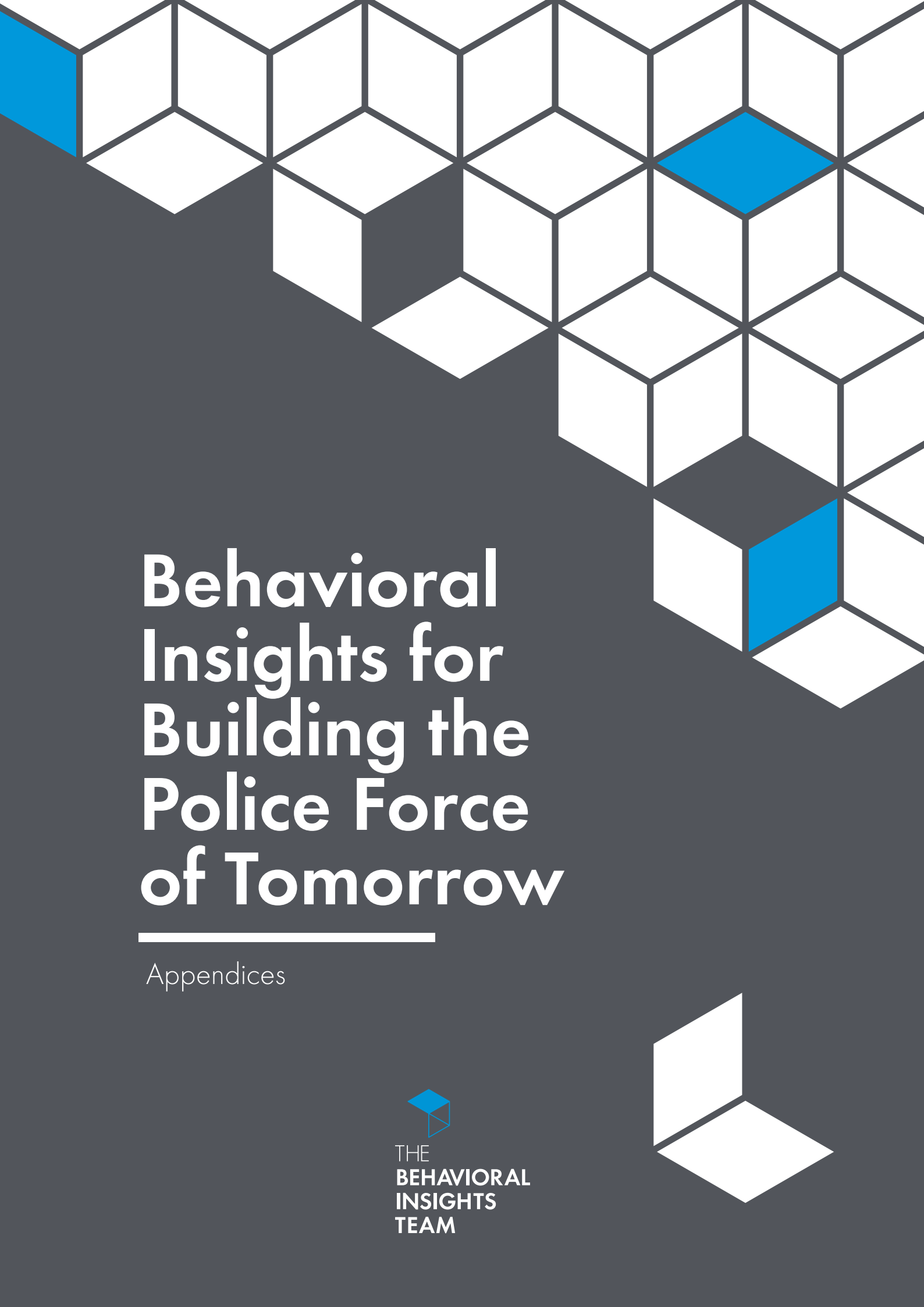




Behavioral Insights for Building the Police Force of Tomorrow

Appendices



Contents

3	Practitioner appendix: A guide to testing
4	Technical appendix: Encouraging initial applications
22	Technical appendix: Increasing follow-through with the application process
28	Police recruitment survey: summary and recommendations
30	Endnotes
31	Authors

Practitioner appendix:

A guide to testing

We would love to be able to report a universal fail-proof solution for all police departments, but the main takeaway from our work is that local problems demand local solutions, which should be tested on roll-out. In this appendix, we describe the steps recruiting staff can take to find out what works.

Encouraging new and different applicants through outreach

This section provides a walk-through using the example of postcard outreach. This is because we found this to be the most effective means of soliciting applications when using a cold approach (including for younger applicants). However, you can also use email outreach for free (this may be effective for potential applicants who have already expressed interest in public service jobs) and employ other methods, such as targeted Facebook adverts.

1. Find a large mailing list

Do you have the addresses of all residents or all registered voters in your city? You should be looking for a mailing list with at least 20,000 individual households on it: try utility billing data, electoral registers, or 3-1-1 caller lists for inspiration.

2. Determine your budget

How many postcards can you send out? We recommend sending a minimum of 2,500 postcards per message variant you wish to test. The remaining people on your mailing list will be in your “control group” and will not receive a postcard. In most cases the control group should be about 50 percent of your sample.

3. Design your messages

As a starting point, we suggest picking one message consistent with your current marketing campaign and at least one new message. How many messages you can test will depend on your budget and the total number of household addresses you have. See the Technical Appendix for inspiration from previous trials.

The only difference between each of the postcards you are sending should be the message you are testing. It is preferable that you feature the

same photo or photos across each postcard and that any text that does not relate to the messages you are testing should also remain the same.

Make sure the postcards are **personalized**, use **clear and simple** language, have a **call to action** linking directly to your application, provide a **deadline**, and feature a **messenger** who resonates with the demographic you are hoping to recruit. (See the body of the report for more on these concepts.)

4. Determine who gets which message

Ideally you will be able to engage a data analyst who can help you to use random assignment to determine which addresses get which postcard variants. It is important to assign who gets what randomly since using another method—picking a different message for each zip code, for example—might wind up telling you more about how responses differ by geographical area than about whether your postcards are effective. You should also be certain that you can collect the data you need to analyze outcomes. For example, if someone applies after receiving the postcard, how will you match them back to the list of who got which postcard? If you can’t match applications back directly then consider using trackable links in each postcard variant so you know which generated the most webpage visits.

If you don’t have access to a data analyst who knows how to do this then you can get more detail on this part of the methodology by taking BIT’s [online course](#)¹⁰ for city government practitioners running trials or you can work with BIT by contacting info@bi.team.

5. Print, send, and wait

You will need to wait until the application deadline or, if recruitment is rolling, for at least two weeks from postcard receipt before collecting data on your results.

6. Find out what worked

Work with your data analyst to determine which message was most effective. Don’t forget to roll out what you learned next time!

Technical appendix: Detail on each project

Encouraging initial applications

Chattanooga, Tennessee

Communication channel:

Postcard

Sample for randomization:

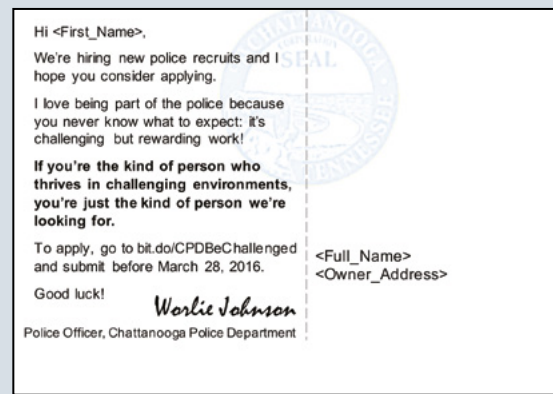
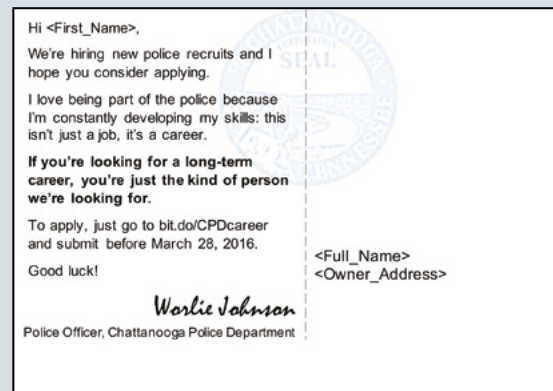
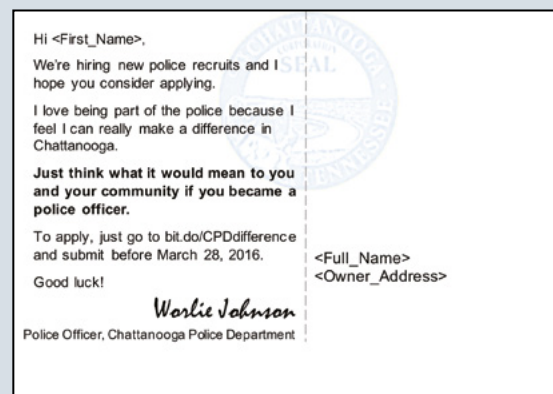
21,991 registered voters between the ages of 21 and 39 who were the youngest member of their household in Hamilton County

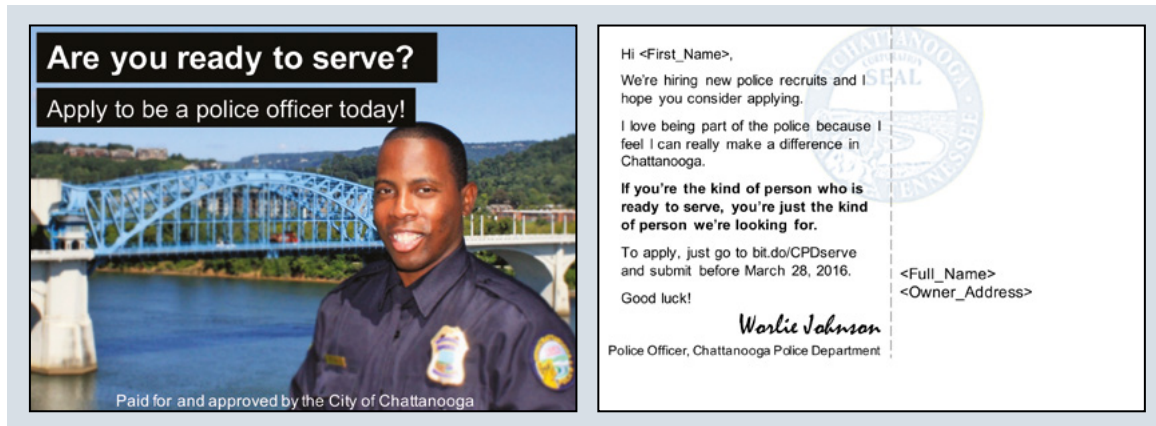
Treatment conditions:

