

## Do Jobseekers Value Diversity Information? A Mixed Methods Investigation

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### Abstract

We examine how information about the diversity of a potential employer's workforce affects individuals' job-seeking behavior, and whether workers' preferences explain corporate disclosure decisions. We embed a field experiment in job recommendation emails sent from a leading career advice agency in the U.S. The experimental treatment involves highlighting a diversity metric to jobseekers. Studying 178,862 unique jobseekers, we find that disclosing diversity scores in job postings increases the click-through rate and willingness-to-pay of jobseekers for firms with higher diversity scores. To better understand how heterogeneity among jobseekers affects their attitudes towards diversity information, we conduct a follow-up survey. The survey evidence indicates that diversity information is more valuable to female jobseekers and people of color. Finally, we document that firms in industries characterized by higher jobseeker responsiveness to diversity information tend to voluntarily disclose diversity metrics in their 10-Ks under new SEC disclosure requirements. Overall, our findings generate important insights regarding jobseekers' demand for diversity information.

**Keywords:** Diversity, Job Search, Disclosure, Field Experiment

**JEL Classifications:** M14, J64, D40, D83, M41, C93

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## I. Introduction

Recent social movements have generated a renewed emphasis on promoting diverse and inclusive workplaces. For example, institutional investors have increased their investments in firms that demonstrate a commitment to diversity (Taylor [2021], Heath et al. [2021]). Regulators also increasingly require firms to describe the extent to which their culture is diverse and inclusive (Vaseghi et al. [2020]). Although these pressures are imposed by outside stakeholders, it is the firm's workforce that is arguably most affected by a firm's diversity practices. Yet, it remains unclear whether jobseekers value diversity information when considering potential employers. This issue is of particular importance given the scarcity of diversity information available to potential employees, with our data suggesting that only 17% of public firms disclose either numerical metrics of gender or racial workforce diversity in their 2020 disclosures filed with the SEC. The objective of this study is to assess how information about the diversity of a potential employer affects individuals' job-seeking behavior, whether this varies based on worker demographics, and what factors determine whether firms voluntarily disclose such information.

We conduct a field experiment with Zippia, a leading career advice agency in the U.S. that provides individuals with information about job postings. Importantly, Zippia also collects and aggregates firm-level diversity information. In our field experiment, we present jobseekers with an email indicating jobs that could be of interest, and randomly vary whether the email includes information about prospective employers' workforce diversity. The list of companies presented to jobseekers is determined primarily based on user preferences regarding preferred location, industry, and the desired role. In other words, we hold constant the jobs that are presented to a given jobseeker (based on their stated job search criteria), and *only* manipulate whether or not the

job listings also include diversity information.<sup>1</sup> We then measure interest in diversity information based on whether participants are, on average, more likely to click on more diverse firms when a diversity metric is included in a job listing message.

Our field experiment has several appealing characteristics. First, a field experiment allows us to randomize the presence of diversity information (using Diversity Scores from Zippia), while holding constant the set of firms provided to users and other important job search attributes, such as wage and location. This randomization is practically impossible to achieve in archival settings (Floyd and List [2016]). Second, we can infer prospective employees' intentions to apply for a job through "click-throughs" on the emails they receive. Such user-level job search data is typically unobservable in an archival setting. Finally, our large sample of individual job search data across thousands of firms allows us to assess jobseekers' heterogeneous responses to the provision of information in real-world conditions.

There are compelling reasons as to why workers would respond positively to information about diversity, as employment at a diverse firm can benefit workers both directly and indirectly (Williams and O'Reilly [1998], Roberson [2019]). Direct benefits can stem from a worker being a diverse candidate and receiving more interest from the firm, or from a worker simply deriving utility by being part of a firm whose culture values diversity. Indirect benefits relate to the idea that diverse workplaces employ more talented individuals, foster better engagement, have higher levels of innovation, exhibit better performance, and generally have more satisfied employees (Page [2007], Lorenzo et al. [2018], Lee [2021]). These arguments potentially explain why 80%

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<sup>1</sup> For example, jobseekers interested in technology companies in St. Louis, Missouri will receive the same set of firms in the initial email they receive, regardless of their experimental treatment condition in our study. The only feature that varies is whether the email also includes Diversity Scores for the set of jobs in the list.

of surveyed workers indicate that they want to work for a company that values diversity, equity and inclusion (Caminiti [2021]).

On the other hand, there are also valid reasons for why jobseekers might not respond favorably to diversity information in job postings or could even respond negatively. Workers could primarily care about salary and benefits when seeking employment.<sup>2</sup> For instance, a recent Harris Poll surveyed more than 1,100 U.S. adults and found that the top three jobseeker considerations are salary, benefits, and location (Kuehner-Herbert [2018]). Moreover, workers may already be sufficiently informed about how diverse a firm is, thus making incremental diversity information less beneficial.<sup>3</sup> Finally, diversity information could even send a negative signal to some workers if they believe it will reduce their chance of obtaining a given position, especially if the jobseeker is not a diversity candidate. This argument suggests that workers' responses could vary based on demographic characteristics. Overall, the above discussion suggests the impact of diversity information on jobseekers is ultimately an empirical question. Thus, our first research question is whether and to what extent jobseekers respond to the provision of such information in job postings.

Our experiment was conducted over an eleven-week period beginning in June of 2021 and ending in August of 2021. Participants are 178,862 unique jobseekers who signed up for and received over 3.5 million email notifications about job listings from Zippia during the eleven weeks. These job postings relate to 107,810 identifiable companies, of which 66,694 provide requisite information for Zippia to calculate a Diversity Score. We use a 1 x 2 between-participants design, where participants are randomly assigned to receive either "baseline" job listings (Baseline

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<sup>2</sup> This mirrors the argument that investors primarily care about monetary benefits of securities and not the corporate social responsibility aspects of those securities (Larcker and Watts [2020]).

<sup>3</sup> While public disclosure lacks detailed diversity information, workers could learn about a firm's diversity through less formal channels. For example, a firm could develop a reputation for being diverse and this can be communicated through existing employees.

Condition) or job listings with Diversity Scores (Diversity Condition).<sup>4</sup> The menu of firms presented to a user is independent of the experimental condition to which they are assigned. In the Diversity Condition, participants are also presented with a score ranking the employer's workforce diversity. All other information and formatting are held constant across the two conditions, including median salaries in dollars. Our dependent variable is participants' click-through behavior (i.e., the Diversity Scores of the clicked-through firms). Participants in our sample ultimately click on job listings for 7,871 identifiable companies, with 7,304 companies having Diversity Scores. We find no significant differences across our two experimental conditions with respect to participant education, preferred job level (e.g., "Junior", "Senior", "Executive", etc.), location, or user engagement on the platform, indicating successful randomization.

Our primary finding is that job listings clicked under the Diversity Condition have higher Diversity Scores than the job listings clicked under the Baseline Condition. That is, including information about diversity influences how participants direct their attention and clicking behavior when presented with a menu of job options. The difference is, however, modest at first glance. Participants in the Diversity Condition, on average, click on job listings for companies with mean Diversity Scores of 9.277, which is 2.5 basis points higher than the average Diversity Scores for firms that participants click on in the Baseline Condition (9.252). We draw two initial conclusions from this finding. First, jobseekers respond to diversity information, suggesting that they both value diversity and find that the additional information has value. However, the second initial takeaway is that the extent to which participants value diversity information appears to be modest,

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<sup>4</sup> As described later in the paper, we also include a third condition to help rule out concerns about naïve clicking behavior and jobseekers responding to the provision of *any* information. Thus, our experiment could also be thought of as a 1 x 3 between-participants design. However, since the purpose of the third condition is not to address our research question of interest, we instead characterize our experiment as a 1 x 2 design.

at least in our setting where the inclusion of a diversity metric is subtle and unobtrusive relative to the entirety of the job listing information provided.<sup>5</sup>

To provide more context on the economic magnitude, we next conduct a “willingness-to-pay” (WTP) analysis. In the data, we observe jobseekers’ trade-off between a firm’s underlying diversity and its offered salary. Our analysis allows us to quantify by how much this trade-off changes once a jobseeker receives diversity information through our experiment. For this analysis, we first construct a jobseeker-potential employer pair panel that contains all the potential jobs for participants for which we can estimate job search patterns. We then regress an indicator variable for whether a participant clicks on a given job on two interaction terms: the interaction of Diversity Score with a Diversity Condition indicator and the interaction of the Median Salary (present in all job postings) and the Diversity Condition indicator. We also include main effects for the Diversity Condition treatment, Diversity Score of a firm (regardless of whether it is provided to jobseekers), and Median Salary. Using the coefficient estimate on the Diversity Score interacted with the Diversity Treatment (i.e.,  $Diversity\ Score * Treatment$ ) and the estimate on the median salary (i.e.,  $Salary$ ), we can measure by how much jobseekers update their WTP for a firm’s diversity once they receive our experimental treatment.

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<sup>5</sup> In untabulated analyses, we also consider a third condition, which adds the provision of a summary Salary Score (Salary Condition). The Salary Score reflects how competitive a firm’s salaries are in its local labor market. Recall that all participants observe salary ranges for job listings, regardless of experimental condition. Thus, this test allows us to assess how participants respond to the provision of *any* summary metric, even when it offers relatively little incremental value (i.e., naïve clicking). The mean Salary Score of firms clicked on in the Salary (Baseline) Condition is 8.540 (8.521) indicating a 1.9 basis point effect from this alternative experimental treatment. Comparing this effect size to the effect size in our Diversity manipulation (2.5 basis points) suggests that providing diversity information yields an effect that is 31% (2.5/1.9) larger than that observed from providing a context-relevant, yet relatively uninformative signal. To the extent that some of the response to the Salary Score represents informed clicking, the implied treatment effect due to informed clicking under the Diversity Condition increases. Thus, we view 31% as a lower bound in terms of measuring informed clicking under the Diversity Condition. The assumption is that naïve clicking under the Salary Condition is not crowded out by informed clicking.

We find that when there is a shift in underlying diversity by 10% of the Diversity Score's interquartile range, jobseekers provided with diversity information through our experiment are willing to forgo \$1,366 more in salary to work at that firm relative to control treatment jobseekers. To place this figure into context, the average salary offered among clicked job postings in our sample is \$52,061. Thus, a jobseeker is willing to trade off approximately 2.6% of the average salary for a slightly more diverse job offering. Overall, the WTP analysis helps shed more light on the economic magnitudes surrounding the effects we document.

Our results thus far are consistent with jobseekers, on average, valuing diversity information. One explanation for the relatively modest differences in the mean Diversity Scores between our experimental conditions is that jobseekers could exhibit heterogeneous preferences for diversity information (i.e., some could value it more than others). Our next set of analyses thus explores heterogeneity in jobseekers' response to diversity information. We conduct these analyses in two stages. First, using our field experiment data, we examine how our results vary based on preferred job-level and geographic location. We focus on these two attributes as they are generally contingent on the job posting, well-populated across our sample, and do not require us to make assumptions about a jobseekers' demographics that are potentially incorrect.<sup>6</sup> In the second stage of this analysis (discussed in more detail below), we conduct a follow-up survey with the participants in our sample, in which we ask participants to self-disclose their race and gender, thus allowing us to more carefully assess heterogeneity along these dimensions.

With respect to our field experiment, we examine two heterogeneous factors that appear to affect interest in diversity information. First, relative to the Baseline Condition, the Diversity

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<sup>6</sup> Jobseekers do not directly provide information to Zippia about their gender and race. Given the documented problems with making probabilistic inferences about demographics based on surnames (e.g., Shah and Davis [2017]), especially those about race, we are hesitant to rely on these methods to classify individual jobseekers and analyze heterogeneous effects in our field experiment along these dimensions.

Condition increases the average company Diversity Scores associated with click-throughs to a greater extent for workers seeking jobs in more entry-level positions. This suggests that younger workers respond more to diversity information, potentially because they are more concerned about workforce diversity. Second, with respect to location, we examine the effect of local attitudes towards diversity. We do this by splitting our sample based on whether a jobseeker is searching for a position in a state that is above or the below the median in per-capita pro-Black Lives Matter (BLM) events. We do not find a main effect of pro-BLM events per capita. However, we find a significant interaction between our pro-BLM split and treatment condition, where the Diversity Condition increases the average company Diversity Scores associated with job listings that are clicked on (as compared to the Baseline Condition) to a greater extent in the above-the-median group in pro-BLM events than in the below-median group. This is consistent with jobseekers in states with more pro-BLM sentiment being more sensitive to signals about firm diversity in their job search. Although we are cautious not to over interpret our findings, our field experiment data yields meaningful variation with respect to how workers value diversity information based on heterogeneous characteristics.

