

Executive Summary

APPLYING BEHAVIOURAL INSIGHTS TO LABOUR MARKET CHALLENGES:

Increasing Career Services Participation and Informing
Postsecondary Education Choices



The Future Skills Centre (FSC) is a forward-thinking centre for research and collaboration dedicated to preparing Canadians for employment success. We believe Canadians should feel confident about the skills they have to succeed in a changing workforce. As a pan-Canadian community, we are collaborating to rigorously identify, test, measure, and share innovative approaches to assessing and developing the skills Canadians need to thrive in the days and years ahead. The Future Skills Centre was founded by a consortium whose members are Toronto Metropolitan University, Blueprint ADE, and The Conference Board of Canada, and is funded by the Government of Canada's Future Skills Program.



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The opinions and interpretations in this publication are those of the author and do not necessarily reflect those of the Government of Canada.



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We partner with all levels of government, nonprofits, foundations, and the private sector to deliver evidence-based solutions and rigorous evaluations. Some of our clients include the Government of Canada, Government of British Columbia, Ville de Montréal, [Ontario Securities Commission](#), WoodGreen Community Services, [United Way-Halton Hamilton](#), the Daymark Foundation, East Toronto Health Partners, and Sun Life Financial.

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We also help organizations build their own research and evaluation capacity. From setting up a new behavioural science function to growing a mature, interdisciplinary team, we bring BIT's global expertise and experience to Canadian organizations. Contact us: bitcanada@bi.team

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- **Government of British Columbia**
- **EducationPlannerBC**
- **British Columbia educators and students**
- **Government of Saskatchewan**
- **Government of Alberta**
- **Alberta Employment Services providers**

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Sasha is the Director of BIT Canada, leading BIT's team in Toronto and its work across Canada. BIT Canada works with a wide range of Canadian organizations that are dedicated to social impact. We have done work with the Government of British Columbia's Public Service Agency, Environment and Climate Change Canada, the McConnell Foundation, University Health Network, Ontario Securities Commission, and Region of Peel, among others.



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Executive Summary

Approach and recommendations

The Canadian labour market is evolving rapidly. Canadians need to be well prepared and supported to respond to ongoing uncertainties and shocks. Canadian labour market policy and programming are funded and delivered to do exactly that. However, there are major gaps in the evidence base around how best to inform, empower, and engage Canadians when it comes to making decisions about work.

From June 2022 to October 2023, the Behavioural Insights Team (BIT) worked collaboratively with three Canadian provinces, the Future Skills Centre, and a wide range of stakeholders to generate practical ideas and rigorous, generalizable evidence related to labour market information (LMI) provision and uptake of career services.* Our program of research was unique in adopting an approach rooted in applied behavioural science. It was organized under two workstreams.

Working closely with the Government of British Columbia and partners like Education Planner British Columbia, we co-designed and implemented a multi-phase, mixed-methods research approach to answer three questions:

1. Whether and how LMI helps students make more informed decisions about postsecondary education (PSE);
2. What specific LMI data points are most helpful in empowering students; and,
3. How the LMI should be provided, including who provides it, when it is provided, how it is framed and visualized, and more.

First, we reviewed the existing evidence base on the influence of LMI on PSE choices. We found very few high-quality studies, and the results of those studies were mixed. Some studies showed a positive impact on PSE participation and program selection, others showed no effect at all. In short, there was a major gap to fill.

* The terms “career services” and “employment services” are used interchangeably in this document.

We then conducted interviews with students and their teachers/counsellors in British Columbia, exploring the drivers behind students' decisions to attend PSE and what labour market data points resonate most. Using these insights, we designed and implemented two randomized controlled trials (RCTs), a highly rigorous method for evaluating the impact of interventions. These were implemented on Predictiv, a platform for running online surveys and trials that BIT developed.

- Our first online trial explored whether and what information about labour market outcomes to share with students to influence their career pathway decisions. We found that providing simple and clearly explained LMI about labour market outcomes has a large effect on encouraging students to pursue fields with stronger prospects. To determine this, we asked students to choose which job they would prefer between pairs of otherwise somewhat similar jobs with quite different labour market outcomes. Those who did not see information about the outcomes selected the job with better prospects 52% of the time; those who did see the information selected it 62% of the time. We also learned that a common measure that combines various indicators into a “holistic job outlook,” either on its own or combined with other data points, was more influential than other outcomes, including salary.
- Our second trial examined whether providing information about financial aid would increase the influence of LMI by making the higher opportunity jobs, which had more expensive educational requirements, feel more accessible. We found that even though the information increased students' perceptions of the generosity of available aid, it did not influence their pathway decisions. This suggests an important next step, determining how to make financial aid information more relevant and influential.

There are important limitations to online trials, as they simulate decision-making rather than testing it in the real world. To mitigate this limitation we completed a final, in-classroom study in British Columbia. Receiving open-ended responses from students both confirmed our findings and allowed us to build a nuanced, local understanding of their perceptions of LMI and financial aid information.

Given these results, we recommend that organizations supporting students' PSE decisions:

- Provide LMI to high school students to help them make more informed decisions about occupational pathways and PSE.
- In providing LMI to students, prioritize the following data points: educational and skill requirements, “holistic job outlook,” and salary or salary range.
- Do not include more than one or two other data points related to labour market outcomes as they can be difficult to understand and interpret.
- Share localized, disaggregated LMI that provides specific data about career pathways and opportunities in students' locations of interest.
- Provide LMI in ways that are more likely to capture student attention and feel personally relevant. Where it is feasible, we recommend a facilitated, in-classroom approach – where it is not, personalization and interactive components that require students to take actions.
- Keep language simple (maximum Grade 6 reading level) and provide short, clear definitions when they are required.

