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The Effect of the 2016 United States Presidential Election on Employment Discrimination

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The Effect of the 2016 United States Presidential Election on Employment Discrimination

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We examine whether employment discrimination increased after the 2016 presidential election in the United States. We submitted fictitious applications to publicly advertised positions using resumes that are manipulated on perceived race and ethnicity (Somali American, African American, and white American). Prior to the 2016 election, employers contacted Somali American applicants slightly less than white applicants but more than African American applicants. After the election, the difference between white and Somali American applicants increased by 8 percentage points. The increased discrimination predominantly occurred in occupations involving interaction with customers. We continued data collection from July 2017 to March 2018 to test for seasonality in discrimination; there was no substantial increase in discrimination after the 2017 election.

Keywords: discrimination, race/ethnicity, immigration, resume audit, election
JEL codes: J61, J68, J71

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The 2016 U.S. presidential campaign, election, and aftermath saw heightened tensions surrounding race and immigration. Donald Trump advocated banning Muslim immigration to the United States and suspending refugee programs from Muslim-majority countries (Cox 2016; Trump 2015). As a candidate, Donald Trump also held rallies where he harshly criticized refugee programs. Minnesota and Maine are both home to large Somali American refugee communities; President Trump held campaign events in both states where he tied Somali refugees to terrorist attacks (Sherry 2016). More broadly, President Trump's campaign was frequently accused of using coded racial language and "dog whistle" politics that appealed to biased voters (Nunberg 2016). In the months leading up to the election on November 8, 2016, Minnesota also experienced bias crimes against Somali Americans as well as crimes committed by Somali Americans tied to terrorist groups. For example, in June 2016, two Somali American men were shot in Minneapolis in a hate crime (Hudson 2016). In September 2016, a Somali American man stabbed eight people in St. Cloud, Minnesota in an attack tied to ISIS (Phillips et al. 2016).

In a surprise upset, President Trump won traditionally Democrat states in the upper Midwest, including Michigan and Wisconsin (Bialik and Enten 2016). In Minnesota, the Democratic Party's presidential candidate won by less than 45,000 votes which was the closest presidential race in Minnesota since 1984, when Minnesota famously voted for Walter Mondale over Ronald Reagan. After the election, there was a rise in hate crimes across the United States (Southern Poverty Law Center 2016). This included Minnesota, where the Southern Poverty Law Center reported 34 bias crimes in the 10 days after the election. These bias crimes included racist, pro-Trump graffiti in local high schools and universities (Montemayor 2016). News reports after the election described the results as "exposing" racism in the United States (Bacon 2016; Tensley, Richardson, and Frederick 2016). Recent research has found that the surprising

and divisive November 2016 election affected people's behavior. For example, hate crimes against Muslims increased after President Trump was elected, and the increase was concentrated in counties with high Twitter usage (Müller and Schwarz 2018). While less extreme than an increase in bias crimes, male laboratory participants playing the "battle of the sexes" game became less cooperative towards female players after the November 2016 election (Huang and Low 2017) – this indicates a potential increase in less obvious types of discriminatory behavior after the election.

Previous work has investigated the impact of politicians' party affiliations on policy choices and labor market outcomes (Besley and Case 1995; Lee, Moretti, and Butler 2004; Reed 2006). In recent work, Beland (2015) and Beland and Unel (2018) examine the causal impact of the party affiliation of governors on labor market outcomes using a regression discontinuity design to exploit variation associated with close elections. They find evidence of favorable labor market outcomes for black workers (Beland 2015) and immigrants (Beland and Unel 2018) under Democratic governors. While these papers consider the effects of policy choices made by governors once they are in office, it is unclear if an election itself has an impact prior to the implementation of new policies.

Labor market discrimination appears to worsen after specific events. For example, the earnings of Arab and Muslim men in the United States declined after September 11th, an effect attributed to increased discrimination (Dávila and Mora 2005; Kaushal et al. 2007). Arab and Muslim men worked fewer hours when a U.S. soldier from their state of residence died in the Afghanistan and Iraq wars (Charles et al. 2017). Likewise, customers in Israel report being willing to pay a premium to hire Jewish painters rather than Arab painters after increased violence in Israel (Bar and Zussman 2017). Underlying forms of discrimination in the labor

market may be affected by the *salience* of a job applicant's race or religion. People do not pay equal amounts of attention to all aspects of their environment – attention is selective and can be drawn to particular features even when logically irrelevant[1] (Fiske and Taylor 1984; Taylor and Fiske 1978; Tversky and Kahneman 1974). When a customer's attention is drawn to a certain characteristic of a product, they over-weight it in their decision (Bordalo et al 2013). Recent work has found that increases in the salience of Muslim minorities in Germany, due to the establishment of new mosques, have led to increases in nationalism and politically motivated crimes (Colussi et al. 2016). On the other hand, a recent study has found that while terrorist attacks perpetrated by a self-described Muslim affects Americans' concerns about radicalism, they do not affect Americans' feelings toward Muslims (Boydstun et al. 2018).

These findings suggest that labor market discrimination may be responsive to external stimuli, although none of these papers were able to directly test whether employer discrimination increased after a shock. This paper addresses this gap – we have direct evidence of employer discrimination from a correspondence study before and after the surprise election of President Trump in November 2016.

In this paper, we test employers' response to Somali American, African American,[2] and white American job applicants in the Minneapolis and St. Paul metropolitan area before and after

[1] In this context, we are using the traditional psychological definition of "salience" – the salience of a person, object, or characteristic is defined as how much it draws attention or stands out among its neighbors. Chetty, Looney, and Kroft (2009) use a different definition of "salience," where it refers to how visible a tax-inclusive price is. In that paper, a tax was more salient when the posted price included the tax, rather than it being added at the register. This is related to, but different from, the idea of salience as drawing attention to a particular person, object, or characteristic.

[2] In this context, "African American" is used to refer to black Americans whose families have been in the U.S. for multiple generations. While first and second-generation immigrants from

the November 2016 presidential election. Between July 2016 and June 2017, we applied to publicly advertised positions using fictitious resumes that are manipulated on perceived race and ethnicity (Somali American, African American, and white American) and examine the proportion of resumes that are contacted by employers. Indeed, we find a large increase in discrimination against Somali American job applicants immediately after the 2016 election. Because many studies have found that customers play an important role in discrimination (Neumark et al. 1996; Ayres, Banaji, and Jolls 2015; Doleac and Stein 2013; Nunley, Owens, and Howard 2011; Nunley et al. 2015; Laouénan 2014), we test if the increase in discrimination is widespread or concentrated in customer-oriented fields.

We find that prior to the November 2016 election, employers contacted Somali American applicants 5.5 percentage points less often than white applicants, but 4.9 percentage points more than African American applicants. The election was accompanied by a sharp increase in discrimination against Somali American resumes but no change in discrimination against African American resumes. After the election, the difference between white and Somali American applicants increased to 13.8 percentage points. That is, the percentage point difference in how often employers contacted white and Somali American applicants more than doubled after the 2016 presidential election. The difference between white and African American applicants remained constant. We show this increase appeared precisely in November and has partially decreased as time passed. The effect is concentrated in customer-oriented occupations. These results are striking: an election, prior to the candidate taking office or implementing policy, resulted in a dramatic increase in discrimination in the labor market.

Africa may also identify or be identified as "African Americans," we are using this term to refer more specifically to multi-generational black Americans.

We continued to collect data from July 2017 to March 2018 to test for seasonality of discrimination; for example, employers may discriminate against Muslims when hiring for the Christmas season. We find limited evidence of seasonality to discrimination – a small and short-lived increase in discrimination during October and November 2017.

Because we use an interrupted time series to identify the impact of the 2016 election, other events that occur at the same time may contaminate our results. We explore other potential explanations for the increase in discrimination after the election, including other events that happened after the 2016 election and if there were changes in the types of jobs advertised around the time of the election.

Minnesotan Context

Minnesota offers a unique environment to examine how employers respond to applications from Somali American, African American, and white American applicants. Beginning in the early 1990s, the U.S. began receiving refugees from the civil war in Somalia. Minnesota, and particularly the Twin Cities area, served as a major destination for refugees. Using IPUMS ACS data (Ruggles et al. 2015), we estimate that in 2015, over 35% of all people in America who identified as Somali[3] live in Minnesota. The unemployment rate for white

[3] In this context, Somali is defined as having at least one of the following apply:

1. Answering "Somalian" as either the first or second answer to "What is this person's ancestry or ethnic origin?"
2. Reporting being born in Somalia
3. Having a mother or father in the household who reports "Somalian" as their ancestry
4. Having a mother or father in the household who reports being born in Somalia

This expansive definition is used for two reasons. First, some Somali Americans either do not report their ancestry or report it as African, East African, African American, or similar broad option. Using a more expansive definition will capture some of these people. Second, there is a persistent pattern where "Somalian" appears to be occasionally mistranscribed as "Samoan" in the ancestry question. The more

Minnesotans in 2016 was approximately 6%, while the African American and Somali American unemployment rates were both 19% (Minnesota State Demographic Center 2016).

Figure 1 shows that in 2015, approximately 24,256 Somali Americans live in Minneapolis and St. Paul, comprising an estimated 3.4% of the Twin Cities population. Somali Americans comprise a large and important ethnic group within Minnesota, particularly the metropolitan area.

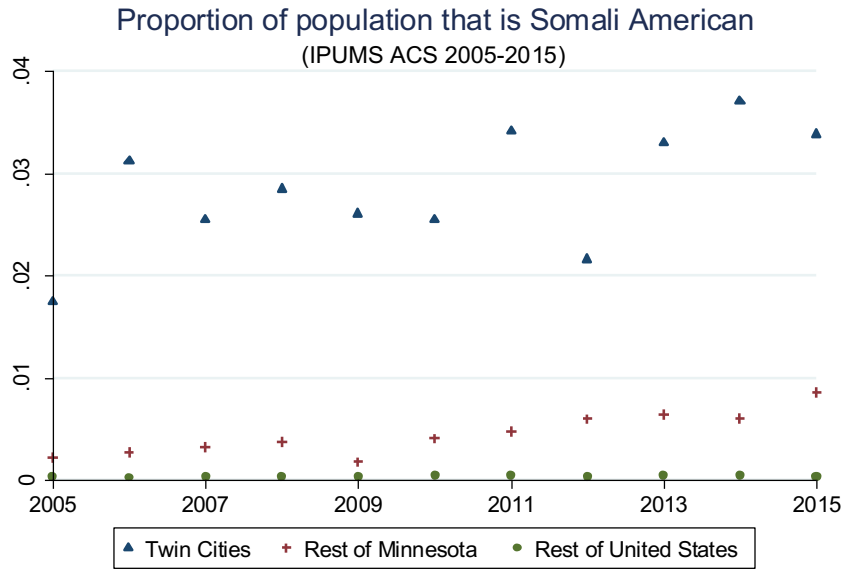

Figure 1: *The proportion of the population that is Somali American*
Source: IPUMS ACS.
Note: Figures use complex weights.
N= 32,984,720 (Rest of US), 44,602 (Twin Cities), 543,995 (Rest of MN)

expansive definition will count these people, if their birthplace, parents' ancestry, or parents' birthplace was reported correctly.

In Minneapolis, Somali refugees and their children have established an immigrant enclave distinct from the pre-existing historically African American neighborhoods. As shown in Figure 2, there are two predominantly black areas of Minneapolis. The neighborhoods to the northwest of downtown are historically African American. Until recently, this area was isolated from the rest of the city by a major highway to the south and an interstate to the east.

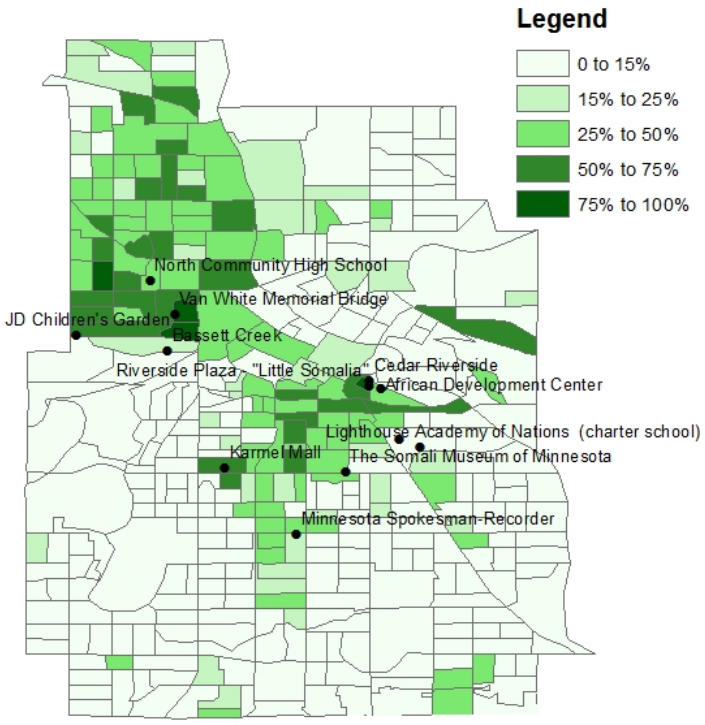

Figure 2: *A map of Minneapolis showing the proportion reporting their race as "Black or African American" (2014 pooled 5 year ACS via American FactFinder)*

Somali Americans have established neighborhoods south of downtown; the Riverside Plaza is a well-known apartment complex housing recent immigrants and is known as "Little Somalia." The neighborhood includes charter schools that address the needs of children who spent substantial time in refugee camps and also incorporate religious and cultural practices. This neighborhood is home to a Somali cultural museum and the Karmel Square mall with stores selling traditional Somali food, clothing, and other items.

Other major immigrant groups in Minneapolis and St. Paul include individuals born in Mexico and Hmong refugees. Figure 3 shows the proportion of foreign-born people in Minneapolis and St. Paul in each reported ancestry. In this paper, we focus on Somali American job applicants. Mexican immigrants include both those with legal immigration documents and

those without legal documents – while employer perception of the legal status of Latinx immigrants is an important research question, it is not the question addressed by this paper. We do not use Hmong names in this paper because they are not distinctive from other Asian immigrant names, making a resume correspondence study less powerful for studying this group.

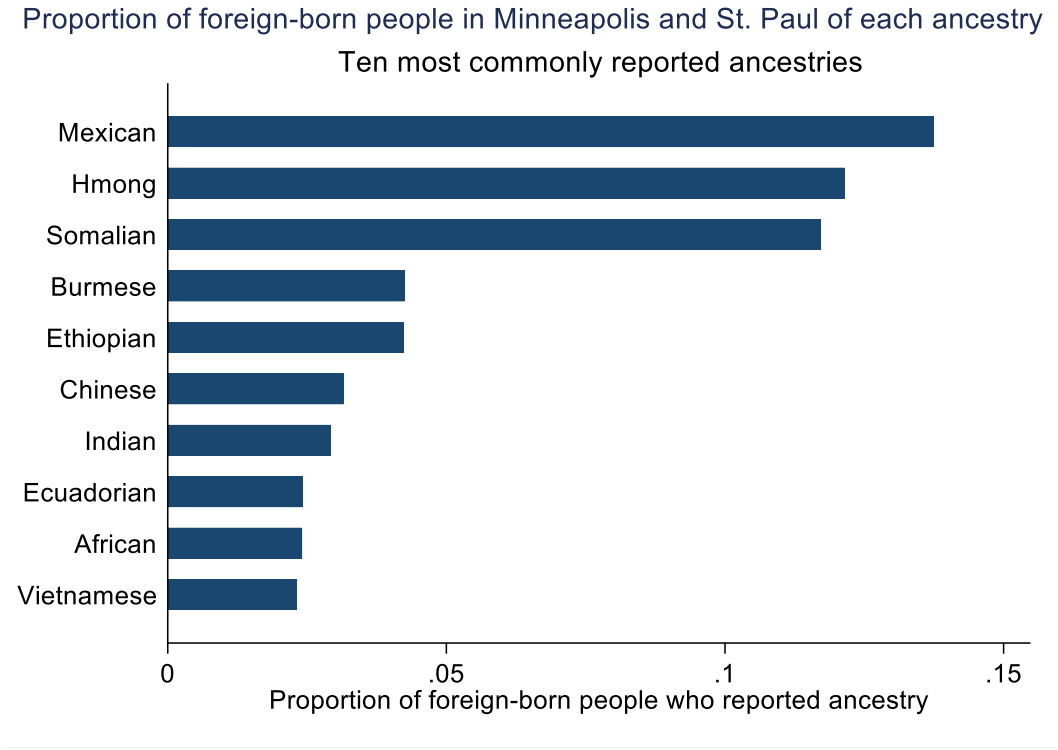

Figure 3: *Proportion of foreign-born people in Minneapolis and St. Paul who describe themselves as each ancestry. IMPUS ACS 2009 to 2018.*

Approach and Methods

Correspondence Study

In this project, we use a resume correspondence study to examine whether employment discrimination increased after the 2016 election. We sent 2,744 fictitious applications to publicly advertised positions using resumes that are manipulated on perceived ethnicity (Somali

American, African American, and white American) and examine the proportion of applicants contacted by employers. Applications were sent between July 1, 2016 and June 30, 2017.