No postcard, challenge, career benefits, impact, service

Top-performing messages:

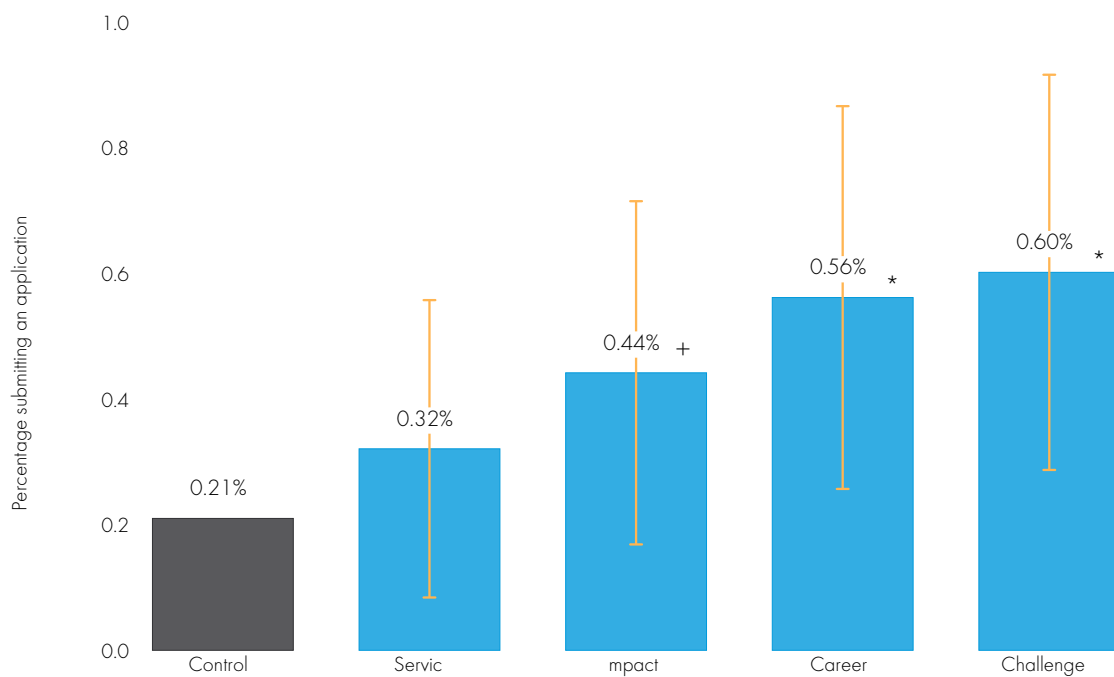
Challenge and career benefits





Results:

- Messages that focus on the personal benefits of applying for the job—emphasizing either the challenge of the job or the career benefits—were three times as effective at getting individuals to apply than the control, without an observable loss in applicant quality.
- Personal benefits messages were especially effective for people of color, making it more than four times as likely they would apply and supporting a key policy goal of the police to increase the diversity of applicants.



N=21,878, *p<.05, + p<.1

South Bend, Indiana

Communication channel:

Postcard

Sample for randomization:

38,090 registered voters between the ages of 21 and 35 with non-duplicate addresses in St. Joseph County, Indiana

Treatment conditions:

No postcard, service, challenge, identity

Top-performing message:

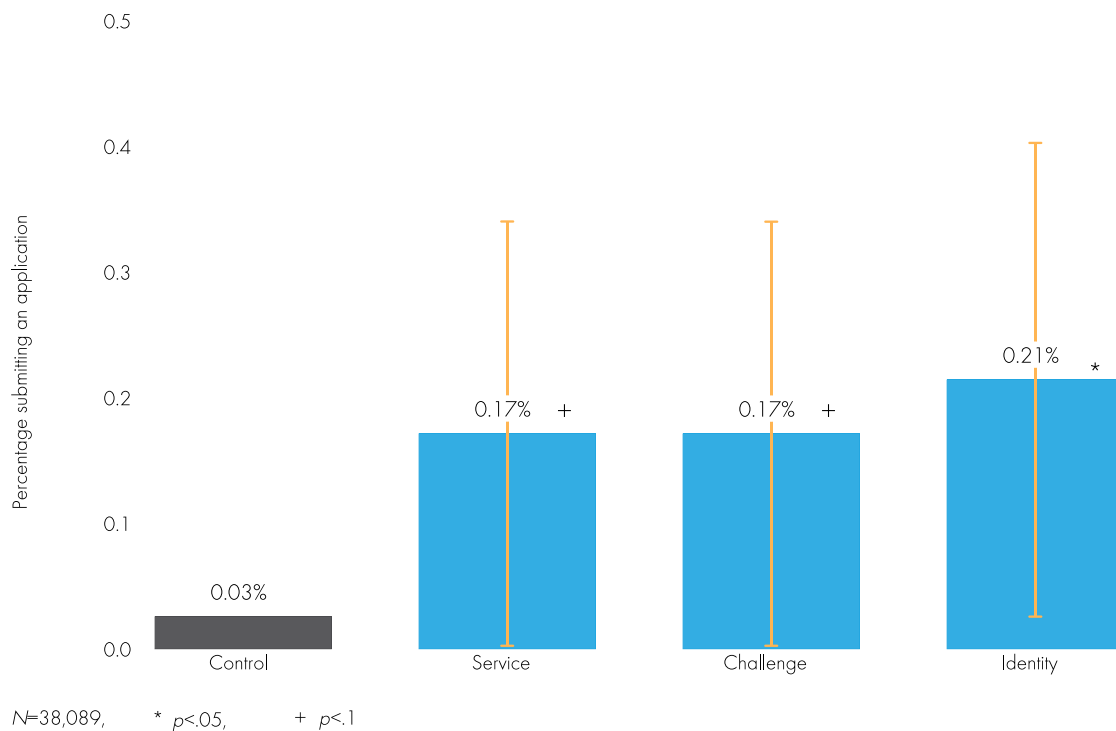
Identity

I am a hard worker. I support my family. I am a police officer.  Apply to be a police officer today!	Dear <First Name>, We're hiring new police recruits, and I hope you consider applying. Many things are important to me. My teammates know that, and that's why I'm proud to be a South Bend police officer. If you know police officers are more than just their jobs, you're just the kind of person we're looking for. Apply now at bit.do/SBPDapp. Good luck! Officer Sienna Valdez-Sears South Bend Police Department <Full Name> <Address>
Are you ready to serve your community?  Apply to be a police officer today!	Dear <First Name>, We're hiring new police recruits, and I hope you consider applying. I became a police officer because my community supported me--now I want to give back to my community. If you are looking to serve your community, you're just the kind of person we're looking for. Apply now at bit.do/SBPDserve. Good luck! Officer Sienna Valdez-Sears South Bend Police Department <Full Name> <Address>



Results:

- Recipients of the identity postcard were seven times more likely to complete an application when compared with the control group.
- Postcards were equally effective at recruiting younger applicants and older applicants to submit completed applications.



Tacoma, Washington

Communication channel:

Postcard

Sample for randomization:

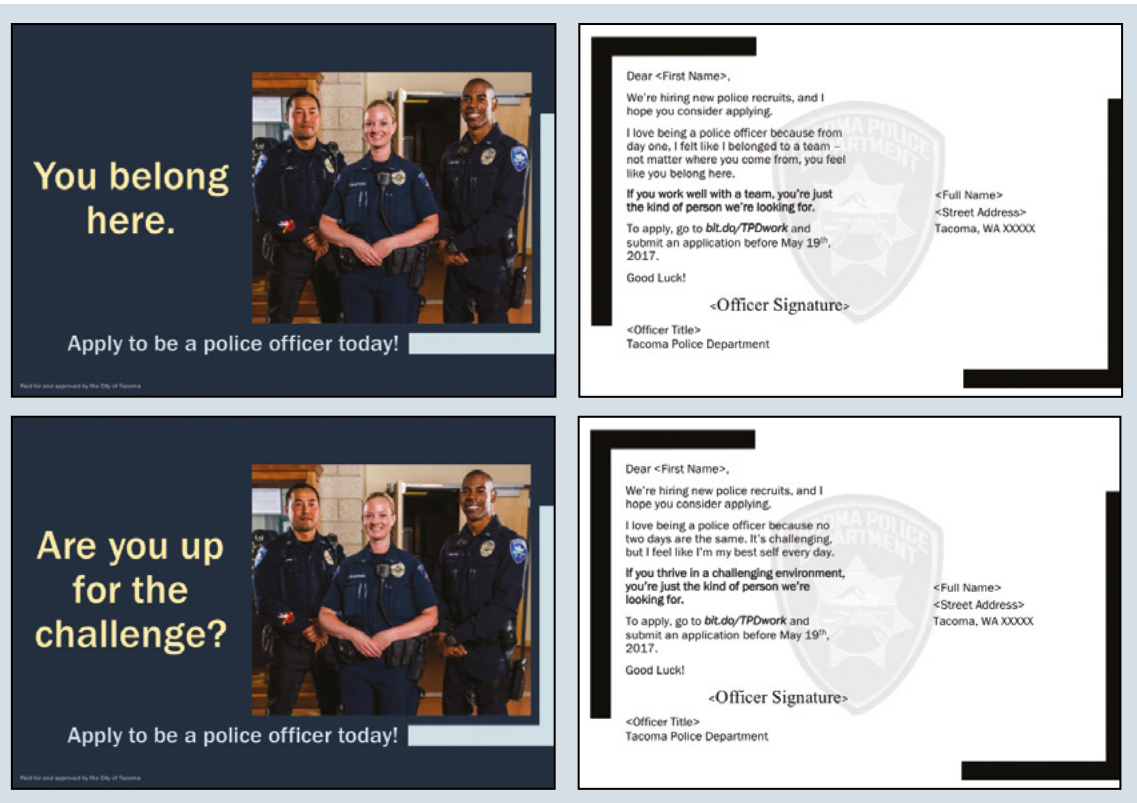
56,980 residential addresses in the city of Tacoma