- Engage trusted messengers (e.g., workers from the field, family, and friends) in LMI delivery.

We also recommend further research to deepen and extend these findings:

- Conduct one or more field trials to measure the impact of these ideas on student outcomes, addressing the key limitation of our study, which examined simulated PSE choices in an online lab environment.
- More precisely, run a large-scale, clustered randomized trial or stepped wedge trial where different schools would be assigned to different LMI options and a control condition.
- Track those students over time to see the differential effect on outcomes like PSE applications and attainment, as well as employment rate and wages.

We started part of our research program by summarizing existing evidence and conducting interviews with policy experts, practitioners, and jobseekers. The goal was to identify what parts of the outreach and engagement process to focus on, and what groups of potential service recipients to prioritize. We ultimately focused on improving outreach to Employment Insurance (EI) applicants by leveraging the Targeting, Referral, and Feedback (TRF) database developed by Employment and Social Development Canada (ESDC). TRF shares information about recent EI applicants with their home province, enabling proactive outreach to recently unemployed residents. We focused on TRF given the ability to engage a large number of jobseekers who could benefit from services and historically low rates of uptake in the program.

Working closely with the Governments of Alberta and Saskatchewan, we rigorously tested options to improve outreach. We focused on email communications to unemployed residents who had applied for EI and were part of the TRF database. The emails were developed based on our qualitative research, literature review, and principles from behavioural science.

In Alberta, we worked with 10 service providers contracted by the province to deliver employment services to run an RCT with over 3,800 jobseekers. This RCT tested three new initial outreach emails to TRF referrals, the first communication that people in the TRF database receive. The three emails used different behavioural science principles. For example, one email visualized uptake of employment services as a third and final step in the EI application process. The three new emails were tested against the “status quo” emails each provider was already sending. The results of the trial were ambiguous; overall the status quo emails did about the same as two of the new emails, with a third new email doing worse. The ambiguous results reflect differences across providers; where providers were already adopting best practices, their status quo emails reflected an understanding of local context that we could not recreate. However, two of the new emails represented a major improvement for providers who were not already integrating key practices. These two emails, included in this report, have been shared with providers across the province alongside key communications principles.

In Saskatchewan, we ran a RCT with almost 1,500 jobseekers to test the impact of sending reminder emails to TRF referrals on uptake of career (employment) services. While TRF was designed as an early intervention program, we hypothesized that TRF outreach was coming too soon for many people – before they were ready or motivated. By the time they would be receptive to career (employment) services, the outreach was no longer salient. Our results were promising, albeit inconclusive. There was a 24% relative increase (from 5.1% to 6.7%) in uptake among those who received a follow-up email, but this result was not statistically significant.

Across our work in Alberta and Saskatchewan, we gained insight into key barriers to uptake of employment services and how to mitigate those barriers through engagement and outreach. Our most important recommendations include:

- Ensuring that outreach to engage jobseekers is simple (Grade 6 reading level), personalized, reinforces legitimacy, has a single, clear next step, and emphasizes the most compelling aspects of service (e.g., connections to local employers, flexibility of service provision). Several templates for initial outreach and follow-up engagement that reflect these imperatives are included in this report.
- Broadening early intervention approaches like the TRF database to promote re-engaging jobseekers later in their employment journey given that their motivation or readiness may have increased.
- Integrating income security programs like EI with career and employment services, so that when someone applies for EI they are registered for services and even have an appointment booked by default. More modestly, making it more obvious to EI applicants that they may be contacted by career (employment) services, to add more legitimacy to the eventual outreach.
- Building a provincial or interjurisdictional initiative to advance this research. The initiative would establish and tackle research and development priorities for uptake of career services. It could 1) consolidate research findings, best practices, and resources; 2) provide tools for evaluation / continuous

improvement; and 3) support shared technology and service procurement and provision.

Beyond the specific insights, findings and recommendations generated, this research underscored the value of interjurisdictional collaboration – the perspectives and support of our government partners in British Columbia, Alberta, and Saskatchewan have been invaluable. We believe the partner-driven, mixed-methods approach developed and implemented in this work can be applied to other pressing questions in Canadian labour market policy.

Trial results

This section of the Executive Summary provides a bit more detail on the design and results of the four randomized controlled trials conducted over the course of research.

Trial 1: Online RCT Testing Impact of Labour Market Outcome (LMO) Information on Selection of Higher Opportunity Pathway