Each resume has basic contact information for the applicant, including a name, address, local phone number, and email address. The resume includes two work experience entries, one activity, an education, and a section labeled "Other skills" with basic computer skills listed. The addresses on the resumes are from mid-range apartment complexes in downtown Minneapolis, located between the historically African American neighborhoods and the predominantly Somali American neighborhoods. We select these addresses because they are geographically central to the jobs we apply for. Addresses were not geographically varied since Bertrand and Mullainathan (2004) found no difference based on the applicant's race in how their neighborhood affected the probability of being called back. As shown in Appendix 1, the address of the applicant is balanced with respect to the race/ethnicity manipulations.

We manipulate the name on the resume to indicate the applicant's sex and whether the applicant is Somali American, African American, or white American. The Somali American names were selected from the CDC's list of popular Somali first names. The surnames are a male first name, following the conventional naming pattern where a surname is the father or grandfather's first name (United Kingdom 2006). The Somali American names we use are Aasha Waabberi, Fathia Hassan, Khalid Bahdoon, and Abdullah Abukar.[4]

[4] Note that these first names are from the Koran and are not specific to Somali Americans. However, in the Minnesotan context, Somali Americans are the largest, most visible Muslim group.

To select African American and white American names, we chose names that are racially distinct and pre-tested[5] them to select names that clearly signal race and do not signal different socioeconomic status (Levitt and Dubner 2005; Gaddis 2015). To evaluate potential names, we recruited participants on Amazon Mechanical Turk, an online labor market where people perform piece-rate tasks. Participants viewed a selection of names in a random order and rated how strongly they associated the name with five major racial groups and whether they associated the name with high or low socioeconomic status. Clearly Hispanic/Latino names (e.g., José Garcia) were used to test participants' attention. Respondents strongly associated names with race and socioeconomic status. The African American names that were higher SES were still rated as having lower SES than the low SES white American names. To reduce the role that perceived differences in SES play in this study, we use high SES African American names and low SES white American names. The surnames are the highest percent white and the highest percent African American of the top 100 most common surnames on the 2000 Census. The white American names we use are Amber Sullivan, Amy Wood, Jacob Myers, and Lucas Peterson. The African American names we use are Imani Williams, Nia Jackson, Andre Robinson, and Jalen Harris.[6]

[5] To the best of our knowledge, names from Minnesotan birth certificates are not public, so we are not able to use Minnesotan birth certificates to select names. We were unable to pre-test Somali American names with a similar method because we would need to recruit a sample from only Minneapolis and St. Paul, which was cost-prohibitive.

[6] At the annual APPAM meeting, our discussant highlighted that most real job applicants do not have racially distinctive names. That is, most African American job applicants do not have names that identify them as African American. Similarly, the white names are Anglophonic – many real white applicants have names or surnames that are not from an Anglo-Saxon origin. This means that the results of resume correspondence studies do not generalize to the broader population of job applicants.

We create a bank of work experiences, educational backgrounds, and related activities drawn from real resumes from Minnesota that were publicly listed on Indeed.com. The manipulated resumes are then created by a computer program randomly selecting elements from the resume bank (Lahey and Beasley 2009). The randomization process occurs each time a resume is produced; the program produced thousands of unique resumes.

All resumes include two different work experiences, each lasting approximately two years. The resumes include variation in the quality of education and work experience. We use a chi-squared test to examine if the characteristics of the resume are balanced with respect to the race/ethnicity manipulations. Table 1 displays the resume characteristics and the p-values for the balance tests. Some resumes are from high school graduates while others are from college graduates and some list that the applicant graduated with honors. As shown in Columns 2 and 3 of Table 1, the education variables are balanced with respect to the race/ethnicity manipulations.

Table 1: Summary Statistics and Balance Tests

	Percentage of resumes (1)	**Chi-squared test** (2)	**P-value** (3)
Race			
White American	25.00		
African American	25.00		
Somali American	50.00		
Sex			
Male	49.20	2.8733	0.392
Female	50.80		
Education Level			
High School Graduate	50.47	0.9578	0.619
College Graduate	49.53		
Honors			
High School Honors	7.29	2.0170	0.365
College Honors	3.32	4.3986	0.111

Activity			
Generic Activity	41.69	3.491	0.479
Political Activity	29.81		
Religious Activity	28.50		
n	2744		
Among Somali American Resumes			
Language Skills			
Native Speaker	24.93		
ESL	24.49		
No Language listed	50.58		
n	1372		

Column (1) shows the percentage of the resumes with each characteristic. Column (2) shows the chi-squared statistic for the test that the characteristic is distributed equally across the key manipulation (African American, Somali American, and white American). Column (3) shows the p-value for the chi-squared test in Column (2).
n=2,744 for all resumes; n=1,372 for Somali American resumes.

We include other attributes on the resumes, including extracurricular activities and language skills. For extra-curricular activities, we randomly select between an activity that signals a religious affiliation (e.g., volunteering at a place of worship), a political activity (e.g., volunteering for a campaign), or a generic activity (e.g., volunteering at a library or hospital).[7] If a resume is randomly selected to have a religious activity, the Somali American resumes have a mosque activity, the white American resumes a church activity, and the African American resumes randomly select between mosque and church activities.[8] All activities, including mosque and church activities, are drawn from publicly listed resumes.

[7] We intended to have an equal number of resumes with generic, religious, and political activities. However, initially there was an error in generating the resumes such that 50% of resumes had a generic activity, 25% had religious, and 25% had political activities. This was corrected starting with resumes in August 2016.
[8] The Somali American refugee population is almost entirely Sunni Muslim (IIMN 2020). The impact of being Somali American will always include the impact of being Muslim – these two

We signal length of time in the U.S. and language skills on the Somali American sounding resumes with two elements: birthplace and language. All the resumes include a Minnesotan high school. Some Somali American resumes list the applicant's birthplace as the U.S., while other resumes do not indicate a birthplace. Some Somali American resumes also list information about the applicant's English skills – either being a native English speaker or having an "ESL certification" in English. The language skills are consistent with the listed birthplace – for example, a Somali American resume that indicates a U.S. birthplace and is also randomized to list language skills will indicate the applicant is a native English speaker. This manipulation is designed to investigate time in the United States and language skills, not citizenship or legal status. Most Somali American refugees are immediately eligible for permanent residency in the U.S. and for citizenship after 5 years of residency (USCIS 2020). That is, the Somali American applicants would all be eligible to work in the U.S. and most would be eligible for U.S. citizenship.

We send fictitious resumes to publicly advertised jobs on Craigslist in the Minneapolis/St. Paul metro area. We applied to all available job postings, except those with a specific licensure or experience requirement.[9] We also do not apply for jobs that require submitting an application through an employer's application form because we usually cannot

elements are not separable in reality or in the experiment. When a Somali American resume is randomly selected to include a religious activity, this can be interpreted as a signal of religiosity rather than religion. We do not include church activities on Somali American resumes because the effect would be difficult to interpret. Employers would likely view the applicant as a convert. We randomly select between church and mosque on African American resumes that are selected to include a religious activity.

[9] There are many jobs that our fictitious applicants are simply not qualified for, such as truck driving or healthcare positions that require a specific license. None of our resumes have these types of occupation-specific licenses, so we do not apply for these jobs.

include the desired manipulations. The most common jobs included receptionist, cook, cleaning crew member, dishwasher, and retail salesperson.

Each job receives four manipulated resumes: one female Somali American, one male Somali American, one African American, and one white American. While this over-represents Somali Americans and African Americans relative to the Twin Cities population, the Somali American and African American communities are younger on average than white Minnesotans. Additionally, the Somali American and African American unemployment rates are over three times the white American unemployment rate in Minnesota (Minnesota State Demography Center 2016). This means that Somali Americans and African Americans would make up a larger share of young job seekers than in the general Twin Cities population. Additionally, Somali American women and men aged 18 to 25 in Minnesota have very similar labor force participation rates: 75% and 78% respectively (authors calculations from ACS 2018 5-year pooled), so including both male and female resumes accurately reflects the labor force patterns among young Somali Americans in Minnesota.

The resumes are sent from an email address that matches the applicant's name and are sent with a delay between emails. No element on the resume is repeated among the four resumes sent to the same employer. For example, no employer receives two resumes with an identical work experience section. We record the occupation, industry, and the text from the job ad. As shown in Appendix 1, the order in which the resumes are sent is balanced with respect to our key manipulations.

Our outcome of interest is whether the employer contacts the fictitious applicant regarding an interview. We monitored the email addresses and phone numbers for any contact from employers. We recorded whether the employer makes any positive contact with the

applicant (e.g., a request for an interview). If the employer contacts the applicant simply to state that they received the application, we did not count this as a "positive contact." When an employer contacted a fictitious applicant, we immediately responded informing the employer that the applicant had just accepted another offer.

Strengths and limitations of the correspondence study approach

Resume correspondence studies are a very useful approach to studying behavior in the labor market. These studies can carefully balance the characteristics of the fictitious applicants, the resumes can include many relevant manipulations, and the outcome focuses on employers' actual behavior (Bertrand and Duflo 2016). Additionally, a resume correspondence study examines a form of discrimination that is almost costless to the employer but has large impacts on the applicant. This captures a relevant form of discrimination that may go unnoticed by the employers themselves.

While powerful, the correspondence study approach has some important limitations with respect to understanding discrimination in the job search. One important caveat in this paper results from using time to identify the effect of the election. We compare patterns in discrimination pre- and post-election; however, other events also occurred in November. We examine many alternative explanations for our findings, including co-incident events, after we present our results.

A second consideration is that a correspondence study will not necessarily reflect the average job seeker's experience, because many jobs are acquired through social networks, whereas a correspondence study is limited to publicly advertised positions. Similarly, the names used to signal race are not representative of the average job seeker. Finally, a correspondence study focuses on one particular part of the job acquisition process: getting an interview. The

application stage is often necessary to acquiring a job and one where multiple types of discrimination may manifest. However, other important aspects of discrimination will not be captured by a resume correspondence study, including getting a job offer, the starting wage, and subsequent promotions.

Analysis

We examine whether employer discrimination against Somali Americans and African Americans changed after the 2016 election. To do this, we use the following linear probability model:[10]

$$y_{ij} = \beta_0 + \beta_1 African\ American_{\ ij} + \beta_2 Somali\ American_{ij} + \theta_1 African\ American_{ij} * After\ election_j + \theta_2 Somali\ American_{\ ij} * After\ election_j + \boldsymbol{X}_{ij}\boldsymbol{\delta} + \boldsymbol{Z}_{ij}\boldsymbol{\gamma} + \eta_j + \varepsilon_{ij} \quad (1)$$

In Equation 1, y_{ij} is an indicator variable showing job j's reaction to applicant i. We include an indicator for Somali American and African American resumes. We also include these indicator variables interacted with a variable showing whether the application was sent on or after the election on November 8, 2016.[11] We first estimate this base regression with no control variables; for this base regression, $\hat{\beta}_2$ will show the percentage point difference in callback rates between white American applicants and Somali American applicants. The difference between $\hat{\beta}_1$ and $\hat{\beta}_2$ will show the percentage point difference in callback rates between Somali American resumes and African American resumes. The coefficients on the interaction terms, $\hat{\theta}_1$ and $\hat{\theta}_2$ will indicate

[10] Probit model is presented in Appendix 2.

[11] It is important to note that we only know when the application was sent and when an employer contacted the fictitious applicant. We do not when the employer evaluated the application. Some applications that were sent just prior to the election may have been evaluated after the election. If this occurs, it will bias our findings towards zero. Those applications that were sent on election day itself are coded as "After the election" because most applications were sent in the evening and it is unlikely the employer read the applications immediately.

whether these baseline differences increase or decrease after the 2016 election. For example, if $\hat{\theta}_2$ is negative this would show that the difference between Somali American and white American resumes becomes more negative after the 2016 election.

We then add variables for the included manipulations ($\boldsymbol{X}_{ij}$). For example, $\boldsymbol{X}_{ij}$ will include whether the applicant listed their language skills and indicator variables for church activity, mosque activity, and political activity, and level of education. These variables are important elements to analyze, but this paper focuses on the impact of the 2016 election; more thorough analysis of the $\boldsymbol{X}_{ij}$ variables is contained in a separate paper. We further add other resume characteristics ($\boldsymbol{Z}_{ij}$) as controls, including the formatting of the resume and fixed effects for the specific work experience. We also include job fixed effects, η_j; when job fixed effects are included, we cannot identify a coefficient on the $After\ election_j$ indicator variable. We also estimate Equation 1 with occupation fixed effects and without fixed effects; we include $After\ election_j$ in those regressions. Standard errors are clustered by occupation to account for correlation of unobserved characteristics that affect the proportion of applicants contacted by an employer.

We stratify Equation 1 by gender to examine if these relationships vary by the gender of the applicant; we do not include job fixed effects in this stratified regression because we have fewer observations for each job when stratifying.

To examine the mechanisms of why there was a change in discrimination at the time of the November 2016 election, we augment Equation 1 to examine if the impact of $\boldsymbol{X}_{ij}$ variables changes after the November 2016 election. We first examine if the impact of including a mosque activity, political activity, and language skills changes at the time of the election. Second, we

examine if there is a different impact for Somali Americans who list a U.S. birthplace and those who do not.

The results vary by occupation. If discrimination is driven by customer prejudice, jobs requiring more interaction with customers will have more discrimination. As in Oreopoulos (2011), we code each job title with the Occupational Information Network (O*NET) coding structure. O*NET provides multiple measures of work context for each job ranging from 0 to 100, including the measure "Deal with external customers."[12] Using this variable, we sort occupations into terciles (three groups) and examine whether the differences in callback rates between groups vary by the importance of customer interaction. To examine the impact of the November 2016 election among occupations with differing levels of customer interaction, we stratify Equation 1 by the customer interaction tercile. We do not cluster in the regressions stratified by tercile because there are too few occupations in each tercile to cluster by occupation.