We also conduct a follow-up survey in December of 2021 that yields responses from many of the jobseekers who participated in our field experiment. In the survey, we ask jobseekers to self-report their gender and race, and to more directly rate and describe the usefulness of diversity information. Our survey evidence shows that female jobseekers and people of color are significantly more likely than other respondents to view the Diversity Score as useful. Thus, these results shed further light on heterogeneous preferences for diversity information.

The follow-up survey also allows us to better understand why diversity information matters to jobseekers. This is a question that our field experiment is, by design, unequipped to address.



There are several possible reasons that diversity information could be useful. First, diversity information could signal that the firm is of higher quality across other unobservable metrics (i.e., a “Signaling” channel). Second, jobseekers could choose jobs in diverse firms to avoid discrimination and increase the chance of promotion and inclusion at the firm (i.e., a “Job Prospects” channel). Third, workers could intrinsically value employment at a diverse firm because it aligns with their preferences and self-perceptions (i.e., a “Preferences” channel). While the survey evidence suggests some support for all three channels, the strongest evidence supports a “Preferences” channel—where workers believe diversity is an important social issue.

Informed by the results in our field experiment and survey, the final part of our study investigates how firms publicly communicate information about their workforce diversity. We study the recent Human Capital Disclosure (HCD) mandate imposed on firms by the SEC in November of 2020. The mandate entails substantial judgement and discretion because it requires firms to disclose only the features of their human capital that they deem material. We explore whether firms consider the importance of diversity information for employees (highlighted by our field experiment) when making their HCD disclosure choices. Specifically, we extend our field experiment and show that firms’ diversity performance (our experimental stimuli) and the relevance of diversity information to jobseekers (our experimental treatment effect) are associated with a greater probability of firms disclosing numeric diversity metrics in their 10-Ks. These findings suggest that firms’ diversity disclosure choices are partly explained by the usefulness of diversity information to jobseekers.

Our study makes several contributions to the literature. First, we study the effects of diversity information, as opposed to diversity itself, which has been the focus of the majority of archival studies in this area (Kim and Starks [2016], Bernile et al. [2018], Field et al. [2020]). Prior

research has not examined how these fundamentals are communicated to stakeholders and whether firms provide sufficient information. We use a field experiment to break the link between fundamentals and disclosure, which ensures internal validity through randomization and maintains external validity through data obtained from a large set of users about many firms. Our setting allows us to calculate by how much a jobseeker updates their WTP for a firm's diversity once they become informed, which also represents a novel addition to the literature.<sup>7</sup> In addition, we also conduct a follow-up survey that allows us to better understand why diversity information matters to jobseekers. More broadly, these findings should also be informative to regulators and academics interested in the SEC's human capital disclosure mandate. Our results suggest that firms provide more detailed diversity disclosures when such information is valuable to employees.

## **II. Prior Research, Theoretical Framework, and Hypothesis Development**

### *Job Search and Information about Diversity in the Workplace*

Our study is motivated by several strands of prior research. First, we build on the literature about job search, where there has been a long-standing interest in understanding how individuals sort into jobs based on their preferences and skills (Roy [1951], McCall [1970]). Similar to our study, prior research has used field experiments to investigate jobseekers' behavior in natural settings. For example, Gee [2019] uses a field experiment to show that jobseekers are more likely to apply for a position when information is provided about the number of other applicants who

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<sup>7</sup> These findings also contribute to the labor economics literature regarding how workers sort into jobs, and complement recent field studies on this question (Card et al. [2012], Hedblom et al. [2019], Ashraf et al. [2020]). A long-standing economics literature is interested in understanding how individuals sort into jobs based on their preferences and skills (Roy [1951]). Several studies have demonstrated how intrinsic factors such as an individual's identity or self-image influence job search (Akerlof and Kranton [2005], Bénabou and Tirole, [2011], Ashraf et al. [2020]). Our study also complements recent work by LaViers and Sandvik [2021], who propose an experiment to examine how workplace gender diversity affects an individual's willingness to work for a company. Our study differs from LaViers and Sandvik [2021], as we vary the provision of diversity information rather than varying the underlying diversity trait for a hypothetical firm.

have applied. Although diversity issues are not the focus of her study, Gee [2019] finds that the observed effect is stronger among women, suggesting that providing information to female applicants on the number of other applicants could increase application rates and therefore firm diversity. Other field studies have more directly investigated gender-related job search behaviors. For example, Flory et al. [2015] investigate how gender imbalances in the workforce could be driven, in part, by differences in the preferences of men and women for a competitive work environment. After randomizing jobseekers into more or less competitive compensation schemes, they find that women are more likely than men to eschew jobs that are more competitive, particularly when alternative employment options are available (Leibbrandt and List [2015]). Samek [2015] also finds that women shy away from applying for jobs that involve more competitive compensation schemes, but that application rates for all jobseekers increase when a position is framed as helping a non-profit organization. These studies provide evidence on how jobseekers' preferences could affect application decisions and influence firm diversity. Our study complements this research by studying the effect of providing jobseekers with diversity-related information.

Broadly speaking, jobseekers could care about diversity and diversity-related information for at least three reasons: “Signaling” for firm productivity, heterogeneous “Job Prospects”, and “Preferences” that match and individuals' self-perceptions of their identity. First, diversity could indicate better firm productivity and performance, although prior evidence on this issue is mixed (Williams and O'Reilly [1998]).<sup>8</sup> On one hand, individuals who have more in common could have an easier time communicating. Diversity, which reduces shared characteristics, could therefore

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<sup>8</sup> More broadly, prior studies examine the link between CSR activities and firm performance/value, and produce mixed evidence. For example, see Section 4.1 of Christensen et al. [(2021)] for a recent review of this literature.

impede decision-making within an organization (Ingram and Zou [2008]). On the other hand, a lack of diversity can lead to “groupthink” (e.g., Asch [1961]). Diversity could introduce different points of view and make an environment more amenable to divergent thoughts, which are often ultimately constructive (Sommers [2006]). Related research on information and decision-making theory argues that diverse workforces facilitate distinctive information flows through groups, which improves performance (Corritore et al. [2020]).<sup>9</sup>

Second, diversity information could inform workers of employers’ heterogeneous job prospects. Williamson et al. [2008] show that the language used in firms’ recruiting materials to describe their diversity practices affects the perceived attractiveness of those firms to prospective job applicants’, and that this varies with applicants’ race and prior experiences. Though targeted recruiting materials can help to attract minority and female applicants (Avery and McKay [2006], Egan et al. [2022]), emphasizing diversity could have different effects on the perceptions of job candidates who are not a part of the target group.<sup>10</sup> Consistent with this, Williamson et al. [2008] find that even non-minority jobseekers are attracted to firms that convey a commitment to diversity, but that those who have experienced workforce discrimination in the past react more positively when a firm provides a business-related explanation for diversity in its recruitment materials rather than an ideology-related explanation. The evidence suggests that diversity

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<sup>9</sup> Roberson and Park [2007] more directly investigate the relationship between firm diversity and performance and find that firms with a better reputation for diversity experience improved financial performance. Also consistent with the idea that greater diversity could improve firm performance, Hartzmark and Sussman [2019] find that investors value firms with better ESG performance, and over 25% of the investors that they surveyed view diversity (e.g., promotion of women and minorities, etc.) as a component of firms’ sustainability efforts. Again, although the findings in the prior literature are mixed, particularly when it comes to different sources of diversity (Williams and O’Reilly [1998]), there is some evidence to suggest that diversity improves firm performance and is valued by external stakeholders.

<sup>10</sup> For example, job advertisements are likely to be viewed by both the target applicants as well as those who are not specifically being targeted. Evidence from the advertising literature suggests that prospective applicants who are not part of the advertisement’s target audience could feel as though they are not as valued by the organization (Grier and Brumbaugh [1999]). If so, they could further infer that they are more likely to be excluded from the candidate pool.

information can help to attract job applicants, but that its influence could vary with the characteristics of jobseekers.

Third, jobseekers could have preferences for diversity because it aligns with their social identity preferences (Ashraf et al. [2020]). Akerlof and Kranton [2005] describe ‘identity’ as a form of self-image that arises from a job role, and that can be used to motivate workers in lieu of economic incentives. Individuals want to be associated with organizations that share their values, as this can affect not only their self-perception, but also their perceptions of how others will view them (Carter and Highhouse [2014]). Consistent with this notion, prior research shows that employees attracted to organizations with a social mission orientation are actually *more* cooperative and productive when they receive below-market pay rather than above-market pay (Chen et al. [2020]).

#### *Diversity Disclosures*

Our research also relates to the literature examining demand for ESG disclosure and the consequences associated with such disclosure (e.g., Matsumura et al. [2014], Hartzmark and Sussman [2019]). Consistent with a pivot from a shareholder-centric reporting regime to a stakeholder-centric one, the SEC increasingly oversees ESG disclosures (e.g., those about median-pay ratios, supply-chain conflict minerals, climate risks, and more recently, human capital) (Hart and Zingales [2017]). Diversity and inclusion form part of the ‘Social’ pillar of ESG performance. As awareness of Social issues has grown, so too has the extent of associated disclosures, covering aspects such as consumer safety (Jin and Leslie [2003]), workplace safety (Johnson [2020]), fair payments for mineral extraction rights (Rauter [2020]), and supply chain human rights integrity (Chilton and Sarfaty [2017]).

Among Social issues, diversity and inclusion are distinct because the most affected stakeholders (i.e., jobseekers and employees) could have very different views regarding how strongly these aspects should be prioritized. One can observe this type of disagreement in the often heated debate around university admissions policies.<sup>11</sup> A divergence of opinions could explain the significant heterogeneity we observe in firms' human capital diversity disclosures.

### *Hypothesis Development*

Our study is predicated on the notion that jobseekers could view diversity information as informative, which ties to the long-standing literature in accounting that is interested in the informativeness of various disclosures to stakeholders of the firm (Dechow et al. [2010]). We argue that diversity information in job postings could be useful to jobseekers by informing them about the diversity initiatives of a firm. Collecting information on a firm's diversity is costly and potentially infeasible for many jobseekers. While it is possible that some firms generate a reputation for commitment to diversity through highly visible actions (e.g., large donations), it could be impossible for a potential employee to ascertain how diverse the workforce is until they interview at the firm or accept a job. In addition, while workers can potentially collect diversity information about prospective jobs through Zippia's website (instead of through automated emails), this process would still introduce significant search costs. The email message in our study presents jobseekers with a simple menu of jobs that are likely a good fit based on the jobseekers' preferences, and in our experimental treatment condition, presents diversity information without cost. Intuitively, and as we will show later, theoretically, the extent to which workers respond to diversity information depends on *both* how much the worker values diversity and the level of prior knowledge that the worker has regarding the diversity of the firm.

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<sup>11</sup> One can observe this type of disagreement in debates around the use of policies such as affirmative action (e.g., Coate and Loury [1993], Fryer and Loury [2005], Ellison and Pathak [2021]).

Given the prior literature suggesting that jobseekers do, in fact, value diversity, and the above discussion suggesting that it could be difficult for individuals to gather diversity information themselves, we predict that jobseekers in our study will respond to diversity information provided by Zippia in job postings. Specifically, our prediction can be stated as follows:

*Hypothesis: When presented with diversity information within job postings, jobseekers will be more likely to click on job postings for firms that are higher, on average, in their Diversity Score.*

### **III. Field Experiment Research Design**

Our field experiment uses a 1 x 2 between-participants design, where we manipulate the format of information provided to participants in email messages that they receive about job postings. We partner with Zippia, Inc., an online platform that facilitates individuals' job searches.<sup>12</sup> Zippia posts job listings, provides career mentoring and, most importantly for our purposes, allows individuals to sign up to receive email messages with job postings that are tailored to their job search criteria (e.g., based on preferences related to target industry, geographic location, career stage, etc.).