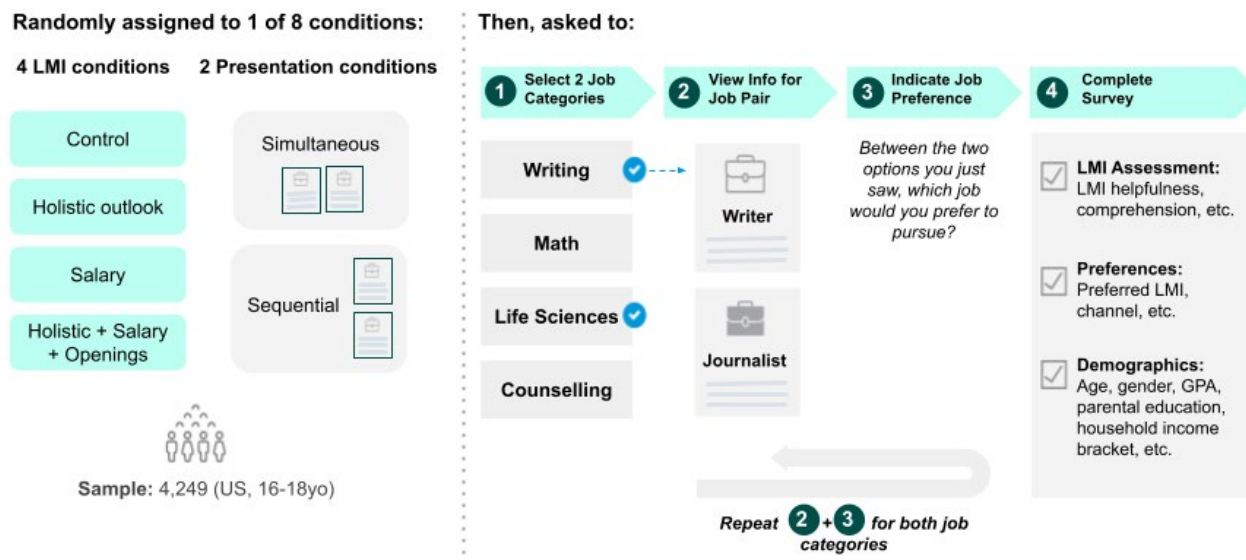
- **Sample:** 4,249 US high school students and recent graduates aged 16-18; note that US students were used a proxy due to limited availability of Canadian students. The follow-up trial described below was with Canadians.

- **Research questions:** Does information about labour market outcomes influence the PSE decisions of graduating high school students? If so, which outcomes are most influential?
- **Design:** The sample was recruited through online panels. Participants were randomly assigned to one of four groups: three treatments and a control. Participants were asked to pick a field they were interested in, then asked to choose between two quite similar jobs in that field with quite different labour market outcomes.

The control group received basic information about the job (e.g., job duties, education requirements) but no information about labour market outcomes. The treatment groups received the same basic information as well as labour market outcomes: 1) holistic job outlook, 2) salary information, 3) holistic job outlook, salary information, and expected job openings (“combined LMO”). Within the treatment groups, half the participants viewed jobs simultaneously (side-by-side comparison) and half viewed jobs sequentially.

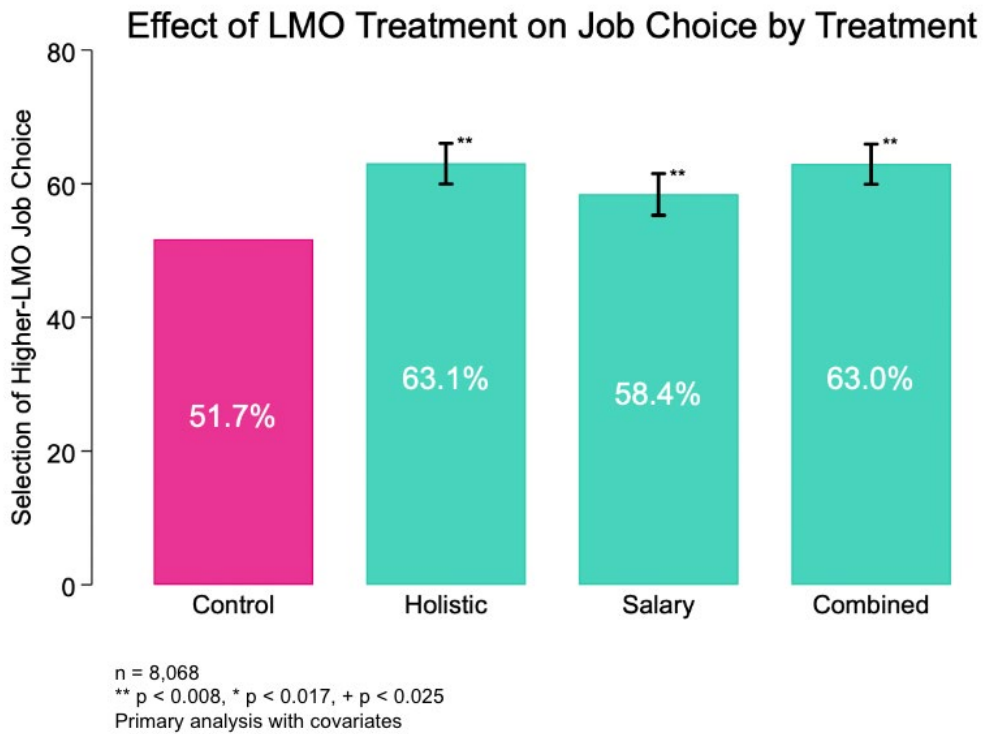
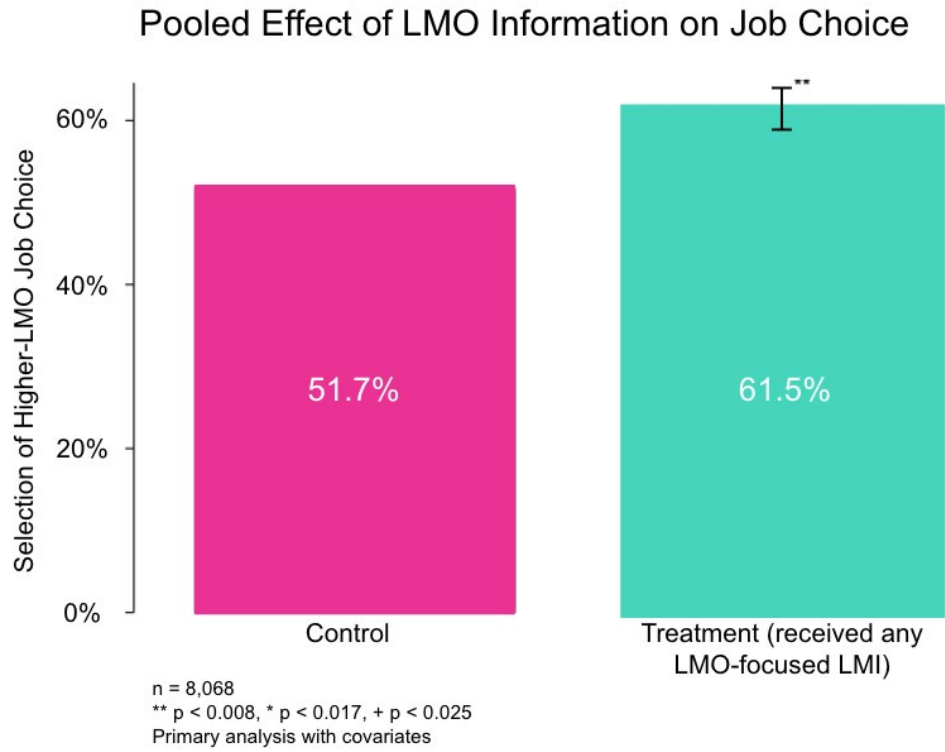
Participants then completed the exercise again for another field they were interested in. At the end of the study, they were asked about how helpful / understandable they found the LMI and how they prefer to receive LMI.