[12] This measure answers the question "How important is it to work with external customers or the public in this job?" and can be downloaded here: https://www.onetonline.org/find/descriptor/result/4.C.1.b.1.f?a=1

Results

Effect of the election on employment discrimination

Summary statistics

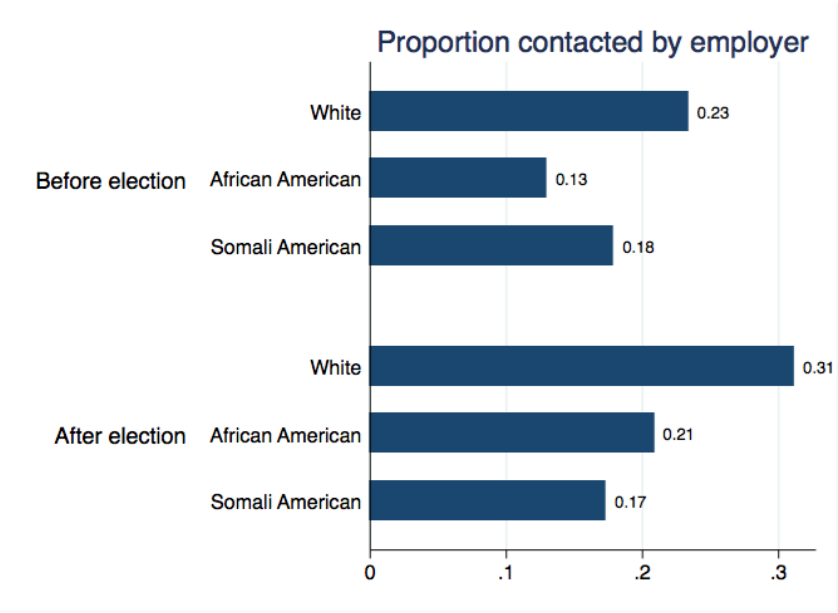

Figure 4: *The proportion of applicants contacted by an employer*
N=2,744

Figure 4 shows the overall proportion of applicants contacted before and after the election, not controlling for any characteristics on the resume.[13] The proportion of white American and African American applicants who were contacted by employers both increased by 8 percentage points after the election. However, after the election, Somali Americans were contacted slightly less.

We do not include the time it took employers to respond to applicants as an outcome variable, because employers almost always contact successful applicants on the same day as

[13] The total number of applications that were sent by month is presented in Appendix 3.

other successful applicants. Over the entire data collection period, only 17 jobs responded on different days to different applicants.

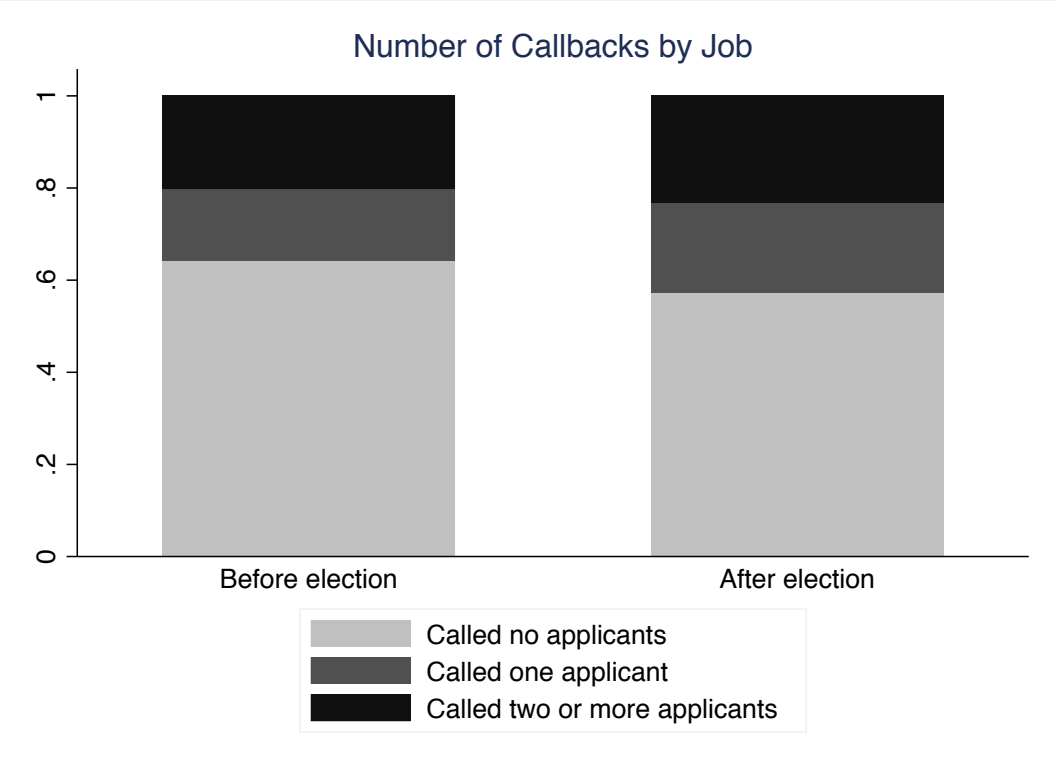

Figure 5: *The distribution of number of callbacks by job*
N=346 before election, N=340 after election

Figure 5 displays the distribution of the number of callbacks by job. Before the election, 64.2% of jobs did not call any of our applicants. This decreased to 57.4% after the election. Before (after) the election, 15.6% (19.4%) of jobs called back one of the four applicants. We consider these jobs to get a sense of discrimination at the job level. Before the election, firms that only called back one applicant called the white applicant 48.1% of the time. This is striking because only one in four applicants that were sent in the experiment was white. The African American resume was the only one called back 9.3% of the time, even though one in four applicants were African American. A Somali American resume was the only one called back

42.6% of the time despite the fact that we sent two Somali American applications to each job posting. After the election, a Somali American was the only person called back 19.7% of the time, half as likely to be the only one called back compared to before the election. After the election, firms that only called back one applicant called the white applicant 60.6% of the time and called the African American applicant 19.7% of the time.

Regression results

We use the regression specified in Equation 1 to test whether discrimination against Somali Americans and African Americans increases after the 2016 election. Consistent with the summary statistics presented in Figure 4, we find that prior to the election, Somali Americans were contacted less often than white Americans but more often than African American applicants. After the election, the percentage point difference between how often employers contacted white and Somali American applicants more than doubled. There was no increase in the difference between white and African American applicants.

Table 2 shows the results of estimating Equation 1. Columns 1-3 include job fixed effects to control for firm-specific variation. Columns 4-6 include occupation fixed effects. Columns 7-9 do not include fixed effects.[14] Controls include education level, language skills (only included on Somali American resumes), and political/church/mosque activity variables (generic activity is the omitted category). Additional controls include fixed effects for specific work experiences included on the resume, formatting of the resume, and the order in which the resumes were sent to employers.

[14] Regression results in which we include a time trend in the regressions with occupation fixed effects and no fixed effects can be found in Appendix 4.

Table 2: Results of a of linear probability model

	(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*	*(7)*	*(8)*	*(9)*
	Job fixed effects			Occupation fixed effects			No fixed effects		
African American	-0.104***	-0.098***	-0.095***	-0.104***	-0.095***	-0.093***	-0.104***	-0.095***	-0.094***
	(0.024)	(0.025)	(0.024)	(0.021)	(0.021)	(0.021)	(0.021)	(0.021)	(0.021)
Somali American	-0.055**	-0.046	-0.050*	-0.055**	-0.033	-0.035	-0.055**	-0.030	-0.033
	(0.024)	(0.028)	(0.028)	(0.021)	(0.024)	(0.023)	(0.021)	(0.023)	(0.022)
After election				0.062	0.042	0.042	0.078*	0.061	0.059
				(0.039)	(0.042)	(0.041)	(0.040)	(0.043)	(0.043)
African American* after election	0.001	0.006	0.010	0.001	0.009	0.014	0.001	0.008	0.014
	(0.044)	(0.045)	(0.044)	(0.038)	(0.041)	(0.039)	(0.038)	(0.040)	(0.038)
Somali Americanafter election***	-0.083**	-0.079*	-0.078*	-0.083**	-0.078**	-0.079*	-0.083**	-0.078**	-0.077*
	(0.041)	(0.043)	(0.043)	(0.036)	(0.039)	(0.040)	(0.036)	(0.038)	(0.039)
Mosque		-0.027	-0.027		-0.021	-0.021		-0.018	-0.018
		(0.023)	(0.023)		(0.022)	(0.023)		(0.023)	(0.023)
Political activity		-0.001	-0.006		-0.000	-0.004		-0.001	-0.004
		(0.014)	(0.015)		(0.017)	(0.017)		(0.017)	(0.017)
Church		0.014	0.010		0.043	0.041		0.045	0.043
		(0.035)	(0.035)		(0.039)	(0.038)		(0.038)	(0.037)
Native English speaker		0.009	0.015		-0.011	-0.012		-0.022	-0.022
		(0.023)	(0.022)		(0.025)	(0.023)		(0.025)	(0.024)
ESL		-0.012	-0.011		-0.021	-0.020		-0.022	-0.020
		(0.023)	(0.023)		(0.017)	(0.015)		(0.020)	(0.017)
Honors in high school		0.058	0.056		0.083**	0.062		0.064	0.047
		(0.046)	(0.052)		(0.038)	(0.042)		(0.039)	(0.042)
College degree		0.005	0.006		-0.029***	-0.027***		-0.031***	-0.029***
		(0.014)	(0.014)		(0.011)	(0.010)		(0.011)	(0.010)
Honors in college		-0.006	-0.022		0.047	0.038		0.048	0.041
		(0.050)	(0.046)		(0.046)	(0.043)		(0.046)	(0.042)
R-squared	0.580	0.581	0.601	0.112	0.117	0.149	0.016	0.021	0.056
Additional controls	No	No	Yes	No	No	Yes	No	No	Yes

*** p<0.01, ** p<0.05, * p<0.1

N=2,744. SEs are all clustered by occupation.

Additional controls in columns 3, 6, and 9 include work experience fixed effects, order the resume was sent, and formatting on the resume.

As shown in Column 1 of Table 2, prior to the election, Somali American resumes are called 5.5 percentage points less often white American resume within the same job (Column 1), occupation (Column 4), or overall (Column 7). Prior to the election, a resume with an African American name is contacted 10.4 percentage points less often than a resume with a white American name. The F-test for the difference between the African American and Somali American resumes is statistically significant, indicating there was less discrimination against Somali American applicants than African American applicants prior to the election (Column 1 p=.008, Column 4 p=.003, Column 7 p=.002).

Columns 2, 5, and 8 include controls for extracurricular activities, education, and language skills. The omitted categories are a generic activity (e.g., volunteering at a library), a high school degree without honors listed, and nothing listed about language abilities. For this omitted group, particularly within occupation (Column 5) and overall (Columns 8) including controls reduces the difference between white American and Somali American resumes to a statistically insignificant 3 percentage point difference.

However, after the election, discrimination against Somali American resumes increased. The difference between the proportion of white American and Somali American resumes that were contacted increased by 8.3 percentage points after the election for a total difference of 13.8 percentage points (Column 1). The increase in discrimination against Somali American resumes after the 2016 election remains when including resume controls (Columns 2 and 3), occupation fixed effects (Columns 4-6), and no fixed effects (Columns 7-9). African American resumes did not experience increased discrimination at the time of the election.

The resumes varied by the perceived gender of the applicant in addition to race/ethnicity. Figure 6 shows the proportion with positive contact from employers by race/ethnicity and gender

before and after the 2016 election. For white American and African American applicants, men receive positive contact more often than women. Among, Somali American applicants, women receive more positive contacts than men. This overall pattern remains the same before and after the election. Table 3 shows the results of Equation 1 stratified by gender. Somali American men experienced more discrimination than Somali American women prior to the 2016 election and experienced a larger increase in discrimination after the 2016 election. Among African American applicants, women experienced more discrimination than men prior to the election, but neither men nor women experienced an increase in discrimination after the 2016 election.

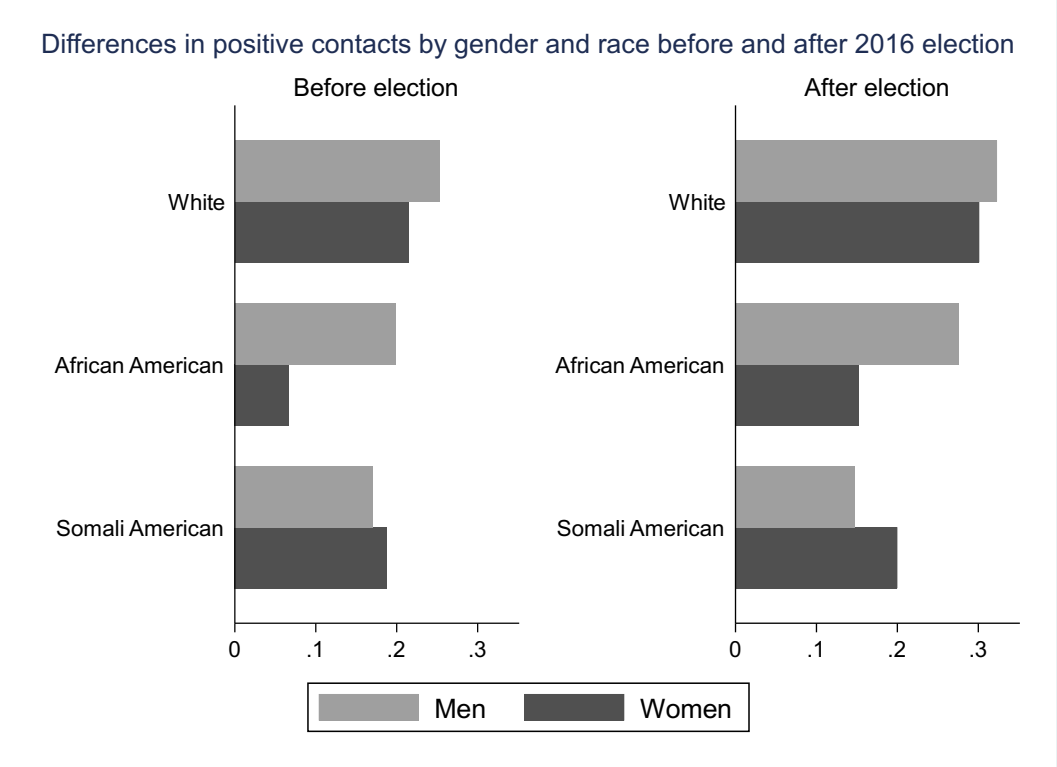

Figure 6: *The proportion with positive contact by race/ethnicity and gender before and after the 2016 election N=2,744*

Table 3: Results of a of linear probability model stratified by gender

	(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*
	Women			Men		
African American	-0.148***	-0.134***	-0.134***	-0.054	-0.050	-0.038
	(0.032)	(0.032)	(0.030)	(0.036)	(0.038)	(0.034)
Somali American	-0.026	0.020	0.017	-0.082**	-0.082**	-0.072*
	(0.031)	(0.034)	(0.035)	(0.032)	(0.040)	(0.039)
After election	0.087*	0.055	0.051	0.070	0.068	0.064
	(0.047)	(0.053)	(0.057)	(0.060)	(0.060)	(0.057)
African American* after election	-0.001	0.019	0.018	0.006	0.004	0.009
	(0.067)	(0.068)	(0.066)	(0.066)	(0.068)	(0.065)
Somali American*after election	-0.075	-0.067	-0.067	-0.094*	-0.094*	-0.085
	(0.053)	(0.056)	(0.064)	(0.052)	(0.053)	(0.054)
Observations	1,394	1,394	1,394	1,350	1,350	1,350
R-squared	0.025	0.040	0.097	0.022	0.028	0.084
Controls	None	Limited	Full	None	Limited	Full

*** p<0.01, ** p<0.05, * p<0.1

No fixed effects included. SEs are all clustered by occupation.

Controls in Column 2, 3, 5, and 6 include mosque activity, political activity, church activity, listed language abilities, and listed education. Additional controls in columns 3 and 6 include work experience fixed effects, order the resume was sent, and resume formatting.

