inspection of companies.

Problem

In 2017, the construction sector accounted for 29% of all workplace fatal injuries in Singapore. While this was a reduction from 2013 when the number was a high of 47%, the Ministry of Manpower wanted to do more to bring this number as far down as possible.

Intervention

Inspectors were shadowed to understand companies and inspectors' enforcement experience. Interviews were conducted with more than thirty employers, employees, companies' outsourced safety officers and inspectors to understand their workplace safety and health motivations and challenges. Key insights were:

1. Employers perceived the hiring of safety officers as having fulfilled their workplace safety and health (WSH) responsibilities, and gave limited attention to safety practices.
2. Safety officers were conflicted between implementing safety practices while ensuring they did not delay project timelines.
3. Companies saw value in MOM's inspections, but did not perceive us as collaborative or helpful.

A two-arm trial was conducted where companies were randomly allocated to the control and treatment groups. For the treatment group:

- **Data analytics**

A profiling tool was developed to grade companies based on their past inspection records and identified higher-risk companies that needed to be checked more frequently.

- **Pre-inspection**

Prompting and social norming - To get management's attention and involvement in improving WSH practices, a letter was sent to companies' management to highlight their companies' WSH performance in comparison with other companies' performance. It provided actionable tips for management and highlighted the potential consequences of being in poor performing bands.

- **During inspection**

Salience - A checklist was developed to guide inspectors to diagnose the root causes of WSH lapses (e.g. lack of clarity of employees' roles and responsibilities) and provide actionable advice during the inspection. It was also used to debrief the company representative at the end of each inspection. The checklist was aimed to facilitate conversations between inspectors and companies,

shifting the focus away from simply pointing out technical lapses, to one that is facilitative and guided companies to improve their WSH practices.

- **Post-inspection**

Saliency and loss aversion - After the inspection, a follow-up letter was sent to the management to highlight the actionable advice given during the inspection, to create a feedback loop and impetus to implement change. Again, actionable tips were provided for management and the potential consequences of being in a poor performing band of companies were highlighted.

Results and Impact

The trial showed that the interventions resulted in a 6-times reduction in the average number of enforcement actions taken. There was also a 10-15% reduction in resource savings, which was designed for in this new enforcement approach.

The Occupational Safety and Health Division in MOM made a strategic decision to implement the interventions with all construction companies, to increase MOM's impact in enhancing WSH practices. The Division is also exploring ways to scale the interventions in other sectors, such as manufacturing, to encourage companies to take greater ownership of their WSH performance.

Institutional set-up for interventions using BI

The Ministry of Manpower (MOM) is a ministry of the Government of Singapore, which is responsible for developing a productive workforce and progressive workplaces for Singaporeans to have better jobs and a secure retirement. The Ministry has been using behavioural insights as tool of evidence-based policy design, to design and implement policies and services that better meet user needs based on a deeper understanding of customers' behaviours and decision making environment. The practice of testing to discover what works in behavioural insights also helps the Ministry ensure efficient use of its resources.

The Ministry possesses a central unit called Behavioural Insights and Design Unit, through which behavioural insights are applied across the institution. The unit consists of officers from diverse disciplines including design, accounting, economics, business, sociology and psychology. The Ministry also partners with private consultancies and academic institutions to tap into different expertise in behavioural insights.

Encouraging On-time Payment of Levies

Snapshot

Country	Singapore
Sector	Employment and Labour
Institution	Ministry of Manpower (MOM)
Start of intervention	February 2013
End of intervention	February 2013
Objective	Increasing on-time payments by employers of levies on foreign domestic workers.
Method	Randomised Controlled Trial applied to a sample of 1,000 employers of foreign domestic workers
Application	Redesign of the reminder letter sent to employers of foreign domestic workers.

Problem

About 96% of Foreign Domestic Worker employers in Singapore pay their levies on time, via automated bank account deductions. Every month, the Ministry of Manpower sends reminder letters to about 8,000 Foreign Domestic Worker employers. Can the compliance rate be further increased?

The Ministry of Manpower wanted to test whether a 'nudge' could make more employers pay their levy promptly, avoid penalties for late payment, and reduce the resources spent to follow-up on the late payments.

Intervention

A two-arm trial was designed to test 'nudges' in reminder letters sent to employers who had defaulted on their previous month's levy payment. A sample of 1000 Foreign Domestic Worker employers who had not paid their previous month's levy were chosen on a purely random basis. A control group was utilised to whom the existing reminder letters were sent unchanged as a point of comparison. The tested 'nudges' included:

- **Salience** – the use of boxes in a new letter template to draw attention to key action steps and indicating 'Your foreign worker levy is overdue' in the letter header.
- **Social norms** - '96% of Foreign Domestic Worker employers pay their levies on time'.
- **Priming** - printing reminder letter on pink paper.
- **Personalisation** - including the Foreign Domestic Worker's details in the letter.

Results and Impact

The trial found that the payment rate for levy defaulters was higher for the treatment group:

- 76% of employers who were sent letters which included the Behavioural Insights interventions made a full payment and 85% made a partial payment, compared to 71% and 82% respectively for the control group.
- The use of salient messaging and social norms appeared effective in encouraging levy payments from Foreign Domestic Worker employers who did not pay their outstanding levies.

The Ministry of Manpower estimated that the application of 'nudges' to reminder letters would translate into an annual increase of 3,800 employers making prompt levy payments of about \$1.5 million.

Interestingly, however, not all 'nudges' worked and for which purpose they are use matters. Following this trial, a separate department in the Ministry of Manpower sent out pink reminder letters to encourage a particularly disengaged group to respond to a mandatory household survey. Although the response rate increased for this group, it also attracted a number of complaints from respondents who felt that the use of pink reminder letters was unnecessarily alarming. The use of pink paper was effective in nudging the recipients into action, but it also implied some drawbacks.

Institutional set-up for interventions using BI

The Ministry of Manpower (MOM) is a ministry of the Government of Singapore which is responsible for developing a productive workforce and progressive workplaces, for Singaporeans to have better jobs and a secure retirement. The Ministry has been using behavioural insights as tool of evidence-based policy design, to design and implement policies and services that better meet user needs based on a deeper understanding of customers' behaviours and decision making environment. The practice of testing to discover what works in behavioural insights also helps the Ministry ensure efficient use of its resources.

The Ministry possesses a central unit called Behavioural Insights and Design Unit, through which behavioural insights are applied across the institution. The unit consists of officers from diverse disciplines including design, accounting, economics, business, sociology and psychology. The Ministry also partners with private consultancies and academic institutions to tap into different expertise in behavioural insights.

Gender equality index

Snapshot

Country	Saudi Arabia - Riyadh, Makkah and the Eastern Province
Target group	Gender stereotyping in the business sector
Institution	Alnahda Center for Research, specialized in impact assessment and social and economic research, including project-specific applications of Behavioural Insights
Start of intervention	November 2018
End of intervention	July 2019
Objective	The objective of this pilot initiative, Takafu (<i>Parity</i>), is to establish a Gender Equal Opportunity Index for the Saudi private sector.
Method	Preparation of the Company Scorecard by the Takafu team in response to request of participating companies and collection of anecdotal feedback.
Application	Six participating companies were offered the Company Scorecard.

Problem

Saudi Arabia's Vision 2030 and the National Transformation Program Strategic Objectives emphasise the importance of increasing women's share of employment and management. Yet, while there is general awareness of the gender gap in the workforce, the gap is not formally measured or monitored. This is especially true with employers who may find it difficult to improve their work environment and advance gender equality in their workplaces in the absence of a clear understanding of their baseline performance.

To this end, Alnahda's Center for Research carried out an initiative under the name "Takafu". Meaning 'parity,' the Takafu initiative aims to establish a Gender Equal Opportunity index for the Saudi private sector. The index evaluates gender equality across three indicators: participation, career development and wages. To support employers, the Takafu team developed a tool, the Company Scorecard that allows each company participating in the survey to benchmark its gender equality performance against their peers.

Intervention

The team prepared the Company Scorecard upon the request of participating companies and collected anecdotal feedback. In the second round of the initiative, the team is planning to design a randomized controlled trial to evaluate the impact of the scorecard on company performance towards workplace gender equality.

Six participating companies were offered the Company Scorecard which summarized key indicators generated through the Takafu survey. The Takafu survey included an employer surveys filled by HR managers and an employee surveys filled by male and female employees of the recipient companies. Within each company the target population was the Management and Executive Management.

Takafu Executive Summary: download the report in PDF format: http://www.alnahda.org/research_center/programmes/

This does not include the company score cards, as they were shared privately with companies. The report offers a summary of the overall Index.

Key results and lessons

The Company Scorecard summarizes the main findings of the Takafu Surveys for each participating company compared to the average performance of their peers. The findings fall within the following themes:

- 1) Participation: Number of employees, applicants and new-hires by gender, employee perceptions on gender representation and drivers of the representation gap.
- 2) Career development: Number of employees in management and promotion by gender, employee perceptions on gender equality in opportunities for promotion, access to training and development, and reasons for disparity in women access to promotions.
- 3) Compensation: Gender wage gap in the organization, benefits offered to employees, by gender, employee perceptions on gender equality in compensation and drivers of the wage gap.
- 4) Corporate policies and support mechanisms: Existing policies and strategies that promote gender equality, existing support mechanisms provided to employees with caring responsibilities and to help employees maintain work-life balance.

This intervention collects baseline data on equal opportunity and offers the results to the survey participants. In future phases, the research aims to collect mid-line and end-line data to assess impact of the score card on survey participants.