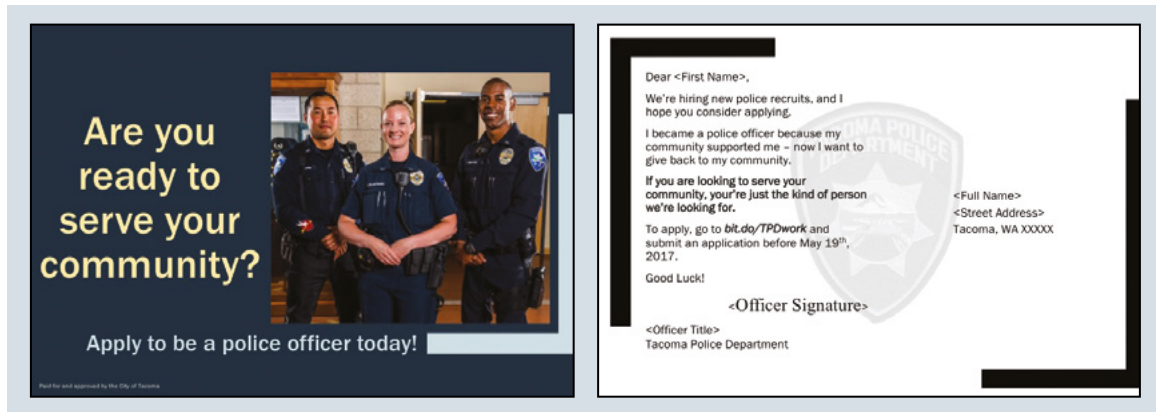
Treatment conditions:

No postcard, challenge, service, belonging

Top-performing message:

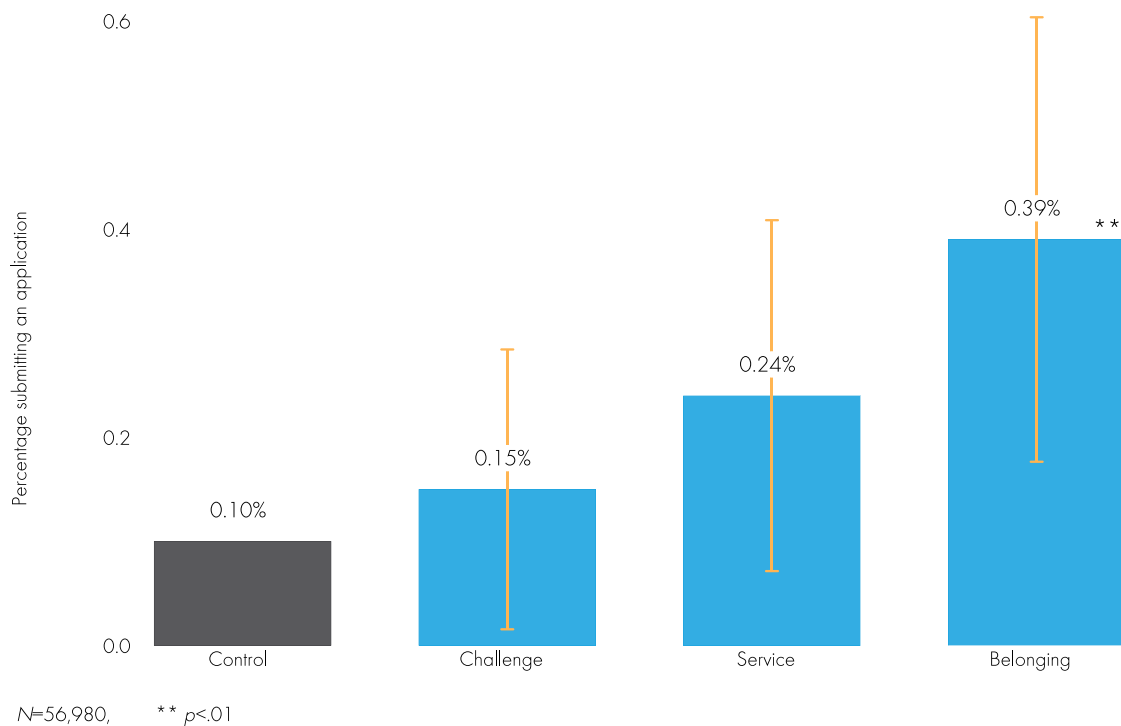
Belonging





Results:

- Recipients of the belonging postcard were nearly four times more likely to complete an application when compared with the control group.
- The service postcard was effective for non-veterans but not for veterans



*Washington, District of Columbia***Communication channel:**

Postcard

Sample for randomization:

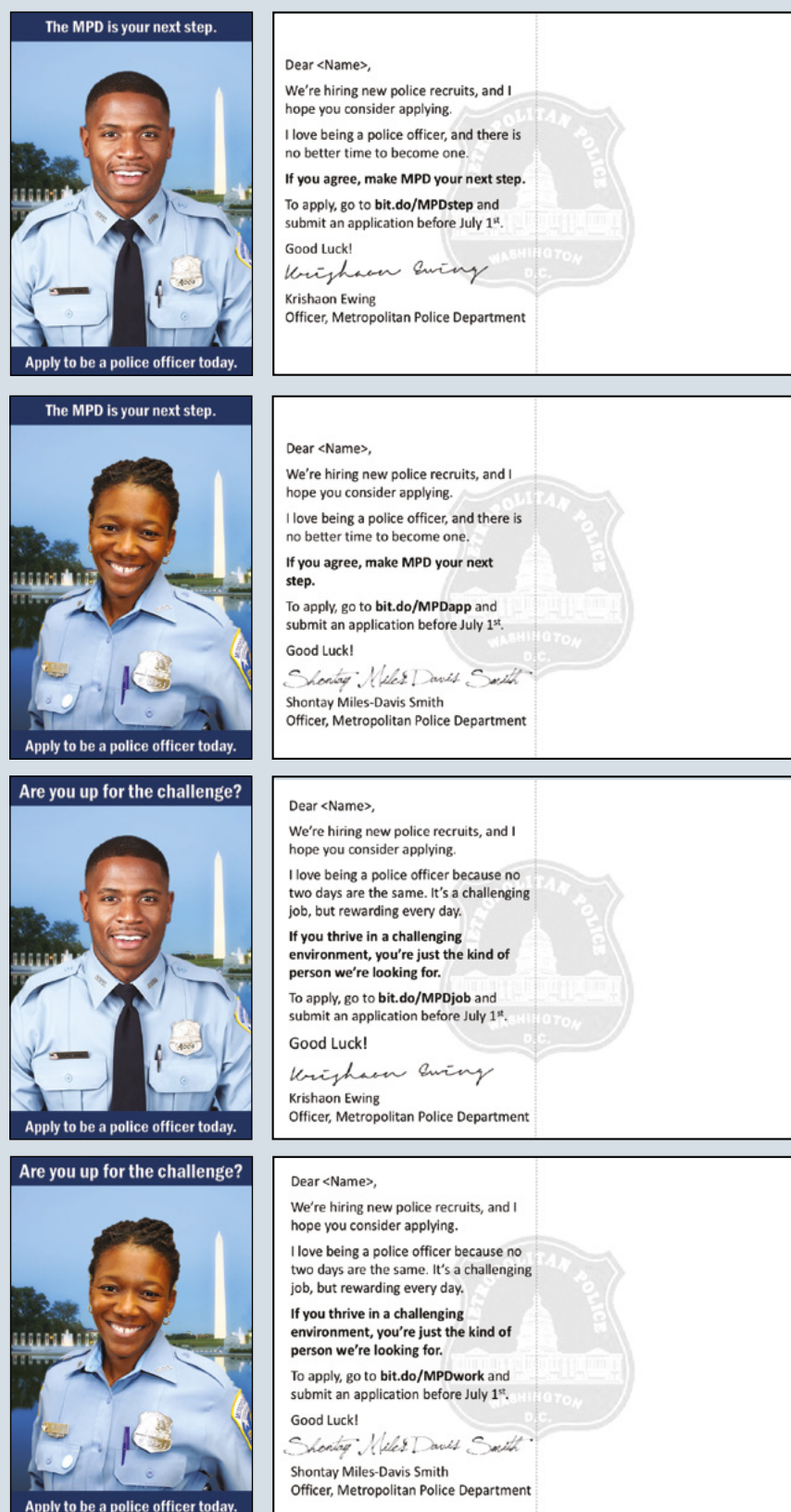
30,015 registered voters between the ages of 18 and 34 in Ward 8 and District 1, neighborhoods with large proportions of black residents

Treatment conditions:

No postcard, challenge (male photo), challenge (female photo), next step (male photo), next step (female photo)

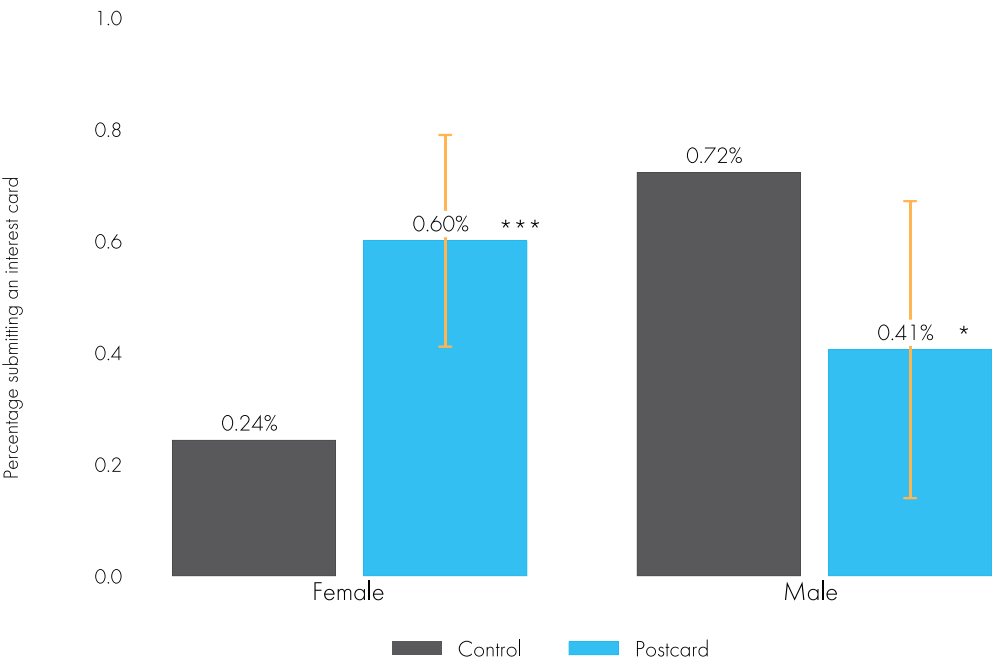
Top-performing message:

Next step featuring a photo of a female officer

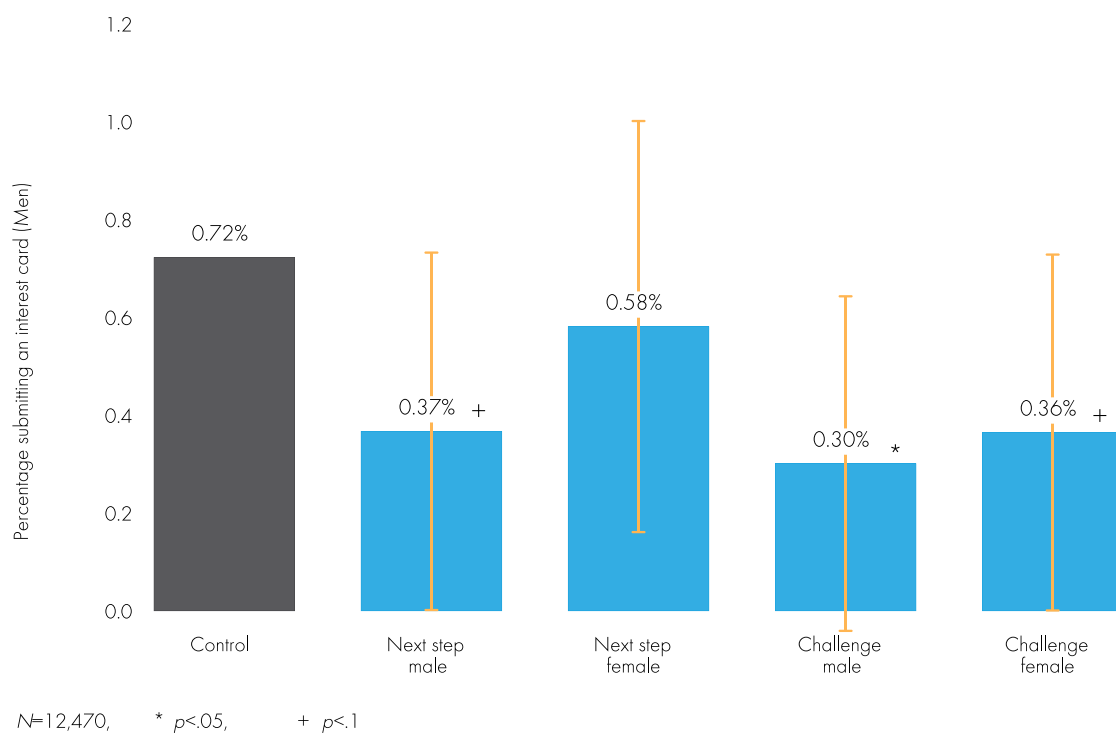
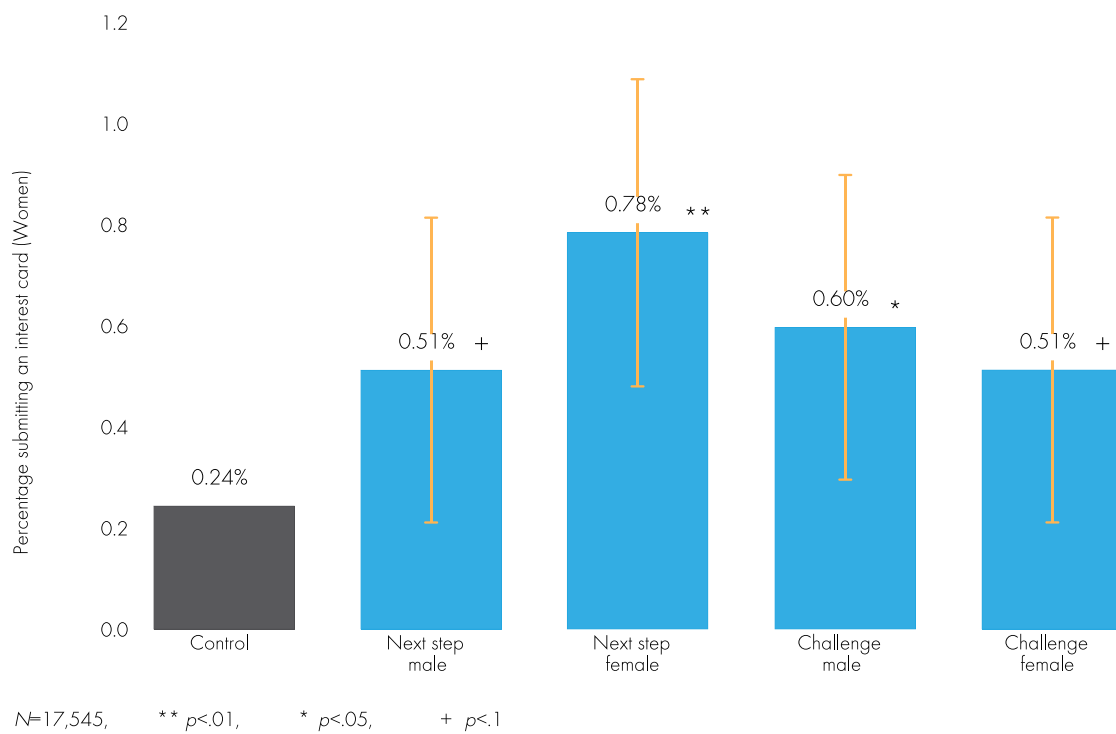


Results:

- In absolute terms, people who received a postcard completed more applications than those who did not receive a postcard. However, this was not statistically significant; in other words, we cannot prove that this difference was not due to chance.
- Overall, the next step postcard featuring the female officer was 1.6 times more effective than not receiving a postcard, but this difference was only marginally statistically significant.
- Receiving any of the postcards made women 2.5 times more likely to apply and cut the likelihood that men would apply almost in half. These results appear to be driven by the postcard featuring the challenge message and the photo of the male officer, which backfired for men.
- The postcard featuring the new step message and the female officer increased the likelihood that a woman would submit an interest card [the first step of their application process] by three times and did not have a statistically significant negative effect on men, unlike the challenge message and the photo of the male officer, which backfired for



N=30,015, *** $p<.001$, * $p<.05$



Portland, Oregon

Communication channel:

Postcard

Sample for randomization:

28,927 registered voters between the ages of 20 and 45 in diverse zip codes: 97211, 97216, 97217, 97218, and 97220

Treatment conditions:

No postcard, neighborhood/service, challenge, career benefits

Top-performing message:

Salary benefits



Dear

We're hiring new police recruits, and we hope you consider applying.

We became police officers because our communities supported us – now we want to give back to our communities.

If you are looking to serve your community, you're just the kind of person we're looking for.

To indicate your interest and apply, go to: bit.do/PDXneighbor and submit before July XX, 2017.

Good luck!

Officers Israel Hill and Rashinda Saunders
Portland Police Bureau

Portland Police Bureau
1111 SW 2nd Ave.
Portland OR 97204



Dear

We're hiring new police recruits, and we hope you consider applying.

Entry wage is \$60,840, plus \$5,000 in bonuses.

If you are looking for a long-term career that provides financial stability, you're just the kind of person we're looking for.

To indicate your interest and apply, go to: bit.do/PDXcareer and submit before July XX, 2017.

Good luck!

Officers Israel Hill and Rashinda Saunders
Portland Police Bureau

Portland Police Bureau
1111 SW 2nd Ave.
Portland OR 97204



Dear

We're hiring new police recruits, and we hope you consider applying.

We love being police officers because no two days are the same. It's challenging, but rewarding.

If you thrive in a challenging environment, you're just the kind of person we're looking for.

To indicate your interest and apply, go to: bit.do/PDXchallenge and submit before July XX, 2017.

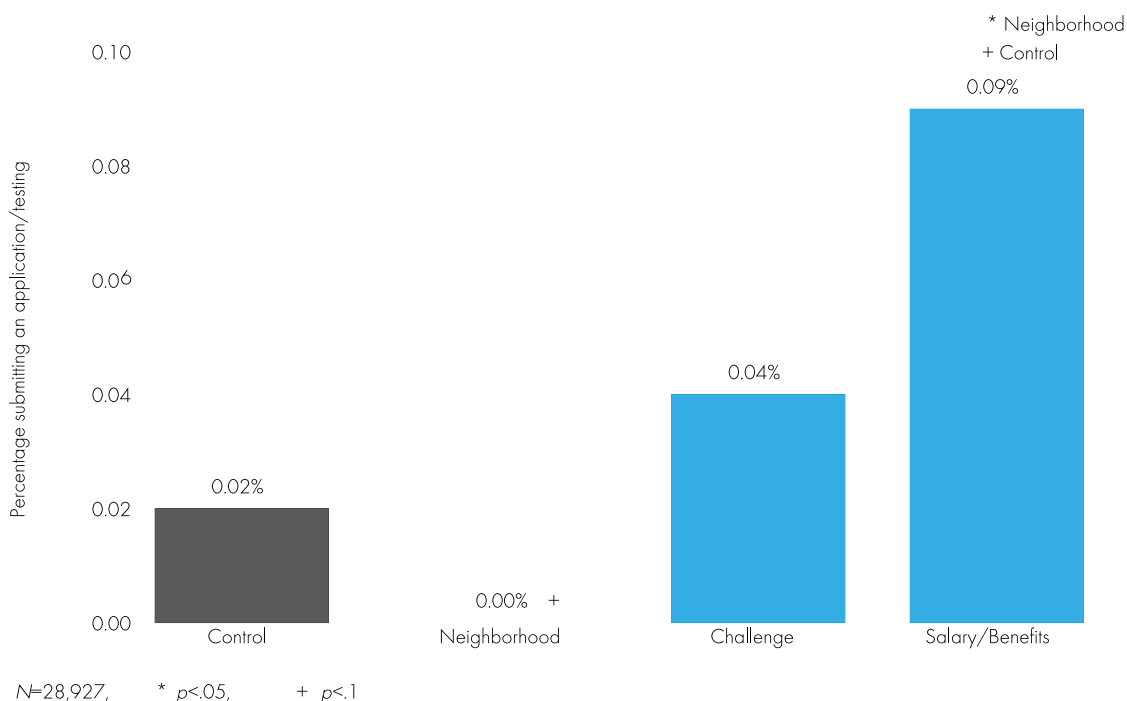
Good luck!