To investigate potential mechanisms driving the increase in discrimination against Somali American resumes, we first test if the change at the time of the election varies between resumes that do not list a birthplace (perceived as 1.5 generation immigrants) and those that list a U.S. birthplace (2nd generation immigrants). Second, we examine if the impact of including a mosque activity, political activity, or language skills on the resume changes at the time of the election among Somali American applicants. As shown in Table 4, there is no difference in discrimination against 1.5 and 2nd generation immigrants prior to the election. After the election, the increase in discrimination was slightly higher for Somali American resumes that listed a U.S. birthplace when looking within occupation (Columns 4-6) or overall (Columns 7-9), but the difference is small and not statistically significant. This suggests that the increase in discrimination against Somali American job applicants was not driven by worries about applicants' citizenship.

Table 4: Results of a of linear probability model by immigrant generation

	(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*	*(7)*	*(8)*	*(9)*
	Job fixed effects			Occupation fixed effects			No fixed effects		
African American	-0.104***	-0.098***	-0.095***	-0.104***	-0.095***	-0.093***	-0.104***	-0.095***	-0.094***
	(0.024)	(0.025)	(0.024)	(0.021)	(0.021)	(0.021)	(0.021)	(0.021)	(0.021)
Somali American – no birthplace	-0.056**	-0.046	-0.048	-0.055**	-0.032	-0.034	-0.057**	-0.032	-0.035
	(0.027)	(0.032)	(0.031)	(0.026)	(0.031)	(0.029)	(0.025)	(0.030)	(0.027)
Somali American – US birthplace	-0.051	-0.045	-0.053	-0.054*	-0.038	-0.039	-0.050*	-0.026	-0.027
	(0.035)	(0.036)	(0.035)	(0.031)	(0.030)	(0.030)	(0.029)	(0.028)	(0.028)
After election				0.062	0.042	0.042	0.078*	0.061	0.059
				(0.039)	(0.042)	(0.041)	(0.040)	(0.043)	(0.043)
African American* after election	0.001	0.006	0.010	0.001	0.009	0.014	0.001	0.008	0.014
	(0.044)	(0.045)	(0.044)	(0.038)	(0.041)	(0.040)	(0.038)	(0.040)	(0.039)
Somali American no birthplace* After election	-0.087**	-0.081*	-0.081*	-0.075**	-0.071*	-0.069	-0.078**	-0.073*	-0.070*
	(0.041)	(0.042)	(0.042)	(0.038)	(0.040)	(0.042)	(0.037)	(0.039)	(0.040)
Somali American US birthplace* After election	-0.070	-0.070	-0.071	-0.108**	-0.103*	-0.110**	-0.098*	-0.092*	-0.099*
	(0.060)	(0.062)	(0.061)	(0.052)	(0.053)	(0.053)	(0.051)	(0.052)	(0.051)
R-squared	0.580	0.581	0.601	0.112	0.118	0.150	0.016	0.022	0.056
Controls	None	Limited	Full	None	Limited	Full	None	Limited	Full

*** p<0.01, ** p<0.05, * p<0.1

N=2,744. SEs are all clustered by occupation. Controls in Column 2, 3, 5, 6, 8, and 9 include mosque activity, political activity, church activity, listed language abilities, and listed education. Additional controls in columns 3, 6, & 9 include work experience fixed effects, order the resume was sent, and formatting.

Table 5 examines the proportion contacted among Somali American resumes to see if the impact of other elements of the resume changes at the time of the election. As shown in Table 5, the impact of including a mosque, political activity, and language skills is minimal prior to the election. The coefficients on the interaction between mosque and after the election are negative, but not statistically significant. Likewise, indicating that the applicant was a native English speaker is more negative after the election, but the difference is not statistically significant. Indicating that the applicant has an ESL certificate or was engaged in a political activity remained unchanged after the election. This suggests that the increase in discrimination against Somali Americans after the election was not due to concerns over language skills, but may indicate increased discrimination against applicants who include a mosque activity.

Table 5: Results of a of linear probability model among Somali American resumes

	(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*
	Occupation fixed effects			No fixed effects		
Mosque	0.015	0.015	0.011	0.011	0.009	-0.001
	(0.051)	(0.052)	(0.051)	(0.048)	(0.048)	(0.047)
After election	0.014	-0.007	-0.007	0.027	0.009	0.004
	(0.051)	(0.044)	(0.046)	(0.050)	(0.044)	(0.045)
Mosque * After election	-0.066	-0.067	-0.071	-0.044	-0.045	-0.043
	(0.065)	(0.065)	(0.064)	(0.062)	(0.062)	(0.059)
Political activity	-0.012	-0.011	-0.016	-0.024	-0.023	-0.029
	(0.034)	(0.034)	(0.032)	(0.034)	(0.034)	(0.032)
Political activity * After election	0.014	0.018	0.006	0.009	0.013	0.006
	(0.043)	(0.042)	(0.044)	(0.043)	(0.042)	(0.044)
Native English speaker	0.024	0.022	0.021	0.007	0.005	0.005
	(0.042)	(0.042)	(0.043)	(0.040)	(0.041)	(0.042)
Native English speaker * After election	-0.074	-0.071	-0.063	-0.058	-0.053	-0.043
	(0.062)	(0.062)	(0.063)	(0.061)	(0.060)	(0.063)
ESL	-0.018	-0.017	-0.017	-0.011	-0.010	-0.012
	(0.033)	(0.034)	(0.033)	(0.033)	(0.034)	(0.032)
ESL * After election	-0.013	-0.011	-0.001	-0.023	-0.019	-0.006
	(0.062)	(0.061)	(0.059)	(0.059)	(0.058)	(0.055)
Honors in high school		0.066	0.036		0.031	0.013
		(0.049)	(0.064)		(0.048)	(0.061)
College		-0.022	-0.017		-0.025	-0.019
		(0.021)	(0.019)		(0.020)	(0.020)

Honors in college		0.120	0.095		0.148*	0.111
		(0.091)	(0.082)		(0.088)	(0.081)
R-squared	0.127	0.132	0.188	0.003	0.009	0.073
Additional controls	No	No	Yes	No	No	Yes

*** p<0.01, ** p<0.05, * p<0.1

N=1,372. SEs are all clustered by occupation.
Additional controls in columns 3 and 6 include work experience fixed effects, order the resume was sent, and resume formatting.

The finding of increased discrimination after the election is robust to different model specifications. In our main analysis we use a linear probability model, because Ai and Norton (2003) show that the marginal effect of changing both interacted variables in a non-linear model is **not** equal to the marginal effect of changing the interaction term.[15] Norton, Wang, and Ai (2004) developed a method to estimate corrected marginal effects for interaction terms in non-linear models. In Appendix 2, we replicate our findings with a probit.

The regression in Equation 1 is a difference-in-difference. An important assumption for difference-in-difference analysis is that the groups have the same trend prior to the intervention. In Appendix 5, we show the pre-election trends in the callback rate. Prior to the election, the proportion contacted for white American and Somali American resumes were increasing over time. There is a slight difference in the pre-election trend, with the proportion of white Americans contacted increasing at a slightly faster rate.

Customer discrimination

Becker's canonical model of discrimination highlights three ways discrimination could manifest: in the utility function of the employer, customer, or co-workers. While research on discrimination in the labor market often focuses on employers, the preferences of customers also

[15] In fact, the sign of the correct marginal effect can be different for different observations. Because statistical software used to compute the marginal effects ignores this, traditional computations of the marginal effect of interaction terms in non-linear models can result in incorrect estimates.

play an important role. For example, using a matched pairs audit study, Neumark et al. (1996) find evidence that customer preference for male waiters contributes to discrimination against women in hiring for jobs as servers at restaurants. Other research has consistently found customer discrimination in online markets (Ayres, Banaji, and Jolls 2015; Doleac and Stein 2013; Nunley Owens and Howard 2011). To examine whether the increase in discrimination after the 2016 election is driven by employer prejudice or customer prejudice, we examine the pattern of discrimination by occupation. If a subset of employers always held discriminatory preferences, but only began acting on them after the election, most occupations should experience a similar increase in discrimination. This would also be the case if employers are not prejudiced but are simply responding to anticipated policy changes; for example, employers might anticipate that Somali Americans may leave the United States if they were no longer able to reunite with family members still waiting to immigrate to the United States. If instead the election conveyed new information about *customers'* prejudice or led employers to perceive an increase in customer prejudice, we should see the increase in discrimination predominantly occurring in occupations with more interaction with customers.

To examine this, we utilize a measure of work called, "Deal with external customers," from the Occupational Information Network (O*NET) coding structure. This measure of how important it is to work with external customers or the public ranges from zero to 100 with higher values indicating more importance. Two research assistants coded all of the jobs in our sample using the O*NET framework; we then stratify our sample into terciles of customer-service orientation.[16] The tercile cutoffs are based on all occupations included in the O*NET coding

[16] The O*NET structure includes 964 detailed occupations. The RAs both coded each job in our sample with an occupation code. The two RAs agreed on the exact occupation for 74.5% of jobs.

structure, not the jobs in our sample. The lowest tercile consists of jobs with an external customer score of 0 to 51, the second tercile is from 51 to 72, and the highest tercile is from 72 to 99.[17]

This approach serves a second purpose as well: if employers hiring for customer-oriented jobs discriminate more, any change after the election could be detecting a change in the composition of jobs instead of a change in discrimination. Figure 7 shows the distribution of the "External customer" measure for the jobs that we applied to before and after the election. While the distribution of this measure is not dramatically different for jobs before and after the election, there is an increase in the proportion of jobs that have a value 40 to 60 after the election. Changes in relative callback rates after the election could be due to changes in the composition of occupations. By stratifying the jobs into terciles of this work context measure, we are able to test the effect of the election while holding job composition constant.

If the RAs coded the same job with two different occupations, we used the average of the "Deal with External Customer" score from the two coded occupations. For example, one job was coded as "Cashier" by one RA and as "Retail Salesperson" by the other. These occupations have scores of 91 and 97, respectively. This job was given the average of 94.

We also coded occupations with AutoCoder, a machine learning algorithm developed for the Department of Labor that assigns O*NET occupational codes to job descriptions. Unfortunately, about 24% of the jobs in our sample had a match score below 70. Scores of 70 or above are generally considered to be a good fit. Therefore, we do not use AutoCoder for our analysis.

[17] Common jobs from the first tercile include dishwasher, carwash worker, or working in construction. The second tercile includes jobs like being an administrative assistant, cook, and data entry. The third tercile includes jobs like baristas, retail salespeople, customer service representatives, and being a server.

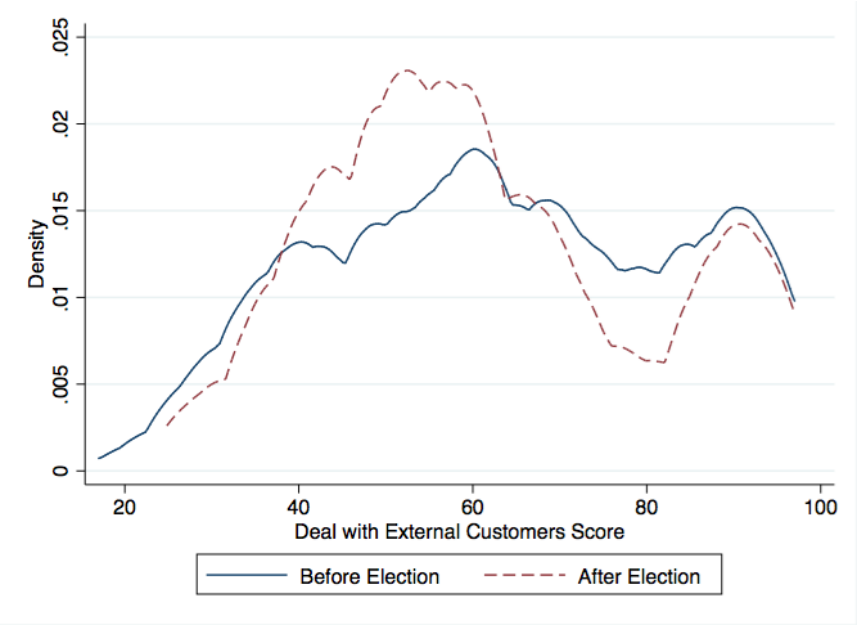

Figure 7: *The kernel density of "Deal with External Customer" Measure of jobs before and after the election.*
N= 1,384 (before election), 1,360 (after election)

In Table 6, we display results from estimating Equation 1 for jobs separated into terciles. Prior to the election, the estimates of discrimination against Somali Americans and African Americans are larger among the more customer-oriented jobs. After the election, the increase in discrimination against Somali Americans is much larger among more customer-oriented jobs. The increase in the top tercile (-.12) is more dramatic than the increase in the bottom tercile (-.04). African Americans do not experience an increase in discrimination after the election in any tercile. This result suggests that employers' perception of customer prejudice drove the increase in discrimination against Somali Americans after the election. We split the jobs by terciles, rather than smaller divisions, to have a sufficient sample size in each group. Similar results occur when we split by quartiles, although they are noisier. These results are available upon request.

Table 6: Differences in discrimination by customer-service orientation

	Lowest tercile	Middle tercile	Highest tercile
	Contacted by Employer		
Difference before the election			
African American ($\widehat{\beta_1}$)	-0.069	-0.094***	-0.116***
	(0.042)	(0.035)	(0.044)
Somali American ($\widehat{\beta_2}$)	0.010	-0.033	-0.088*
	(0.039)	(0.037)	(0.045)
Change in difference after the election			
After election*African American ($\widehat{\theta_1}$)	0.083	-0.022	-0.028
	(0.063)	(0.050)	(0.072)
After election*Somali American ($\widehat{\theta_2}$)	-0.037	-0.123***	-0.117*
	(0.054)	(0.045)	(0.063)
Observations	804	1,092	848
R-squared	0.627	0.641	0.606

*** p<0.01, ** p<0.05, * p<0.1*
Robust standard errors
Controls include job FE, work experience FE, extracurricular activity on the resume, language skills, education level of the resume, honors on resume, order in which it was sent, and formatting of resume.

We perform a parallel analysis based on self-reported industry instead of the O*NET terciles in Appendix 6 and find similar results: discrimination increased after the election in jobs listed in Food/Beverage/Hospitality and Customer Service, but there was no increase in discrimination in General Labor or Administrative/Office. These parallel results again highlight that the increase in discrimination is being driven by employers' perception of customer prejudice, rather than employer or co-worker prejudice. In Appendix 6, we further examine this pattern by setting up a triple interaction between the customer service score, the ethnicity indicators and the indicator for the time period after the election. This analysis indicates that the relationship between the customer service score and being called back became more negative for Somali American applicants after the election.

Persistence of effect

A sudden change in discrimination is consistent with the election conveying new information about Somali American applicants, making employers more aware of prejudice against Somali Americans, or increasing the salience of Somali American identity. If employers drew new information about Somali American applicants or about prejudice against Somali Americans from the campaign and election, it would likely cause a sustained increase in discrimination. Employers may also be affected by salience – where their attention is selective and can be drawn to particular features of an applicant after a cue or triggering event. In this case, the unexpected election of a politician who espoused strong opposition to immigration of Muslims and refugee programs would make a Somali American's identity more salient to employers for a brief period of time. This would cause an increase in discrimination that would fade over time as the salience of the event diminishes.

To examine the roles of salience and information, we test whether the increase in discrimination spiked in November and decreased as time passed or if it was a sustained increase. To do this, we first examine unadjusted differences each month. We then augment Equation 1 to examine monthly effects controlling for other factors on the resumes.[18] Because of fewer observations in April through June, we combine March-April and May-June.[19]

[18] Because we include job fixed effects, we cannot include month indicators by themselves.
[19] This is not due to changes in the number of job listings, but rather to changes in the number of hours the RA could work.

$$y_{ij} = \beta_0 + \beta_1 Somali\ American_{ij} + \beta_2 African\ American_{\ ij}$$

$$+ \sum_{m=Aug}^{March} \theta_1^m * Somali\ American_{\ ij} * I(month = m) +$$

$$\sum_{m=Aug}^{March} \theta_2^m * African\ American_{\ ij} * I(month = m) + \boldsymbol{X}_{ij}\boldsymbol{\delta} + \boldsymbol{Z}_{ij}\boldsymbol{\gamma} + \eta_j + \varepsilon_{ij}$$

Figure 8 shows the unadjusted difference between the proportion of white American resumes who were contacted and Somali American resumes each month.