For our study, Zippia sends job posting emails for a period of eleven weeks to users enrolled on their platform. The content of the emails is similar in format to the messages that Zippia sends to its users on a regular basis, with one exception. Specifically, participants in our field experiment are randomly assigned to one of two conditions that changes the format of the emails that they receive. In our Baseline Condition, participants receive emails in the standard format, which includes job listings based on an individual user's job search preferences. In our treatment condition (Diversity Condition), a participant receives the same job listings that an individual would have received if they were in the Baseline Condition. However, this condition also includes

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<sup>12</sup> For more information about Zippia, please see [www.Zippia.com/about-us](http://www.Zippia.com/about-us).

a numerical Diversity Score for each company associated with a given job listing, so long as Zippia has enough information to calculate a Diversity Score for the firm.<sup>13</sup> Table 1 provides more detail on our treatment conditions.

<INSERT TABLE 1 ABOUT HERE>

Figure 1 provides an example of the type of email that a participant could receive under the two conditions. The figure illustrates the recommended jobs for an individual seeking employment in the technology sector near Austin, Texas. The Baseline Condition presents a set of suggested employers, including eBay, Cinemark and CoreLogic, with the corresponding locations and estimated salaries. The Diversity Condition presents users exhibiting the same geographical and industry preferences with the same set of recommended firms and information as the Baseline Condition, but also introduces a numeric Diversity Score (shown in green). As illustrated in Figure 1, users are presented with the same set of recommended jobs in the same order across both conditions, helping to alleviate any concerns related to selection bias.

<INSERT FIGURE 1 ABOUT HERE>

Each email message received by our participants includes an average of 14 job postings on the screen, in addition to a link that provides them with additional job recommendations. As illustrated in Figure 2, clicking a job post leads to an employer's application page either directly or through a detailed intermediate job post. The number of job postings that are visible in a given preview of each email message depends on the type of device used to access the email (e.g., smartphone vs. desktop computer), although randomization of our participants suggests that

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<sup>13</sup> The Diversity Scores that Zippia calculates for individual companies are based on a proprietary formula that incorporates employee-level data to evaluate how a given firm compares to other firms that are similar with respect to industry and geographic location. It combines information about the race, gender, education, and language skills of a firm's workforce in a way that is standardized across the firm's job roles and locations. For our purposes, the actual calculation of the individual scores is not as critical as the extent to which users' clicking behavior is affected by the provision of a summary diversity measure.



participants' choice of how to access the emails is not expected to vary by condition. The frequency of emails also varies by user depending on their stated preferences and website activity, and ranges from daily to monthly email messages. Again, our random assignment of participants suggests that users who differ in the frequency with which they receive email messages should be evenly distributed across both of our conditions.

<INSERT FIGURE 2 ABOUT HERE>

All data is captured by Zippia over the course of the study. Zippia collects information on: 1) whether each email is opened; 2) how many jobs are clicked on by a user; and 3) which companies are associated with each job listing that was clicked on. After collection, the data is anonymized by Zippia for participants' privacy and provided to the author team for analysis.

#### **IV. Experimental Results**

Participants in our study are 178,862 unique users enrolled on the Zippia platform.<sup>14</sup> Table 2, Panel A provides a description of these users. The data indicate that many users do not provide education (76%), preferred job level (56%) or information on their preferred geographic region (51%). Approximately 15% of users in our sample indicate having at least a bachelor's degree. Users tend to desire lower-level jobs, with entry-level and junior-level workers comprising 21% of the sample. In addition, Table 2 and Figure 3 also indicate that users are well-distributed across the United States.

<INSERT TABLE 2 ABOUT HERE>

<INSERT FIGURE 3 ABOUT HERE>

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<sup>14</sup> When individuals sign up on Zippia they have the option to provide their names and resumes. For those who provide sufficient information, Zippia uses machine learning software to make a probabilistic inference about the likely gender and ethnicity of a given user. A large number of participants do not provide the requisite data to assign gender and ethnicity. We thus rely on our follow-up survey evidence for exploring this layer of heterogeneity.

Panel B of Table 2 describes user engagement in our experiment. The average user receives approximately 20 emails and opens about 9 of them. In addition, the mean number of jobs clicked on is 0.717.

Our participants receive a total of 3,522,253 email messages in aggregate from Zippia, with job listings associated with 107,810 unique companies. Of these companies, 66,694 provide enough information for Zippia to calculate a Diversity Score. Recall that Zippia calculates a Diversity Score for all firms that provide sufficient information. Our experiment varies only with regard to whether those scores are provided in the email messages received by jobseekers. Panel C in Table 2 shows the Diversity Scores of the set of firms for which jobseekers received listings. However, not all firms for which jobseekers received listings were clicked on over the course of the study. Panel D in Table 2 shows the Diversity Scores for the subset of companies associated with job listings that participants *actually clicked on*. Comparing Panels C and D in Table 2, we observe that the subset of companies associated with job listings that participants *actually clicked on* was larger in size (in terms of number of employees) and higher, on average, in the Diversity Score measure (8.70 vs. 7.65) than the broader set of companies associated with job listings that were *sent* to participants.

Before analyzing our results, we confirm that participants were appropriately randomized to treatment conditions. Table 3 provides the results from an analysis of means across treatment conditions. Consistent with successful randomization, we do not find significant differences across our two conditions with respect to participant education, preferred job level, or geographic region (Panel A). In addition, we do not find meaningful differences in engagement across the conditions (Panel B). All p-values are greater than 0.10, two-tailed.

<INSERT TABLE 3 ABOUT HERE>

### *Primary Analyses*

Results of our analyses testing our main prediction are presented in Table 4. As shown in Panel A, participants in our Diversity Condition, on average, click on job listings from companies with higher Diversity Scores than do participants in our Baseline Condition (mean Diversity Scores of 9.277 vs. 9.252,  $p=0.001$ , one-tailed), consistent with our prediction. Panel B provides results for participants based on their first email interaction with Zippia. Inferences are similar, and continue to suggest that participants in our Diversity Condition, on average, click on job listings from companies with higher Diversity Scores than do participants in our Baseline Condition (mean diversity scores of 9.264 vs. 9.238,  $p=0.028$ , one-tailed). Recall that participants in both conditions receive emails that contain job listings that would normally be targeted to them by Zippia. Those in the Baseline Condition, however, did not observe the Diversity Scores for each company associated with a particular job listing, whereas those in the Diversity Condition did. This suggests that, on average, participants in our study prefer firms with more diversity. In addition, jobseekers value additional information about diversity—the inclusion of a score in the Diversity Condition directs participants’ attention and clicking behavior towards firms that measured higher on diversity than in our Baseline Condition. We note, however, that the difference in magnitudes appears modest at first glance. We thus explore this issue in more detail below.

<INSERT TABLE 4 ABOUT HERE>

### *Willingness to Pay for Diversity and Information Frictions*

We next estimate how jobseekers update their WTP for a firm’s diversity once they are provided with a Diversity Score. Doing so allows us to offer some additional clarity on the economic magnitudes of our findings. We provide a theoretical foundation for this analysis in Appendix B. For our estimation, we first construct a sample of jobs that are probabilistically

recommended to users on the platform based on their previous searches. We limit our sample to those users providing their names or resumes to Zippia because these users are more proactive in their job searches, and thus their interactions are more likely to generate useful inferences.<sup>15</sup> We then estimate the following probit regression model:

$$\begin{aligned} \Pr(\text{Job Post Click}=1)_{ij} = & \beta_0 + \beta_1 \text{Log Diversity Score}_j + \beta_2 \text{Log Diversity Score} * \text{Treatment}_{ij} \\ & + \beta_3 \text{Log Median Salary}_j + \beta_4 \text{Log Median Salary} * \text{Treatment}_{ij} \\ & + \beta_5 \text{Treatment}_i + \varepsilon_{it} \end{aligned} \quad (1)$$

where  $i$  indexes a participant and  $j$  indexes a job choice. *Log Diversity Score* is the natural log of the Diversity Score associated with job  $j$  (regardless of whether the participant is assigned to the treatment condition that observes this). *Log Median Salary* is the natural log of the median salary associated with job  $j$  (observed by all participants). *Treatment* is an indicator that takes the value of one if participant  $i$  is assigned to the Diversity Condition, and zero otherwise.

The results from estimating the above equation are provided in Table 5. We find that  $\beta_1$  is positive and statistically significant, indicating that jobseekers prefer to work for diverse workforces and have prior knowledge about the diversity of employers (or some correlate thereof). Importantly,  $\beta_2$  is positive and statistically significant, which suggests that jobseekers are even more likely to click on jobs with more diverse workforces when employers' diversity metrics are provided (controlling for employers' median salaries). As expected,  $\beta_3$  is positive and statistically significant and suggests that jobseekers prefer to apply for high salary jobs.  $\beta_4$  is statistically

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<sup>15</sup> Zippia does not collect a list of firms recommended in each email, unless those firms are clicked. Instead, Zippia provided us with a list of firms that were most likely recommended based on a users' past history. Zippia's platform records its interactions with users, including its users' visits to specific company pages. In doing so, Zippia keeps track of users' interest in various companies and recommends those companies' jobs in the job recommendation email. The list of companies that users interact with does not reflect the full set of jobs that were recommended, but reasonably represents the list of companies that were presented to users in job recommendation emails.

insignificant because median salaries (as opposed to Diversity Scores) are provided under both conditions. Using these coefficients, we estimate the extent to which jobseekers update their WTP for a firm's diversity once they receive diversity information by computing  $\frac{\beta_2 \bar{w}}{\beta_3 \bar{D}} \Delta D$ . We estimate an incremental WTP of \$1,366 (when diversity information is provided) if there is a 10% increase in Diversity Scores relative to the interquartile range.

<INSERT TABLE 5 ABOUT HERE>

Our WTP results are subject to several limitations. First, we assume that click data reflect jobseekers' interest in different jobs based on those jobs' characteristics. However, click data could be a noisy measure of employment interest to the extent it reflects other jobseeker traits such as general curiosity (for example, curiosity about a company with a name that sounds interesting). That said, we do not expect this type of noise to vary systematically across the Baseline and Diversity Conditions, given that the number of opened emails and clicked job postings is statistically indistinguishable across these conditions. Second, if median salaries reflect jobseekers' expected salaries with varying degrees of accuracy, our coefficients will be less reliable. For example, if some jobseekers expect to secure a salary higher than the median in a firm, and others expect to secure a salary lower than the median, this heterogeneity will attenuate the median salary coefficient, inflating the WTP number.

#### *Heterogeneity in Field Experiment Participants*

Having established that diversity information is, on average, useful to jobseekers, we further explore heterogeneity relevant to our field experiment setting. Our objective is to explore features germane to the job posting, including preferred job level and geographic location.

We begin by exploring the heterogeneous effects of users' preferred job level. Panel A of Table 6 presents means, by condition, for the average Diversity Score associated with the job

listings that users clicked on, broken out by each jobseeker's preferred level of employment. Level of preferred employment is classified as either "Entry", "Junior", "Mid-level" (Mid), "Senior", "Management" (MGMT), or "Executive". Panel B of Table 6 presents the ANOVA output for examining the effects of preferred job level, treatment condition, and the interaction of job level and treatment on the average Diversity Score associated with job postings that users clicked on. As shown in Panel B of Table 6, we find a main effect of preferred job level ( $p < 0.001$ , two-tailed), where the average Diversity Scores associated with job listings that are clicked on is generally increasing with users' preferred level of employment. In addition, we find a significant interaction between preferred job level and treatment condition, where the Diversity Condition increases the average Diversity Scores associated with job listings that are clicked on (as compared to the Baseline Condition) to a greater extent, generally speaking, for users who are seeking jobs at a lower preferred level of employment ( $p < 0.001$ , two-tailed). As shown in Panel A of Table 6, there is more dispersion across conditions in the mean Diversity Scores for Entry-level or Junior-level jobs than for Management or Executive-level jobs. One interpretation of these results is that more experienced workers could be less likely to face "statistical discrimination" (i.e., discrimination based on screening criteria, such as gender or race, that economic agents use when faced with imperfect information about others). Those looking for more entry-level jobs have, by definition, fewer ways to signal their qualifications or experience, which not only increases the likelihood that screening tools will be used to narrow the applicant pool but also the likelihood that they face statistical discrimination. By contrast, experienced workers have more signals to convey their productivity to employers (such as prior work and promotions history, and more extensive references). Combined, this suggests that entry-level workers could care relatively more about workforce diversity than those who are more experienced (Bertrand and Duflo [2017]).