Officers Israel Hill and Rashinda Saunders
Portland Police Bureau

Portland Police Bureau
1111 SW 2nd Ave.
Portland OR 97204

Results:

- The career benefits postcard was 4.5 times more effective at getting someone to submit an application or take the NTN exam than the control group, but this difference was only marginally statistically significant.
- The career benefits postcard was significantly more effective at getting someone to submit an application or take the NTN exam than the neighborhood postcard, which may have had a backfiring effect.
- In absolute terms, people who received postcards completed more applications and NTN exams than those who did not receive a postcard. However, this was not statistically significant; in other words, we cannot prove that this difference was not due to chance.
- The neighborhood postcard may have been an especially ineffective way to recruit people of color.
- The challenge postcard was marginally significantly less effective for women than for men.



*Postcards across three cities***Communication channel:**

Postcards

Sample for randomization:

106,253 individuals who received the challenge or service message, or were in the control group in Chattanooga, South Bend, and Tacoma; these cities were chosen because both the challenge and service messages were tested in them, and potential applicants were asked to take the same first step—completing an online application¹¹

Treatment conditions:

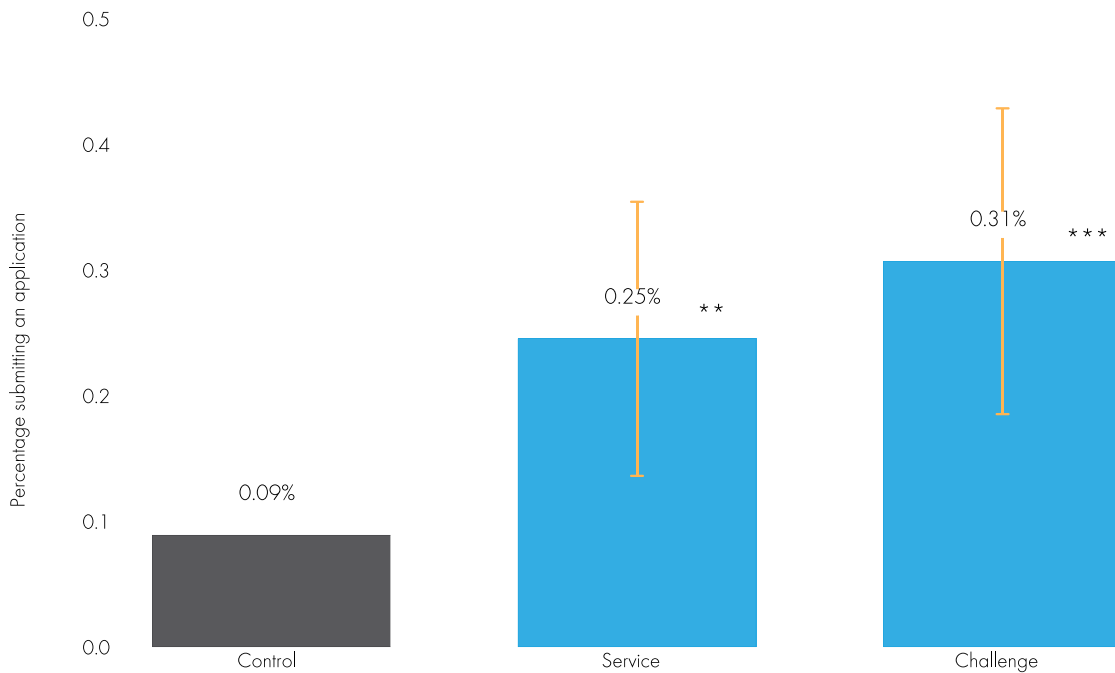
No postcard, service, challenge

Top-performing message:

Challenge

Results:

- A registered voter was 3.5 times more likely to apply when they received a behaviorally informed postcard.
- Receiving a postcard with the service message significantly increased the proportion of applicants who were black, while receiving a postcard featuring a challenge message did not.
- There was also a trend suggesting that receiving any postcard increased the proportion of applicants who were black or were women; however, this finding was not statistically significant.



$N=106,253$, *** $p<.001$, ** $p<.01$

*Little Rock, Arkansas***Communication channel:**

Email

Sample for randomization:

1,279 email addresses of people who had filled out electronic interest cards in the past three years for one of a number of different city jobs (excluding those who recently applied for the police)

Treatment conditions:

Control email, behaviorally informed

Top-performing message:

Behaviorally informed

CONTROL

Subject: Apply to the Police Today

Good Afternoon,

I would like to take this opportunity to thank you for visiting the Little Rock website and completing a city job interest card. I want to encourage you to go to bit.do/LRPDapp TODAY and apply for the position of Entry Level Police Officer. If you have any questions about applying, please feel free to email one of our below listed Little Rock Police Department Recruiters. We will also be at a career fair at the Southwest Community Center Saturday, March 11, from 12:00 to 3:00 (see the attached flyer for more information.)

Congratulations in advance for taking your first step in a great and exciting career in Law Enforcement. We look forward to seeing **YOU in BLUE!**

Recruiting Officer Joe Hill
 Recruiting Officer Herbert Kimbrough
 Recruiting Officer Elisha Ramer
 Recruiting Officer Anthony Withers
 Recruiting Officer Allison Walton
 Recruiting Officer Jessica Eubanks
 Recruiting Officer Ira Whitfield

Respectfully,

Sergeant Van Thomas

Little Rock Police Department
 Training Division- Recruiting & Personnel Unit
 Email:

TREATMENT

Subject: You Belong in Blue.

You belong with the Little Rock police department. I love being a police officer because from day one, I felt like I belonged to a team - no matter where you come from, you feel like you belong here.

We're hiring new police recruits, and I hope you consider applying. **If you work well with a team, you're just the kind of person we're looking for.**

I encourage you to go to bit.do/LRPDjob by **March 13th, 2017** and apply for the position of Entry Level Police Officer. I'll also be at a career fair at the Southwest Community Center Saturday, March 11, from 12:00 to 3:00 and hope to see you there (see attached flyer).

Congratulations in advance for taking your first step in a great and exciting career in Law Enforcement. We look forward to seeing **YOU in BLUE!**

Respectfully,

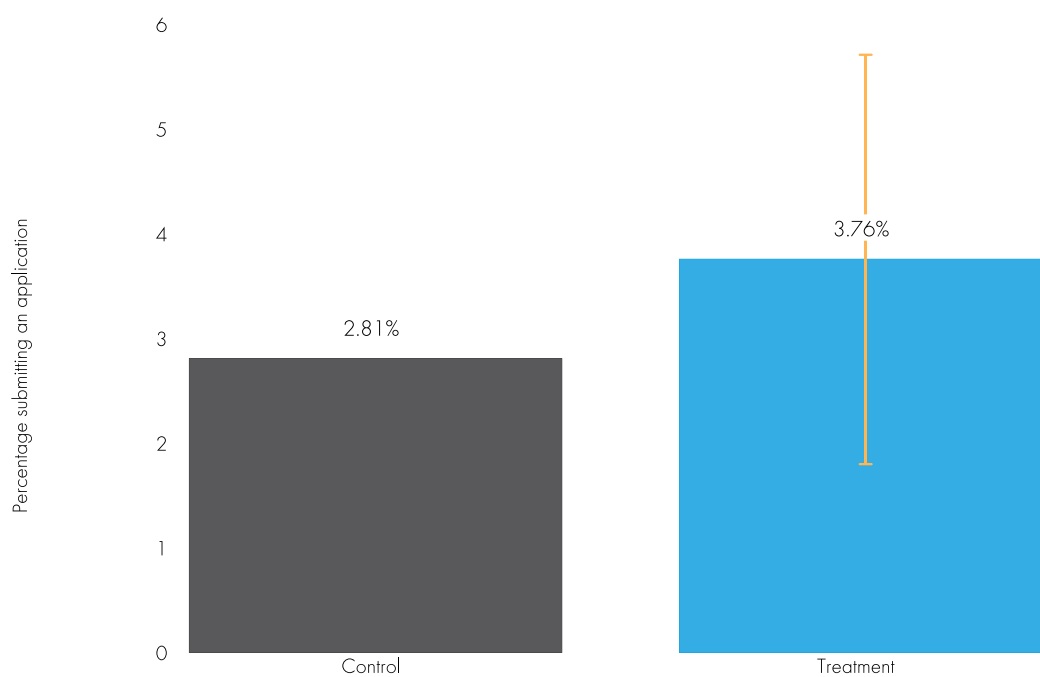
Sergeant Van Thomas

Little Rock Police Department
 Training Division- Recruiting & Personnel Unit
 Email:



Results:

- At the end of the trial, 2.8 percent of those who received the control email applied and 3.8 percent of those who received the behaviorally informed email applied. While this means that in absolute numbers the treatment email was more effective than the control email, the difference was not statistically significant.