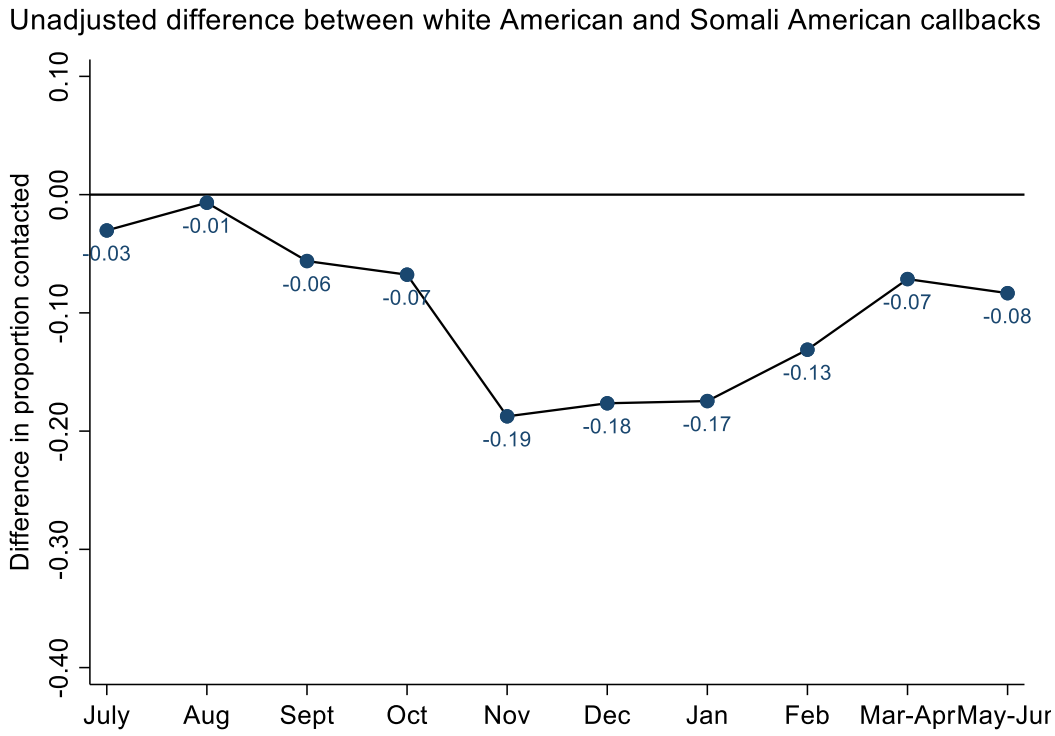

Figure 8: *The raw monthly difference between Somali American and white American resumes that had positive contact from an employer from July 2016 to June 2017.*

Figure 9 shows the predicted difference between white American and Somali American resumes each month ($\hat{\beta}_1 + \widehat{\theta_1^m}$) and the 95% confidence interval.

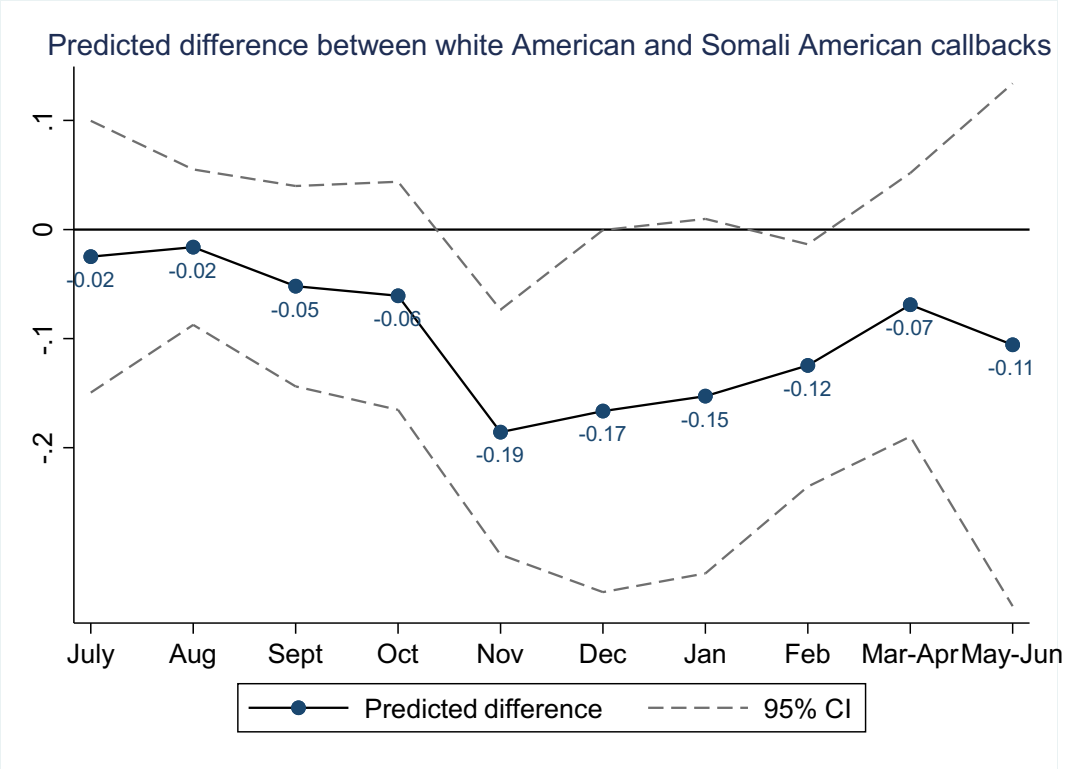

Figure 9: *The predicted monthly difference between Somali American and white American resumes from July 2016 to June 2017.*
Robust standard errors, clustered by occupation
Controls include job FE, work experience FE, extracurricular activity on the resume, language skills, education level of the resume, honors listed on resume, order in which it was sent, and formatting of resume.

This is a very striking result: between October 2016 and November 2016, the difference between white American and Somali American resumes increased by 12 percentage points. The three months after the election show a large, statistically significant difference between white and Somali American resumes. The effect is possibly fading over time, falling from a peak difference of 19 percentage points in November to 12 percentage points by February.

More detail is shown in Table 7:

Table 7: Monthly difference between Somali American and white American resumes for July 2016 to June 2017.

	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March - April	May-June
$\hat{\beta}_1 + \hat{\theta}_m$	-0.02	-0.02	-0.05	-0.06	-0.19	-0.17	-0.15	-0.12	-0.07	-0.11
P-value of F-test $\hat{\beta}_1 + \hat{\theta}_m = 0$	.70	.66	.27	.26	.002	.05	.07	.03	.27	.39
Obs in month *m*	264	292	356	384	416	136	252	244	280	120

P-values used robust standard errors, clustered by occupation
Controls include job FE, work experience FE, extracurricular activity on the resume, language skills, education level of the resume, order in which it was sent, and formatting of resume. The number of Somali American observations is half the number of total observations.

Testing for seasonality using November 2017 election

It is possible that the spike in discrimination after the 2016 presidential election reflects a seasonal trend that would have happened without the election. As shown in Appendix 7, we find no evidence that the unemployment rate of black Americans or of immigrants typically changes in November.[20] To test for seasonality more specifically, we continued data collection from July 2017 to March 2018 .[21] Minneapolis and St. Paul both had mayoral elections on November 7, 2017. In this section, we repeat all the key analyses using the 2017 election to test for seasonality. We first display the callback rates during this time period (mirroring Figure 4).

[20] Appendix 7 shows the monthly unemployment rate by race for 2013, 2014, 2015, and 2016. There is no increase in the black unemployment rate or the immigrant unemployment rate in November, refuting the idea that there is typically a seasonal increase in discrimination. The spike in discrimination we observe in the correspondence study is specifically targeted (Somali Americans) and does not reflect some broader seasonality of discrimination.
[21] In Appendix 3, we present the number of resumes that were sent by month for the July 2017 to March 2018 period.

Then, we present the main analysis (mirroring Table 2) and split the jobs by customer-service orientation (mirroring Table 6). Additionally, we examine the monthly results, mirroring Figure 8. Overall, there is no increase in discrimination during the November 2017 election period compared to prior to November 2017. We do find evidence of seasonality in discrimination: discrimination increased against Somali Americans in October and November 2017; however, the increase was small and not sustained.

Figure 10 displays the proportion of applicants that were contacted from July 2017 to March 2018 period, both before and after the November 2017 election. The raw statistics in the July 2017 to March 2018 period suggest the possibility of some seasonality in discrimination against Somali Americans as resumes with Somali names experienced the greatest decrease in callback rates after the 2017 election. However, callback rates decreased for all groups. This stands in contrast to the main analysis period in which callback rates increased after the election for white and African American resumes while it decreased for Somali American resumes.

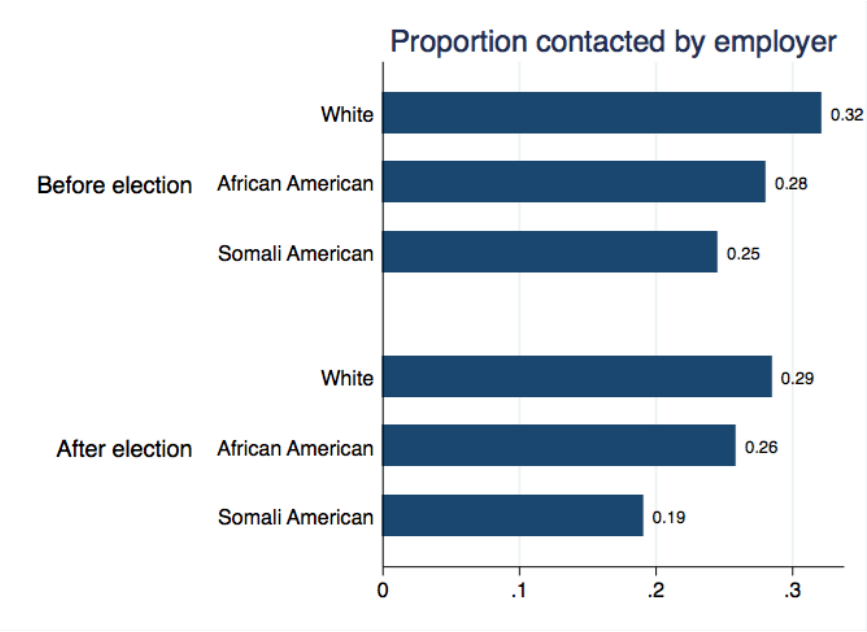

Figure 10: *The proportion of applicants contacted by an employer before and after the election in November 2017. N=2,044*

Table 10 shows the result of a linear probability model estimating Equation 1 using data from July 2017 to March 2018. Columns 1-3 includes job fixed effects to control for firm-specific variation. Columns 4-6 include occupation fixed effects and Columns 7-9 include no fixed effects. As in Table 2, additional controls in Columns 3, 6, and 9 include work experience fixed effects, formatting of the resume, and the order in which the resumes were sent to employers.

Column 1 of Table 10 indicates that prior to the 2017 election Somali American resumes are called 7.6 percentage points less often than white American resumes. African American resumes are contacted 4.1 percentage points less than white American resumes, but this is not statistically significant. After the 2017 election, the difference between Somali American and white American resumes increased by 1.8 percentage points, but this change is not statistically significant. There is no increase in discrimination against African American resumes.

Table 10: Results of a of linear probability model for November 2017 election

	(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*	*(7)*	*(8)*	*(9)*
	Job fixed effects			Occupation fixed effects			No fixed effects		
African American	-0.041	-0.046	-0.054	-0.041	-0.050	-0.052	-0.041	-0.050	-0.052
	(0.039)	(0.041)	(0.046)	(0.035)	(0.037)	(0.042)	(0.034)	(0.037)	(0.042)
Somali American	-0.076**	-0.065*	-0.059	-0.076**	-0.066**	-0.059*	-0.076**	-0.066**	-0.062*
	(0.037)	(0.035)	(0.036)	(0.032)	(0.031)	(0.032)	(0.032)	(0.031)	(0.031)
After election				-0.039	-0.037	-0.042	-0.036	-0.036	-0.040
				(0.035)	(0.034)	(0.033)	(0.032)	(0.032)	(0.032)
African American* after election	0.014	0.013	0.022	0.014	0.013	0.021	0.014	0.013	0.022
	(0.054)	(0.054)	(0.056)	(0.048)	(0.047)	(0.050)	(0.047)	(0.047)	(0.048)
Somali Americanafter election***	-0.018	-0.020	-0.025	-0.018	-0.020	-0.021	-0.018	-0.020	-0.018
	(0.034)	(0.034)	(0.032)	(0.030)	(0.030)	(0.031)	(0.030)	(0.029)	(0.031)
Mosque		-0.001	-0.001		0.005	0.011		0.004	0.009
		(0.020)	(0.022)		(0.026)	(0.028)		(0.027)	(0.030)
Political activity		0.007	0.009		0.028	0.033		0.026	0.030
		(0.018)	(0.019)		(0.022)	(0.023)		(0.023)	(0.026)
Church		-0.020	-0.023		-0.035	-0.032		-0.032	-0.031
		(0.025)	(0.032)		(0.029)	(0.034)		(0.031)	(0.035)
Native English speaker		-0.017	-0.020		-0.030	-0.036*		-0.033	-0.039*
		(0.022)	(0.022)		(0.019)	(0.019)		(0.021)	(0.022)
ESL		-0.051	-0.060*		-0.064**	-0.071**		-0.059**	-0.067**
		(0.034)	(0.033)		(0.029)	(0.030)		(0.029)	(0.029)
Honors in high school		0.008	0.005		0.014	0.012		0.014	0.011
		(0.016)	(0.016)		(0.017)	(0.018)		(0.017)	(0.018)
College degree		0.019	0.023		0.037*	0.036*		0.034	0.034
		(0.018)	(0.017)		(0.020)	(0.021)		(0.022)	(0.022)
Honors in college		-0.022	-0.020		-0.015	-0.012		-0.017	-0.015
		(0.022)	(0.022)		(0.028)	(0.029)		(0.029)	(0.030)
R-squared	0.690	0.691	0.701	0.126	0.131	0.149	0.010	0.015	0.034
Additional controls	No	No	Yes	No	No	Yes	No	No	Yes

*** p<0.01, ** p<0.05, * p<0.1

N=2,044. SEs are all clustered by occupation.

Additional controls in columns 3, 6, and 9 include work experience fixed effects, order the resume was sent, and formatting on the resume.

To examine the November 2017 election for the three groups of customer service orientation, we repeat the analysis shown in Table 6 but using the data from July 2017 to March 2018. In Table 11, we display results from estimating Equation (1) for jobs separated into terciles. Prior to the 2017 election, the most customer-service oriented jobs had the largest point estimate of discrimination against African American resumes, while the middle and highest terciles had similar point estimates of discrimination against Somali Americans. No tercile experienced a statistically significant increase in discrimination against Somali American or African American resumes.