FIGURE 1:
Study design for Trial 1



- **Key results:** Participants who received any LMI about labour market outcomes were about 10 percentage points more likely to pick the job with better labour market outcomes, from 52% to 62%. Holistic job outlook was more influential than salary. There was no difference when the job pairs were showed simultaneously or sequentially.

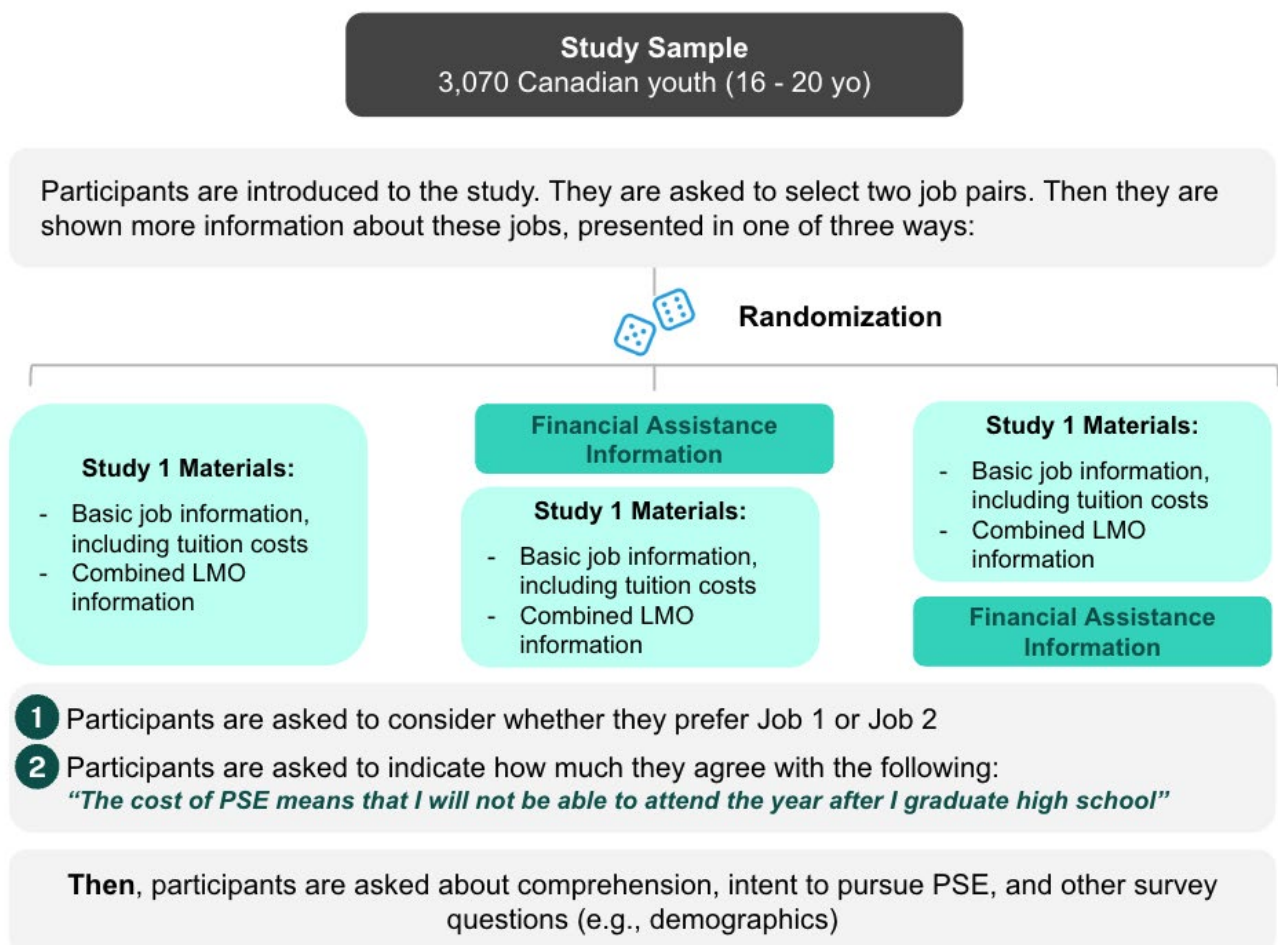
FIGURE 2:
Impact of labour market outcome information on job choice