<INSERT TABLE 6 ABOUT HERE>

We next explore variation based on geographic location and, more specifically, whether jobseekers are searching for a position in an area with more or less pro-BLM sentiment. Kline et al. [2021], Tilcsik [2011], and Chetty et al. [2020] document regional variation in various forms of discrimination. Accordingly, regional differences could affect whether jobseekers view diversity within firms as desirable or undesirable. We thus examine how job search behavior varies with the number of pro-BLM events per capita in the state that a jobseeker is targeting for a position. We consider pro-BLM events per capita as a proxy for general attitudes towards diversity or discrimination in a given region.

Panel C of Table 6 presents means, by condition, for the average Diversity Score of the companies associated with the job listings that users clicked on, broken out by whether each jobseeker is searching for a position in a state that is above or below the median in per capita pro-BLM events. Panel D of Table 6 presents the ANOVA output for examining the effects of pro-BLM events, treatment condition, and the interaction between pro-BLM events and treatment on the average Diversity Score associated with job postings that users clicked on. As shown in Panel D of Table 6, we do not find a main effect of pro-BLM events per capita ( $p=0.425$ , two-tailed). However, we do observe a significant interaction between our experimental treatment and whether a jobseeker is searching for a position in a state that is above or below the median in per-capita pro-BLM events. Specifically, the Diversity Condition increases the average company Diversity Scores associated with job listings that are clicked on (as compared to the Baseline Condition) to a greater extent among jobseekers in states that are above the median in pro-BLM events per capita ( $p=0.001$ , two-tailed). Thus, the interaction presented in Panel D of Table 6 is consistent with

jobseekers being more sensitive to signals about firm diversity in their job search in states with more positive attitudes towards the pro-BLM movement.

## V. Follow-up Survey

In this section we discuss results of our follow-up survey, which allows us to fulfill two objectives. First, the survey allows us to examine heterogeneous preferences for diversity information related to jobseeker gender and racial diversity. Second, the analysis also allows us to shed light on the potential underlying mechanisms for our main result.

We begin our follow-up survey on December 9th, 2021, where we email the original field experiment participants and provide them the opportunity to complete a follow-up survey in exchange for a chance to win a small monetary prize. The survey remains open through December 20th, 2021, and participants receive one reminder email. During this 12-day period, we receive 1,465 completed responses (although not every respondent provided an answer to every question).

We first summarize the demographics of the 1,465 participants in the survey. In the field experiment, participants were randomly assigned to the Baseline Condition, Diversity Condition, or a Salary Condition.<sup>16</sup> We find that participation rates in the follow-up survey are similar across the conditions to those in the field experiment, with 460 survey participants from the Baseline Condition and 485 participants from the Diversity Condition, and 520 participants from the supplemental Salary Condition. Among participants who provide their age, the mean (median) age of participants is 37.91 (36) years of age. In addition, 57.47% of participants identify as female, 41.16% as male, and 1.37% do not identify with a particular gender. Most participants have a four-

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<sup>16</sup> As noted above, we include the Salary Condition to help rule out concerns about naïve clicking behavior, but this condition is not the focus of the field experiment (i.e., not part of the primary 1 x 2 design). In our follow-up survey we include responses from participants in all three conditions because we do not expect the original experimental condition to affect responses to our survey questions. Consistent with this, responses to survey questions do not vary based on which condition a participant was in during the field experiment.



year undergraduate degree or higher (66.66%). The majority of participants are White (45.7%), with the second largest racial/ethnicity group being African-Americans (22.2%). For our analyses, we classify anyone who reports themselves as non-White as a Person of Color.

We next present participants with a side-by-side comparison of two identical excerpts from an email message containing job listings, except that one excerpt includes Diversity Score information for the listed jobs. Participants respond to the question: “To what extent do you think you might find the information on the Diversity Score useful in a job search?” (responses are on a 6-point scale, from 1 = Not at All Useful to 6 = Very Useful). Panel A of Table 7 presents the results. The results indicate that, on average, participants believe that the Diversity Score would be useful. The mean response is 4.317, which is significantly higher than the midpoint of the scale ( $p < 0.001$ , two-tailed, untabulated) and 72.3% of participants respond with a value of 4 or greater.

Panel B provides the results of how participants’ responses vary based on gender and ethnicity. Female jobseekers are significantly more likely than other respondents to view the Diversity Score as useful (means of 4.455 and 4.118, respectively,  $p < 0.001$ , two-tailed, untabulated,  $N = 1,440$ ). In addition, People of Color are significantly more likely than other respondents to view the Diversity Score as useful (means of 4.651 and 3.934, respectively,  $p < 0.001$ , two-tailed, untabulated,  $N = 1,455$ ).

<INSERT TABLE 7 ABOUT HERE>

Having established the usefulness of diversity information among participants, we next consider why such information may or may not be useful. First, workers could intrinsically value employment at a diverse firm (i.e., a “Preferences” channel). Second, jobseekers could choose jobs in diverse firms to avoid discrimination and increase the chance of promotion and inclusion at the firm (i.e., a “Job Prospects” channel). Third, diversity information could signal that the firm is of

higher quality across other unobservable metrics (i.e., a “Signaling” channel). In our survey, participants are presented with one of two follow-up questions. If participants select a “4” or higher response on the usefulness question above, they are presented with a question asking why the diversity information would be useful. Otherwise, they are presented with a question asking why such information would not be useful.

Table 8, Panel A summarizes responses from the 1,059 participants who indicate diversity information would be useful. 50.14% of these respondents indicate that such information is useful because they believe diversity is (or is not) an important social issue and would like to know whether their employer shares these values. In addition, 45.14% of these participants believe such information is useful because it reflects how much they are likely to enjoy the work environment. 39.57% of these participants believe that diversity information is informative about their likelihood to be hired and/or promoted. Finally, 37.68% of these participants believe that diversity information helps them assess the overall, long-term success prospects of an employer. Thus, a large majority of jobseekers find diversity information valuable because it relates to their preferences for diversity per se. Nevertheless, a substantial portion of these jobseekers also value diversity information for other reasons, such as the likelihood that they will be hired and firms’ long-run prospects.

In terms of the 406 participants who did not believe that diversity information would be useful, we find weaker evidence for any particular explanation. As summarized in Panel B of Table 8, the most common view is that participants believe they already have a good sense of the diversity of employers within their profession (32.27%). Further, 29.06% believe they can obtain such information through other sources. Only 23.15% of these jobseekers prefer employers not to focus on diversity, and 18.23% believe that diversity is not that important generally. Given that only a

minority of jobseekers claim to have such information readily available through other sources, we conclude that diversity information is generally informative to jobseekers.

In terms of explaining our main field experiment result that jobseekers value diversity information, the evidence is most supportive of the “Preferences” channel discussed earlier; that is, diversity information relates to something that workers believe is an important social issue. Nevertheless, our survey highlights that diversity information is useful for various reasons including the “Job Prospects” and “Signaling” channels, and that there is a non-trivial fraction of jobseekers who do not value diversity, or prefer that firms do not focus on it.

<INSERT TABLE 8 ABOUT HERE>

## **VI. Firms’ Human Capital Disclosures (HCDs)**

### *Background*

Our field experiment demonstrates that providing information about employers’ workforce diversity affects jobseekers’ search behavior. This leads to a natural follow-up question: do employers consider this decision-usefulness for jobseekers when they choose whether to disclose diversity metrics publicly? In this section, we provide insight into this question by linking the findings of our field experiment to human capital disclosures (HCDs) in the United States.

On August 26, 2020, the SEC modernized items in Regulation S-K, which prescribes various reporting requirements for public companies. Included was an amendment to Item 101 (Description of Business, the first contents item in 10-Ks) that requires companies to describe their human capital resources to the extent that such items are material. The modernization reflects a general concern that financial reporting does not adequately describe most economic assets (e.g., Ewens et al. [2020]). The amendments became effective for FY2020 10-Ks filed on or after November 9, 2020. As is the case with the majority of ESG topics, the SEC’s principles-based

approach to HCD does not prescribe specific subtopics or metrics to disclose. Potential topics include training and development initiatives, retention strategies, labor relations, COVID-19 strategy, and workplace safety. However, commentary around the modernization pointed to a human capital issue widely perceived as relevant: diversity (Lee [2020], Wyatt and Yerre [2020]).

The first set of HCDs firms produced vary widely in the degree of detail provided across the various sections. Boilerplate language is common, and casual empiricism reveals that few firms disclose detailed diversity metrics. Appendix C, Example A provides the HCD section for Simpson Manufacturing. Simpson details its workforce gender and racial/ethnicity breakdowns by employee seniority, which we view as a high degree of detail. Simpson goes on to discuss Talent Development, Pay Equity, Workplace Safety and Health, and Labor Relations. Appendix C, Example B details the HCD section of UScellular, which simply provides a count of full-time and part-time employees and some general, qualitative statements about employee satisfaction, training, workplace culture, and diversity. We view this as a low degree of detail.

#### *HCD Data*

We collect all FY2020 10-Ks filed between October of 2020 and March of 2021, and extract the HCD sections, which appear in Item 1 of the 10-K, which describes the business. This corresponds to 3,321 firms' disclosures. We then extract disclosed proportions of the workforce that comprise diversity groups, along with any attached qualifiers. Diversity groups largely correspond to gender and ethnicity/race, although some firms quantify other employee subsets, such as veterans, people with disabilities, and people identifying as LGBTQ+. We focus on the predominant groupings of gender and race. As to qualifiers, firms frequently report diversity proportions for job functions and geographies, or as metrics that reflect changes (rather than

levels), or aspirations (rather than current proportions). To keep the subsequent analyses consistent, we focus on disclosed metrics about a firm’s current workforce.

In terms of gender metrics, most firms disclose a female percentage and seldom an ‘other’ percentage, which we exclude for consistency. We also note that 17% of firms disclose a gender metric. In terms of race, the categorizations vary in terms of aggregation, for example, some firms could disclose the fraction of employees that identify as people of color, while others will provide more granular categorizations such as white, black, Hispanic, Asian, and so forth. We aggregate the race disclosures such that there are two categories: white and non-white (henceforth people of color, or POC). The data indicate that 13% of firms disclose a race metric.

#### *Underlying Diversity Information and Firms’ Disclosures*

To examine the link between our experimental stimuli and firms’ disclosure, we estimate the following cross-sectional regression at the firm-level:

$$\begin{aligned} \text{Diversity Disclosure} = & \beta_0 + \beta_1 \text{Diversity Score}_j + \beta_2 \text{Experiment Delta} \\ & + \beta_3 \text{BLM Protests} + \beta_4 \text{Log MV} + \beta_5 \text{ROA} + \varepsilon \end{aligned} \quad (2)$$

The dependent variable, *Diversity Disclosure*, is an indicator variable that takes the value of one when a firm discloses the proportion of its workforce that comprises women (firm-wide) or that comprises People of Color (in the US), and zero otherwise. Our two variables of interest are *Diversity Score* and *Experiment Delta*. *Diversity Score* is the firm’s Diversity Score as computed by Zippia. *Experiment Delta* is our field experiment treatment effect measured at the 2-digit SIC level. The model also controls for other potential determinants of diversity disclosure. In particular, we account for social pressure upon firms to either disclose or not disclose their diversity metrics (Tilcsik, 2011) by considering the number of pro-BLM protests per capita, focusing on a firm’s location of headquarters (*BLM Protests*). We also control for firm size (*Log MV*) and profitability

(*ROA*). If diversity performance influences firm's disclosure decisions, we expect a positive loading on  $\beta_1$ . If firms also consider the importance of diversity information to their stakeholders, we also expect a positive loading on  $\beta_2$ .

### *HCD Results*

Table 9 describes the data used for the diversity metric disclosure analysis. To keep the analysis parsimonious and consistent with the field experiment setting (in which an overall Diversity Score metric was highlighted), we now consider a firm as a discloser if it disclosed a gender and/or a race metric. By this measure, 17% of firms are disclose a diversity metric.