Increasing hiring of women

Snapshot

Country	Saudi Arabia
Target group	Female Employment
Institution	Ministry of Human Resources and Social Development (MHRSD), the Human Resource Development Fund (HRDF) in collaboration with Harvard Kennedy School - Evidence for Policy Design (EPOD). Evidence for Policy Design (EPOD) is a team led by Harvard research faculty that brings data and economic insights to the design and implementation of public policies in countries around the world
Start of intervention	May 2017
End of intervention	2017
Objective	To measure the effects of Nitaqat on aggregate employment and earnings. Nitaqat Programme is a standard for incentivizing firms to Saudize jobs. It is one of the most important pillars of the strategic transformation programme to improve the performance of the Saudi labour market
Method	Regression discontinuity design to evaluate the impact of Nitaqat
Application	Increasing Female Employment by Investing in Up-Front Costs

Problem

A significant constraint to getting more female Saudis in the work-force is the high upfront costs (fixed costs) faced by firms that have never before hired a female employee. If firms are accustomed to hiring and working with only males, they may not be willing to invest in the physical space, production methods, and new hiring process that are required for firms to hire their first female employee. According to economic theory, once firms make these initial investments to cover the fixed costs of hiring their first female employee, it will become significantly easier for them to hire each additional female worker.

Intervention

Findings show that firms that hired their first female employee after Nitaqat, on average, now have almost 30% of their workforce made up of female Saudis. It appears that making the upfront investment in fixed costs allowed these firms to tap into a valuable resource: female labour.

<https://epod.cid.harvard.edu/sites/default/files/2018-06/Nitaqat.pdf>

Key results and lessons

This points to a potential permanent impact of Nitaqat since firms will be able to continue hiring more and more women without paying these fixed costs again.

Post-Nitaqat hiring patterns show that there are high upfront costs that make it expensive for firms to hire their first female worker. Government programmes can increase female employment by offsetting those fixed costs. Examples include:

1. Offering firms a credit to help with creating a female-suitable workplace. These credits could be applied to building the physical space needed or supporting pro- grams such as childcare.
2. Providing a direct subsidy to firms based on the number of women that they hire. A larger subsidy could be provided for the first few female hires in order to encour- age firms to make the switch.
3. Creating a centralized recruitment platform so that firms can more easily adjust to recruiting females for the first time.

Firms that hired their first female employee after Nitaqat saw large increases in the share of their workforce made up of female Saudis. There was no corresponding increase for firms that already had female staff before Nitaqat. This is due to the upfront costs that firms face when hiring their first women.

Improve occupational safety and health*Snapshot*

Country	USA
Target group	Employee safety and health
Institution	U.S.Department of Labor's (DOL) Chief Evaluation Office (CEO) in collaboration with the Occupational Safety and Health Administration contracted with Abt Associates. CEO has dedicated staff and resources specifically focused on applying and testing the application of BI in labor programmes.
Start of intervention	2014
End of intervention	
Objective	Evaluation of the OSHA On-site Consultation Programme (OSC):The Effect of High Rate Letters on OSC Requests
Method	Randomly assigned, with employers eligible for OSC as the relevant population.
Application	DOL CEO in partnership with OSHA. Test of the effectiveness of behaviourally informed letters in increasing participation of employers in OSC

Problem

The OSC Programme, which is available in all 50 states, DC, and several U.S. territories, is administered in each state by a state agency or university, and is operated separately from OSHA's inspection programme. The service is free, and there are no fines even if problems are found. DOL was interested in testing communication to increase use of the programme.

Intervention

In this study, we partnered with OSHA to test the effectiveness of behaviourally informed letters in increasing participation of employers in OSC.

Final report: https://www.dol.gov/sites/dolgov/files/OASP/legacy/files/OSC-HRL_Report_Final.pdf

Key results and lessons

For small and medium-sized workplaces, which are the focus of the OSC programme and which were called out as eligible for the OSC programme in the high-rate letter, the estimated impact is 1.9 percentage points; without the high-rate letter 8.8 percent of these workplaces would have requested a consultation; with the high-rate letter 10.6 percent requested a consultation. This represents a 21.2 percent increase in the consultation request rate. See report for full impacts.

Institutional set-up for interventions using BI

Many psychological insights were used based on insights taken from literature review and behavioural scientists' review. See final report and materials for details.

The design was informed by previous research but the exact application was new.

The application of BI heavily influenced the intervention and lead to many changes in the programme messaging.

Enforcement and compliance with occupational safety and health standards

Snapshot

Country	USA
Target group	Employee safety and health; enforcement and compliance
Institution	U.S. Department of Labour's (DOL) Chief Evaluation Office (CEO) in collaboration with the Employment and Training Administration (ETA) contracted with Mathematica Policy Research and ideas42. CEO has dedicated staff and resources specifically focused on applying and testing the application of BI in labor programmes.
Start of intervention	Summer 2015
End of intervention	Spring 2016
Objective	Using Behavioural Interventions to Help Employers Resolve OSHA Citations
Method	Stratified random assignment. Before intervention. Employers who failed to respond promptly to citations as the relevant population
Application	In this study, we partnered with OSHA to pilot test whether a limited set of changes to the citation process could lead more employers to respond to OSHA after receiving a health and safety citation and reduce the number of employers referred to debt collection. We used a nationwide randomized controlled trial in two phases to test the effect of the changes, and results indicate statistically significant improvements.

Problem

The Occupational Safety and Health Administration (OSHA) was concerned that 20 percent of employers weren't successfully resolving safety and health citations by fixing hazards and paying penalties. So the agency commissioned a nationwide pilot study to test whether a modified citation process that drew on behavioural science could lead to more resolutions.

Intervention

In the pilot process we tested, OSHA staff (1) gave employers a new handout at the end of each inspection that described how to resolve citations; (2) used a new cover letter for citations; and (3) provided employers with timely reminders about the citation, including a postcard and follow-up phone call. Staff also had access to Spanish-language versions of all materials, which had never before been provided consistently on a national scale.

Many psychological principles were used based on insights taken from literature review and behavioural scientists' review. A full list can be found in the final report but they include:

- Complexity: Used simpler, less technical language to make the citation package easier for employers to quickly digest.
- Limited attention: Concisely described response options in the citation cover letter and previewed the citation process in the inspection handout.
- Procrastination: Emphasised key deadlines and sent a reminder.

The design was informed by previous research but the exact application was new.

The application of BI heavily influenced the intervention and lead to many changes in the programme messaging.

Key results and lessons

The estimated difference between treatment and control groups in the proportion of employers who responded to citations was 3.9 percentage points in Phase 1 and 5.4 percentage points in Phase 2. Both estimated impacts were statistically significant. Given an annual caseload of approximately 24,000 cases in which citations were issued with penalties, the average change in response across the two phases (4.7 percentage points) translates into approximately 1,100 more employers responding to citation packages each year. The difference in impact across phases was not significant; evidence was not found that elimination of the follow-up telephone calls lessened the effect on employer responsiveness.

See following reports for further details:

Technical Report: <https://www.dol.gov/sites/dolgov/files/OASP/legacy/files/13-50291-UIREA-FinalTechnicalReport-20170517.pdf>

Final Project Brief: <https://www.dol.gov/sites/dolgov/files/OASP/legacy/files/14-50291-UIREA-FinalBrief-20170511.pdf>

Interim Project Brief: <https://www.dol.gov/sites/dolgov/files/OASP/legacy/files/BILRP-UI-REA-Trial-Brief.pdf>

Infographic: https://www.dol.gov/sites/dolgov/files/OASP/legacy/files/16a_REA-narrated-video.zip

Public and private providers of employment services

Collaboration in employment services

Snapshot

Country	Australia
Target group	Collaboration in employment services
Institution	Former Department of Jobs and Small Business; Applied and Behavioural Economics Section
Start of intervention	October 2017
End of intervention	October 2017
Objective	Improve job matches through greater collaboration among job service providers/Understand what motivates providers to collaborate
Method	RCT
Application	Trust game in a framed field experiment with employment advisors as participants

Problem

Collaboration and information sharing about vacancies and job seekers among providers can only be effective in the presence of clear financial incentives and trust.

Intervention

This experiment used two interventions to increase trust and collaboration that are budget-neutral to the government. The framed field experiment tested how financial incentives and a reputational mechanism may influence collaboration between employment agencies. 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. The trial also tested the impact of a social incentive in the form of a feedback mechanism, where providers 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.

One intervention restructured the financial incentives and the other introduced social incentives via a reputation mechanism. Participants were recruited by an email sent by the Department in October 2017, which contained a link to the experiment, an explanatory statement, and a copy of the ethics study approval. The link took the subjects to a landing page where the instructions and financial incentives of the experiment were explained. Once they read the instructions, subjects could click on a button to begin the experiment with the first task. After they finished with the sixth task, subjects answered a number of survey questions.

The Randomised Controlled Trial (RCT) was run as a partnership between the department, BIT Australia and Monash University

Key results and lessons

At the time of writing results are yet to be published. See some early findings reported in: <https://www.bi.team/wp-content/uploads/2018/11/TheBehaviouralInsightsTeam-LabourMarketsReport.pdf>

Creating a new model of public employment centres to better suit client base

Snapshot

Country	Russia - 16 Regions of the Russian Federation
Target group	Employers and job seekers to improve job matching
Institution	Ministry of Labour and Social Protection of the Russian Federation, Rostrud (Russian Federal Service for Labour and Employment)
Start of intervention	2019
End of intervention	Still ongoing
Objective	Creation of new model of public employment centres (PEC)
Method	After intervention. 20 model PEC across 16 regions. The population in the remaining 69 regions is considered a control group
Application	Includes standard PEC services and other social services as provided by complementary suppliers.