Trial 2: Online RCT Testing Impact of Financial Aid Information and LMO Information on Selection of Higher Opportunity Pathway

- **Sample:** 3,070 Canadian high school students and recent graduates aged 16-20
- **Research questions:** Do young Canadians exposed to information about LMOs select the higher opportunity occupation at a similar rate to US youth? Does providing financial aid information either before or after the LMO information increase the influence of the LMO information?
- **Description:** Participants were recruited and completed the study as in Study 1. However, instead of assigning them to three LMO treatment groups and a control, they were assigned to three groups: 1) a control that only received the combined LMO, 2) a treatment group that saw the financial aid information, then the combined LMO, and, 3) a treatment group that saw the combined LMO and then the financial aid information. At the end of the study participants were asked about how significant a concern affordability was, how generous they found financial aid to be, and their intent to pursue PSE.

FIGURE 3:
Study design for Trial 2



- Key results:** Like Study 1, providing LMI resulted in about 65% of Canadian youth choosing the higher opportunity job. Providing financial aid information increased the perceived generosity of financial aid from 41% rating it as generous to 54%, but it did not increase the proportion picking the higher opportunity job. This is despite the fact that roughly half of the participants indicated that affordability had a major impact on their PSE decisions. This suggests that more work is needed to design financial aid information provision that feels more personally relevant and actionable.

FIGURE 4:
Impact of financial aid information on simulated job choice

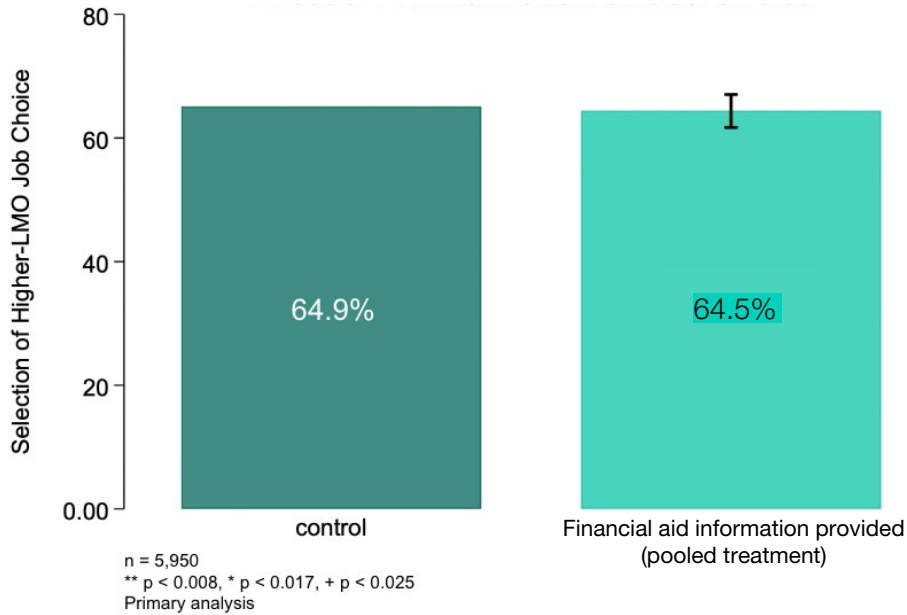
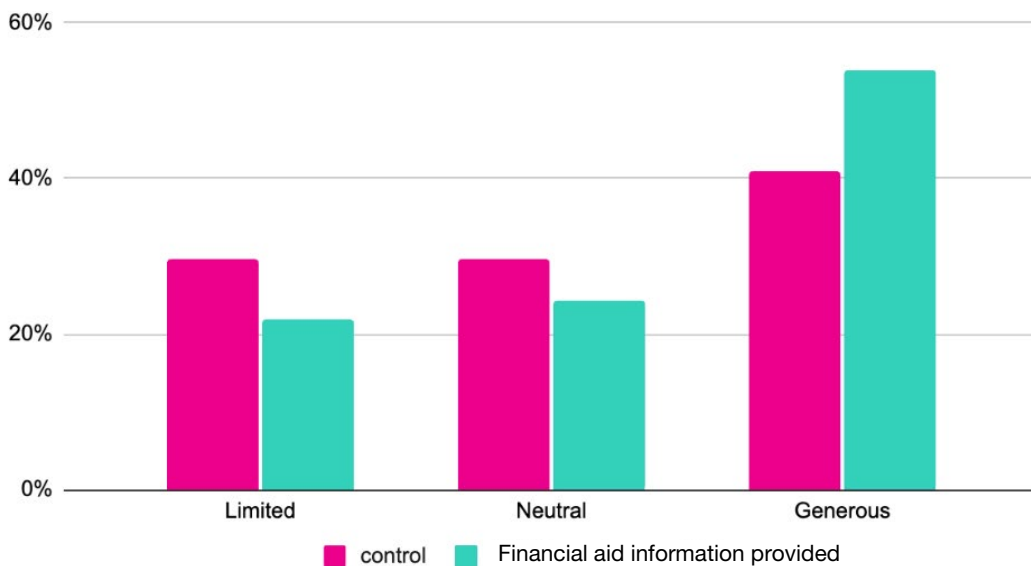