N=1,279

Fort Worth, Texas

Communication channel:

Email

Sample for randomization:

11,561 email addresses of people who had previously completed an electronic interest card for the police

Treatment conditions:

No email, service, career benefits

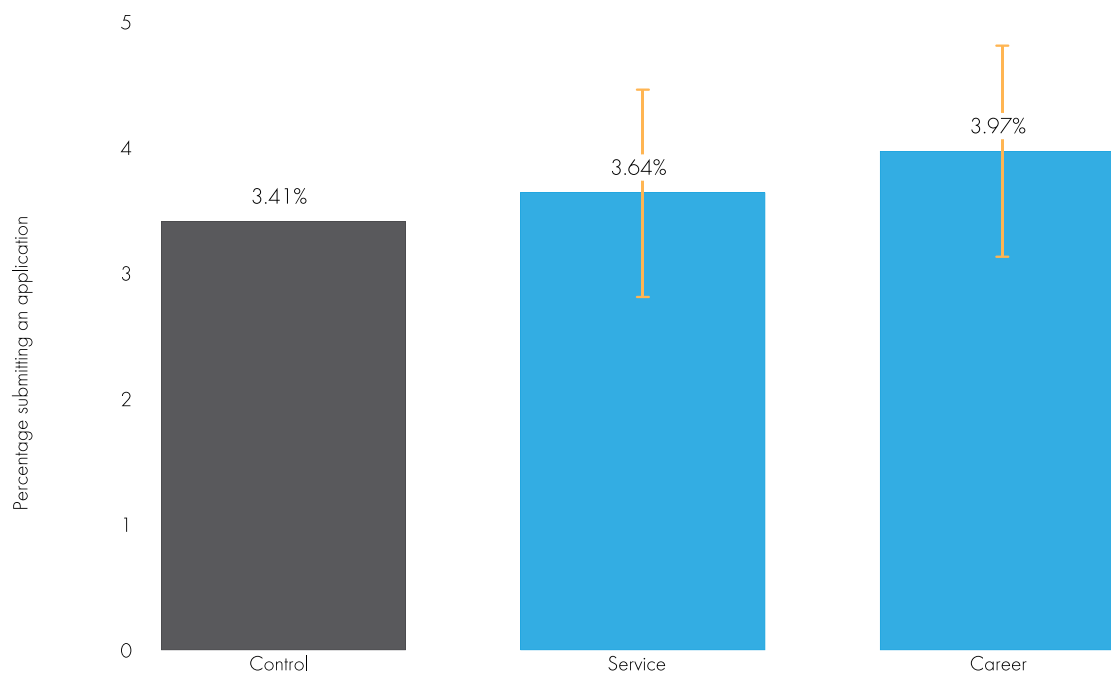
Top-performing message:

Career benefits



Results:

- At the end of the trial, 3.4 percent of those in the control group, 3.6 percent of those receiving the service message, and 4.0 percent of those receiving the career message applied. Although the behaviorally informed messages looked more effective in absolute terms, they were not statistically significantly different from the control or from each other.



N=11,569

*Los Angeles, California***Communication channel:**

Facebook advertisement

Sample for randomization:

71,149 Facebook users between the ages of 18 and 34, half with ties to Historically Black Colleges and Universities (HBCUs) and half from zip codes in Los Angeles with a large proportion of black residents

Treatment conditions:

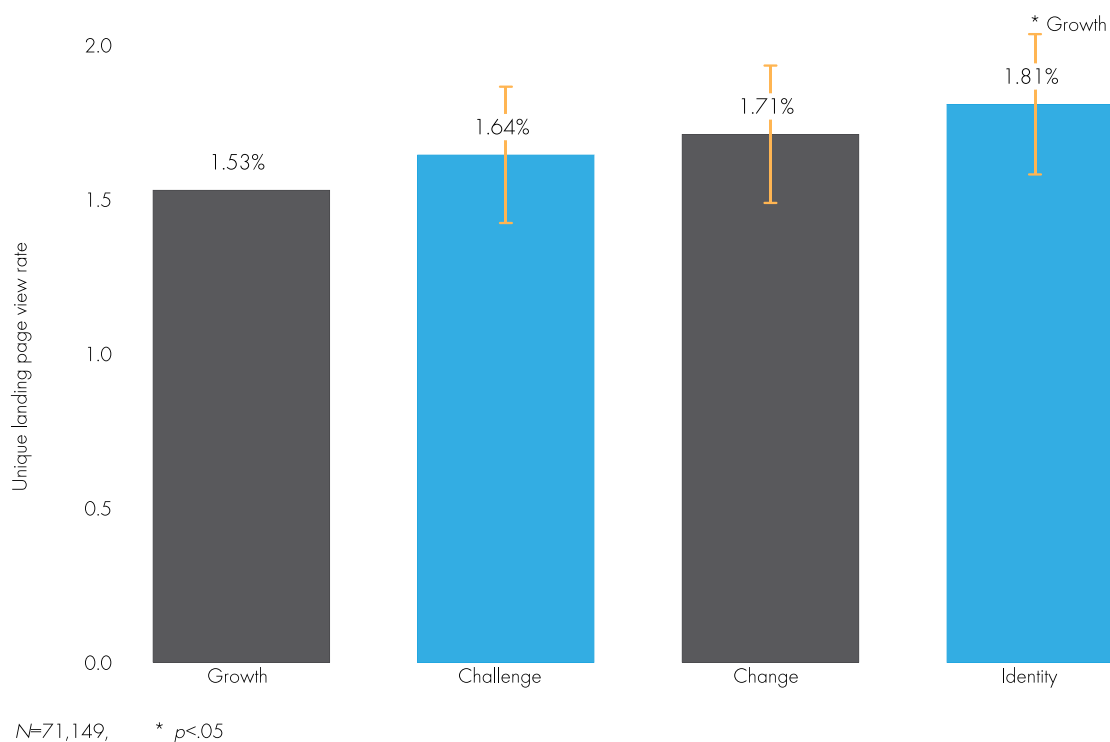
Growth, challenge, identity, change

Top-performing message:

Identity

Results:

- Overall, the identity-focused ad attracted the most engagement, outperforming the growth-focused ad, which was the least successful, by 18 percent.
- When looking only at the HBCU-affiliated audiences, identity also outperformed growth, and there was suggestive evidence that challenge outperformed growth as well. However, for audiences from local Los Angeles zip codes, we found suggestive evidence that the change-focused ads performed the best, with a page view rate that was 24 percent higher than that for the challenge-focused ads.
- Users from Los Angeles zip codes had a 34 percent higher click-through rate overall than users from HBCUs and were also four times more likely to apply.



Scottsdale, Arizona

Communication channel:

Email

Sample for randomization:

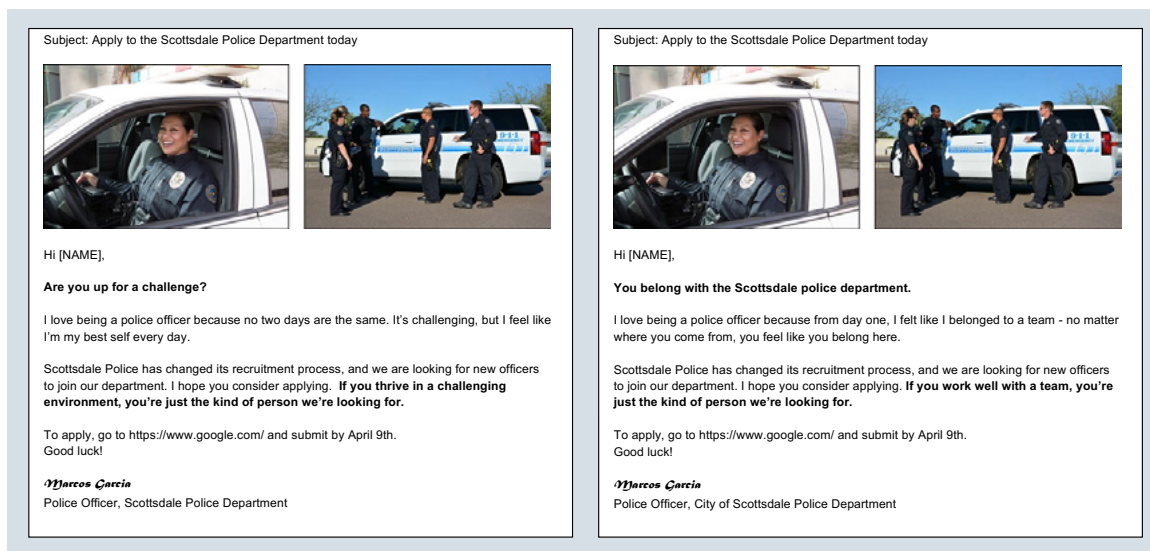
17,211 email addresses of prior applicants, people who had submitted electronic interest cards for any city job, and current and former area community college students

Treatment conditions:

No email (or standard HR notification that hiring was open for those who had submitted interest cards for law enforcement), belonging, challenge

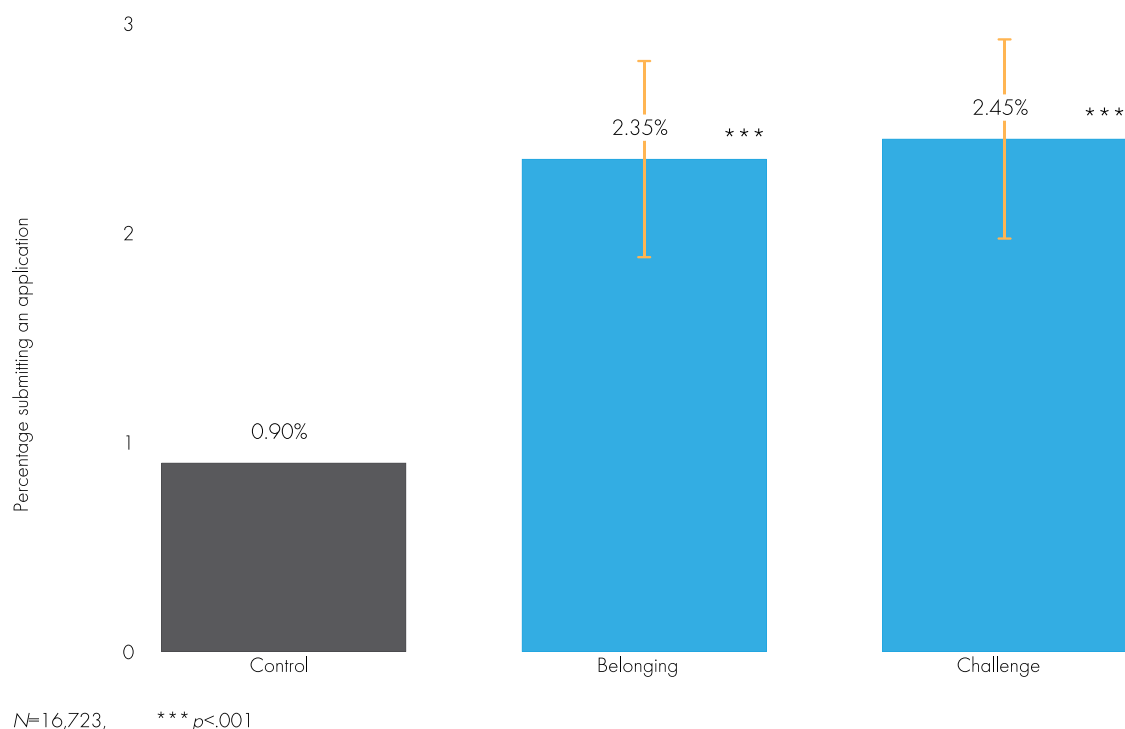
Top-performing message:

Belonging and challenge



Results:

- Receiving either of the behaviorally informed emails more than doubled the likelihood of a person applying to the Scottsdale Police Department, and the challenge and belonging emails were equally as effective as each other.
- There was suggestive evidence that the belonging message was less effective for women than for men, while the challenge message worked equally well for both groups.