<INSERT TABLE 9 ABOUT HERE>

Table 10 provides the results from testing the determinants of diversity metric disclosure choice (i.e., estimating equation (2)). Column (1) shows that firms with higher Diversity Scores (as calculated by Zippia) tend to disclose more often—a one standard deviation increase in Diversity Score increases the probability of disclosure by 5.2%. Column (2) shows that that industry-level experimental treatment effect is positively related to disclosure choice, but not significantly. Because the treatment effect occurs in response to Diversity Scores, it makes sense to include both variables jointly, so as to examine their orthogonalized effects on disclosure choice. In Column (3), we re-include the Diversity Score, and the loading on *Experiment Delta* becomes significantly positive. These results persist with the addition of control variables, state fixed effects and industry fixed effects in Columns (4) through (6). Overall, the evidence suggests that, separate from their own diversity performance, firms consider the decision-usefulness of diversity information for employees when making their diversity-disclosure choices. Based on Column 3, a one standard deviation increase in *Experiment Delta* increases the probability of disclosure by 1.5%.

<INSERT TABLE 10 ABOUT HERE>

## **VII. Conclusion**

In this study we examine how information about the diversity of a potential employer affects jobseekers' behavior. In cooperation with Zippia, a leading career advice firm, we conduct a 1 x 2 between-participants field experiment with 178,862 participants. We manipulate job recommendation emails across two conditions: a Baseline Condition which shows job postings and a Diversity Condition in which the job postings also highlight information about firm diversity.

Our results indicate that diversity information affects jobseekers' behavior. Embedding information about diversity in a job posting increases the average level of firm diversity among job postings that workers click on relative to a Baseline Condition that does not provide this information. Exploiting the richness of data in our setting, we estimate that jobseekers update their willingness-to-pay for a company's diversity by \$1,366 when faced with a 10% increase in Diversity Scores relative to the interquartile range.

We also conduct follow-up analyses and data collection to assess the value of diversity to heterogeneous jobseekers. Within our field experiment, the observed effects appear to be more pronounced for entry-level workers and workers in states with more favorable attitudes towards diversity issues (as proxied by a high degree of pro-BLM events per capita). In a follow-up survey of participants from our field experiment, we find that the usefulness of diversity information is driven by various factors, including a jobseeker's gender and ethnicity. Finally, we document that when the demand for diversity information is stronger, as measured through our field experiment, companies are more likely to disclose workforce diversity information in their 10-K human capital disclosure sections, which were recently mandated by the SEC.

Our field experiment allows us to demonstrate the importance of workforce diversity information in the job search process. Our study also provides important insights for policy-makers considering whether to prescribe more disclosure about diversity, and for firms that could use disclosure to attract and retain a diverse workforce. We also highlight how disclosure of a firm characteristic can elicit heterogeneous stakeholder responses.

Our findings highlight several avenues for future research. First, although we provide novel evidence on jobseekers' demand for diversity information based on heterogeneous characteristics, our analyses are not exhaustive. Future research might examine whether jobseeker characteristics along other dimensions (e.g., sexual orientation, religious affiliation, etc.) affect demand for diversity information. Second, our analyses are based on a current cross-section of workers and rely on an information environment from a point in time. It is possible that workers' demand for diversity could shift with on time-varying conditions, such as political climate or social awareness.



**Appendix A. Variable Definitions**

<b>Variable</b>	<b>Description</b>
<b><u>Zippia Analyses</u></b>	
<b><u>Jobseeker-level</u></b>	
Education	A categorical variable indicating jobseekers’ highest self-reported education level attained. The levels are: <i>High School, Associate, Bachelors, Masters, and Doctorate</i>
Level	A categorical variable indicating jobseekers’ highest self-reported preferred job level. The levels are: <i>Entry, Junior, Mid, Senior, Management (MGMT), and Executive</i>
Pro-BLM	A dummy variable indicating jobseekers who are seeking a position in states with an above median per capita number of Black Lives Matter-affiliated protests in 2020
Diversity Condition	A dummy variable indicating jobseekers that were randomly assigned to receive Diversity Scores alongside job posts recommend to them
Diversity Score	The score Zippia assigns to firms based on the diversity of those firms’ workforces. Higher scores correspond to higher diversity ( <i>see Footnote 13 for details about the computation of Diversity Score</i> )
Salary Score	The score Zippia assigns to firms based on the salaries those firms pay—higher scores correspond to higher salaries (benchmarked against salaries offered by other firms for similar jobs in similar geographic locations)
Size	A categorical variable capturing the number of employees. The levels are: <i>&lt;50, 50-100, 101-500, 501-1,000, 1,001-10,000, and &gt;10,000</i>
Median Salary	The median salary offered by the firm (based on estimation performed by Zippia that utilizes salary data from various sources)
<b><u>Disclosure Analysis</u></b>	
Diversity Disclosure	Whether a firm discloses a quantitative, firm-wide gender metric or US-wide-people of color metric for its current stock of employees
Experiment Delta	By 2-digit SIC, the experimental treatment effect on click-through rate
BLM Protests	By state, the per capita number of Black Lives Matter-affiliated protests in 2020
Log MV	The natural logarithm of market capitalization
ROA	Return on Assets

## Appendix B. Theoretical Framework for Willingness-to-Pay

Our experimental data allow us to examine how jobseekers' willingness-to-pay for diversity under two different information environments (the Baseline and Diversity Conditions) differs. Using a regression specification, the economics literature has developed a theoretical, revealed-preference framework to understand jobseekers' willingness-to-pay (WTP) for non-monetary benefits such as flexible working hours or fringe benefits (e.g., He et al., 2021).

We augment the job search decision model of He et al. (2021) and describe jobseekers as choosing firms based on two characteristics: wage ( $w$ ) and diversity ( $d$ ). We first consider an idealized setting, in which jobseekers in the Baseline Condition have no firm-specific information about diversity—they only know the average diversity of firms in each industry. Further, the Diversity Condition is fully informative about employer diversity. We assume that jobseekers can only click and explore one job post, and that their decision to click and explore considers a search cost ( $c$ ) and probability to get the job ( $p$ ). Under these assumptions, a jobseeker's utility function under the Baseline Condition is:

$$U_{ij} = \bar{U}_{ij} + \varepsilon_{ij}$$

$$\text{where } \bar{U}_{ij} = \theta + \beta \ln(w_j).$$

$i$  indexes an individual and  $j$  indexes a job.  $\bar{U}_{i0} = 0$  and  $\varepsilon_{ij}$  is independent and identically distributed and follows a Normal Distribution.  $\theta$  captures the utility provided by the average firm's non-pecuniary aspects.

A jobseeker's utility function under the (fully informative) Diversity Condition is:

$$U_{ij} = \bar{U}_{ij} + \varepsilon_{ij}$$

$$\text{where } \bar{U}_{ij} = \theta' + \alpha E[\ln(d_j) | \ln(d_{ij})] + \beta \ln(w_j) = \theta' + \alpha \ln(d_j) + \beta \ln(w_j),$$

$$\ln(d_{ij}) = \ln(d_j),$$

$$\text{and } \theta' = \theta - \alpha \ln(\bar{d}_j).$$

$d_j$  captures the diversity of the employer, and  $d_{ij}$  captures individual  $i$ 's information set about employer  $j$ 's diversity. The job search decision can be summarized as:

$$P_{ij} = \Phi(\bar{U}_{ij} - \frac{c}{p}),$$

where  $P_{ij}$  is the probability of a clicking on a job posting. The estimation model for the idealized WTP is:

$$\text{Willingness-To-Pay (WTP)} = \frac{\alpha \bar{w}}{\beta \bar{D}} \Delta D.$$

$\Delta D$  can be the industry-adjusted diversity of an employer; recalling that the industry-average reflects a prior about an employer's diversity.

To compare the difference of WTP in two conditions, we consider a Baseline Condition in which jobseekers have partial understanding of firm-specific human capital policies and compensation packages because the idealized Baseline condition does not reflect jobseekers' prior, imperfect information about employer diversity. The frictions leading to such imperfect information are important in understanding jobseekers' decisions (Autor, 2001; Choi, Choi, and Malik, 2021). In this Baseline Condition case, a jobseeker's utility function is:

$$U_{ij} = \bar{U}_{ij} + \varepsilon_{ij}$$

$$\text{where } \bar{U}_{ij} = \theta' + \alpha E[\ln(d_j) | \ln(d_{ij})] + \beta \ln(w_j)$$

$$\text{and } \ln(d_{ij}) = \ln(d_j) + \tau_{ij}.$$

We assume that jobseekers use Bayes' rule and consider the precision of their information, that is,  $E[\ln(d_j) | \ln(d_{ij})] = (1 - \gamma) \ln(\bar{d}_j) + \gamma \ln(d_{ij})$ . The Baseline utility function is then:

$$\bar{U}_{ij} = \theta'' + \alpha' \ln(d_j) + \beta \ln(w_j) + \gamma \tau_{ij}$$

$$\text{where } \theta'' = \theta - \alpha \cdot \gamma \overline{\ln(d_j)},$$

$$\text{and } \alpha' = \alpha \cdot \gamma.$$

$\gamma$  captures the precision of a jobseeker's (non-Diversity Score) information about employer diversity. Comparing  $\alpha$  and  $\alpha'$  allows us to test the hypothesis that jobseekers value diversity information, which is a joint hypothesis of  $\alpha \neq 0$  and  $\gamma \neq 1$ . The responsiveness of jobseekers to diversity information is captured in  $\alpha(1 - \gamma)$ . Additional diversity information matters only when jobseekers care about diversity and the information is new. Using the WTP formula, we define  $\frac{\alpha(1-\gamma)\bar{w}}{\beta\bar{D}} \Delta D$  as how much jobseekers *update* their WTP for a given firm's diversity once they become additionally informed with the Diversity Score.

## Appendix C. Examples of 10-K Human Capital Disclosures

These excerpts exemplify the variation in detail provided by firms in their 2020 10-K Human Capital Disclosures. Simpson Manufacturing is an engineering firm and building materials producer. UScellular is a mobile network operator.

### Example A: Simpson Manufacturing Co., Inc.’s HCD

#### Human Capital Resources

Successful execution of our strategy is dependent on attracting, developing and retaining key employees and members of our management team. The skills, experience and industry knowledge of our employees significantly benefit our operations and performance. We continuously evaluate, modify, and enhance our internal processes and technologies to increase employee engagement, productivity, and efficiency opportunities, skills, and resources they need to be successful.

At December 31, 2020, our employees, including those employed by consolidated subsidiaries, by region were approximately:

Asia Pacific	301
Europe	670
North America	2,591
	3,562

At December 31, 2020, we had the following global gender demographics:

	Women	Men
All employees	22%	78%
Individual Contributors	23%	77%
Middle Management	19%	81%
Senior Leadership	22%	78%

#### Inclusion & Diversity

We strive to have a diverse culture of employees representing different genders, ages, ethnicities and abilities. Our commitment to diversity and inclusion starts at the top with a highly skilled and diverse board. At December 31, 2020, our U.S. employees had the following race and ethnicity demographics:

	All U.S. Employees	Individual Contributors	Middle Management	Senior Leadership
American Indian or Alaska Native	1 %	1 %	— %	— %
Asian	10 %	11 %	7 %	8 %
Black or African American	11 %	11 %	2 %	4 %
Hispanic or Latino	20 %	22 %	8 %	— %
Native Hawaiian or Other Pacific Islander	— %	1 %	— %	— %
Two or More Races	1 %	1 %	2 %	— %
White	58 %	53 %	81 %	88 %

#### Talent Development

Talent development underpins our efforts to execute our strategy and continue to develop, manufacture and market innovative products and services. The opportunity to grow and develop skills and abilities, regardless of job role, division, or geographical location is critical to the success of the Company as a global organization and we continually invest in our employees’ career growth and provide employees access to a wide variety of learning and development resources, including a suite of online courses for developing both soft and technical skills. These resources are designed to encourage a growth mindset and continuous learning. Accordingly, we also have leadership development programs that provide employees with training, tools and experiences that are targeted to develop their full leadership potential.

### ***Pay Equity***

The Company's compensation philosophy is to attract, retain, motivate, and differentiate employees through its rewards programs. We believe people should be paid for what they do and how they do it, regardless of their gender, race, or other personal characteristics and are committed to internal pay equity. Our Board of Directors, through its Compensation and Leadership Development Committee, monitors the relationship between the pay received by our executive officers and non-managerial employees. We believe our compensation philosophy and strategy are strongly aligned with our corporate strategic priorities and our vision for stockholder value creation.