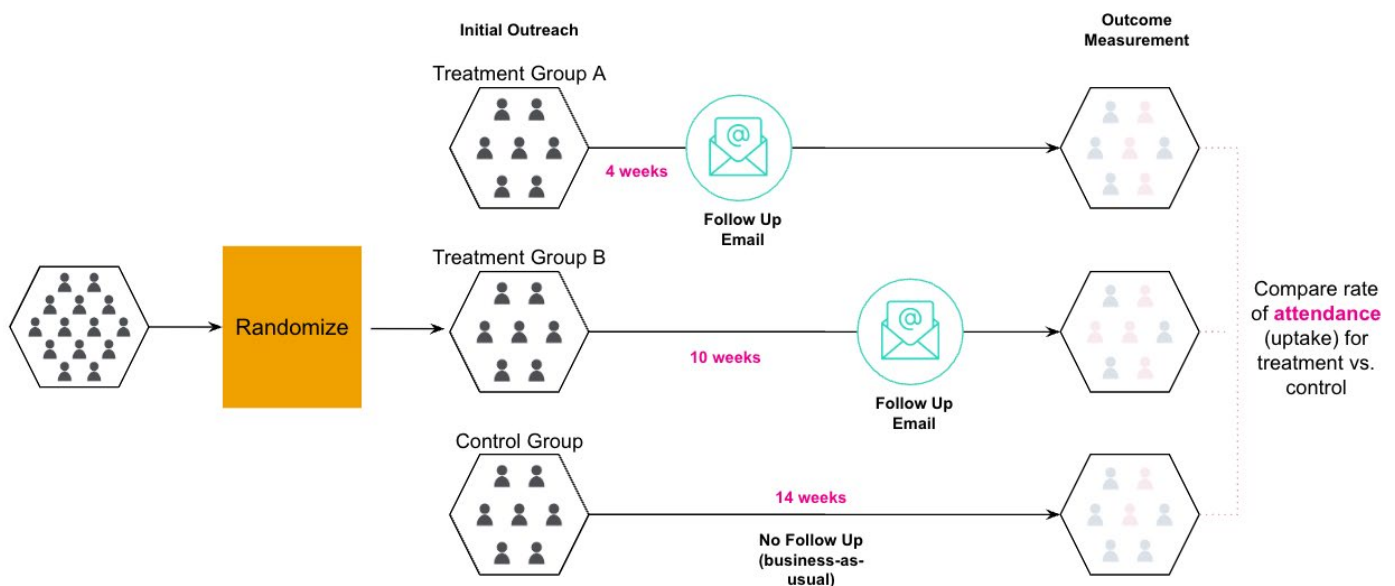
FIGURE 5:
Perceived generosity of financial aid with & without financial aid information



Trial 3: Field RCT Examining the Impact of Behavioural Insights-Informed Follow-up Emails on Uptake of Career Services