Problem

The system of public employment services works with population on a daily basis and monitors the demand for different services. It provides consultancy and profiling services and complimentary services, such as writing a job application, helping to find a kindergarden for a child, etc. Matching the needs of those who are applying to the employment service is an ongoing process. Every year new requirements appear depending on the status of applicant, region of their origin, etc. These new needs are reflected in the design of piloted PEC programmes.

Intervention

The pilot demonstrated that the most popular types of services for the population are the services for women with children, people with disabilities (provided in 7 regions), pensioners, people in the pre-retirement age and young professionals (provided in 5 regions). The most popular types of services for businesses were related to investment projects and creation of small enterprise (in 5 regions), services for enterprises with seasonal employment (in 4 regions), modernization of enterprise and hiring of workers (in 3 regions).

The application of BI is reflected in the structure of the services provided, along with the provision of complementary services that are provided by invited private providers.

Key results and lesson

New model PEC activities are evaluated by Rostrud. The evaluation is conducted based on the assessment of the satisfaction of the population and employers.

Overall, the 16 regions demonstrated positive results and in 2020 the piloting will continue with the number of participating regions being expanded. In total, 41 region will be involved.

Other groups

Increasing take-up of minimum income benefits

Snapshot

Country	France, Seine-et-Marne
Target group	Minimum income benefits
Institution	Conseil Départemental de Seine et Marne (Departmental Council). In France, social policies targeting recipients of minimum social benefits are steered by the departments.
Start of intervention	September 2014
End of intervention	
Objective	To raise the take-up of the minimum income benefit (Revenu de Solidarité Active - RSA).
Method	Minimum income beneficiaries. 4032 households, pure random assignment. The control group receives the standard letter of invitation.
Application	The RCT was carried out in the French département of Seine-et-Marne, which is located within the metropolitan Paris area southeast of Paris, and accounts for about 11 % of the population of the greater Paris area. For the experimentation, the cost was very low (we only sent letters). For the evaluation, it is about € 30 000.

Problem

To understand the very small take-up of minimum income.

Intervention

The intervention itself consists of two fairly minor modifications of the content of the official letter which is sent to beneficiaries convoking them to meet and confer with a social worker. The measured outcome is the event of participating to the counseling services offered.

Potential recipients of the minimum income were randomly assigned to receive one of the three notices (the original letter, the simplified version, and the salient information version), so that the sample sizes are equal, and that the mean characteristics of age and gender are equalized across the three groups. The causal effects are then determined by comparing the participation rates across the three groups.

Key results and lessons

The outcome variable for the randomised controlled trial is not the initial choice among the eligible population to apply for RSA benefits, but the choice to comply with the programme's key qualifying regulations in order to maintain their eligibility to collect benefits.

For people under 30, the participation rate for the treatment group who received the salient information version is 12.1 percentage points (and 22 %) higher than the corresponding figure for the control group. The participation rate of these households reaches almost 67 % compared to 55 % for the control group. For further details, see <https://www.cairn.info/revue-d-economie-politique-2018-5-page-777.htm>

The findings indicate that the letters that informed recipients about the advantages (in the form of active labour market policy benefits) accompanying the passive income support benefits substantially increases the participation of two groups in the interviewing process, namely young men and individuals living in rural areas.

The results suggest that governments have little to lose by providing further information about the set of benefits — typically taking the form of activation measures — accompanying the social assistance regime.

These findings are in line with those generally found from experiments involving breast cancer screening, such as Goldzahl et al. [2018], who find no significant effect of their mailing interventions. The experiments conducted by Bourmaud et al. [2016] and Wardle et al. [2016] also failed to increase participation in screening by providing more information about cancer in a supplemental leaflet. On the other hand, Bhargava and Manoli [2015] do find positive and significant effects (yet still of only moderate magnitude) of their mailing experiment involving take-up of social assistance benefits in California.

The experiment supports the relevance of a combination of lack of information and high perceived cost as one factor to explain the non-participation outcome.

Improving education outcomes for young women from low-income backgrounds

Snapshot

Country	Saudi Arabia
Target group	Labor inclusion: Education and Mentorship
Institution	Alnahda Center for Research, specialized in impact assessment and social and economic research, including project-specific applications of Behavioural Insights
Start of intervention	July 2018
End of intervention	January 2019
Objective	Impact Assessment of Mustaqbali Career Mentorship Programme - Pilot
Method	Case control, after conclusion of the Mustaqbali programme. The evaluation has experimental attributes. Subject heterogeneity accounted for by controlling for demographic variables, identification and presence of father in the household.
Application	The case control compares education, employment and behavioural outcomes between Mustaqbali graduates (in the treatment group) and girls who shared similar socioeconomic characteristics but were never enrolled in the programme (in the control group)

Problem

Young beneficiaries at Alnahda demonstrated low rates of graduation from high school, as well as low labor market participation rates (15%) and insufficient income to meet basic needs.

Intervention

The Mustaqbali Programme is the intervention for the treatment group in the assessment. Mustaqbali is a programme designed for young female secondary students (16 -19). The aim of the programme is to ensure that females graduate from high school, and do so with a feasible future plan, built on self-awareness and knowledge of academic and career opportunities.

Key results and lessons

The Mustaqbali Report details an assessment of Alnahda's Mustaqbali programme for female secondary school students from low-income backgrounds. The assessment was conducted by Alnahda Center for Research between July 2018 and January 2019. The report draws from multiple sources: literature on global career guidance programmes, literature on impact evaluations of career guidance programmes, primary materials and data on Mustaqbali participants, secondary reports on Mustaqbali, and interviews with Mustaqbali administrators, instructors and coaches. It includes a survey designed to collect feedback

from Mustaqbali graduates on the curriculum, as well as measure the education, career and behavioural outcomes of the programme. The Mustaqbali Report synthesizes this analysis and recommends areas for improvement for the programme. It also proposes a systematic data-collection methodology and set of data collection tools for the programme.

The analysis recommends areas for improvement for the programme, including measuring behavioural outcomes prior to and after sessions. Measuring the programme's impact on behavioural outcomes is a difficult exercise, especially considering the debate on whether some skills (e.g. resilience) are teachable, let alone measurable. Regardless of the methodology used, these skills are best measured using "pre and post" assessments in order to compare changes among the same group of individuals rather than across groups.

At the time of writing, results are not published yet.

The relevant population are Mustaqbali graduates and girls who did not join the programme. The pilot included 133 young girls between 17 and 25 years old.

The control group (n=68) for this study was formed by identifying individuals with the same key demographic characteristics as the intervention group (e.g. age, household income, etc.), who did not receive any form of sustained career guidance or mentoring of any type. Specifically, the control group consisted of girls who were nominated by sister organizations who served beneficiaries with similar characteristics served by Alnahda, but were never enrolled into the programme.

The treatment group (n=65) consisted of girls who had graduated from Mustaqbali programme. Assignment was not random as all graduates who responded to the research team and consented to answering the survey were recruited into the study.

The pilot study only examined groups after conclusion of the Mustaqbali programme (i.e. the treatment group had already graduated from the programme, and all those selected for the control group were within the same age range as the treatment group). There was no baseline study. Currently, the research team is implementing the second phase of the research which will include a before/after assessment of current cohorts.

In the pilot version, the evaluation determined immediate and medium-term (i.e. 0 to 4 years post-programme) impacts of Mustaqbali programme. As previously mentioned, the team is working on streamlining a data collection protocol that allows for the assessment of long-term education and career outcomes of the programme and persistence of behavioural changes observed on the immediate term.

Estimated impacts on Education Attainment:

- Metric 1: Scores on Qudurat and Tasheeli exams, which are aptitude tests high-schoolers need to take before joining University.
- Result 1: Mustaqbali graduates were three times more likely to score 75 or above on university-entrance exams, compared to their peers who did not join Mustaqbali
- Metric 2: Number of participants enrolled in degree granting university.
- Result 2: Mustaqbali graduates were twice as likely to be enrolled in a degree-granting university, compared to their peers who did not join Mustaqbali

Estimated impacts on Employment:

- Metric 3: Number of participants in full time employment.
- Result 3: Mustaqbali graduates were three times more likely to be in full time employment and less likely to be outside of the labor force, compared to their peers who did not join Mustaqbali
- Estimated impact on Behavioural Skill:

- Metric 4: Self reported reaction along a five-point scale to 16 scenarios that measure five types of behavioural skills that the Mustaqbali programme aims to foster among participants: self-confidence, communication, resilience, ability to set and plan for goals, and optimism and ability to overcome challenges.
- Result 4: Mustaqbali graduates reported stronger behavioural outcomes on the periphery (i.e. choosing options that indicate that they are more likely to “always” embrace a positive behaviour or “never” embrace a negative behaviour) compared to their peers who did not join Mustaqbali, mainly in the categories of self-confidence, communication, resilience, ability to set and plan for goals, and optimism and ability to overcome challenges). Mustaqbali graduates demonstrated significantly better behavioural outcomes in the category of ability to set plans and goals.

The outcomes measured in this study are designed based on the Kirkpatrick model, which is detailed in the literature review of the study and has been referenced by the Human Resources Development Fund in its previous assessments of career guidance programmes in Saudi Arabia.