In addition to our financial compensation we offer a health and wellness package to our employees, which is designed to provide employees with options for their individual and/or family needs. In addition, in an effort to continue to attract, retain, and motivate our workforce, in the U.S., we offer remote and flexible work packages for positions which allow for remote work. We continue to engage our partners and benefits consultants to ensure our health and wellness package continues to meet the needs of our diverse workforce today and into the future.

### ***Workplace Safety and Health***

A vital part of our business is providing our workforce with a safe, healthy and sustainable working environment. Our Environmental, Health and Safety program focuses on implementing change through our employee observation feedback channels to recognize risk and continuously improve our processes, as well as conducting regular risk reviews and self-audits at our manufacturing facilities around the world to explore new opportunities to reduce potential employee exposure to occupational injuries.

Importantly during 2020, our experience and continuing focus on workplace safety have enabled us to preserve business continuity without sacrificing our commitment to keeping our colleagues and workplace visitors safe during the COVID-19 pandemic.

At the onset of the pandemic we established a Crisis Management Team (the "CMT") to monitor new COVID-19 related developments and support our operations to respond to the ever-changing landscape:

- The CMT consists of senior members of management including our CEO, CFO, President of Sales, General Counsel, and Heads of HR, Manufacturing, IT, Internal Communications, and Safety.
- Currently the CMT meets weekly and at onset of the pandemic met daily.
- The CMT provides updates to the Board of Directors on a regular basis.
- Our goals are to:
  - Support safe working environments in our operations,
  - Regularly communicate to inform and update employees, and
  - Provide oversight of training on COVID-19 safety practices.

The Company took immediate action at the onset of this crisis to enact rigorous safety protocols in all of our facilities by improving sanitation measures, implementing mandatory social distancing, temperature screening, use of facing coverings, reducing on-site staff through staggered shifts and schedules, remote working where possible, and restricting visitor access to our locations. These actions, in addition to generally being deemed an essential business, have enabled us to continue operating our business with minimal disruptions during the pandemic.

### ***Labor Relations***

As of December 31, 2020, approximately 14% of the Company's employees are represented by labor unions and are covered by collective bargaining agreements. We have two facility locations with collective bargaining agreements covering tool and die craftsmen, maintenance workers, and sheet-metal workers. In Stockton, California, two union contracts will expire in June 2023 and September 2023, respectively. Also, we have two contracts in San Bernardino County, California that will expire by the end of March 2021 and June 2022, respectively. Based on current information and subject to future events and circumstances, we believe that, even if new agreements are not reached before the existing labor union contracts expire, it is not expected to have a material adverse effect on the Company's ability to provide products to customers or on the Company's profitability. See "Item 1A — Risk Factors."

### ***Available Information***

The Company's website address is [www.simpsonmfg.com](http://www.simpsonmfg.com). We file or furnish annual, quarterly and current reports, proxy statements and other information with the United States Securities and Exchange Commission (the "SEC"). You may obtain a copy of any of these reports, free of charge, on the "Investor Relations" page our website, as soon as reasonably practicable after we file such material with, or furnish it to the SEC. Printed copies of any of these materials will also be provided free of charge on request.

## Example B: UScellular's HCD

### **Human Capital Resources**

UScellular had approximately 5,300 full-time and part-time employees as of December 31, 2020. Employee engagement and development is critical to the success of UScellular. UScellular periodically surveys its employees; those surveys have consistently shown that employees have strong engagement and high overall job satisfaction. UScellular offers education assistance, development assignments, and mentoring programs to assist in employee development. Additionally, UScellular sponsors various employee resource groups to build small, connected communities within its workforce and promote diverse, inclusive experiences. UScellular supports the communities it serves and encourages employees to volunteer and support local organizations and community groups.

## References

- AKERLOF, G. A., and R. E. KRANTON. 'Identity and the economics of organizations.' *Journal of Economic Perspectives* 19 (2005): 9–32.
- ASCH, S. E. *Effects of group pressure upon the modification and distortion of judgments. Documents of gestalt psychology.* University of California Press, 1961.
- ASHRAF, N., O. BANDIERA, E. D., and S. S. LEE. 'Losing prosociality in the quest for talent? Sorting, selection, and productivity in the delivery of public services.' *American Economic Review* 110 (2020): 1355–1394.
- AUTOR, D. H. 'Wiring the labor market.' *Journal of Economic Perspectives* 15 (2001): 25–40.
- AVERY, D. R., and P. F. MCKAY. 'Target practice: An organizational impression management approach to attracting minority and female job applicants.' *Personnel Psychology* 59 (2006): 157–187.
- BÉNABOU, R., and J. TIROLE. 'Identity, morals, and taboos: Beliefs as assets.' *Quarterly Journal of Economics* 126 (2011): 805–855.
- BERNILE, G., V. BHAGWAT, and S. YONKER. 'Board diversity, firm risk, and corporate policies.' *Journal of Financial Economics* 127 (2018): 588-612.
- BERTRAND, M., and E. DUFLO. *Field Experiments on Discrimination. Handbook of Economic Field Experiments*, 2017.
- CAMINITI, S. 2021. <https://www.cnbc.com/2021/04/30/diversity-equity-and-inclusion-are-important-to-workers-survey-shows.html>
- CARD, D., MAS, A., MORETTI E., and E. SAEZ. 'Inequality at work: The effect of peer salaries on job satisfaction.' *American Economic Review* 102 (2012): 2981–3003.
- CARTER, N. T., and S. HIGHHOUSE. *You will be known by the company you keep: Understanding the social-identity concerns of jobseekers. The Oxford handbook of recruitment*, 2014.
- CHEN, C. X., H. L. PESCH, and L. W. WANG. 'Selection benefits of below-market pay in social-mission organizations: Effects on individual performance and team cooperation.' *The Accounting Review* 95 (2020): 57-77.
- CHETTY, R., N. HENDREN, M. R. JONES, and S. R. PORTER. 'Race and economic opportunity in the United States: An intergenerational perspective.' *Quarterly Journal of Economics* 135 (2020): 711-783.

CHILTON, A. S., and A. S. GALIT. 'The limitations of supply chain disclosure regimes.' *Stanford Journal of International Law* 53 (2017): 1.

CHOI, B., J. H. CHOI, and S. MALIK. 'Not Just for Investors: The Role of Earnings Announcements in Guiding Job Seekers,' Working Paper, 2021. Available at [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3744498](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3744498).

CHRISTENSEN, H. B., L. HAIL, and C. LEUZ. 'Mandatory CSR and sustainability reporting: economic analysis and literature review.' *Review of Accounting Studies* 26 (2021): 1176–1248.

COATE, S., and G. C. LOURY. "Will affirmative-action policies eliminate negative stereotypes?" *American Economic Review* (1993): 1220-1240.

CORRITORE, M., A. GOLDBERG, and S. B. SRIVASTAVA. 'Duality in Diversity: How Intrapersonal and Interpersonal Cultural Heterogeneity Relate to Firm Performance.' *Administrative Science Quarterly* 65 (2020): 359–394.

DECHOW, P., W. GE, and C. SCHRAND. 'Understanding earnings quality: A review of the proxies, their determinants and their consequences.' *Journal of Accounting and Economics* 50 (2010): 344-401.

EGAN, M., G. MATVOS, and A. SERU. 2022. 'When Harry Fired Sally: The Double Standard in Punishing Misconduct.'

ELLISON, G., and P. A. PATHAK. "The Efficiency of Race-Neutral Alternatives to Race-Based Affirmative Action: Evidence from Chicago's Exam Schools." *American Economic Review* 111 (2021): 943-975.

EWENS, M., R. PETERS, and S. WANG. 2020. 'Measuring Intangible Capital with Market Prices.' <https://doi.org/10.31235/osf.io/kvp2f>

FIELD, L. C., M. E. SOUTHERN, and A. S. YORE. 'At the table but cannot break through the glass ceiling: Board leadership positions elude diverse directors.' *Journal of Financial Economics* 137 (2020): 787-814.

FLORY, J. A., A. LEIBBRANDT, and J.A. LIST. 'Do competitive workplaces deter female workers? A large-scale natural field experiment on job entry decisions.' *Review of Economic Studies* 82 (2015): 122–155.

FLOYD, E., and J. A. LIST. 'Using field experiments in accounting and finance.' *Journal of Accounting Research* 54 (2016): 437-475.

FRYER JR, R. G., and G. C. LOURY. 'Affirmative action and its mythology.' *Journal of Economic Perspectives* 19 (2005): 147-162.



GEE, L.K. 'The more you know: Information effects on job application rates in a large field experiment.' *Management Science* 65 (2019): 2077-2094.

GRIER, S. A., and A. M. BRUMBAUGH. 'Noticing cultural differences: Ad meanings created by target and non-target markets.' *Journal of Advertising* 28 (1999): 79-93.

HART, O., and L. ZINGALES. 'Companies should maximize shareholder welfare not market value.' *Journal of Law, Finance, and Accounting* 2 (2017): 247-274.

HARTZMARK, S. M., and A. B. SUSSMAN. 'Do Investors Value Sustainability? A Natural Experiment Examining Ranking and Fund Flows.' *Journal of Finance* 74 (2019): 2789–2837.

HE, H., D. NEUMARK, and Q. WENG. 'Do workers value flexible jobs? A field experiment.' *Journal of Labor Economics* 39 (2021): 709-738.

HEATH, D., D. MACCIOCCHI, R. MICHAELY, and M.C. RINGGENBERG. 2021. 'Does Socially Responsible Investing Change Firm Behavior?'

HEDBLOM, D., B. R. HICKMAN, and J. A. LIST. 'Toward an understanding of corporate social responsibility: Theory and field experimental evidence,' National Bureau of Economic Research, Working Paper, 2019. Available at <https://www.nber.org/papers/w26222>.

INGRAM, P., and X. ZOU. 'Business friendships.' *Research in organizational behavior* 28 (2008): 167-184.

JIN, G. Z., and P. LESLIE. 'The effect of information on product quality: Evidence from restaurant hygiene grade cards.' *The Quarterly Journal of Economics* 118 (2003): 409-451.

JOHNSON, M. S. 'Regulation by shaming: Deterrence effects of publicizing violations of workplace safety and health laws.' *American Economic Review* 110 (2020): 1866-1904.

KIM, D., and L. T. STARKS. 'Gender diversity on corporate boards: Do women contribute unique skills?' *American Economic Review* 106 (2016): 267-271.

KLINE, P., E. K. ROSE, and C. R. WALTERS. 'Systemic Discrimination among Large U.S. Employers,' Becker Friedman Institute Working Paper Series, 2021. Available at <https://www.nber.org/papers/w29053>.

KUEHNER-HERBERT, K. 2018. <https://www.benefitspro.com/2018/07/31/whats-most-important-to-todays-jobseekerjobseekers/>

LARCKER, D. F., and E. M. WATTs. 'Where's the greenium?' *Journal of Accounting and Economics* 69 (2020): 101312.

LAVIERS, L., and J. SANDVIK. 2021. 'The Effect of Workplace Gender Diversity Disclosures on Job Search Decisions'

LEE, A. H. 2020. Diversity Matters, Disclosure Works, and the SEC Can Do More: Remarks at the Council of Institutional Investors Fall 2020 Conference. Retrieved from <https://www.sec.gov/news/speech/lee-cii-2020-conference-20200922>

LEE, S. 2021. <https://www.cultureamp.com/blog/benefits-diversity-in-workplace>

LEIBBRANDT, A., and LIST, J. A. ‘Do women avoid salary negotiations? Evidence from a large-scale natural field experiment.’ *Management Science* 61 (2015): 2016–2024.

LORENZO, R., N. VOIGT, M. TSUSAKA, and M. KRENTZ. 2018. <https://www.bcg.com/en-us/publications/2018/how-diverse-leadership-teams-boost-innovation>

MATSUMURA, E. M., R. PRAKASH, and S. C. VERA-MUÑOZ. ‘Firm-value effects of carbon emissions and carbon disclosures.’ *Accounting Review* 89 (2014): 695–724.

MCCALL, J. J. ‘Economics of information and job search.’ *The Quarterly Journal of Economics* 84 (1970): 113-126.

PAGE, S. E. *The Difference: How the Power of Diversity Creates Better Groups, Firms, Schools, and Societies*. Princeton, NJ: Princeton University Press, 2007.

RAUTER, T. ‘The effect of mandatory extraction payment disclosures on corporate payment and investment policies abroad.’ *Journal of Accounting Research* 58 (2020): 1075-1116.