Technical appendix: Detail on each project

Increasing follow-through with the application process

*San Jose, California***Communication channel:**

Email

Sample for randomization:

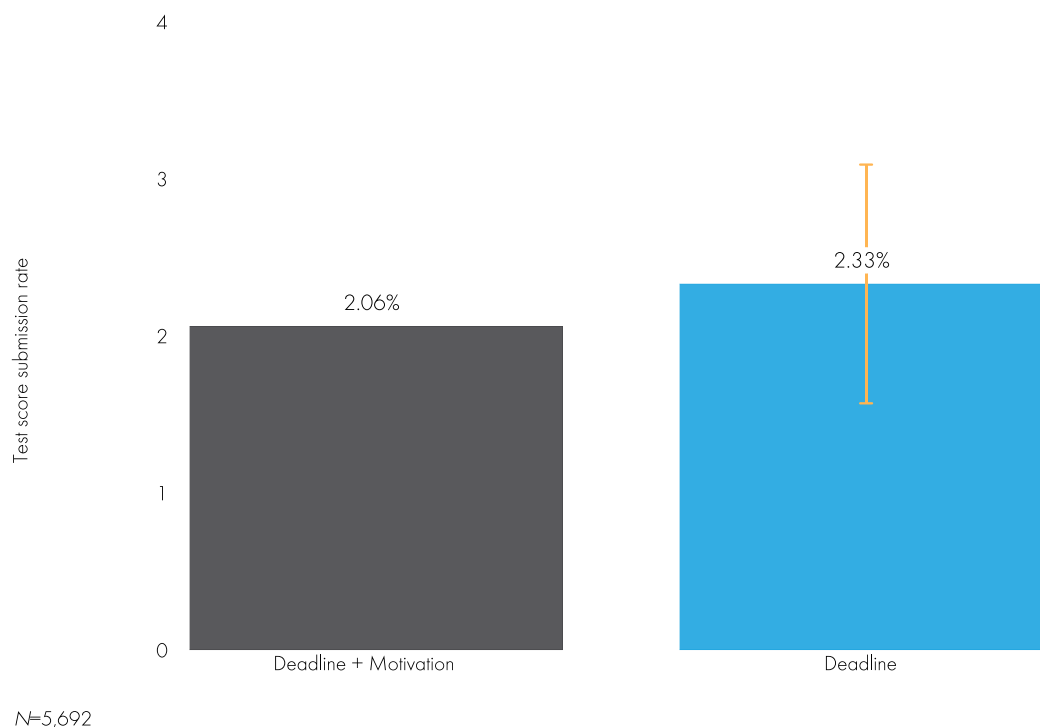
5,692 inactive applicants from the past year who had not submitted passing NTN test scores

Treatment conditions:

Deadline email, deadline plus motivation email

Results:

- While this project did not include a control group, the intervention had a success rate of approximately 2.2 percent, meaning that San Jose Police Department “reactivated” 125 applicants who went on to send in their test scores.
- We did not find a significant difference between the two treatment groups.



*Chattanooga, Tennessee,
and Baltimore, Maryland*

Communication channel:

Email

Sample for randomization:

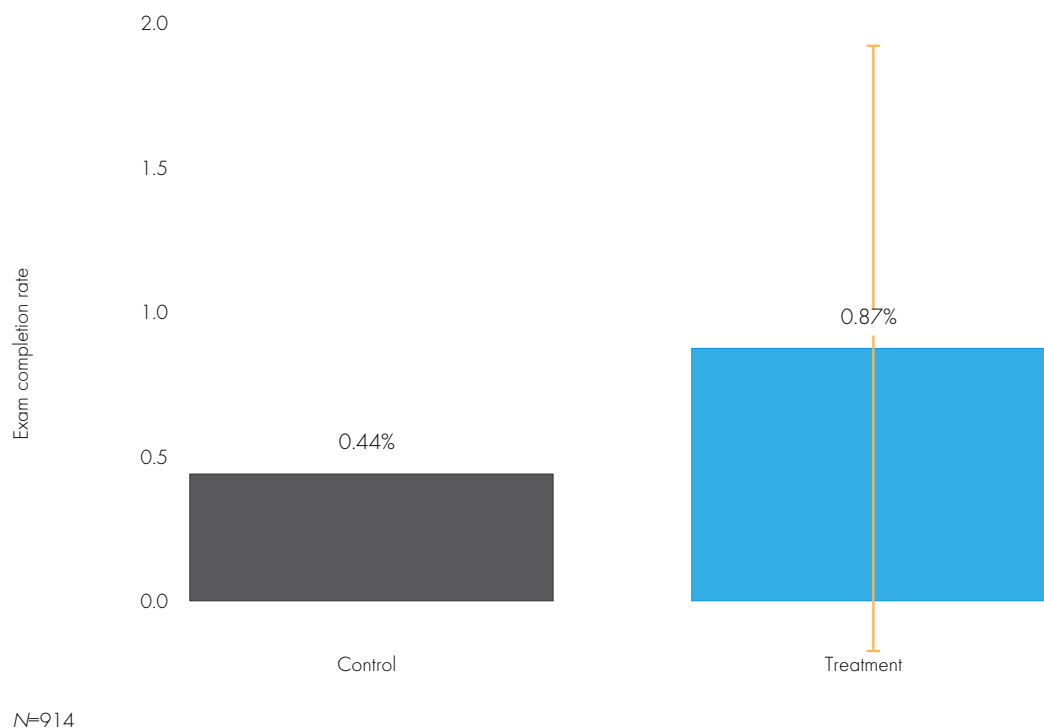
914 inactive applicants to the Baltimore and Chattanooga police departments

Treatment conditions:

Email with self-imposed deadline, no email

Results:

- We did not find that the intervention had a significant effect on exam completion rates.
- In Chattanooga, where applicants are required to schedule their exam before taking it, we found that 11 percent of applicants in the treatment group scheduled their written exam, compared to 5.9 percent in the control group, and that this difference was statistically significant.



New Orleans, Louisiana

Communication channel:

Email

Treatment conditions:

Control email, behaviorally informed email

Sample for randomization:

946 applicants to the New Orleans Police Department who were deemed eligible for testing

Letter for local applicants:

Dear <Applicant_FirstName>:

Congratulations! You have been selected to move forward in the police recruit application process. Your next step is an in-person assessment. The testing should take about five hours and includes a multiple choice exam and a written exercise.

We want to move forward with your application as quickly as possible so why don't you pick a time next week when you can come in? Testing is available on a walk-in basis at 9:30am, Monday-Friday.

We are located at:

If you have any questions, please call me at 504 You'll find a list of documents you need to bring with you below and you can read more about what to expect [here](#).

This could be your first step in a long career of serving with the NOPD.

Good luck!

Shana Parker
City of New Orleans
Civil Service Department | Recruitment & Selection Division

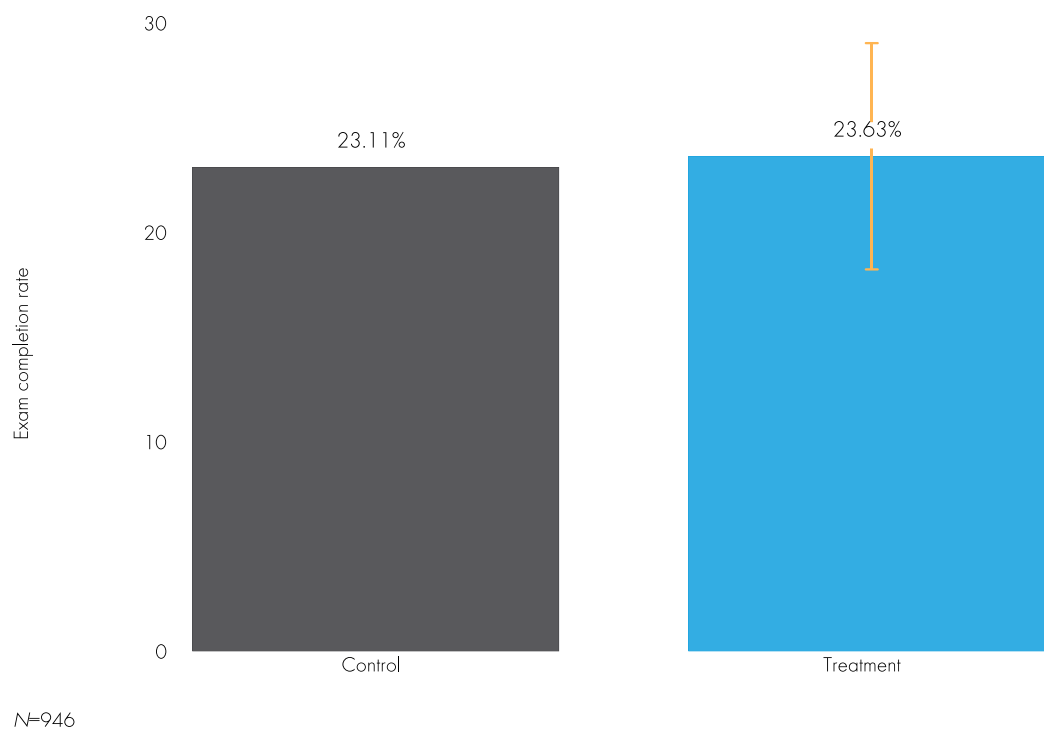
What to bring:

- Valid driver's license, and
- Official proof of education to the test.

Acceptable documents for proof of education are: an official high school diploma, an official G.E.D. issued by a state department of education, an official high school transcript indicating graduation date, an official college diploma, or an official college transcript indicating high school or college graduation date. Photocopies, wallet sized diplomas, and online high schools will not be accepted at the test.

Results:

- We did not find that the intervention had a significant effect on exam completion rates.
- 23.1 percent of applicants in the control group and 23.6 percent of applicants in the treatment group completed their exams.