Table 11: Differences in discrimination by customer-service orientation 2017 election

	Lowest tercile	Middle tercile	Highest tercile
	Contacted by Employer		
Difference before the 2017 election			
African American ($\widehat{\beta_1}$)	-0.018	-0.038	-0.131**
	(0.076)	(0.051)	(0.055)
Somali American ($\widehat{\beta_2}$)	0.007	-0.088*	-0.079
	(0.066)	(0.048)	(0.058)
Change in difference after the 2017 election			
After election*African American ($\widehat{\theta_1}$)	-0.017	0.026	0.078
	(0.085)	(0.063)	(0.067)
After election*Somali American ($\widehat{\theta_2}$)	-0.071	0.042	-0.057
	(0.069)	(0.053)	(0.061)
Observations	596	792	656
R-squared	0.710	0.707	0.764

Robust standard errors
Additional controls include job FE, work experience FE, extracurricular activity on the resume, language skills, education level of the resume, honors on resume, order in which it was sent, and formatting of resume.

To examine the monthly change in discrimination during the 2017 period, we repeat the analysis from Figures 8 and 9. In Figure 11, we plot the monthly difference for the 2017 election. Figure 11 shows that discrimination against Somali Americans increased in October and

November 2017 and weakened in December and January, before resurfacing in February. In contrast to the sustained increase in discrimination after the 2016 election, discrimination during the 2017 election period appears to have a negative average, with random monthly variation. More detail is shown in Table 12.

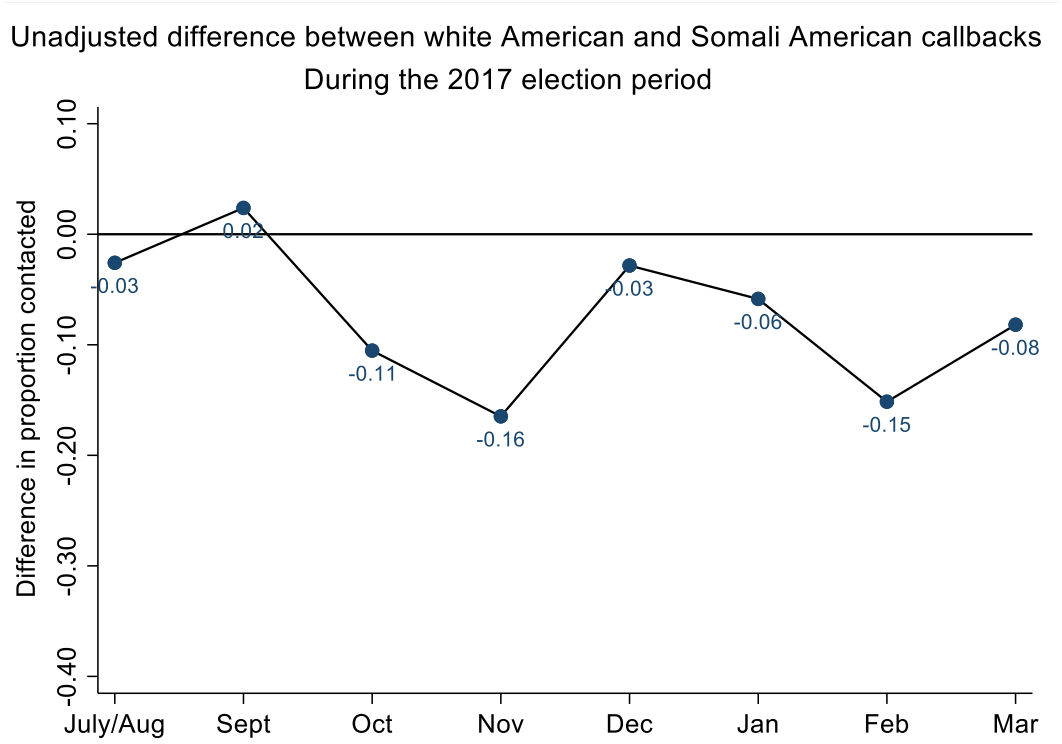

Figure 11: *The raw monthly difference between Somali American and white American resumes that had positive contact from an employer from July 2016 to June 2017.*

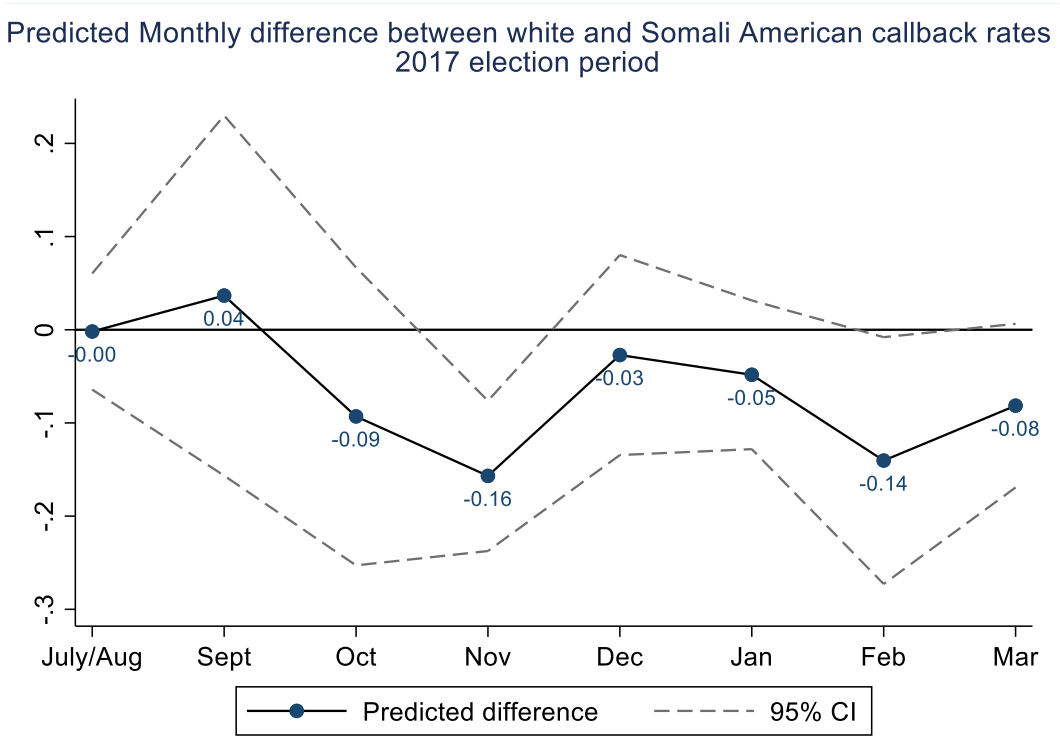

Figure 12: *The monthly difference between Somali American and white American resumes for the 2017 election period. July 2017 to March 2018.*

Controls include job FE, high school FE, work experience FE, extracurricular activity on the resume, language skills, education level of the resume, honors listed on resume, order in which it was sent, and formatting of resume.

Table 12: Monthly difference between Somali American and white American resumes for July 2017 to March 2018.

	July & August	**Sept**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**
$\hat{\beta}_1 + \hat{\theta}_m$	-.002	.037	-.093	-.157	-.027	-.048	-.140	-.081
P-value of F-test $\hat{\beta}_1 + \hat{\theta}_m = 0$	.95	.71	.26	.0003	.62	.24	.04	.07
Obs in month *m*	232	84	304	352	212	376	264	220

P-values used robust standard errors, clustered by occupation
Controls include job FE, work experience FE, extracurricular activity on the resume, language skills, education level of the resume, order in which it was sent, and formatting of resume. The number of Somali observations is half the number of total observations.

Exploring alternative explanations

Co-incident events

One weakness in this paper results from using time to identify the effect of the election. We compare patterns in discrimination pre- and post-election; however, other events occurred in November 2016 that may have contributed to these patterns. In 2014 nine Somali American men from Minnesota were arrested for attempting to join ISIS. These individuals were convicted of terrorism-related charges in June 2016 and some were sentenced on November 14 and November 16, 2016. Additionally, at Ohio State University (OSU), a Somali American man injured 11 people on November 28 in an attack tied to ISIS. Both the sentencing and the OSU attack received press coverage (for example, Montemayor and Mahamud 2016; Griffin and Dean 2016). There was limited press coverage of the ISIS case between the conviction in June and the sentencing on November 14 and 16.

To examine the relative impact of the Trump campaign, election, and terrorism-related events, we analyze internet search terms used in Minneapolis and St. Paul. Google search intensity examines how often a term is searched relative to other words and has been used as a measure of a wide range of social issues. In a famous example, researchers used Google search intensity of influenza related terms (e.g., "cough" and "fever") to predict flu epidemics more quickly than the traditional approaches used by the CDC (Ginsberg et al. 2009).

Figures 13 and 14 display the weekly Google search intensity of different terms in the Minneapolis/St. Paul area. Figure 13 shows the search intensity for the whole study period, while Figure 14 uses the same data to focus on the time surrounding the election. As shown in these figures, searches for "Somali," "ISIS," and "terrorist" increased after a Somali American man

stabbed multiple people in St. Cloud, Minnesota on September 19. Figure 6 displays that other major ISIS attacks also saw spikes in searches for "terrorist" and "ISIS."

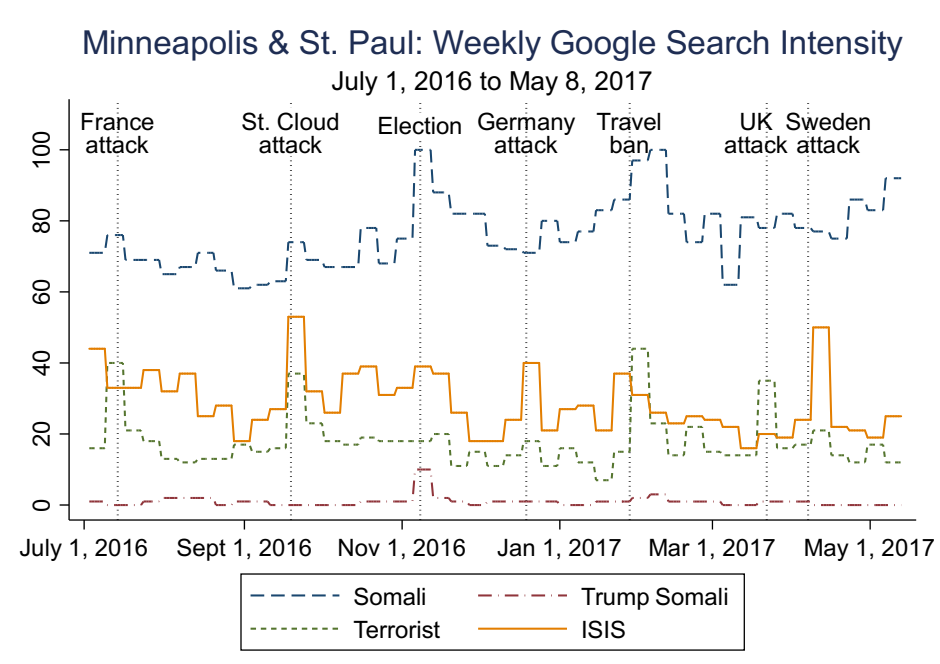

Figure 13: *Google search intensity in Minneapolis and St. Paul for July 2016 to May 2017. Major political events and terrorist attacks are labeled.*

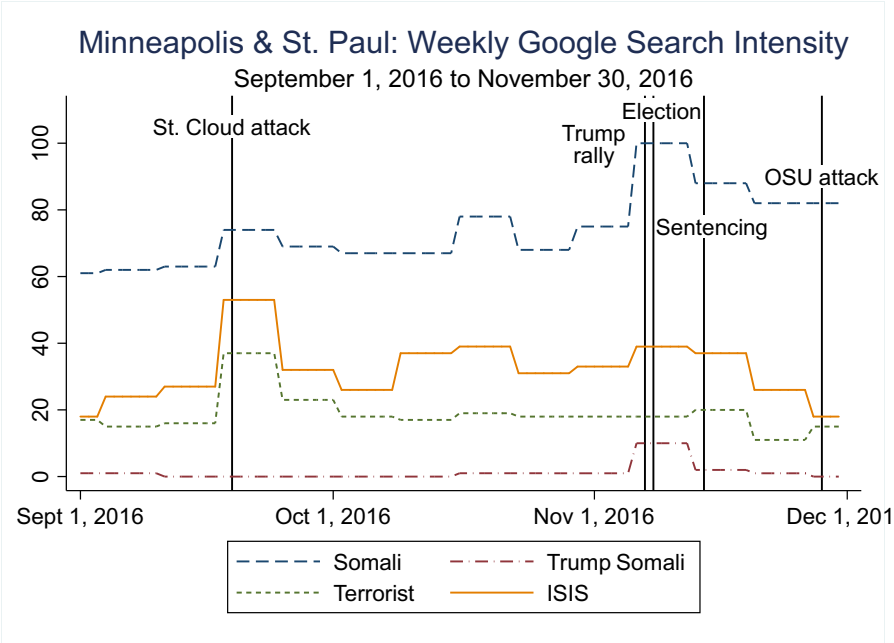

Figure 14: *Google search intensity in Minneapolis and St. Paul for September 2016 to December 2016 (subset of Figure 8). Major political events and terrorist attacks are labeled.*

The week of November 6 to November 12 included a Trump rally in Minneapolis that featured anti-Somali rhetoric as well as the election itself – in this week there was a large increase in searches for "Somali" and "Trump Somali." This increase appears to be unrelated to any attack, because "terrorist" searches did not increase. In Minneapolis, a week after the election, six Somali American individuals who were convicted of terrorism-related charges were sentenced. As shown in Figure 14, this week had fewer searches for "Somali" than the previous week and saw no increase for "terrorist" or "ISIS." Likewise, the OSU attack was not associated with internet searches in Minneapolis/St. Paul for "Somali," "ISIS," or "terrorist." Thus, while we cannot definitively rule out that our results are capturing an impact from these other November events, the patterns in Figures 13 and 14 show that the Trump campaign and/or the election drew Minnesotans' attention to Somali Americans while the ISIS related sentencing and the OSU attack were not as striking events.

Additionally, if the attack in Ohio and the terrorism related sentencing increased employers' estimated probability that a Somali American was a terrorist, the increase in discrimination would appear across all sectors. Our results show that the increase in discrimination is isolated to customer-service oriented positions, which is not consistent with employers' fear of terrorism driving our results.

Other types of employer-driven discrimination

The discussion in the popular press about the increase in racially motivated crimes after the election suggested that the election of a candidate who espoused anti-minority rhetoric made racism more culturally acceptable (Schmidt and Scherer 2016). In that vein, one might expect that employers may view acting on their prejudices as more permissible. However, because we do not find increased discrimination in hiring for jobs with low customer interaction, we do not conclude that employers were emboldened to act upon their personal prejudice as a result of the election but rather that they were acting upon their perception of customer prejudice.

Another potential reason for increased discrimination is that employers were concerned about President Trump's well-publicized ban on travel from Muslim-majority countries (including Somalia). Employers might believe that some Somali American employees would be more likely to leave after such a ban were passed if they were no longer able to reunite with family members waiting to immigrate to the United States. If this was the case, any effect of the travel ban would have become stronger when President Trump implemented the executive actions banning travel from several Muslim-majority countries. The first executive action was issued on January 27, 2017 (blocked by a federal judge on January 28). The second executive order was issued on March 6 (blocked prior to being implemented on March 16). On June 26, parts of the ban were allowed to go into effect. We observe the largest increase in discrimination

immediately after the election, not after President Trump's attempts to implement the travel ban. Because the timing of the increased discrimination does not follow the timeline of the travel ban, we do not conclude that employer's concern about the travel ban is a driving factor for increased discrimination.

Additionally, if concern over the travel ban caused discrimination, we would expect to see wide-spread increases in discrimination. Likewise, if the campaign and election worsened employers' estimates of Somali American applicants' productivity, we would see increases in discrimination across all job types. Because we only find increased discrimination in jobs with more interaction with customers, we do not conclude that employers' concerns about the travel ban or changes in employers' perceptions of Somali Americans' productivity are the driving factors for the increase in discrimination.