Increase pension savings

Snapshot

Country	UK
Target group	Pensions
Institution	Pensions Commission; Department for Work and Pensions
Start of intervention	2018
End of intervention	2018
Objective	Develop new policy options to address motivation and information barriers to pension savings
Method	Behavioural economic theory to explain saving attitudes in terms of harnessing inertia, the tendency of people to remain with the status quo
Application	Independent Commission carried out problem diagnosis and worked with the Department for Work and Pensions to develop policy solutions, informed by Richard Thaler's then-recent work on automatic enrolment

Problem

The Pensions Commission identified an emerging pensions challenge, with people living longer, saving less and with a reliance on state provision and a decline of private pensions and fewer employers offering it.

Intervention

Independent Commission carried out problem diagnosis and developed consensus-based solutions, informed by Richard Thaler's then-recent work on behavioural economics, alongside other relevant academic research. In DWP, work was undertaken alongside the Commission to explore behavioural insights, including a process of engagement with North American academics on the role of default options consisting of automatic enrolment into workplace pensions. The policy was then implemented by DWP and The Pensions Regulator, following enactment of legislation and considerable consultation, and consensus-building of the detailed design. As part of the reforms, DWP created NEST, the National Employment Savings Trust, a not-for-profit pension scheme with a public service obligation so that all employers have access to a suitable, low-charge vehicle to meet their automatic enrolment duties. NEST continues to collaborate with leading behavioural scientists. The success of automatic enrolment was part of the motivation to later create DWP's own behavioural science function. It should be noted that this is an early

example of policy informed by behavioural insights and the Pensions Commission predates the emergence of bespoke behavioural functions within government.

What would now be recognised as a behavioural and barrier analysis was conducted through the Pensions Commission. Having tried lots of different communications approaches to address motivation and information barriers to pension savings, policy options were developed around Richard Thaler's work, and other academics, on behavioural economics. Lessons were drawn from Kiwisaver, an early version of automatic enrolment through the tax system in New Zealand, and experiences of large companies who had implemented automatic enrolment into private savings vehicles. DWP used an employer duty to automatically enrol workers to achieve a greater degree of pension saving. Implementation was supported by addressing opportunity barriers to pension saving (e.g. creating a national saving scheme for less profitable employers and employees), developing a legislative and regulatory framework to clearly set out, educate and enforce employer responsibilities and building cross-party political consensus around the approach, and consensus among delivery agents (in particular employers and payroll) throughout the operational supply chain.

The approach overall was not tested through a trial, though elements on implementation were tested and benefitted from research evidence (including the role of the default opt-in and default contribution rates), and evidence from 401k pension plans in the United States. Additionally we have carried out a thorough evaluation of the implementation of automatic enrolment.

The evaluation of implementation generally was overseen by the lead pensions analyst for government.

The Automatic Enrolment Evaluation Report has been published: <https://www.gov.uk/government/publications/automatic-enrolment-evaluation-report-2018>

Key results and lessons

There was substantial evidence that citizens wanted to save more, but were unable to, due to system limitations. The pension system was complicated to navigate, and generally difficult to make initiatives to save for the future. By changing the system into an opt-out format, we were able to expand the numbers of citizens saving automatically, making it as easy as possible to start saving for the future. Additional £18.7 billion a year was saved into workplace pensions by 2019-2020. The approach is being emulated internationally.

Institutional set-up for interventions using BI

After years of trying different approaches based on more traditional economic models (information, tax relief etc) the case was made to try something else, and behavioural economists had come up with a possible solution. Automatic enrolment uses the idea of smart defaults. It means that if people do nothing, they are saving, instead of the reverse. Behavioural economic theory would explain this in terms of harnessing inertia, the tendency of people to remain with the status quo. A barriers-based psychological analysis would describe the reforms as removing major opportunity barriers to saving (including ensuring all employees have access to a scheme and no requirement to navigate complex forms to join). Our latest data showed lower than expected opt-out rates at 9-10% (compared to an expected rate of 28%), despite being introduced at a time of low earnings growth.

After School Project*Snapshot*

Country	South Africa
Sector	Education
Institution	Western Cape Government
Start of intervention	2012
End of intervention	2015
Objective	To Improving participation at the MOD (after-school) centres
Method	Randomised controlled trial, experiments and surveys using behavioural insights
Application	To inform WCG policies regarding the recruitment of MOD centre coaches and to increase attendance rates at MOD centres.

Problem

In 2010, the Western Cape Government (WCG) Department of Cultural Affairs and Sport (DCAS) created the “Mass participation; Opportunity and access; Development and growth” (MOD) programme as an after school programme aimed at creating a socially inclusive, creative and active Western Cape. The MOD Centres act as a hub for sport, recreation, arts and culture activities for learners in the community. The centres are usually located in a school and serve the community as a whole. MOD Centres offer a complement to educational activities provided by schools, offering a safe place for learners to “hang out” and for children to engage in sport and recreational activities. They also assist in the identification of talent learners, who may be selected for high-performance training at “Sharp Centres,” which focus on sporting, arts, culture, excellence and youth development.

There are currently 181 MOD Centres across the province, with a total of 500 coaches that provide sport and recreational activities to over 40 000 registered participants from disadvantaged communities and underserved schools.

A key motivation behind the establishment of the MOD programme was the idea that keeping young people engaged, and providing homework support after school would lead to improved academic, emotional and social outcomes. Furthermore, the delivery of high-quality programming within MOD centres hinges critically on the quality of coaches recruited and increasing the attendance numbers at MOD centres.

As a result, it was important for the WCG to study both the effects of the MOD centres on the performance of learners, as well as to try to identify the behavioural attributes of coaches and messages to parents that could result in high learner attendance. The interventions used experimental methods combined with surveys to investigate these issues and find solutions to implement.

Intervention

As part of a partnership established in 2012 to study the application of behavioural insights to four policy areas, the Western Cape Government (WCG) worked with ideas42 and the University of Cape Town to initiate a series of behavioural change pilot projects aimed at investigating whether behavioural nudges could enhance policy implementation and delivery.

This intervention has two distinct phases. During Phase I, UCT and ideas42 developed and implemented two levels of communication rollouts in schools, at the school and classroom level respectively, and worked with DCAS to improve the internal monitoring and evaluation system to facilitate timely collection of individual-level attendance data.

The trial used behavioural insights to inform the design of posters, stickers and messaging in order to increase the **salience** and **reframe** the identity of the MOD centres. In total, 90 schools participated in the

RCT, which were randomly split into 45 treatment and 45 control. The primary unit of measurement was the number of learners who attended MOD programmes consistently.

In Phase II, led by UCT, three separate projects were tested:

1. Measuring the impact of MOD centre attendance on learner **academic outcomes** in relation to Phase I;
2. Understanding the **behavioural traits of coaches** that correlate with higher attendance, and provide input on ways to successfully identify and measure these traits during the recruitment and selection phase of new coaches; and,
3. Testing the use of **behavioural messaging to parents** as a mechanism to increase learner involvement and attendance at the MOD programme.

The first project was measured by compiling school level data on MOD centres from an audit conducted in 2016, leader demographics and test scores from grades 3, 6 and 9 systemic tests, and MOD attendance data provided by DCAS. The audit was conducted for all 181 MOD centres, while attendance data was provided for 170 of the 181 MOD centres. Systemic test results were available for 172 schools, representing 25 545 students. However, due to issues with matching test results with participant lists at MOD centres, the final sample includes approximately 9 800 (40% of the total sample) learners from 114 schools who attended an MOD centre at least once.

The second project used self-reported surveys in combination with individual choices in a series of standard experimental tasks collected at a meeting of head coaches in November 2015. Each coach participated in five experimental tasks over a 3-hour period and then completed a questionnaire independently. In total, 162 coaches representing the nine school districts took part in the experiment.

For the experiment, coaches were randomly assigned to one of six classrooms, with approximately 25 to 30 coaches per room, and the experiments were run simultaneously. The tasks were designed to elicit measures of patience, cooperation, trustworthiness, honesty and selfishness. The five games were:

1. *Simple Discount Task*: This task measured how coaches characterised **time preference** to indicate how individuals view choices in the present versus choices in the future, and the estimated discount rate provides some measure of the willingness to delay gratification.
2. *Prisoner's Dilemma / Cooperation Game*: This task measured the **propensity to co-operate** with a stranger as opposed to defect. In this task, the decision is framed in terms of a decision to make a High or Low contribution to a common pot. Players earn a return based on contributions to the common pot.
3. *Trust Game / Reciprocity Game*: This task measured the **trustworthiness** of coaches. Trustworthiness is measured by the amount of money a coach returns to a stranger, who has made an initial transfer to them in the expectation of receiving a return.
4. *Honesty Reporting*: This task investigates how individual levels of **honesty** vary under different scenarios, and to extent to which monitoring – which can be expensive – might be effective. The game consists of a basic word search task which individuals complete under 3 different conditions – one in which they are monitored; one in which they have the opportunity to be dishonest about their performance in the task, and one in which they compete against their peers for a single prize.
5. *Dictator Game*: This task seeks to measure **altruism** in coach's behaviour. In this task, individuals each received ZAR 100, which they could donate some, or all, to a charitable organisation. Altruism is measured by the size of the donation made.

The questionnaire gathered information such as age, gender, education, income and method of recruitment. In addition to these questions, give psychological scales were included to measure specific personality traits.

The third project considers whether messaging parents of learners has any positive impact on learner participation in the MOD programme. Using a randomised-controlled trial, learners were randomly assigned to two separate treatment groups and a control group. For this experiment, the researchers recruited students participating in the “Year Beyond” (YeBo) programme⁶. Participants were recruited from 18 of the 24 schools – 10 primary and 8 high schools – participating in the programme, with 1 689 registered attendees (approximately 93 per school). Of this group, 1 363 contact phone numbers for parents/guardians were acquired, of which 1 107 were verified.