ROY, A. D. ‘Some Thoughts on the Distribution of Earnings.’ *Oxford economic papers* 3 (1951): 135–146.

ROBERSON, Q. M. ‘Diversity in the Workplace: A Review, Synthesis, and Future Research Agenda.’ *Annual Review of Organizational Psychology and Organizational Behavior* 6 (2019): 69–88.

ROBERSON, Q. M., and H. J. PARK. ‘Examining the link between diversity and firm performance: The effects of diversity reputation and leader racial diversity.’ *Group & Organization Management* 32 (2007): 548-568.

SAMEK, A., ‘A university-wide field experiment on gender differences in job entry decisions,’ Unpublished working paper, The University of Wisconsin-Madison, 2015. Available at [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2579257](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2579257).

SHAH, P. R., and N. R. DAVIS. ‘Comparing three methods of measuring race/ethnicity.’ *Journal of Race, Ethnicity, and Politics* 2 (2017): 124-139.

SOMMERS, S. R. ‘On racial diversity and group decision making: identifying multiple effects of racial composition on jury deliberations.’ *Journal of Personality and Social Psychology* 90 (2006): 597.

TAYLOR, M. 2021.

<https://www.institutionalassetmanager.co.uk/2021/03/27/297852/institutional-investors-increase-focus-ethnic-and-gender-diversity-wake-2020>

TILCSIK, A. 'Pride and prejudice: Employment discrimination against openly gay men in the United States.' *American Journal of Sociology* 117 (2011): 215–224.

VASEGHI, M., P. MARCOGLIESE, and E. BIEBER. 2020.  
<https://corpgov.law.harvard.edu/2020/10/31/incorporating-human-capital-management-disclosures-into-a-companys-annual-report/>

WILLIAMS, K. Y., and C. A. O'REILLY III. 'Demography and Diversity in Organizations: A Review of 40 Years of Research.' *Research in Organizational Behavior* 20 (1998): 77-140.

WILLIAMSON, I. O., H.S. SLAY, D. L. SHAPIRO, and S. L. SHIVERS-BLACKWELL. 'The effect of explanations on prospective applicants reactions to firm diversity practices.' *Human Resource Management* 47 (2008): 311-330.

WYATT, S., and B. YERRE. 2020. PWC Report: New human capital disclosure rules: Getting your company ready.  
[https://viewpoint.pwc.com/dt/us/en/pwc/in\\_the\\_loop/in\\_the\\_loop\\_US/New-human-capital-disclosure-rules-Getting-your-company-ready.html](https://viewpoint.pwc.com/dt/us/en/pwc/in_the_loop/in_the_loop_US/New-human-capital-disclosure-rules-Getting-your-company-ready.html)

**Table 1. Description of Treatment Conditions**

This table shows the potential configurations of treatments for a simplified version of the field experiment described in Section III. This example includes six users and three firms, with each user receiving one email about two firms. For example, Users 1, 3, and 5 were randomly assigned to the “Baseline” Condition, where they received emails from Zippia containing job postings in the standard format. User 1 would receive an email with job listings for Firms A and B, whereas Users 3 and 5 would receive job listings from Firms A and C, and Firms B and C, respectively. Users 2, 4, and 6 were randomly assigned to the Diversity Condition, where they received emails from Zippia containing job postings that also included a Diversity Score metric for each firm associated with a given job listing. In the actual field experiment, there were 178,862 users and 107,810 firms.

User	Email sent to user that contains the below:			We then observe the following:	
	Firm A	Firm B	Firm C		
1	Baseline post	Baseline post	Not shown	Did the user open the email?	If email opened, which firms' posts were clicked
2	Diversity post	Diversity post	Not Shown		
3	Baseline post	Not shown	Baseline post		
4	Diversity post	Not shown	Diversity post		
5	Not shown	Baseline post	Baseline post		
6	Not shown	Diversity post	Diversity post		

**Table 2. Descriptive Statistics**

This table shows the descriptive statistics for users of the Zippia platform who took part in the field experiment. Panel A describes users’ education, desired job level, and preferred geographic region for employment. Panel B describes sample users’ engagement with the platform. Panel C describes characteristics of all firms in our sample, and Panel D describes characteristics of the firms in our sample that were clicked on by jobseekers in our experiment. The “Other” specification for Education contains 422 instances in which individuals have no degree, with the remaining observations providing no information. The “Other” specification for Region contains 166 observations in Puerto Rico, with the remaining observations providing no information. Variable definitions are provided in Appendix A.

*Panel A: Sample Users*

	Number	%
<b><u>Education</u></b>		
High School	8,590	4.80
Associate Degree	5,189	2.90
Bachelor’s Degree	19,517	10.91
Master’s Degree	7,814	4.37
Doctorate	1,471	0.82
Other	136,281	76.20
<b><u>Preferred Level</u></b>		
Entry	27,333	15.28
Junior	10,558	5.90
Mid	18,001	10.06
Senior	9,196	5.14
Management	9,117	5.10
Executive	4,869	2.72
No information	99,788	55.79
<b><u>Region</u></b>		
US South	36,711	20.52
US West	20,766	11.61
US Northeast	14,157	7.92
US Midwest	15,299	8.55
Other	91,929	51.39

*Panel B: User Engagement*

	Num. Users	Num. Interactions	Mean	Std. Dev.	Q1	Median	Q3
Emails Received	178,862	3,522,253	19.693	19.411	0	12	37
Emails Opened	178,862	1,558,456	8.713	18.632	0	1	9
Jobs Clicked	178,862	128,169	0.717	5.655	0	0	0

*Panel C: Characteristics of All Firms in the Sample*

		Number of Employees in the Firm						
	N	Missing	< 50	100	500	1,000	10,000	>10,000
Size	107,810	8.00%	39.49%	7.63%	18.86%	10.77%	13.21%	2.03%

	N	Mean	Std. Dev.	Q1	Median	Q3
Diversity Score	66,694	7.650	1.541	6.667	7.778	8.889

*Panel D: Characteristics of Firms in the Sample Clicked on by Users*

		Number of Employees in the Firm						
	N	Missing	< 50	100	500	1,000	10,000	>10,000
Size	7,871	2.12%	8.12%	2.44%	12.86%	17.28%	42.1%	15.08%

	N	Mean	Std. Dev.	Q1	Median	Q3
Diversity Score	7,304	8.702	1.454	8.268	9.251	9.634

**Table 3: Covariate Balance across Treatment Conditions**

This table assesses the effectiveness of randomization of users across two treatment conditions in our field experiment, as described in Section III. Panel A presents differences based on user characteristics. Panel B presents differences based on user engagement. Variable definitions are provided in Appendix A. All reported p-values in this table are two-tailed.

*Panel A: Covariate Balance across Treatment Conditions*

	<b>Treatment Condition</b>		t-statistic	p-value
	Baseline	Diversity		
<b><u>Education</u></b>				
High School	0.202	0.197	1.218	0.223
Associate	0.120	0.121	-0.226	0.821
Bachelor's	0.453	0.455	-0.345	0.730
Master's	0.180	0.183	-0.668	0.504
Doctorate	0.034	0.034	0.268	0.789
Other	0.761	0.762	-0.481	0.630
<b><u>Preferred Level</u></b>				
Entry	0.343	0.348	-1.431	0.152
Junior	0.134	0.133	0.223	0.824
Mid	0.227	0.228	-0.381	0.704
Senior	0.117	0.116	0.374	0.708
Management	0.117	0.113	1.613	0.107
Executive	0.062	0.061	0.538	0.590
No Information	0.557	0.559	-0.629	0.530
<b><u>Region</u></b>				
US South	0.419	0.424	-1.596	0.111
US West	0.239	0.238	0.601	0.548
US Northeast	0.162	0.163	-0.312	0.755
US Midwest	0.178	0.174	1.633	0.103
Other	0.513	0.515	-0.881	0.378

*Panel B: User Engagement across Treatment Conditions*

	<b>Treatment Condition</b>		t-statistic	p-value
	Baseline	Diversity		
<b><u>Engagement</u></b>				
Emails Received	19.632	19.753	1.324	0.186
Emails Opened	8.700	8.726	0.294	0.769
Jobs Clicked	0.713	0.721	0.299	0.765

**Table 4. Diversity Information and Job Search**

This table describes the sensitivity of jobseekers' interest in job postings (measured by click-through-rates) to diversity metrics of candidate employers. Specifically, it describes how this sensitivity changes when the diversity metric of the employer is made observable to jobseekers in our experiment. The Baseline Condition observations are those in which the diversity metric is not included in the emailed job listings. The Diversity Condition observations are those in which the employer's diversity metric is included in the emailed job listings. Panel A presents the results for the full sample. Panel B presents the results for the sub-sample of observations representing users' first email interaction with Zippia. Appendix A provides variable definitions. All p-values in this table are one-tailed, given our directional predictions.

*Panel A: Full Sample*

	<b>Treatment Condition</b>		t-statistic	p-value
	Baseline	Diversity		
Diversity Score	9.252	9.277	3.169	0.001

*Panel B: Early Interaction*

	<b>Treatment Condition</b>		t-statistic	p-value
	Baseline	Diversity		
Diversity Score	9.238	9.264	1.906	0.028



**Table 5. Diversity Information and Willingness-to-Pay for Diversity**

This table provides estimates of jobseekers' willingness-to-pay for diversity. The sample consists of all jobs that jobseekers may probabilistically click on the Zippia platform. *Log Diversity Score* is the natural log of the Diversity Score associated with a job (regardless of whether the participant is assigned to the treatment condition that observes this). *Log Median Salary* is the natural log of the median salary associated with a job *j* (observed by all participants). *Treatment* is an indicator that takes the value of one if a participant is assigned to the Diversity Condition, and zero otherwise. Appendix A provides variable definitions. \*\*\*, \*\*, and \* indicate significance at p-values (two-tailed) of less than 0.01, 0.05, and 0.10, respectively.

	<b>Job Post Click</b>
<i>Log Diversity Score</i>	0.730*** (0.069)
<i>Log Diversity Score * Treatment</i>	0.213** (0.102)
<i>Log Median Salary</i>	0.128*** (0.020)
<i>Log Median Salary * Treatment</i>	-0.001 (0.029)
<i>Treatment</i>	-0.561 (0.381)
<i>Intercept</i>	-4.029*** (0.265)
N	85,632
Pseudo R <sup>2</sup>	0.007

**Table 6. Job-level Preference and Regional Heterogeneity**

This table describes heterogeneity in the sensitivity of jobseekers’ interest in job postings (measured by click-through rates) to diversity metrics of potential employers. Panel A presents heterogeneity based on the jobseekers’ desired job level. Panel B illustrates the ANOVA output for the effects of preferred job level, treatment condition, and the interaction of job level and treatment on the average Diversity Score associated with job postings that users clicked on. Panel C presents heterogeneity based on exposure to Black Lives Matter protests. Jobseekers in states with pro-BLM events per capita greater than the median are classified as “Above Median Pro-BLM Events per Capita”. The Baseline (Diversity) Condition observations are those where the diversity metric is not (is) highlighted. Appendix A provides variable definitions. P-values in this table are one-tailed equivalents when they relate to directional predictions (indicated with †), and two-tailed otherwise.

*Panel A: Descriptive Statistics – Desired Job Level*

<b><u>Diversity Score</u></b>	Entry	Junior	Mid	Senior	MGMT	Executive	All Groups
Baseline Condition	9.172	9.199	9.291	9.294	9.318	9.315	9.265
Diversity Condition	9.241	9.301	9.258	9.322	9.312	9.315	9.288
Both Conditions	9.205	9.251	9.275	9.309	9.315	9.315	9.276

*Panel B: ANOVA Tests – Desired Job Level*

	Sum of Squares	df	Mean Square	F-value	p-value
Treatment	8.742	1	8.742	6.387	0.006†
Level	107.579	5	21.516	15.721	0.000
Treatment x Level	34.607	5	6.921	5.057	0.000
Residuals	90,298.564	65,978	1.369	-	-

*Panel C: Descriptive Statistics – BLM Events*

<b><u>Diversity Score</u></b>	Above Median Pro-BLM Events per Capita	Below Median Pro-BLM Events per Capita	All Groups
Baseline Condition	9.242	9.267	9.260
Diversity Condition	9.312	9.272	9.283
Both Conditions	9.278	9.270	9.272

*Panel D: ANOVA – ANOVA Tests - BLM*

	Sum of Squares	df	Mean Square	F-value	p-value
Treatment	8.784	1	8.784	6.351	0.006†
Pro-BLM	0.881	1	0.881	0.637	0.425
Treatment x Pro-BLM	14.653	1	14.653	10.594	0.001
Residuals	93,886.850	67,883	1.383	-	-

**Table 7. Survey Results Regarding the Usefulness of Diversity Information**

This table presents the results from our follow-up survey on the usefulness of diversity information. Panel A presents the count of participant responses (and % of the total sample) in response to our survey question about how useful Diversity Score information would be to them (from 1=Not at all Useful to 6 = Very Useful). Panels B and C presents the heterogeneous usefulness of Diversity Score information across gender and ethnicity, respectively. All reported p-values in this table are two-tailed.