Another possible explanation for our findings is that other factors that led to a relative decrease in callbacks for Somali Americans, also led to the election of a president who espoused discriminatory views. In this case, the election would not have caused the increase in discrimination against Somali American workers. Instead, both the election and relative decrease in callbacks for Somali Americans would be symptoms of the same underlying cause, an increase in prejudice. While we cannot fully rule out this possibility, Figure 8 shows a sudden decrease in relative callback rates for Somali Americans in November after four months of steady relative rates. If our findings are the result of confounding variables, these variables must also have changed suddenly in November. Furthermore, we find an increase in discrimination in jobs that have a high level of customer interaction but not in those with a low level of interaction, so the confounding variables must have only affected the discriminatory views of employers

hiring in customer-oriented jobs. While possible, it is difficult to imagine a sudden change in discriminatory views and even more difficult to imagine this for just a subset of employers.

Changes in the demand for labor

Figure 7 indicates that after the election, fewer jobs require high customer interaction. This could reflect lower demand for labor in customer service fields after the election. When demand for labor is high, employers have a harder time hiring and are therefore less able to discriminate. If the demand for labor in the customer service field dropped after the election, this could cause an increase in measured discrimination among customer service jobs

To examine this hypothesis, we evaluate the average customer service skill needed in the jobs applied for by month. As shown in Table 13, the average customer service level of jobs fell after the election, but not until February. Figure 15 shows that the distribution of customer service-oriented jobs in September and October is quite similar to the distribution from November and December. The increase in discrimination we observe in November is therefore not due to changes in the demand for labor in customer service industries.

Table 13: Average "Deal with External Customer" score by month

	Average Deal with External Customer Service Score
July	62.9
August	63.8
September	62.0
October	65.1
November	63.8
December	62.0
January	66.4
February	59.8
March	57.5
April	60.2
May	55.7

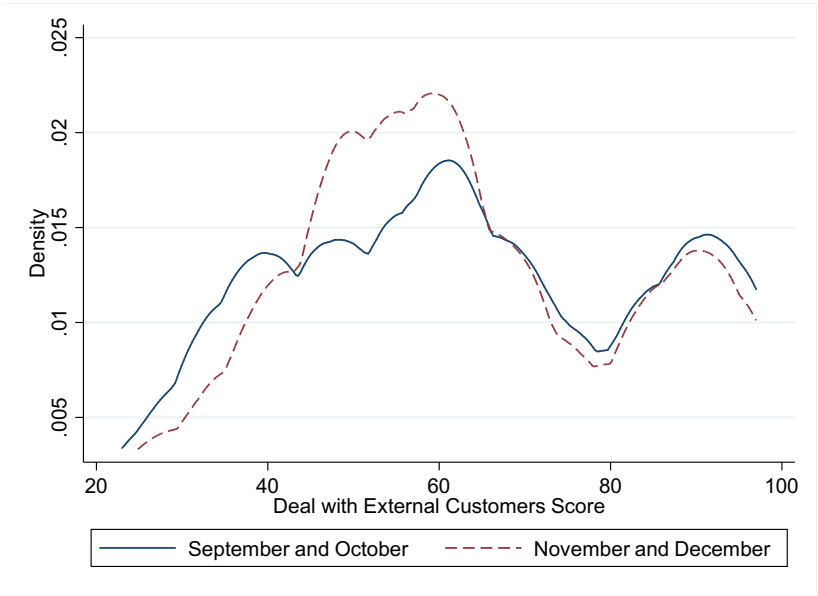

Figure 15: *The kernel density of "Deal with External Customer" measure of jobs in September/October and November/December*
N= 185 (September and October), 138 (November and December)

Neumark correction

One important consideration when interpreting the results of an audit study is that while all observed characteristics are carefully controlled on the resumes, there may be unobserved characteristics that have different variances between the different groups. This can mean the regression coefficients do not reflect the underlying discrimination (Heckman and Siegelman 1993; Heckman 1998; Neumark and Rich 2019). Neumark (2012) developed a method to correct the bias caused by differences in variances from unobserved characteristics.

Because Somali Americans and white American applicants likely have different variances of unobserved characteristics, we implement the Neumark correction[22]to estimate an unbiased

[22] David Neumark generously shared his code.

overall discrimination effect between white American and Somali American resumes. The correction uses a heteroskedastic probit model to test if the ratio of the variances in unobserved characteristics differ between white and Somali American applicants. We then decompose the total difference in callback rates into the amount due to the difference in the level of unobserved characteristics and the difference due to variance. We find that the corrected estimates of discrimination remain negative and of similar magnitude to the naïve estimate. Likewise, the *level effect* of discrimination – the discrimination coming from the employers' taste for discrimination or from first moment statistical discrimination – is consistently large and negative. That is, the discrimination we find is not being driven by variance in the unobserved characteristics. Detailed results of this correction are shown in Appendix 8.

Conclusion

Race and immigration are controversial topics in the United States. Numerous long-standing policy debates center around racial discrimination, as well as immigration policies and refugee programs. The 2016 presidential campaign increased tension surrounding these issues when President Trump advocated banning Muslim immigration to the United States and suspending refugee programs from Muslim-majority countries (Cox 2016; Trump 2015). President Trump's election in November 2016 was a surprise to many political analysts. The election was associated with a wave of bias crimes around the nation and described as "exposing" racism. (Bialik and Enten 2016; Southern Poverty Law Center 2016; Anti-Defamation League 2016; Bacon 2016; Tensley, Richardson, and Frederick 2016).

In this project, we implemented a resume correspondence study to examine if employment discrimination increased after the November 2016 presidential election. This paper

is the first to examine the impact of an electoral shock on discrimination in the labor market. We find that the election was accompanied by a sharp increase in discrimination against Somali Americans. After the election, the difference in callback rates between the white and Somali American resumes increased by 8.3 percentage points. The increase in discrimination appeared larger for male applicants and the impact of including a mosque activity on a resume became more negative after the election, although these differences are not statistically significant. Notably, the increase in discrimination began in November – when President Trump was elected but before he took office. Prior to implementing any actual policy, the election of a politician who espoused strong opposition to immigration of Muslims and refugee programs was accompanied by an increase in discrimination against Muslim refugees. This is a striking finding: labor market decisions are influenced by elections, even prior to any policy changes.

Our results highlight the role of external events that affect discrimination in the labor market. We find a spike in discrimination after the election that partially fades over time. That is, the unexpected election of a candidate who espoused anti-Muslim and anti-refugee rhetoric is associated with an increase in discrimination against Muslim refugees. These findings are consistent with the 2016 campaign and election increasing the salience of race, religion, and immigration status for employers. Similarly, the campaign and election may have increased recognition of Somali American names or increased awareness of prejudice against Somali Americans. The results demonstrate the possible harm of public figures targeting certain groups – the election of a candidate who engages in rhetorical attacks may affect real, tangible outcomes such as employment opportunities.

A second important finding is that the increased discrimination was concentrated among customer-oriented positions and did not appear strongly in other occupations. Even in a perfectly

competitive market with no search frictions, customer-driven discrimination will not be competed out of the market. In the long run, a perfectly competitive market with no search frictions will eliminate discriminatory *employers*. However, when *customers* have discriminatory tastes against a particular group, discriminatory firms will have *higher* profits than a non-discriminatory competitor. While our study is examining a short-run change in discrimination, the results are concerning because when changes in perceived customer preferences drive discrimination, there is little hope that even the most competitive market will eliminate discriminatory employers.

Compliance with Ethical Standards:

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Conflict of Interest: The authors declare that they have no conflict of interest.

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Appendix 1: Balance of resume elements with respect to key manipulations

The work experiences included on the resumes are selected randomly. To check this, we regress an indicator variable for key groups (white American, African American, Somali American) on the full list of work experience indicator variables. The following table shows the p-value of the F-statistic for jointly testing if any of the coefficients are significantly different from zero. None of the p-values are below 0.1.

Table A1: Work experience balance

	F-statistic
White American	.89
African American	.80
Somali American	.88

Sample size = 2,744 applications

We also use a chi-squared test to examine if the address and order the resumes were sent are all balanced with respect to the key groups. In all cases we fail to reject the null hypothesis that the manipulations are balanced across these elements.

Table A2: Address balance

	White American	African American	Somali American	Total
Address 1	174	170	342	686
Address 2	160	162	364	686
Address 3	170	178	338	686
Address 4	182	176	328	686
Total	686	686	1,372	2,744

Pearson chi2(6) = 4.3848 Pr = 0.625

Table A3: Order resumes sent balance

	White American	African American	Somali American	Total
First	162	166	358	686
Second	158	174	354	686
Third	179	174	333	686
Fourth	187	172	327	686
Total	686	686	1,372	2,744

Pearson chi2(6) = 5.6152 Pr = 0.468

Appendix 2: Probit model

The main analysis of our paper relies on a linear probability model because interaction terms are difficult to interpret in non-linear models. Specifically, Ai and Norton (2003) show that the marginal effect of changing both interacted variables in a non-linear model is not equal to the marginal effect of changing the interaction term. In fact, the sign of the correct marginal effect can be different for different observations. Norton, Wang, and Ai (2004) developed a method to estimate corrected marginal effects for interaction terms in non-linear models that computes the true cross derivative of the two interacted variables.

To examine if our main results are robust to model specification, we also analyzed a version of Equation 1 that was augmented to be able to calculate the marginal effects of the key interaction terms. We find the same results as in the LPM: discrimination against Somali Americans increased after the 2016 election.

Table A4: Results of probit models testing differences in discrimination (naïve interaction terms)

	Probit **Contacted by employer**
Somali American	-0.0866
	(0.102)
African American	-0.310***
	(0.0831)
After election	0.264***
	(0.0807)
Somali American and After Election	-0.313***
	0.264***
Observations	2,744
Job fixed effects	No
Work experience FE	Yes

Standard errors in parentheses.
Additional controls include work experience FE, extracurricular activity on the resume, language skills, education level of the resume, order in which it was sent, and formatting of resume.

Table A4 shows the results of the probit model with the same controls as in Table 1, but with simplified interactions. We now include only an interaction between "After election" and "Somali American," which allows us to be able to accurately calculate the marginal effects of the interaction term using *inteff*. Table A5 shows the marginal effects of the interaction term and the z-statistic. In the probit, the corrected interaction term is negative and statistically significant.

Table A5: Corrected calculation of the interaction effects for probit model

	Probit
Interaction effect	-.088
	(.0336)
Interaction effect z	-2.60

Interaction effects calculated with inteff package in Stata.

Appendix 3: Number of Resumes Sent

The following figure presents the number of resumes that were sent to employers by month for both the main analysis of the November 2017 election and the test for seasonality analysis. Resumes for the main analysis were sent from July 2016 until June 2017 while resumes for the seasonality analysis were sent from July 2017 until March 2018.

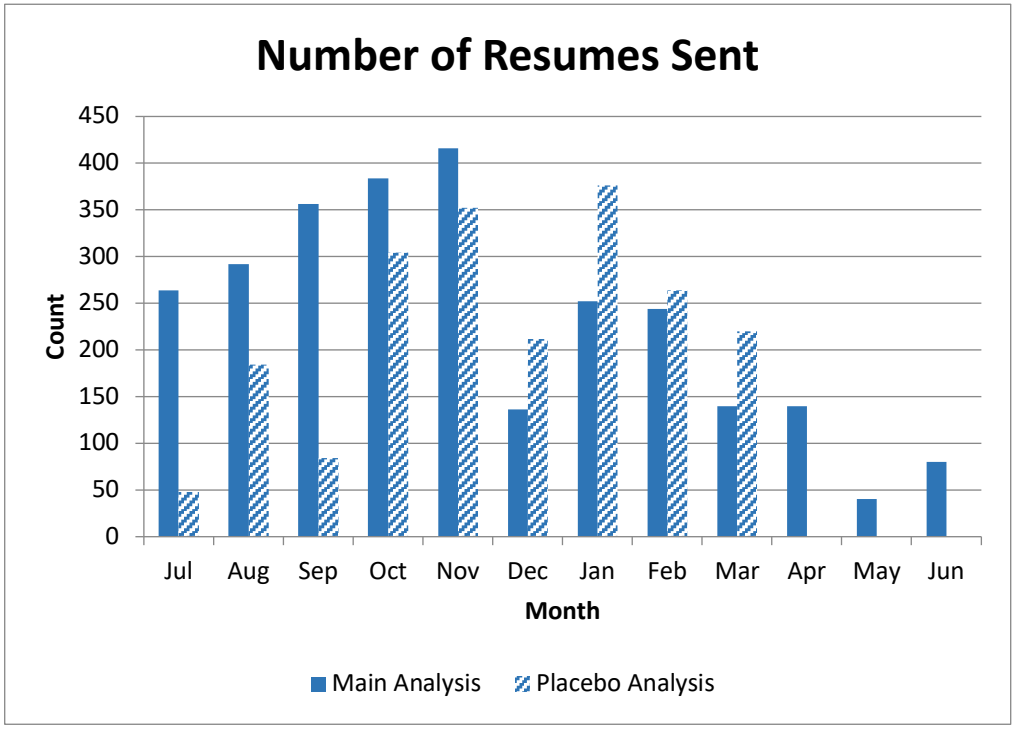

Figure A1: *Main Analysis covers July 2016-June 2017. Placebo Analysis covers July 2017-March 2018.*

Appendix 4: Time trend

Table A6: Results of a of linear probability model that includes a time trend

	Occupation fixed effects	No fixed effects
Difference before the election		
African American	-0.093***	-0.094***
	(0.021)	(0.021)
Somali American	-0.037	-0.035
	(0.023)	(0.022)
After election	-0.064	-0.028
	(0.052)	(0.056)
Month	0.027***	0.022**
	(0.009)	(0.009)
Change in difference after the election		
After election*African American	0.015	0.015
	(0.039)	(0.038)
After election*Somali American	-0.076*	-0.075*
	(0.040)	(0.039)
R-squared	0.155	0.060

**** p<0.01, ** p<0.05, * p<0.1*
N=2,744
Robust standard errors
Additional controls include work experience FE, extracurricular activity on the resume, language skills, education level of the resume, honors listed on resume, order in which it was sent, and formatting of resume.

Appendix 5: Pre-election trends

The regressions we use in this paper are variants on a classic difference-in-difference. An important assumption for difference-in-difference analysis is that the two groups have the same trend prior to the intervention. As shown in Figure A2, both white American and Somali American resumes were being called back more over time prior to the election. There is a slight difference in trend, with the proportion of white Americans contacted increasing at a slightly faster rate. African Americans do not appear to have this upward trend.