Two types of brief messages were sent to parents of learners assigned to the treatment group, while parents of learners in the control group received no such message. Messages were behaviourally-informed from experiments conducted in the United States and literature, and adapted to the specific contexts of low-income Western Cape populations, including being translated into home languages. The first treatment group received messages that focused on learner’s actual attendance record from the previous week. Treatment group 2 received this information and an additional short sentence that identified a specific long-run benefit of attending the programme.

The messages incorporated the following behavioural insights:

- **Social norms:** Messages were addressed in the first-person and personalized to create a sense that the message came from a real and interested person and thus create a form of social pressure or social expectation.
- **Salience:** All messages used highlighted the learners’ attendance record from the previous week, and presented it in numerical form e.g. child attended 2/3 days. The contrast of numbers to words is more likely to stand out in the message and create an impression in recipients’ memories.
- **Loss aversion:** In messages that went to the group which did not attend any sessions in the previous week, the message focused on the opportunities that were missed rather than what could be gained from attending. This harnesses the tendency of people to place more value on losing something rather than gaining an equivalent item.
- **Anchoring:** The use of a social norm of attending ‘all 3 sessions’, or of attending ‘Monday, Wednesday, and Friday’ (all scheduled sessions), also creates an unconscious ‘anchor’ for behaviour.
- **Efficacy and Channelling:** Messages were designed to reinforce parents’ feelings of their own efficacy in encouraging attendance. This was done by providing a relatively actionable suggestion (encouraging learners to attend) and reinforcing that this would help increase attendance.
- **Time preferencing:** Education is seen as an ‘investment good’, with significant future payoffs and short-run costs.

Messages were scheduled to be sent at the same time on a weekly basis through SMS for an 11-week period.

Results and Impact

For Phase I, the behavioural pilot was shown to have positive effects on learner attendance, increasing daily attendance rates within the treatment schools, and bringing more learners into the MOD programme. The treatment schools in the post intervention period were estimated to have on average 25.6 more students attending per day, or a 39% increase over the control population. There was no appreciable change in the frequency with which learners participated in the programme however.

6. YeBo is a government after-school initiative designed to improve learners’ afterschool opportunities and contribute to numeracy and literacy development.

Additionally, the After School Team was able to implement a new attendance tracking protocol to allow DCAS to evaluate changes in daily attendance behaviour within and across schools, thereby providing the department with a greater ability to target particular MOD centres and coaches to increase programme attendance.

Results from Project 1 of Phase II showed that attendance rates at MOD centres are low, especially for amongst high school learners, with learners attending between five and six days per month on average. However, MOD attendance does appear to yield positive academic benefits. The researchers found:

- Evidence to suggest that MOD centre attendance improves systemic Maths test scores, especially for Grade 6 learners, by between 2 to 4 percent. Results are weaker for Grade 9 Maths scores, but this may plausibly be confounded by lower attendance rates amongst high school learners to begin with.
- Evidence to suggest that regular attendance (more than 15% of available sessions) may yield particularly large gains.
- There is no evidence that MOD centre attendance improves test scores on the language systemic test.
- MOD centre attendance does not appear to affect test score outcomes differentially for girls and boys.

Considering that overall attendance rates are still low and those who attend only attend 5-6 days per month, the researchers note that these test score benefits MOD attendees are encouraging. However, more resources are needed to encouraging greater numbers of learners to attend, and to attend regularly, especially those in high school. In addition, these results do not capture other potential behavioural benefits such as improved discipline, self-control, and greater self-esteem. The authors noted the key constraint of good quality data on the results of all three projects.

For the second project, results showed that MOD centre coaches display significant levels of pro-social behaviour. In particular, coaches appear, on average, to be willing to delay gratification, to exhibit reciprocity in their choices, and high levels of altruism/generosity. Furthermore, they found that that many of these behavioural attributes are correlated with attendance and retention rates of learners in the MODs.

These results are important for future recruitment and selection processes. The researchers recommend that the MOD team should continue to incorporate the personality assessment scales into their recruitment processes, as these provide a quick and reliable measure of important attributes such as integrity, conscientiousness and reliability, all of which positively impact learner participation in the programme. Data quality problems were also highlighting, reinforcing the need for the MOD centres to collect better data.

For the third project, results found that, on average, the attendance rate for those in the treatment group was 6 percent higher than the control. This effect was present for both Treatment 1 (51.9%) and Treatment 2 (50.3%), compared to the control (45.9%). This effect was larger for high school learners than primary school learners, and there was no difference based on race or gender.

Furthermore, the messaging intervention appears to have been effective at bringing non-attendees back into the programme. Evidence suggests that differences in attendance rates post-messaging were higher amongst treatment and control group learners who had not attended at all in June (a 7% difference) compared to those who had attended at least once in June (a 3% difference). However, the pilot results suggest that the messaging intervention does not appear to have extended to parental engagement with their children on issues beyond the scope of YeBo, but this may simply reflect the short time frame involved.

The researchers note that messaging intervention is a relatively low-cost, high impact intervention. Based on the regression analysis, they estimate that messaging generated an additional 900 days of attendance at MODs. With a total cost of messaging at ZAR 4 710 for the 11-week intervention, this suggests a total

cost of ZAR 5.23 for each additional day of attendance generated, which could also be improved with economies of scale.

Institutional set-up for interventions using BI

The Western Cape Government works in co-operation with national government to create laws for and provide services to the people of the Western Cape. The WCG consists of 13 departments that are responsible for implementing laws and providing services, including on health, environment, economic development, social and human development. The application of behavioural insights has been spearheaded by the Policy and Strategy Directorate within the Department of the Premier.

Ideas42 is a non-profit design and consulting firm that uses insights from behavioural sciences to design scalable solutions to some of society's most difficult problems. Initially formed at Harvard in 2008, ideas42 brings together professionals from different backgrounds and disciplines to work on projects worldwide to solve problems in health, education, criminal justice, international development, and government efficiency.

The Research Unit in Behavioural Economics and Neuroeconomics (RUBEN), based at the University of Cape Town, is an interdisciplinary group of researchers who use economic experiments, often together with fMRI imaging techniques, to examine the role that social, cognitive and emotional factors play in economic decision-making. RUBEN is currently the only centre for experimental research in economics on the African continent, providing training, research leadership and technical resources for the benefit of researchers throughout the continent.

Improving Adult Literacy

Snapshot

Country	United Kingdom (UK)
Sector	Adult Literacy; English and Maths Policy
Institution	Department for Business, Innovation and Skills (BIS) and the Behavioural Insights Team (BIT)
Start of intervention	July 2015
End of intervention	November 2014 (10 week trial)
Objective	Encouraging adults with low English and Maths skills to persevere with adult education programmes.
Method	Field Experiment (Sample size: approximately 2 000 students enrolled in adult learning courses).
Application	Sending text messages to adults with low Maths and English skills to encourage persistence with the adult education courses they have enrolled on in various colleges in the UK.

Problem

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. England is ranked average for literacy skills and below average for numeracy skills across the OECD.

In an effort to find out how behavioural insights could be used to improve adult numeracy and literacy, the UK's Department for Business, Innovation and Skills (BIS) established the Behavioural Insights Research Centre for Adult Skills and Knowledge (ASK) in collaboration with the Behavioural Insights Team (BIT) September 2014. ASK conducts research and runs trials with the aim of producing evidence-based policy recommendations and practical tools for employers, training providers and adult learners.

One of the first problems identified by the Centre concerned retention and attainment rates on adult educational programmes. ASK found that many college programmes in the UK were experiencing high rates of attrition at key moments, with attendance rates deteriorating by around 50 per cent over the academic year.

Intervention

In one of the first trials conducted by the Centre since its inception, ASK set out to find out if, using insights taken from behavioural science, it would be able to successfully encourage adults with low English and Maths skills to stick with literacy and numeracy programmes.

It conducted a large-scale field experiment testing the use of encouraging text messages, informed by principles adopted from behavioural science, which were sent to adult learners, aged 19 and over, enrolled in English and Maths courses at two further education colleges in the UK. The trial was randomised at class level, with all learners in treatment classes receiving text messages, and all learners in control classes receiving no text messages.

Two thousand students were sent multiple messages and prompts via text message throughout the duration of their course, which were sent on behalf of the college. The messages focused on inculcating four beliefs in learners, based on insights taken from behavioural science that other studies have shown to predict persistence in education:

1. That what the students are learning is important;
2. That they as a learner can succeed in the course;
3. That practice matters in shaping improvement; and
4. That they belong in college.

Learners were also sent messages to help them plan their attendance at college and how to revise their course materials, using implementation intention and mental contrasting style prompts.

The programme of messages aimed to increase persistence by nurturing their motivation for learning and prompting them to organise themselves for classes in the week ahead.

ASK measured the resulting weekly class attendance by students and the proportion of students that stopped attending courses, where a participant was considered to have dropped out if they were absent for three weeks from classes, and compared this with the same indicators for those students sent no messages at all.

Results and Impact

The experiment found that average attendance increased by 7% for those students who were sent the text messages in comparison to the control group who had been sent no messages at all. Moreover, the dropout rate of students (those who never come back after the mid-term break) decreased by 36 per cent in the group sent messages relative to the control.

ASK was able to conclude that the use of behavioural nudges in the form of simple text messages, based on principles of **positive feedback**, **social support** and **planning** or **organisation**, had a positive impact on improving attendance, attainment and retention rates of learners on adult education programmes. As a result of the trial's findings, a number of colleges around the UK are looking to implement a similar text message regime. Using behavioural insights to reduce attrition and increase attainment in adult education could in the long term, therefore, have the potential to improve overall adult literacy and numeracy in the UK.