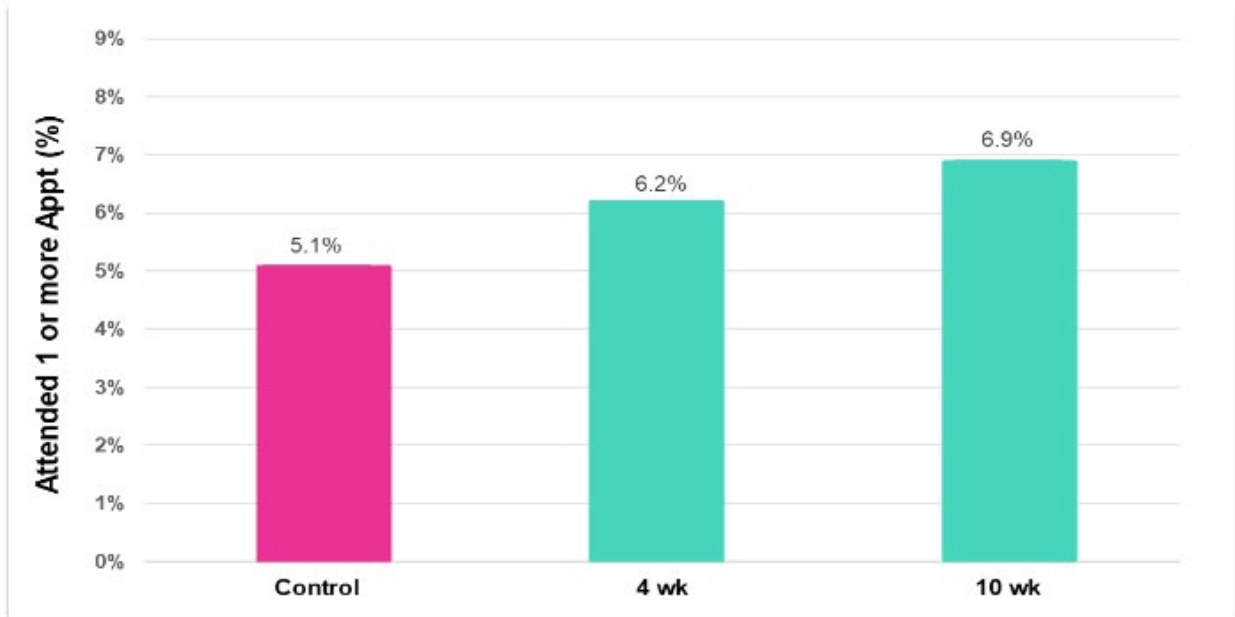
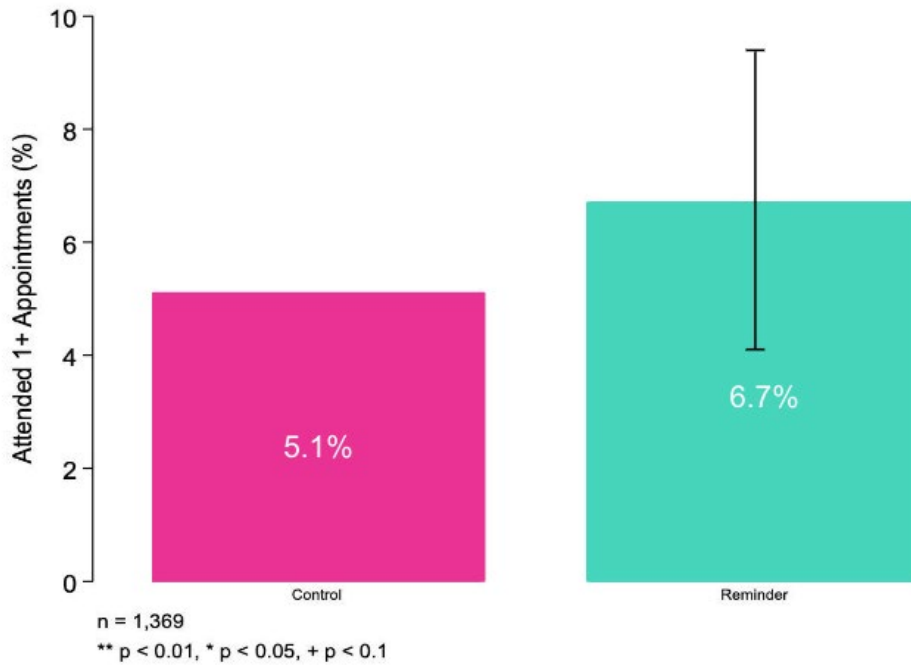
- **Sample:** 1,369 recent EI applicants in Saskatchewan
- **Research questions:** Does sending a follow-up email informed by behavioural science principles to recent EI applicants who have not yet enrolled increase overall uptake? Is it more effective to send the email 4 or 10 weeks after the initial email outreach?
- **Description:** Every week, referrals in the TRF database who had not yet registered for career services were assigned to one of three groups: 1) a control group that did not receive a follow-up email, 2) a treatment group that received a follow-up email after 4 weeks, and 3) another treatment group that received the follow-up after 10 weeks. The follow up emails were sent by the Saskatchewan Ministry of Immigration and Career Training. At the conclusion of the study, the rate of uptake was compared using an administrative data set. Uptake was measured as having attended one or more career services appointments. There was also a secondary outcome measure of the rate of registration for career services, regardless of whether an appointment had been attended.

FIGURE 6:
RCT design of trial testing follow-up outreach emails in Saskatchewan



- **Key results:** Approximately 24% more jobseekers who received a follow-up email took up career services (6.7% compared to 5.1%). Attendance was higher among jobseekers who received a follow-up at 10 weeks (6.9% compared to 6.2%) who received a follow up at four weeks. However, these results were not statistically significant, so we cannot confidently claim that it was the reminders that increased uptake.

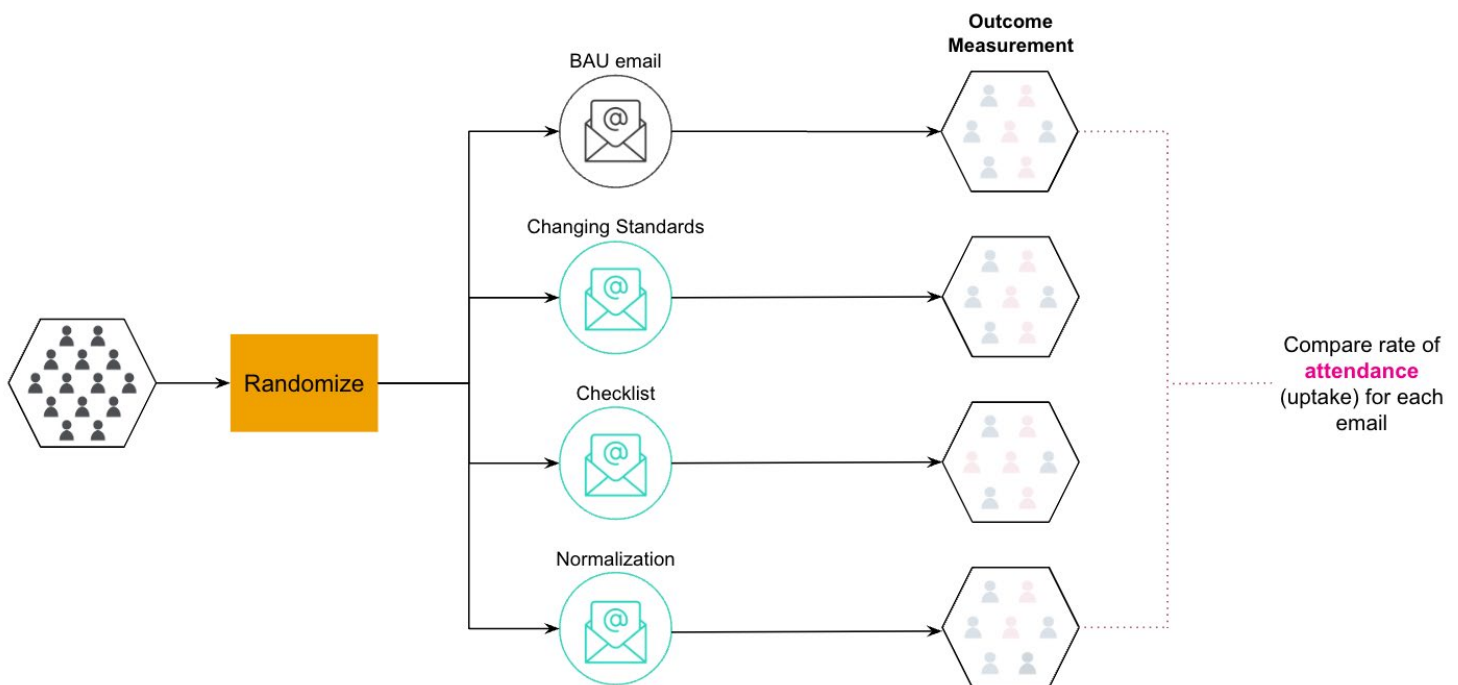
FIGURE 7:
Impact of follow-up emails on uptake of career services