*Panel A: How Useful Would Diversity Score Information Be to You?*

Sample	Count (and %) of Responses						Total
	1 Not at all Useful	2	3	4	5	6 Very Useful	
All	158	97	151	258	318	483	1,465
Respondents	10.78%	6.62%	10.31%	17.61%	21.71%	32.97%	100.00%

*Panel B: Heterogeneous Usefulness of Diversity Information across Gender*

	<b>Gender</b>		t-statistic	p-value
	Female	Male		
Usefulness	4.455	4.118	3.736	<0.001

*Panel C: Heterogeneous Usefulness of Diversity Information across Ethnicity*

	<b>Ethnicity</b>		t-statistic	p-value
	PoC	White		
Usefulness	4.651	3.934	8.369	<0.001

**Table 8. Survey Results Regarding Usefulness Mechanisms**

This table presents the results from our follow-up survey on the reasons why jobseekers find diversity information useful. Panel A presents participants’ rationales as to why Diversity Score information would be useful to them, and includes only the 1,059 participants that responded above the midpoint of the response scale for the question, “To what extent do you think you might find the information on the Diversity Score useful in a job search?” (1 = Not at all Useful, 6 = Very Useful). Panel B of this table presents participants’ rationales as to why diversity score information would not be useful to them, and includes only the 406 participants that responded below the midpoint on the aforementioned question about the usefulness of Diversity Score information. Participants were able to select more than one rationale in their response.

*Panel A: Why Is Diversity Score Information Useful to You?*

Option	Proportion that Chose
Diversity information is useful to me because I believe that it helps me assess the overall, long-term success prospects of an employer.	37.68% (N=399)
Diversity information is useful to me because I believe that it helps me understand the likelihood that I might be hired and/or promoted by an employer.	39.57% (N=419)
Diversity information is useful to me because I believe that it tells me about how much I might enjoy the work environment of an employer.	45.14% (N=478)
Diversity information is useful to me because I think diversity is (or is not) an important social issue, and I would like to know whether an employer shares my values.	50.14% (N=531)
Other	3.68% (N=39)

*Panel B: Why Is Diversity Score Information Not Useful to You?*

Option	Proportion that Chose
Diversity information is not all that useful to me because I believe that the diversity of an employer’s workforce is not that important generally.	18.23% (N=74)
Diversity information is not all that important to me because I prefer employers not to focus on diversity.	23.15% (N=94)
Diversity information is important to me, but I would find another way to obtain it and would not need to see a Diversity Score.	29.06% (N=118)
Diversity information is important to me, but I already have a good sense of the diversity of employers within my profession and would not need to see a Diversity Score.	32.27% (N=131)
Other	11.58% (N=47)

**Table 9. Descriptive Statistics of Human Capital Disclosure Analysis Sample**

These tables describe the data used to examine firms' choices to disclose diversity metrics in their 10-Ks. The full sample consists of 3,235 firms that had their 2020 10-Ks available for download from the SEC by the end of March 2021. N, the number of observations, is sometimes smaller than this because certain variables are sometimes missing (for example, when we were not able to merge the 10-K data with the Zippia data). Appendix A provides variable definitions.

	N	Mean	SD	Q1	Median	Q3
Diversity Disclosure	3,235	0.17	0.38	0	0	0
Diversity Score	2,011	8.75	1.31	8.18	9.30	9.66
Experiment Delta	3,235	0	0.07	0.01	0.02	0.02
BLM Protests	3,060	2.87	1.11	2.14	2.77	3.23
Log MV	3,188	6.93	2.14	5.36	6.92	8.39
ROA	3,234	-4.86	63.37	-6.61	1.82	6.19

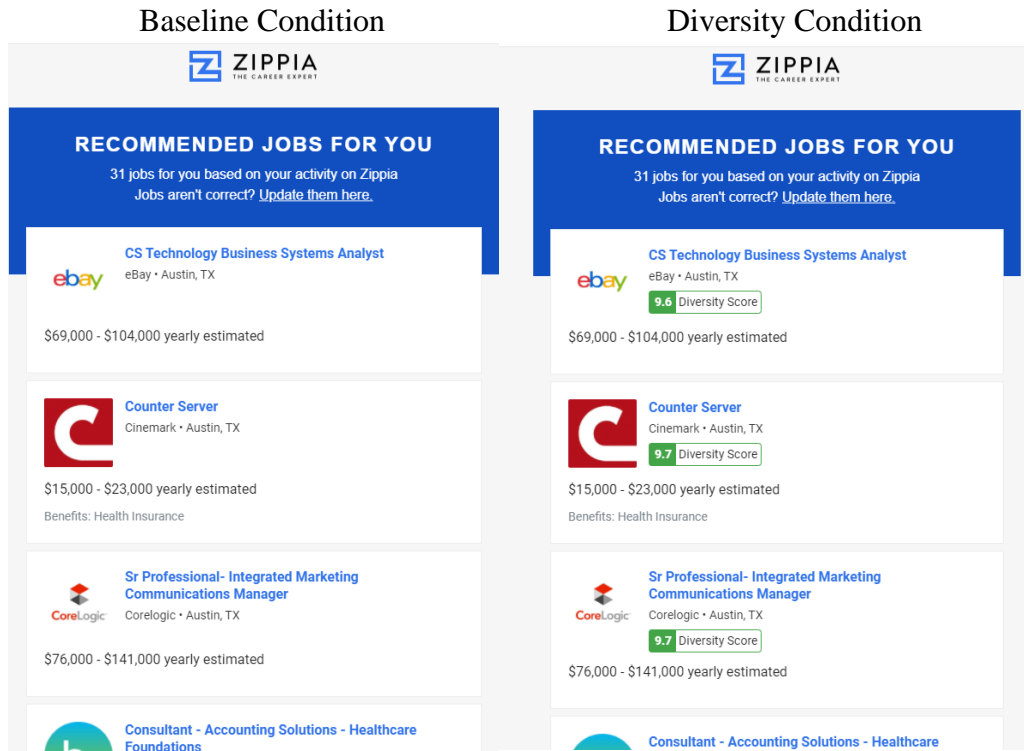
**Table 10. Determinants of Diversity Metric Human Capital Disclosure**

This table examines the determinants of whether a firm discloses detailed diversity information in its 2020 10-K. *Diversity Disclosure* is an indicator variable that takes the value of one when a firm discloses the proportion of its workforce that comprises women (firm-wide) or People of Color (in the US), and zero otherwise. *Diversity Score* is the firm's Diversity Score as computed by Zippia. *Experiment Delta* is our field experiment treatment effect measured at the 2-digit SIC level. The sample consists of firms that had their 2020 10-Ks available for download from the SEC by March 2021. Appendix A provides variable definitions. \*\*\*, \*\*, and \* indicate significance at p-values (two-tailed) of less than 0.01, 0.05, and 0.10, respectively.

<b>DV = Diversity Disclosure</b>	(1)	(2)	(3)	(4)	(5)	(6)
<i>Diversity Score</i>	0.040*** (0.007)		0.040*** (0.007)	0.019*** (0.007)	0.019** (0.008)	0.021*** (0.008)
<i>Experiment Delta</i>		0.106 (0.091)	0.213* (0.110)	0.238** (0.109)	0.237** (0.111)	
<i>BLM Protests</i>				-0.002 (0.008)		
<i>Log MV</i>				0.035*** (0.005)	0.035*** (0.005)	0.037*** (0.005)
<i>ROA</i>				-0.0003 (0.0004)	-0.0002 (0.0004)	-0.0003 (0.0004)
<i>Constant</i>	-0.154*** (0.059)	0.171*** (0.007)	-0.158*** (0.059)	-0.230*** (0.065)		
State Fixed Effects	No	No	No	No	Yes	Yes
SIC-2 Fixed Effects	No	No	No	No	No	Yes
N	2,011	3,235	2,011	1,947	1,947	1,947
R <sup>2</sup>	0.017	0.0004	0.019	0.049	0.072	0.129

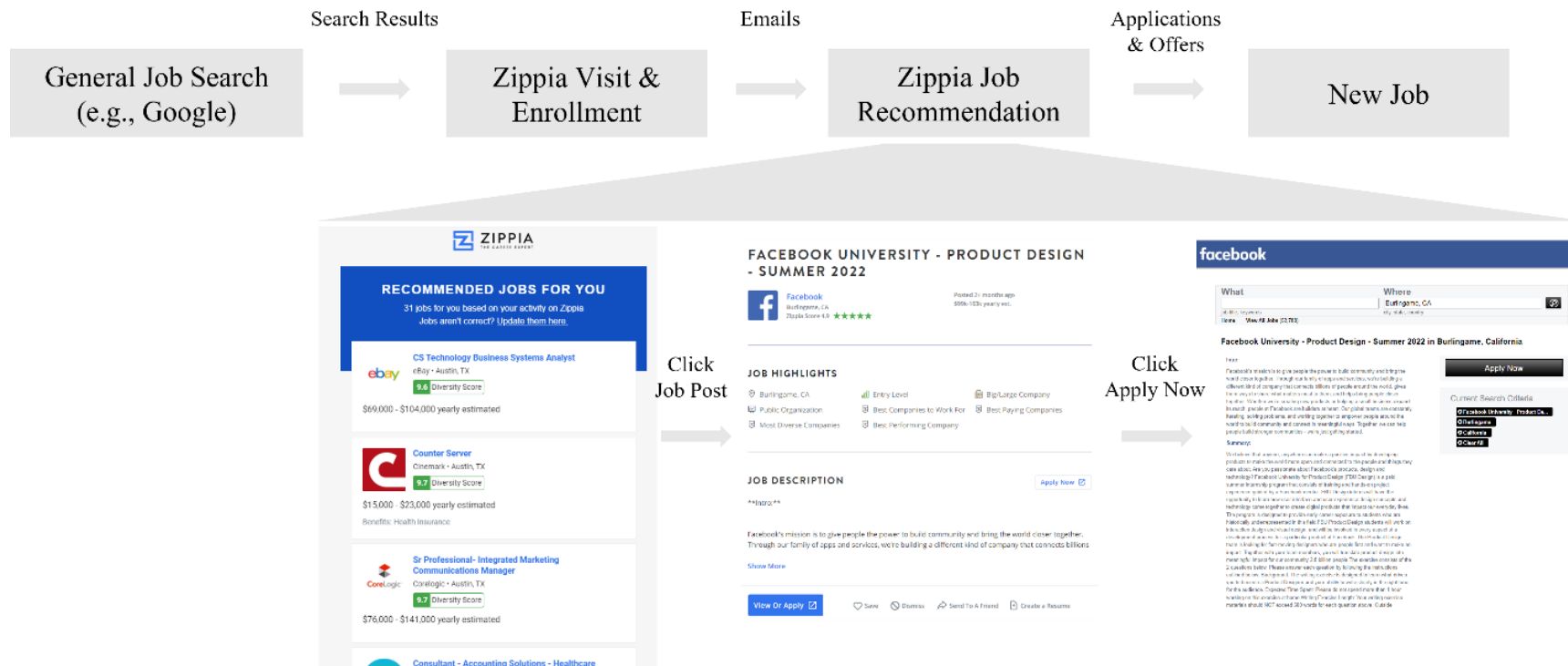
### Figure 1. Experimental Design

This figure depicts the experimental design of different emails sent to users.



**Figure 2. Zippia's User Interaction**

This figure depicts the typical flow of the platform's interaction with users.





### Figure 3. User Location

This figure depicts the number of Zippia users, by state, who are distributed across the US.