Los Angeles, California

Communication channel:

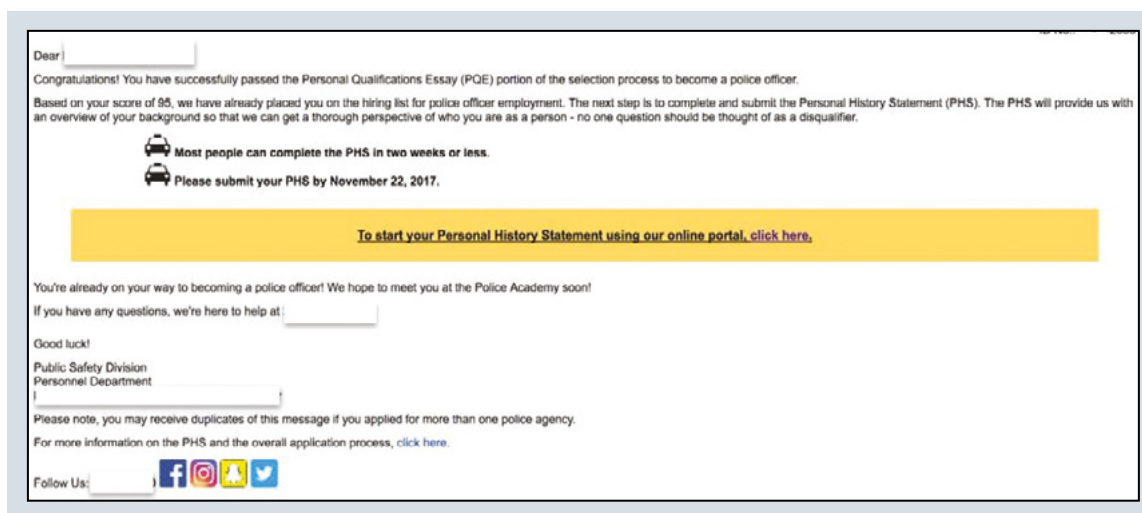
Email, text

Treatment conditions:

Business-as-usual email, modified email and a text message

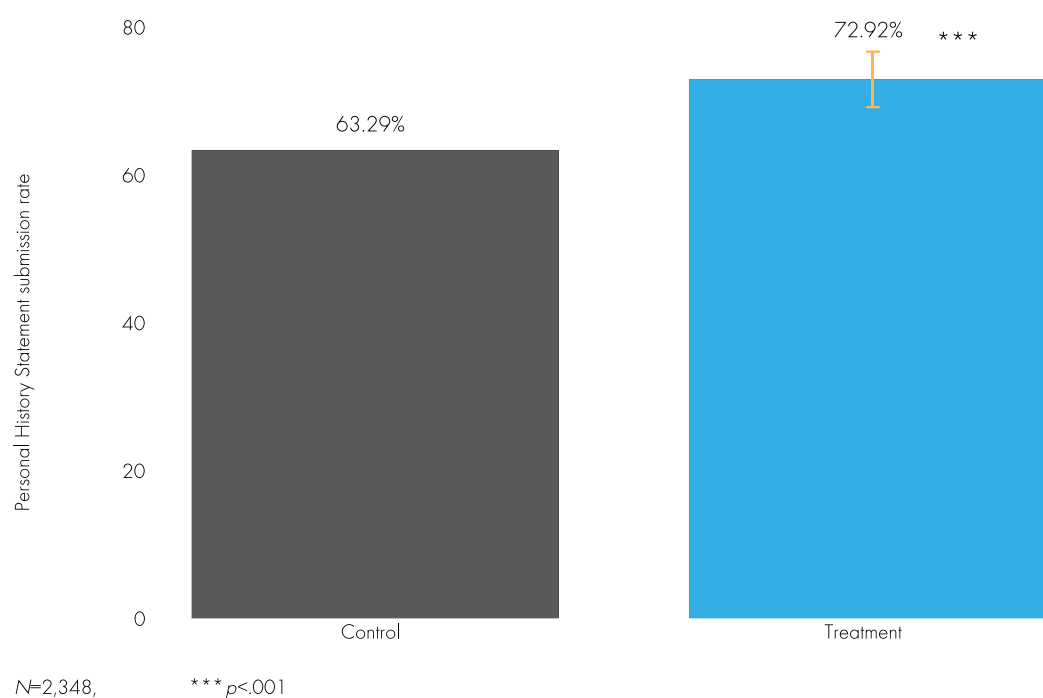
Sample for randomization:

2,351 candidates who applied between November 2017 and April 2018



Results:

- Treated applicants were approximately 15 percent more likely to submit their Personal History Statement, 20 percent more likely to submit online, and 39 percent more likely to submit within two weeks.



*Tacoma, Washington; Fort Worth, Texas;
and Albuquerque, New Mexico*

Communication channel:

Email

Sample for randomization:

approx. 2,000 applicants scheduled to take police exams in Tacoma, Washington; Fort Worth, Texas; and Albuquerque, New Mexico

Treatment conditions:

Email reminder, no email reminder

Results:

The final results of this trial are pending.

Police recruitment survey: summary and recommendations

The Behavioral Insights Team (BIT) surveyed current police officers and trainees to better understand their motivations for joining the police. As many police departments seek to improve their recruiting efforts to address staff shortages and reduce stress on individual officers, it is valuable to understand what motivated current officers to join the force. Many departments are also interested in evaluating how motivations may differ for officers from groups who are underrepresented on police forces, including women and people of color, so that they may better attract applications from these groups.

In order to elicit these insights, we conducted a survey with police officers. This survey builds on our past randomized control trials, enabling us to explore why people become police officers in more depth. It also provides insight into what new messages may be worth testing going forward.

Surveys have some limitations. For example, responses can be influenced by social desirability—people may respond in ways that make them look good, even when responses are confidential. Survey responses are also affected by the inaccuracy of our memory—we may not accurately remember our motivations, especially when we are asked to recall our motivations from long ago. Even when we recall a recent event, what actually motivated us may be hidden from and surprising to us.

The survey was completed by 1,194 officers and trainees in 12 police jurisdictions—Charleston, SC; Chattanooga, TN; Chula Vista, CA; Gresham, OR; Independence, MI; Kansas City, KS; Little Rock, AR; Madison, WI; Scottsdale, AZ; Tacoma, WA; Tulsa, OK; and Wyandotte County, KS. Thirteen percent of respondents were female, and 22 percent were people of color.

Key findings

- Overall, the top five reasons for joining the police force were:
 1. the opportunity to help people in the community;
 2. the excitement of the work;
 3. the desire to fight crime;
 4. the desire to be challenged; and
 5. job security.
- Significant differences between the motivations of women, people of color, recent recruits, and veterans suggest a need for messages tailored specifically to each of these groups.
- Motivations associated with high job satisfaction may be useful for recruitment campaigns.

Recommendations

The following list indicates the key recruitment messages we recommend that police forces design and test, as well as the rationale for each.

Key Message	Rationale
"Belonging to a team" "Companionship with coworkers"	These two messages have a relatively high influence for more recent recruits, across demographic groups. These are also "non-traditional" messages and so may be more likely to pique interest. (However, if these messages are used they must reflect a reality of inclusivity and belonging.)
"Challenge of the job"	This message has a relatively high influence for recent recruits, across demographic groups, and is a non-traditional message and so may be more likely to pique interest. Officers motivated by the "challenge" of the job also reported more job satisfaction. However, this message must be used with careful consideration of what "challenge" is being referenced.
"Opportunities for career advancement" "Excitement of the job"	These messages have a relatively high influence on joining the police, are non-traditional messages, and are associated with job satisfaction.
"Creating change within the policing profession"	This message has a relatively high influence on female officers and officers of color and is also influential for people who joined the police force in the past five years.

In addition to testing the messages above, we recommend that departments re-evaluate referral programs and emphasize direct outreach to women. Women are less likely to join the police because they "have friends/relatives who were police officers," and therefore referral programs could serve to exacerbate the underrepresentation of women on police forces.

Additionally, women are less likely to join because it is their "lifelong dream or aspiration," making them less likely to apply to the police without outreach.

To find out more about the results of this survey email info@bi.team.

Endnotes

- 11 Ideally, we would have liked to include Portland and Washington, DC, in this analysis to determine an overall effect of sending recruitment postcards that include cities where postcards backfired. However, the trials had different outcome measurements in these cities, and in Portland limited access to data made further analyses impossible.

Authors



Dr. Joanna Weill
Senior Research and Jail Reform Associate, Center for Court Innovation
Behavioral Insights Team

Joanna is a Senior Research and Jail Reform Associate at the Center for Court Innovation. Prior to this role, Joanna was an Advisor with BIT North America, where she conducted research on behavioral insights for criminal justice and public safety. She received her MS and PhD in applied social psychology from the University of California, Santa Cruz. She serves on the Society for the Psychological Study of Social Issues’ Policy Committee and is an affiliated Research Associate with the University of California, Santa Cruz.



Dr. Elizabeth Linos
Assistant Professor, University of California, Berkeley, Goldman School of Public Policy

Elizabeth is an assistant professor of public policy at University of California, Berkeley. As a behavioral economist and public management scholar, her research focuses on how to recruit, retain, and motivate civil servants. Prior to this role, Dr. Linos was VP and Head of Research for BIT North America. Dr. Linos holds a Ph.D. in Public Policy from Harvard University.



Siddharth Mandava
Associate Advisor
Behavioral Insights Team

Siddharth is an Associate Advisor with BIT North America where he works with city governments on policy design, research and evaluation, and applying behavioral insights. He graduated with a degree in Philosophy, Politics, and Economics from Claremont McKenna College. Before joining BIT, Siddharth worked on public policy research and implementation during internships at the Office of Mayor Charlie Hales in Portland, OR and the White House Council of Economic Advisers.



Cecily Wallman-Stokes
Senior Advisor
Behavioral Insights Team

Cecily is an Advisor at the Behavioral Insights Team. Her background includes work in philanthropic strategy and social impact measurement, from both the grantor and the grantee perspective. She has also conducted research across a range of behavioral science topics including reproductive health, vaccine access, gun violence prevention, and substance abuse reduction. Cecily holds a Bachelors of Science from Davidson College and a Masters in Public Administration from the University of Washington.



Jacob Appel
Senior Advisor
Behavioral Insights Team

Jake is a Senior Advisor at BIT North America. He has led research and innovation projects with policymakers and practitioners from the public, private, and nonprofit sectors. Previously he worked as a social innovation consultant, and on randomized evaluations of poverty alleviation programs with Innovations for Poverty Action. He is the co-author of two books: More Than Good Intentions and Failing in The Field: What We Can Learn When Field Research Goes Wrong. Jake holds a Masters in Public Affairs from the Woodrow Wilson School at Princeton University.

The Behavioral Insights Team

© Behavioral Insights Ltd. Not to be
reproduced without the permission of the
Behavioral Insights Team



THE
BEHAVIORAL
INSIGHTS
TEAM