Institutional set-up for interventions using BI

The Department for Business, Innovation and Skills (BIS) was a ministry of the UK government responsible for business regulation and consumer affairs, higher and further education including training and skills development, and science and research. It has now merged with the Department of Energy and Climate Change (DECC) to form the Department for Business, Energy and Industrial Strategy (BEIS). Adult Skills and Higher Education have now moved to the Department for Education which is now responsible for overseeing the Adult Skills and Knowledge Centre.

BEIS uses behavioural insights in research, design, and implementation to inform its evidence-based approach to policy making. Behavioural science holds significant potential to influence numerous policy areas which BEIS deals with, including, consumer behaviour, energy use, and business behaviour and compliance

The Department has a small central unit dedicated to behavioural insights, and also maintains an informal network of practitioners throughout the organisation. Introductory training on behavioural insights is available to all employees of the organisation.

Improving employment diversity*Snapshot*

Country	USA
Target group	Employee rights; outreach
Institution	U.S.Department of Labour's (DOL) Chief Evaluation Office (CEO) in collaboration with the Office of Federal Contract Compliance Programmes (OFCCP) contracted with Abt Associates. CEO has dedicated staff and resources specifically focused on applying and testing the application of BI in labour programmes.
Start of intervention	2016
End of intervention	
Objective	Piloting a communications and outreach demonstration to strengthen stakeholders' exposure to OFCCP's mission
Method	Stratified random assignment. Before intervention
Application	Community-based organizations stakeholders for OFCCP

Problem

A Needs Assessment and Feedback Survey of stakeholders was conducted and pointed to piloting a communications and outreach demonstration that aimed to (1) increase stakeholders' exposure to OFCCP's mission and materials, (2) increase the frequency and regularity of communication between OFCCP and these stakeholders, and (3) provide guidance on engagement with OFCCP.

Intervention

The cornerstone of the campaign was monthly "eblasts" (mass emails) sent via the GovDelivery platform that highlighted specific OFCCP mission objectives and/or resources. Each of the five eblasts to community stakeholders contained a link to a newly designed "Opening Doors" landing page. Each eblast also incorporated a monthly experiment that tested various marketing and behavioural economics principles. Half of each month's eblast recipients received emails containing the experimental alternation.

Many psychological insights were used based on insights taken from literature review and behavioural scientists' review. A full list can be found in the final report but they include:

- Social influence
- Personalization
- Loss aversion

The design was informed by previous research but the exact application was new.

The application of BI heavily influenced the intervention and lead to many changes in the programme messaging.

Key results and lessons

Most of the experiments yielded inconclusive results and will require continued refinement and experimentation. But two of the messaging strategies yielded significant impacts:

- Instructions in the subject line to “please forward” generated higher open rates;
- Use of a highly personalized writing style and a person’s name as sender (compared with a more neutral style and “OFCCP” as sender) generated significantly higher open and click-through rates.

Final Report: <https://www.dol.gov/sites/dolgov/files/OASP/legacy/files/OFCCP-Demonstration-Final-Report.pdf>

Encouraging greater pension savings

Snapshot

Country	USA
Target group	Employee benefits; retirement
Institution	US Department of Labour's (DOL) Chief Evaluation Office (CEO) in collaboration with DOL Human Resources Division (DOL-HR) and with the Employee Benefits Security Administration (EBSA) contracted with Mathematica Policy Research and ideas42. CEO has dedicated staff and resources specifically focused on applying and testing the application of BI in labour programmes.
Start of intervention	Fall 2015
End of intervention	Spring 2016
Objective	Using Behavioural Interventions to Increase Retirement Savings
Method	Random assignment at the individual level with employees not receiving full employer match of retirement savings as the relevant population. Before intervention.
Application	In this study, CEO partnered with DOL HR and EBSA to test the effectiveness of email messages in increasing employees contribution amount to their retirement fund (TSP) using behaviourally informed messages.

Problem

Roughly 1 in 4 employees of the U.S. Department of Labor (DOL) contributed less than 5 percent of their salary to the agency’s retirement savings programme, the Thrift Savings Plan (TSP), in 2015. Seeking effective ways to improve retirement security for its employees, DOL commissioned a study to determine whether easy-to-implement, low-cost behavioural interventions, such as strategic emails, could increase rates of employee contribution to retirement savings.

Intervention

Many psychological principles were used based on insights taken from literature review and behavioural scientists' review. A full list can be found in the final report but they include:

- Inattention and misperception.
- Present bias.
- Information overload and fear of a permanent decision.
- Hassle factors and procrastination.
- Included both positive and negative framing.
- Encouraging employees to act now.

The design was informed by previous research but the exact application was new.

The application of BI heavily influenced the intervention and lead to many changes in the programme messaging.

Some cost analysis was completed on costs saved but not a full analysis of intervention costs. See report for further details.

Key results and lessons

Two carefully designed emails led to a 7.5% percentage point increase in the share of employees saving at least 5 percent of their salary, thus getting the full employer match. See report for full impacts.

Technical Report: <https://www.dol.gov/sites/dolgov/files/OASP/legacy/files/1-50291-EBSA-FinalTechnicalReport-20170501.pdf>

Final Project Brief: <https://www.dol.gov/sites/dolgov/files/OASP/legacy/files/2-50291-EBSA-FinalBrief-20170501.pdf>

Other BI-informed studies

Assessing time and risk preferences of job seekers

Snapshot

Country	France
Target group	Unemployed people in France
Institution	Research unit (GATE - CNRS - University of Lyon) with the support of UNEDIC and Chaire Sécurisation des Parcours Professionnels
Start of intervention	September 2019-September 2020 for the 3 waves of the survey. September-December 2020 for the experiment.
End of intervention	
Objective	The project aims at eliciting job seekers' preferences and their impact on job search behaviour, using both experimental and survey measures.
Method	The role of time and risk preferences on job search. Experimental and survey evidence. No treatment comparisons since the study aims to connect behavioural preferences and job search patterns
Application	Longitudinal survey and « lab-in-the-field » experiment on a smaller subject pool. 2000 respondents in the first wave of the survey + 350 participants in the experiment. Budget of €25000

Problem

The project aims at eliciting job seekers' preferences and their impact on job search behaviour, using both experimental and survey measures.

Intervention

1) A longitudinal survey aims at measuring unemployed individuals' preferences on a large scale, check their stability over time, and relate them to search effort provision and subsequent search outcomes over time. 2) The "lab-in-the-field" experiment on a smaller subject pool aims at quantifying preferences more precisely, measuring both risk and time preferences in different domains and testing whether the allocation of money and the allocation of effort give similar estimates of preferences. Preferences will be connected at the individual level with data from the *Fichier National des Allocataires* (national file of benefits recipients) that will inform on transitions in the labour market.

2000 respondents in the first wave of the survey + 350 participants in the experiment.

The study complements previous theoretical studies (e.g., DellaVigna, S., & Paserman, M. D. (2005). Job search and impatience. *Journal of Labor Economics*, 23(3), 527-588). The novelty of the study is the combination of a survey and an experiment, and the ability to disentangle the joint effects of patience and risk aversion and identify the precise channels through which present bias may operate. These issues require a more precise elicitation of individual preferences, with clear implications on how incentive policies could be redesigned to account for risk and time preferences.

Key results and lessons

The study will identify the precise extent to which individual preferences for risk and time, impact job search behaviour and outcomes. It will determine whether risk preferences matter more or less than time preferences in the definition of the reservation wage and its evolution, in the reported intensity of search, and in the search channels used. The project tests whether job seekers discount their utility streams quasi-hyperbolically, which may include present bias and procrastination (delaying effort to future dates).

The study does not include any intervention, but the ability to connect at the individual level the measures of risk and time preferences with unemployment/employment data from the Fichier National des Allocataires will enable to identify the role of specific preferences in the success of job search.

The study remains on-going.

Guidance to improve working conditions in a changing world of work

Snapshot

Country	France
Target group	World of work
Institution	French Interministry Directorate for Public Transformation (Direction Interministérielle de la Transformation Publique). DITP has a dedicated team for BI application.
Start of intervention	2019
End of intervention	
Objective	Changes in the world of work (social interaction, technological tools...)
Method	A good practices guide published in June 2019 provides recommendations to improve working conditions that can be used in any private or public structure.
Application	Gathering of insights deduced from the literature (fundamental and applied researches and studies) about various cognitive science fields of research (social cognition, attention, decision-making...) that can be useful to help and facilitate many aspects of ongoing changes in the world of work.

Problem

Raising awareness of changes in the world of work (social interaction, technological tools...).

This mission is ensured by 3 means: 12 projects with ministries addressing several different policy fields challenges are led by part of the team, whereas others deal with administrative documents simplification. The latter activity is sensitizing public deciders to the importance of taking BI into account by spreading knowledge and good practices (thanks to thematic reports and events).

Intervention

Gathering of insights deduced from the literature (fundamental and applied researches and studies) about various cognitive science fields of research (social cognition, attention, decision-making...) that can be useful to help and facilitate many aspects of ongoing changes in the world of work.

All behavioural insight principles were of previous research and design. This report stands for a broad and simplified review of insights to support current challenging transitions in the world of work.

Key results and lessons

This guide aims at providing helpful and easy to implement good practices for human resources agents and managers of both public and private sectors.