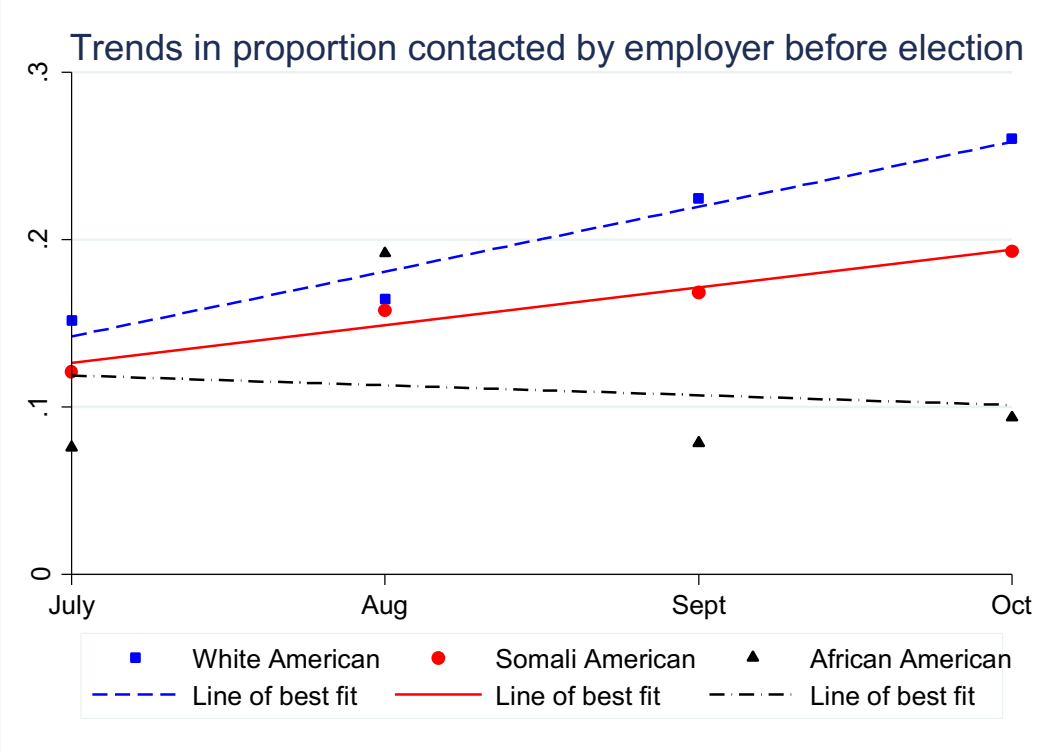

Figure A2: *The proportion contacted by employer July through October*
N= 324 (White American), 324 (African American), 648 (Somali American)

Appendix 6: Main results by industry

In the main text, we showed that jobs in the two highest terciles of customer interaction experienced the largest increase in discrimination after the election. In Table A7, we display results from estimating Equation (1) separately for the top three industry categories- Administrative/Office, Food/Beverage/Hospitality /Customer Service, and General Labor.[23]

For Somali Americans and African Americans, we see a statistically significant increase in discrimination after the election in customer-oriented jobs while there is no evidence of an increase in discrimination in the other job categories considered for this group.

[23] A job posting's occupation category was chosen by the employer. We combined Food/Beverage/Hospitality with Customer Service because of the small sample size of Customer Service jobs. The other categories are- Accounting/Finance, Business/Management, Et Cetera, Healthcare, Human Resources, Legal/Paralegal, Manufacturing, Marketing/Advertising/Public Relations, Real Estate, Sales, Salon/Spa/Fitness, Science/Biotech, Security, Skilled Trade/Artisan, Technical Support, and Transportation.

Table A7: Results of a of linear probability model testing differences in discrimination

	Customer service/ Food/Beverage/ Hospitality	General labor	Admin/ Office
Difference before the election			
African American	-0.078**	-0.051	-0.125*
	(0.039)	(0.043)	(0.073)
Somali American	0.003	-0.041	-0.108
	(0.040)	(0.041)	(0.068)
Change in difference after the election			
After election*African American	-0.080	0.126**	0.046
	(0.055)	(0.061)	(0.105)
After election*Somali American	-0.154***	0.021	-0.016
	(0.048)	(0.051)	(0.093)
Observations	1,128	651	312
R-squared	0.618	0.697	0.682

**** p<0.01, ** p<0.05, * p<0.1*
Robust standard errors
Additional controls include job FE, work experience FE, extracurricular activity on the resume, language skills, education level of the resume, honors listed on resume, order in which it was sent, and formatting of resume.

Table A8 shows the same analysis during the election of 2017. We find no increase in discrimination after the 2017 election in any industry.

Table A8: Results of a of linear probability model testing differences in discrimination during 2017 election

	Customer service/ Food/Beverage/ Hospitality	General labor	Admin/ Office
Difference before the 2017 election			
Somali American	-0.133	-0.093	-0.036
	(0.119)	(0.140)	(0.125)
African American	-0.090	-0.147	-0.047
	(0.133)	(0.153)	(0.119)
Change in difference after the 2017 election			
After election*Somali American	0.124	-0.091	-0.089
	(0.116)	(0.116)	(0.103)
After election*African American	0.168	-0.044	-0.087
	(0.121)	(0.132)	(0.123)
Observations	720	392	268
R-squared	0.759	0.758	0.830

**** p<0.01, ** p<0.05, * p<0.1*
Robust standard errors
Additional controls include job FE, work experience FE, extracurricular activity on the resume, language skills, education level of the resume, honors listed on resume, order in which it was sent, and formatting of resume.

We further examine the increase in discrimination by including a triple interaction between the customer service score, the ethnicity indicators, and the after election indicator. Prior to the election, the customer service score was not associated with being called back for white American, Somali American or African American applicants. While not statistically significant, the relationship between customer service orientation and being called back became negative for Somali American applicants after the election. The results in the tercile analysis suggest that the relationship is non-linear, which is likely why these results are weaker than those found in the tercile analysis.

Table A9: Results of a of linear probability model with triple interaction

	Contacted by employer
Before the election	
Somali American	0.006
	(0.073)
African American	-0.115*
	(0.061)
Customer-service score	0.001
	(0.001)
Somali American * Customer service score	-0.001
	(0.001)
African American * Customer service score	0.000
	(0.001)
Change after the election	
After election	0.008
	(0.131)
After election * Customer service score	0.001
	(0.002)
After election * Somali American	0.057
	(0.108)
After election * African American	0.126
	(0.112)
Somali American * After election * Customer service score	-0.002
	(0.002)
African American * After election * Customer service score	-0.002
	(0.002)
Observations	2,744
R-squared	0.058
Job fixed effects	No

**** p<0.01, ** p<0.05, * p<0.1*

Robust standard errors, clustered by occupation

Additional controls include high school FE, work experience FE, extracurricular activity on the resume, language skills, education level of the resume, honors listed on resume, order in which it was sent, and formatting of resume.

Appendix 7: Checking for seasonality in discrimination

Figure A3 shows the monthly unemployment rate for black Americans and white Americans from 2013 to 2016, calculated with IPUMS CPS (Flood et al. 2015). Figure A4 shows the unemployment rate for native-born Americans and immigrants. There is no spike in the black unemployment rate or the immigrant unemployment rate in November, suggesting that the correspondence study is not picking up some common seasonal trends in discrimination. While not shown here for brevity, a similar pattern exists for labor force participation.

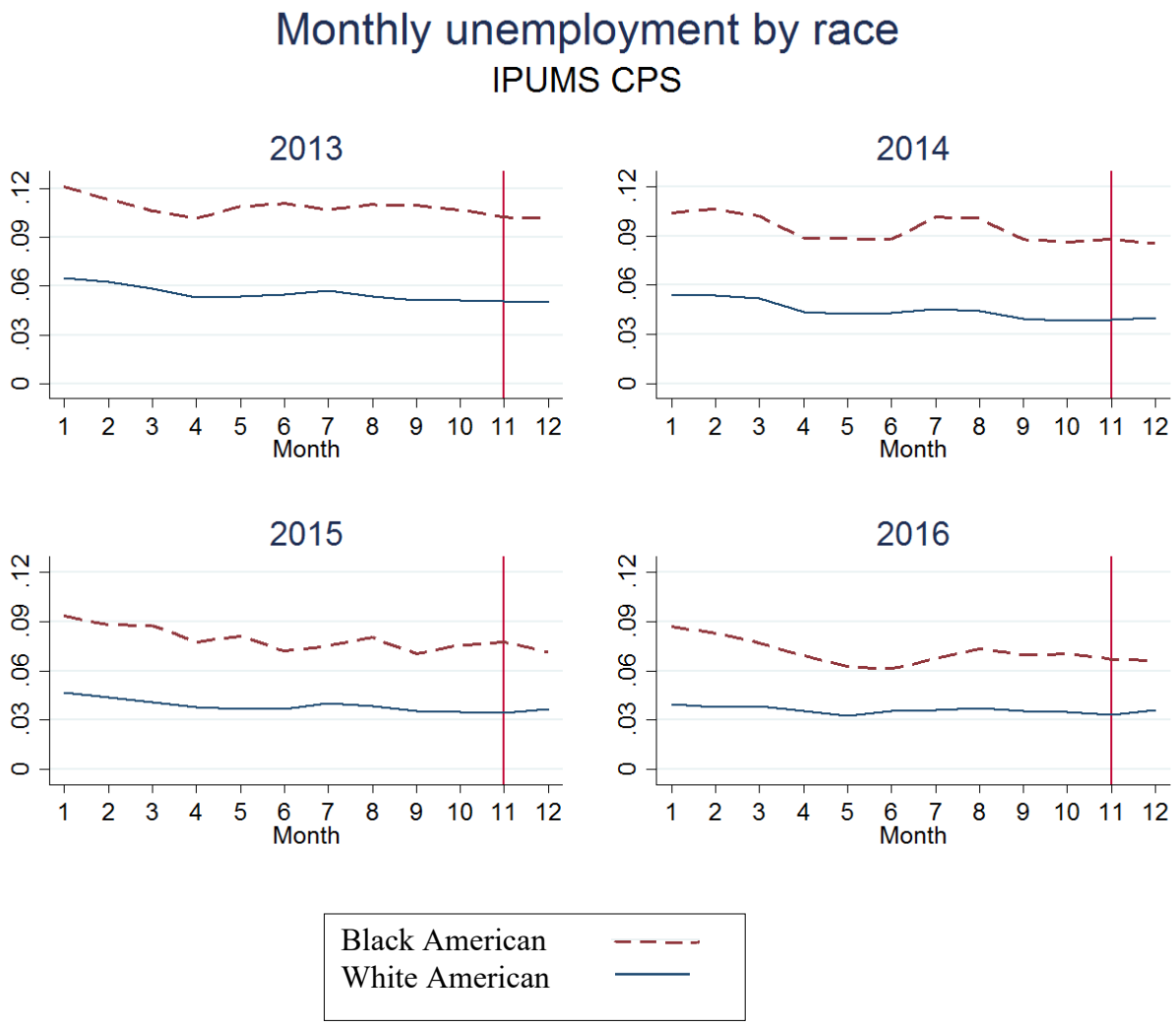

***Figure A3**: Monthly unemployment rates by race for those aged 25 to 60.*
Figures calculated with sampling weights.
Source: IPUMS CPS 2013, 2014, 2015, and 2016.

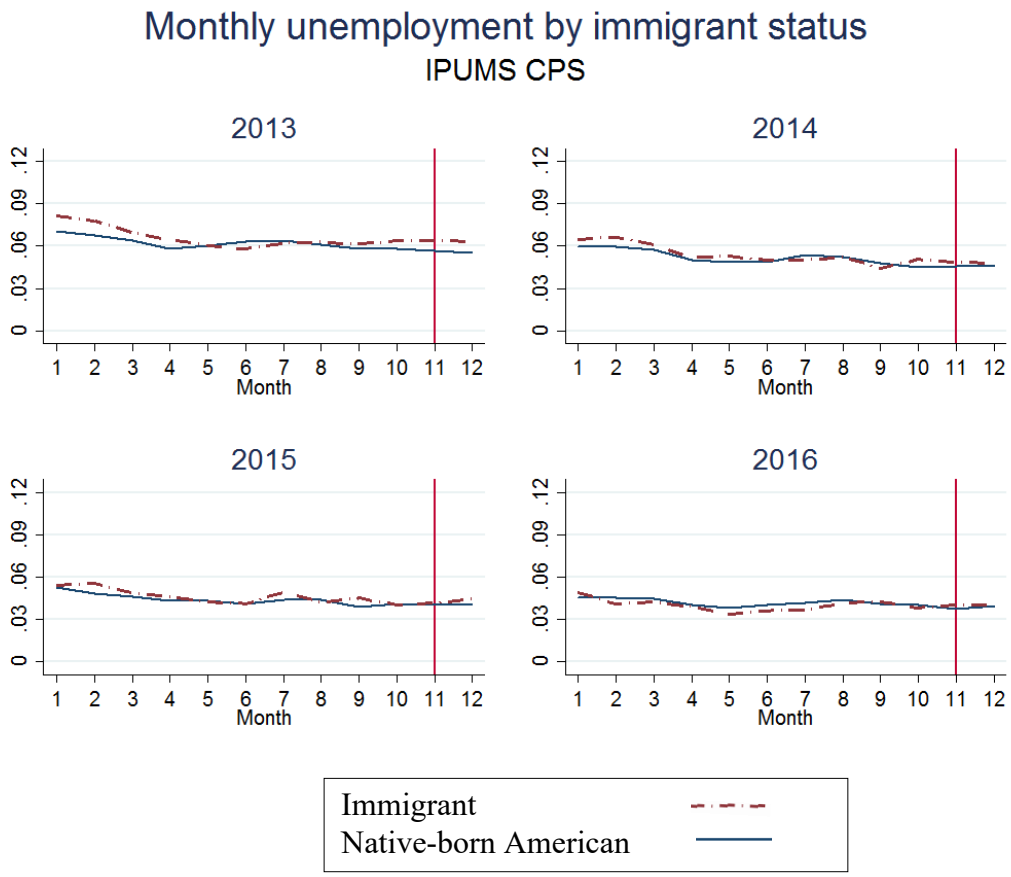

Figure A4*: Monthly unemployment rates by immigrant status for those aged 25 to 60. Figures calculated with sampling weights.*
Source: IPUMS CPS 2013, 2014, 2015, and 2016.

We examined the monthly CPS data for evidence of increased discrimination against perceived-Muslim immigrants in customer-oriented industries after the election. We found an increase in the unemployment rate in November 2016 of people born in the Middle East, North Africa, and East Africa who reported their industry as involving retail or sales. However, the sample size was too small to draw any firm conclusions. These results are available upon request.

Appendix 8: Neumark Correction

While we carefully controlled for all observed characteristics on our resumes, employers may believe that there are differences between white and Somali American applicants in the variance of other characteristics. This can mean the regression coefficients do not reflect the underlying discrimination coefficient (Heckman and Siegelman 1993; Heckman 1998). Neumark (2012) developed a method to correct this bias. To implement this correction, the experimental design must have variation in at least one characteristic in the study that influences perceived productivity and an identifying assumption that this characteristic affects callbacks homogenously across races. The assumption of equal returns to the observed characteristic across groups can be tested when there are two or more characteristics that affect perceived productivity and vary in the data.

In our study, we have multiple variables that affect the perceived productivity of the applicant, including education, managerial work experience, customer service orientation of the job, sex, formatting of the resume, and order the resumes were sent. In column 1 of Table A11, we show the Wald test statistics for testing the equality of the ratio of the coefficients for white American resumes relative to Somali American resumes for all these manipulations. We fail to reject the null hypothesis, meaning we can use these variables to correct the bias from unobserved characteristics.

We use all the available manipulations to implement the correction. Table A11 shows that the corrected estimate is -.098, with the largest component coming from differences in the level (e.g., taste based discrimination or first moment statistical discrimination) rather than the variance of the unobserved characteristics. The level effect is -.073, while the effect of the variance is only -.024.

Table A11: Neumark correction

	All variables used in correction
Estimates from basic probit	
Somali American - marginal effect	-.093
	(.015)
Estimates from heteroskedastic probit models	
Somali American – unbiased estimate of marginal effect	-.098
	(.025)
Decomposition of marginal effect	
Marginal effect of race through level	-.073
Marginal effect of race through variance	-.024
Test statistics	
Standard deviation of unobservables Somali American/White	.902
Wald test statistic: Ratio of the standard deviations =1	.823
Wald test statistic: Ratio of the coefficients for white resumes relative to Somali American resumes are equal	.877
Test overidentifying restrictions: include in heteroskedastic probit model interactions for variables with |white coeff|>|SA coefficient|, Wald test for joint significance of interactions (*p-value)*	.238
Observations	1,758[24]
Controls	All

Controls for basic probit: Political group on resume, formatting, order resume was sent, sex, college, managerial position in work experience, and the customer service score of the job. (Manipulations that appear only on Somali resumes are not included as in Neumark and Rich (2019).)

[24] Sample only includes white and Somali American resumes sent between July 2016 and Feb 2017. Additional variation was introduced in March 2017, so we exclude those resumes from the correction.