Study 4: Field RCT Examining the Impact of Behavioural Insights-Informed Outreach Emails on Uptake of Employment Services

- **Sample:** 3,816 recent EI applicants in Alberta
- **Research questions:** How do three different initial outreach emails to recent EI applicants, each informed by different principles from behavioural science, impact uptake of employment services when compared to current practices?
- **Description:** Every week we worked with 10 employment services organization to randomly select TRF referrals to receive one of four emails: 1) the “business as usual” (BAU) email the provider was already sending, 2) a “changing standards” email that aimed to have jobseekers re-evaluate the impact of employment services, 3) a “checklist” email that framed uptake as a logical continuation of the EI application process, and 4) a “normalization” email that sought to address stigma. The emails were sent to the assigned group by the employment services providers with BIT’s support. At the end of the data collection period, registration and uptake rates (defined as having attended one or more appointments) were obtained through administrative data held by the Ministry of Jobs, Economy, and Northern Development.

FIGURE 8:
RCT design of trial testing initial outreach emails in Alberta



- **Key results:** Overall uptake rates were very similar between the BAU, changing standards, and checklist emails (6.6%, 6.5%, and 6.1% respectively). They were lower for the normalization email (4.7%). These differences were not statistically significant.

Descriptively, across the 12 programs participating in the trial (delivered by 10 providers), the checklist email performed best for six programs, the BAU email for three (two of which were specific to youth), the changing standards email for two, and the normalization email for one. Our qualitative analysis suggested that the BAU

emails outperformed the new emails where they already reflected key principles including reinforcing legitimacy by describing connections to government, offering value to jobseekers (e.g., through links to job boards), simplicity, and personalization. The changing standards and checklist emails outperformed where the BAU emails did not reflect these principles.

FIGURE 9:
Overall uptake rates by email version

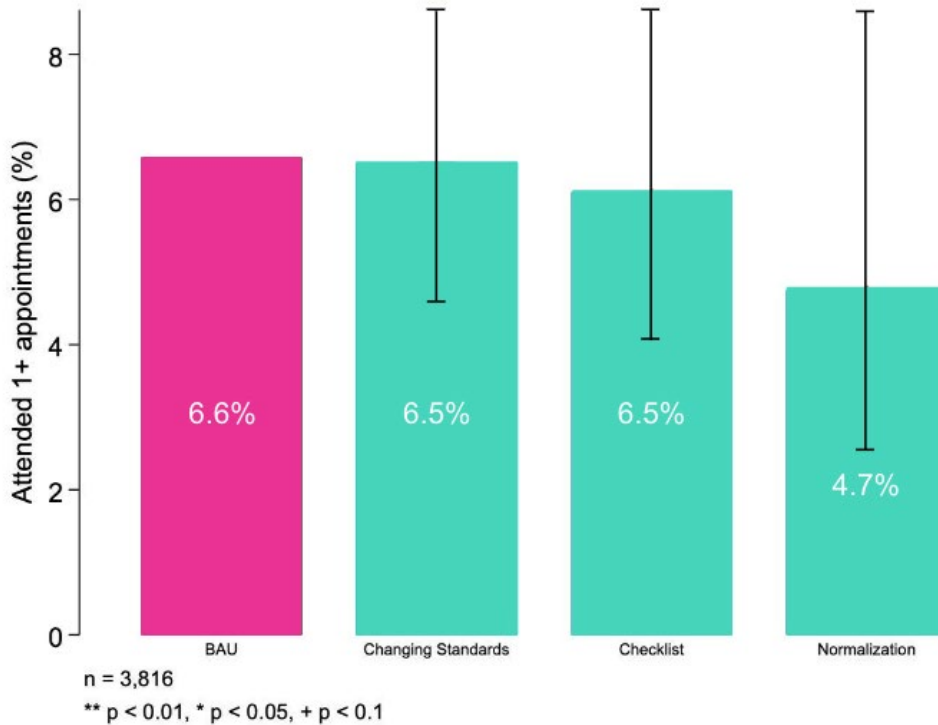


FIGURE 10:
Uptake rates by email version for each program (contract)