The guide was welcomed and shared by our public partners and confirmed the need for practical and easy to apply advices to help administrations cope with mutations of the working life.

Link to the report: <https://www.modernisation.gouv.fr/etudes-et-referentiels/comprendre-et-apprehender-les-nouvelles-realites-du-monde-du-travail-grace-aux-sciences-comportementales>

So far, there is no dedicated protocol that would allow the impact of this guide to be evaluated. However, we could empirically observe the level of interest (especially from public human resources managers could be observed empirically through the number of views of the document and the high number of participants at the event organized on this topic.

Also, some recently adopted laws by the French government provide the basis for improvement of working conditions and would help human resources managers to implement the good practices listed in the guide:

- For example, the "right to disconnect" was introduced in 2017. Companies of 50 employees or more are now required to agree with their employees (through social dialogue and collective bargaining) on their availability outside of working hours.
- Another example is the right to telework: a law adopted in 2017 introduced more flexible rules to allow more people to benefit from teleworking arrangements.

Assessing perceptions and attitudes with respect to childcare

Snapshot

Country	Saudi Arabia
Target group	Female Employment
Institution	Ministry of Human Resources and Social Development (MHRSD), the Human Resource Development Fund (HRDF) in collaboration with Harvard Kennedy School - Evidence for Policy Design (EPOD). Evidence for Policy Design (EPOD) is a team led by Harvard research faculty that brings data and economic insights to the design and implementation of public policies in countries around the world
Start of intervention	December 2018
End of intervention	2018
Objective	Increasing female labour force participation in Saudi Arabia, in line with Vision 2030 goals, will require policy-makers to mitigate barriers women face to employment, one of which could be childcare.
Method	A research team sought to examine to what extent, if any, limited availability, high cost, or low quality of childcare deters mothers from working.
Application	Focus group.

Problem

Increasing female labour force participation in Saudi Arabia, in line with Vision 2030 goals, will require policymakers to mitigate barriers women face to employment, one of which could be childcare. Many employed Saudi mothers self-finance childcare, rather than relying on government support programmes. Low take-up is not due to low awareness of the programmes, rather many women prefer to use private childcare or a domestic worker, or are ineligible to use the programmes.

Intervention

The research team conducted a focus groups and electronically surveyed 2,000 women 18 to 40 years old. The women likely represent a wealthier subset of the population, with median monthly earnings 2.5 times the minimum wage. Respondents resided in large cities (Dammam, Jeddah, and Riyadh). Accordingly, employment rates of respondents (50% for the 40% of respondents with only a high school degree and 80% for the 60% of women with at least a bachelor's degree) are higher than the national average of 26% for the same age group.

<https://epod.cid.harvard.edu/sites/default/files/2019-07/Cortes%20-%20Childcare%20as%20Potential%20Barrier%20to%20Employment.pdf>

Key results and lessons

More than 80% of respondents with children are aware of government regulations regarding private-sector maternity leave, and 55% of those with children have taken advantage of the policy.

Nearly one-fourth of respondents were eligible for Qurrah (which provides childcare subsidies for mothers working in the private sector with monthly earnings below 8,000 SR, for up to two children), and around 15% used it. This rate is reasonable, given the additional qualification that subsidies can only be used in government-approved childcare facilities.

Almost no mothers surveyed used firm-based daycare, which private firms with 50+ female employees with at least ten young children are legally required to provide. One exception was teachers interviewed in the focus groups, all of whom used subsidized childcare provided in their schools.

Most working mothers (56%) rely on domestic workers or nannies, on which they spend about one-fifth of their income. Survey respondents pay 1,400 to 1,500 SR per month on domestic workers or nannies to care for their children. In contrast, women who use other means of childcare, such as daycare, pay 300 – 400 SR less, on average.

All in all, the study shows that many employed Saudi mothers self-finance childcare, rather than relying on government support programmes. Low take-up is not due to low awareness of the programmes, rather many women prefer to use private childcare or a domestic worker, or are ineligible to use the programmes.

Childcare does not appear to be a significant barrier preventing educated women of higher socioeconomic status from working. However, childcare for less educated women from lower socioeconomic backgrounds may pose more of a barrier for employment.

Policymakers could maintain and strengthen childcare support for women. They could increase promotion and uptake of the Telework programme — a programme launched in 2016, which allows employers to work remotely upon agreement with their employer — through a communications campaign targeted at new mothers and employers.

Policies to increase parity between public and private sector policies are also needed, and can simultaneously advance efforts to increase employment of Saudis in the private sector. Average wages are lower and working hours are longer in the private sector, meaning less time and money for childcare. Policymakers should evaluate private sector childcare support programmes, such as Qurrah and maternity leave, and ensure they compensate for the longer working hours and potentially lower pay that may make it harder for working mothers to care for their children.

Employer attitudes towards new graduates

Snapshot

Country	Saudi Arabia
Target group	Job Placement
Institution	Ministry of Human Resources and Social Development (MHRSD), the Human Resource Development Fund (HRDF) in collaboration with Harvard Kennedy School, Evidence for Policy Design (EPoD). EPoD is a team led by Harvard research faculty that brings data and economic insights to the design and implementation of public policies in countries around the world.
Start of intervention	September 2018
End of intervention	
Objective	Supply and Demand — Understanding Saudi Student-Employer Matches and Preferences (Pilot Study)
Method	Gathering and analysis of information on how employers assess potential hires
Application	Over 80 exploratory interviews and surveys with human resource managers and business executives. Respondents expressed that students across discipline, gender, and university type lack the soft skills and applied experience essential for their career readiness

Problem

Labour force participation among degree-holders is low in Saudi Arabia, with college graduates constituting only 35% of the country's workforce. Raising the rate may require better understanding of the thought process, preferences, and constraints of both employers and college graduates entering the labour force.

Intervention

Over 80 exploratory interviews and surveys with human resource managers and business executives to gather information on how employers assess potential hires.

Key results and lessons

Respondents expressed that students across discipline, gender, and university type lack the soft skills and applied experience essential for their career readiness. University learning is largely limited to theoretical training, with minimal opportunities for practical training, such as internships and career mentorship. Even when students have practical training, university data systems do not have the capacity to collect and signal that information to employers. As a result, the guidance available to potential employers is largely limited to student major and GPA, with limited information on career readiness. Students seeking employment after graduation may face their own information gaps due to their lack of work experience and inability to access professional networks. Information gaps are a primary deterrent of graduate job placement.

Employers lack sufficient information to assess graduate career readiness, and students lack sufficient information to assess needs of employers. Policymakers can bridge the information gap by working with universities to develop systematic data collection and signalling platforms.

Caring information and support

Snapshot

Country	UK
Target group	The project spans a number of policy areas but primarily feeds into labour market policy and social care policy
Institution	Department for Work and Pensions (DWP), Department for Health and Social Care (DHSC), Gender Equalities Office (GEO). The project was led by DWP's Behavioural Science Team (a dedicated behavioural science function that sits in the Department's policy division)
Start of intervention	
End of intervention	
Objective	The "Carers Employment Digital Discovery Project" looked across the entire system of caring information and support from the citizen's perspective with a view to identifying opportunities for improving caring intervention
Method	The project was exploratory and multi-method, involving a mixture of novel and adapted approaches
Application	Six core strands designed to help us develop a holistic understanding of the nature of the behavioural challenge and identify potential solutions to later implement and test

Problem

Thanks to record employment rates, 32.75 million (76.1%) people aged 16-64 in the UK are in paid employment or self-employment (ONS, 2019). Outside the workplace, the vast majority will naturally have ties to other adults, whether those are parents, spouses, or grown children. When sickness or disability strikes families, it brings with it the question of how associated care needs are to be managed between family members, public services, private services and charities. People often report feeling that they have no option but to take on caring activities, and that the information and support available to help them during this time has been inadequate.

The outcome is often that employment for some or all of the family members takes a back seat, whether going part time or turning down an opportunity for promotion, switching to an alternative form of work or giving up altogether. People aged between 40 and 64, particularly women, are most at risk of dropping out of work for this reason. Carers who leave work are unlikely to return after caregiving ends. This can have profound and enduring negative impacts on people's financial situation, as well as their mental, physical and social wellbeing. The ramifications are also experienced by employers, and the wider economy, as a result of the loss of skilled and experienced individuals from the workforce. With an aging population, this problem is only going to get more acute over time as more people develop care needs.

Led by DWP's behavioural science team, the "Carers Employment Digital Discovery Project" looked across the entire system of information and support from the citizen's perspective with a view to identifying opportunities for intervention.

Intervention

The project was exploratory and multi-method. It involved six core strands designed to help us develop a holistic understanding of the nature of the behavioural challenge and identify potential solutions to later implement and test:

1. Consultation with a range of expert stakeholders via meetings and collaborative workshops throughout the course of the project;
2. Exploration of the current information available online for carers, involving a review of websites brought up using hypothesised search terms;
3. Qualitative research (depth interviews) with working people facing decisions about work and care. This study explored participants' current and recent experiences of making decisions and accessing information;
4. Qualitative research (focus groups) with carers receiving support from their local carer centre who were working at the point that they became a carer. This study retrospectively explored participants' experiences of making decisions about work and care, as well as what they wished they had known about caring and work earlier in their journey;
5. Triangulating research findings through reference to existing literature;
6. Behavioural analysis and model development: Synthesising findings from the above strands and applying those findings to our understanding of the problem and possible solutions. Extensively and continually testing and refining our understanding with working carers and stakeholder organisations to produce the final set of findings.

Rather than taking behavioural insights from psychological literature and applying them to the problem we used a bespoke set of tools and approaches to help us develop a context-specific understanding of working carers' behaviours (descriptive, and normative or 'ideal') and the current barriers to normative behaviours. These tools included:

- Personas, journey mapping and thought experiments with cross-government stakeholders to identify intended outcomes of existing policies that were vulnerable to unrealistic expectations of citizen behaviour;
- Analysis of the discourse and language around “care” and “caring” in the UK, and its implications on social norms;
- Application of the COM-B (Michie, 2011) behavioural model to the design of primary research with working people facing decisions about work and care;
- Integration and adaptation of the COM-B and Individual Social Material (ISM) (Scottish Government, 2013) behavioural models to systematically map the barriers to informed decision-making faced by potential carers. Both cover subsets of the reasons why people may not perform desired behaviours. The COM-B model focuses on the person (psychological factors) and ISM on the environment (sociological factors). By integrating these two approaches we were able to expand the unit of analysis from individual behaviour to wider social practice around caring, and to develop more granular insight into the specific types of barriers experienced by potential carers;
- Developing a new normative model of decision-making about work and care and cataloguing potential carers' user needs.

Key results and lessons

By taking a user-centred and behaviourally focused approach, we were able to uncover the fact that many working carers currently experience a 'default user journey' in which they struggle to access the information they need to make informed decisions about work and care. This default journey is the result of a range of barriers, including carers not recognising they are carers and that there is information out there for them, carers not being signposted to information and support early enough, and the information that does exist not reflecting the full range of options available. Additionally, different organisations offer information and

advice products which make sense given their specific goals, but the products do not amount to a useable roadmap for navigating the whole system.

Based on these findings we aim to develop and test solutions that address the barriers identified. These solutions will involve two core aspects:

- (i) signposting early-stage working carers repeatedly and proactively to information, and
- (ii) connects them with information to support them through the complex decision-making process.

Institutional set-up for interventions using BI

We are currently in the process of securing funding to develop solutions to address the problems identified through the Discovery project. Once developed we intend to pilot and robustly evaluate these solutions to understand the impact they are having on carers' decision-making and employment outcomes. We anticipate that any resulting reports containing project findings will be published at the end of the pilot.

Assessing experience of job centre clients and identifying possible BI interventions

Snapshot

Country	USA
Target group	Employment and training
Institution	U.S. Department of Labor's (DOL) Chief Evaluation Office (CEO) in collaboration with the Employment and Training Administration (ETA) contracted with Impaq International and ideas42. CEO has dedicated staff and resources specifically focused on applying and testing the application of BI in labor programmes.
Start of intervention	
End of intervention	
Objective	Study of the American Job Center Customer Experience
Method	N/A. Intervention designs were suggested but not evaluated
Application	In this study, we partnered with ETA to better understand customer experience at AJCs and to produce a set of behavioural science-based strategies that could enhance the AJC customer experience.

Problem

DOL funds American Job Centers (AJC) across the country. This was an exploratory study of the customer experience at American Job Centers (AJCs). The purpose of this study is threefold: 1) to learn more about the customer experience in AJCs, 2) to highlight promising practices in those AJCs, and 3) to produce a set of behavioural science-based strategies that could enhance the AJC customer experience.

Intervention

In this study, we partnered with ETA to better understand customer experience at AJCs and to produce a set of behavioural science-based strategies that could enhance the AJC customer experience.

Many insights proposed were taken from literature review and behavioural scientists' review. A full list of the proposed interventions can be found in the final report but they include:

- Revise or augment the invitation letter that job/training seekers receive.
- Initiate a social referral programme.

- Simplify the registration/check-in process for job/training seekers.
- Simplify the registration process for employers, and allow more control over digital tools.
- Offer short, targeted orientation sessions that focus exclusively on introducing AJC services and resources.
- Create a one-page document with a brief review of all AJC services.
- Remove eligibility barriers by opening services to everyone.
- Create a personalized calendar for job/training seekers.
- For staff, set aside time for “busy-work,” incorporate set breaks, and centralize calendars.

The design was informed by previous research but the exact application was new.

Intervention designs were suggested but not evaluated.

Additional information about CEO's behavioural interventions work under this project can be found in the following resources:

Implementation Brief: <https://www.dol.gov/sites/dolgov/files/OASP/legacy/files/8-BILRP-Implementation-Brief-Final-20170501.pdf>

Podcast: https://www.dol.gov/sites/dolgov/files/OASP/legacy/files/17a_BILRP-Podcast.zip

Key results and lessons

A successful intervention requires an appropriate behavioural problem to solve as well as partners who are willing and able to collaborate with the intervention design team. This section describes how we worked with DOL's Chief Evaluation Office (CEO) to recruit partner agencies and identify problems appropriate for behavioural interventions.

Conduct broad outreach to identify candidate problems.

As the DOL-BI project was getting underway, we spoke with representatives from numerous DOL agencies to explore promising opportunities to apply insights from behavioural science to a variety of programme areas. We knew that a broad outreach effort would be necessary because many programmes that appear to be promising in preliminary discussions might not advance to the implementation and testing stages. We reached out to over a dozen potential programmes and pursued six that seemed promising. However, after gathering detailed information about each programme, we ultimately identified three that were suitable for a behavioural trial.

Develop selection criteria based on goals, resources, and priorities.

Annex B: G20 survey of use of Behavioural Insights (BI) in employment policies

What is this survey about?	As one of the outcomes of the G20 Employment Working Group (EWG) under the Saudi G20 Presidency, a stocktaking report will be prepared of recent initiatives by G20 countries in the field of employment and labour policies that involved the use of Behavioural Insights (BI). A number of these initiatives were already presented by G20 countries during the first G20 EWG meeting in Jeddah. The purpose of this survey is to collect information on these initiatives, including any other BI initiatives not presented, using a common template. This will help in the preparation of a more systematic and comparable overview of these initiatives.
What will happen to the survey answers?	The answers will be collected and documented as case studies in the G20 EWG stocktaking report, which the OECD will prepare. The draft report will be circulated to G20 EWG Delegates for comments and revised accordingly.
What is "Behavioural Insights"?	BI is about understanding how social context and behavioural biases influence people's abilities to act rationally. It uses lessons derived from the behavioural and social sciences to collect evidence of what works (and what does not) using experimentation and piloting at a small scale first, and applying these findings to improving the outcomes of public policy.
Who should complete this survey?	Ideally, the persons responsible for each initiative that has involved the application of behavioural insights to an employment or labour policy issue.
Completing the survey	Please complete the questionnaire for as many relevant BI initiatives as possible, including both those that worked and those that did not, using one worksheet for each initiative. Where necessary please add more worksheets. <u>Once you have completed this survey, please send your responses to the contact below by 19 March 2020.</u>
Who should you return the survey to?	G20 Unit Saudi Ministry of Labor and Social Development KSA-G20EWG@mlsd.gov.sa
Thank you!	

Questions on the Application of Behavioural Insights

Please provide detailed information about the initiative where your organisation has applied behavioural insights. (Please complete one worksheet per initiative and use as many worksheets as required)

QUESTIONS	ANSWERS
What was the name of the initiative?	
What policy field/s and or sector/s was it for?	
What entity (i.e. ministry/agency/team/unit) was in charge of developing the project?	
<i>Is this an entity with dedicated BI functions or are they applying BI only project-specific applications? Please provide as much detail as possible</i>	
What was the issue or problem trying to be resolved?	
In what way was BI applied? (e.g. literature review, experiments, piloting, RCTs, etc). Please provide as much detail as possible.	
For experiments, trials, RCTs please provide the following information:	
1. Context:	
i. Place (city, country)	
ii. Time (start and end of the project, experiment, RCT...)	
iii. Public organization in charge (or NGO / research centre if partnership)	
iv. Results in Publication type (if any): Peer-reviewed journal article, government/consultancy report, unpublished, etc. If published please provide link and published report.	
2. Intervention applied (if any)	
3. Design attributes:	
i. Relevant population	
ii. Sample size & methodology (pure random / stratified / clustered, convenience)	
iii. Control group?	
iv. Treatment selection (randomly assigned? Yes/no?)	
v. Before/after intervention?	
vi. Other (please specify)	
4. Evaluation attributes: was or has the experiment/trial/RCT... been evaluated? If yes,	
i. Did the evaluation assess persistence of effects?	
ii. Was subject heterogeneity evaluated / accounted for?	
iii. Did the evaluation assess cost-effectiveness?	
iv. Other (please specify)	

QUESTIONS	ANSWERS
<i>5. Evaluation metrics:</i>	
<i>i. Estimated impact (and indicate units of measurement, e.g. number of persons finding jobs, percent savings in unemployment benefits, etc.)</i>	
<i>ii. Statistical significance</i>	
<i>iv. Intervention costs</i>	
<i>v. Other (please specify)</i>	
What psychological principles / behavioural insights were used in the application? Where were these insights taken from?	
Were these principles / insights replications of previous research and design, or were they (from the best of your knowledge) novel applications? If replications, what adaptations had to be made?	
How did the application of BI change or shape the end decision, action or intervention?	
Was or has the implemented decision or action been evaluated? If yes – what methodology of evaluation was used? What was the outcome? What were the benefits and drawbacks for different groups? [If published please provide link and published report]	
Who managed (title / role) the research / design / evaluation of the application of BI?	
What were the key lessons of the end decision, action or intervention that did or did not work?	
Contact Information (We may contact you for points of clarification but contact details will not be disclosed without prior consent).	
Name of person completing this survey	
Position and Organisation	
Contact details (email and telephone number)	
Please provide any other relevant or appropriate information	