
From Information Restrictions to Employer Accountability: Reframing Employment Discrimination

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Information restrictions have received significant traction as a policy and legislative tool to fight employment discrimination. These policies forbid employers from requesting potentially prejudicial information like criminal records, salary history, or credit scores until the final stage of hiring. The assumption is that this information would disproportionately remove minority and female candidates from contention in the hiring process.

Yet, studies in the wake of these policy changes have suggested that racial and gender disparities remain under these conditions. Drawing upon social science literature, I suggest that restricting limited pieces of information about applicants, as commonly touted, may be an overoptimistic solution for mitigating bias. Employment restrictions rely on the assumption that people will not think about what is not in front of them, but information restrictions may inadvertently make the forbidden information more salient. Instead, employers may seek out information because it is withheld from them.

To test how an information restriction impacts employer interest, this Article leverages two original empirical studies with over six hundred

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respondents, who serve as employers in an economically realistic scenario. I find exploratory evidence that restrictions on information about candidates' protected characteristics results in respondents' increased interest in those protected characteristics.

But simply providing more information to employers does not rectify the bases on which employers continue to discriminate. Rather, I argue that regulators, employers, and courts ought to define the distributional consequences at stake, the criteria they rely on, and the rules of disparate impact in a data-driven world.

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INTRODUCTION

In 2003, sociologist Devah Pager hired two pairs of college students as research assistants.¹ Their job: to apply to the same jobs and to show up to whatever interviews they could obtain.² The catch? They would be acting as the same person. Using similar resumes carefully designed by Pager, the pairs (with one white and one Black college student in each) would differ only by race — and criminal record.³

A criminal record quickly “close[d] doors” in most cases.⁴ Employers homed in on applicants’ criminal records in the course of deciding who to hire.⁵ But Black applicants faced an even greater penalty for a record — such that “even whites with criminal records received more favorable treatment . . . than [B]lacks without criminal records.”⁶

As a result of this groundbreaking study, alongside other work documenting racial disparities in mass incarceration,⁷ the “Ban the Box”

¹ See Devah Pager, *The Mark of a Criminal Record*, 108 AM. J. SOCIO. 937, 947 (2003).

² See *id.*

³ See *id.*

⁴ *Id.* at 956.

⁵ See *id.* at 960.

⁶ *Id.* at 958 (emphasis omitted).

⁷ See generally MICHELLE ALEXANDER, *THE NEW JIM CROW: MASS INCARCERATION IN THE AGE OF COLORBLINDNESS* (rev. ed. 2020) (arguing that mass incarceration operates as a tool of racial control); DEVAH PAGER, *MARKED: RACE, CRIME, AND FINDING WORK IN AN*

movement emerged. Ban the Box advocates called on employers to stop requesting information about applicants' criminal histories, ideally at least until an offer could be made.⁸ The "box" in question was the area on a job application in which applicants would mark whether they had a criminal record.⁹ The underlying logic was that criminal history might serve as an indirect proxy for race, due to pervasive racial disparities in policing and incarceration,¹⁰ so an employer eliminating candidates with an arrest history might reify racial disparities in hiring. The Ban the Box movement was able to elicit commitments from several large companies to change their hiring policies in this manner.¹¹ Concurrent with those commitments, thirty-seven states have enacted Ban the Box laws to date.¹²

Yet, recent field experiments and large-scale data analyses examining the effect of Ban the Box legislation found that employers subject to the legislation — who were prohibited from inquiring about an applicant's criminal background — offered callbacks to white applicants more

ERA OF MASS INCARCERATION (2007) (discussing how criminal histories yield significant stigma with disproportionate racial effect and expanding on the methods, arguments, and implications of Pager's article, *supra* note 1); Dorothy E. Roberts, *The Social and Moral Cost of Mass Incarceration in African American Communities*, 56 STAN. L. REV. 1271 (2004) (documenting the impact of mass incarceration on African American communities).

⁸ See Christina O'Connell, *Ban the Box: A Call to the Federal Government to Recognize a New Form of Employment Discrimination*, 83 FORDHAM L. REV. 2801, 2832 (2015); Jessica S. Henry & James B. Jacobs, *Ban the Box to Promote Ex-Offender Employment*, 6 CRIMINOLOGY & PUB. POL'Y 755, 758-59 (2007); see, e.g., Beth Avery & Han Lu, *Ban the Box: U.S. Cities, Counties, and States Adopt Fair Hiring Policies*, NAT'L EMP. L. PROJECT (Oct. 1, 2021) <https://www.nelp.org/publication/ban-the-box-fair-chance-hiring-state-and-local-guide/> [<https://perma.cc/577M-XBL7>] (resource kit with overviews of Ban the Box laws across the country).

⁹ See O'Connell, *supra* note 8, at 2819-25; Avery & Lu, *supra* note 8.

¹⁰ See O'Connell, *supra* note 8, at 2809.

¹¹ See Michael Hopkins, *Chapter 789: Banning the Box: The Solution to High Ex-Offender Unemployment?*, 49 U. PAC. L. REV. 513, 519 (2018) (citing OFF. PRESS SEC'Y, FACT SHEET: WHITE HOUSE LAUNCHES THE FAIR CHANCE BUSINESS PLEDGE (2016)).

¹² See Avery & Lu, *supra* note 8.

frequently¹³ and were less likely to employ young Black men,¹⁴ compared to before the implementation of Ban the Box. That is, white applicants might be more likely to advance to the next stage of the hiring process.¹⁵ The authors of these studies theorized that employers might assume, absent an applicant's criminal history, that Black applicants are more likely to have been convicted of a crime relative to white applicants.¹⁶ That is, employers made assumptions in the face of missing information about job candidates, grounded in stereotype.

These counterintuitive results raise questions not just about what information employers consider, but how they interpret what they don't have. This Article seeks to unpack this puzzle. There are many ways in which policymakers seek to prevent discrimination, from implicit bias trainings for employers¹⁷ to interventions that seek to recruit diverse candidates¹⁸ or provide early career role models.¹⁹ Recent developments

¹³ See Amanda Agan & Sonja Starr, *Ban the Box, Criminal Records, and Racial Discrimination: A Field Experiment*, 133 Q.J. ECON. 191, 222-23 (2018).

¹⁴ See Jennifer L. Doleac & Benjamin Hansen, *The Unintended Consequences of "Ban the Box": Statistical Discrimination and Employment Outcomes When Criminal Histories Are Hidden*, 38 J. LAB. ECON. 321, 324-26 (2020).

¹⁵ See Agan & Starr, *supra* note 13, at 195.

¹⁶ See Agan & Starr, *supra* note 13, at 196; Doleac & Hansen, *supra* note 13, at 361.

¹⁷ See, e.g., Iyoma N. Onyeador, Sa-kiera T.J. Hudson & Neil A. Lewis, Jr., *Moving Beyond Implicit Bias Training: Policy Insights for Increasing Organizational Diversity*, 8 POL'Y. INSIGHTS BEHAV. & BRAIN SCIS. 19, 20 (2020) (reviewing the empirical effects of implicit bias trainings and proposing new interventions).

¹⁸ See, e.g., Lisa M. Fairfax, *Board Diversity Revisited: New Rationale, Same Old Story?*, 89 N.C. L. REV. 855, 860-66 (2011) (analyzing policymakers' interests in board diversity); Daniel A. Newman & Julie S. Lyon, *Recruitment Efforts to Reduce Adverse Impact: Targeted Recruiting for Personality, Cognitive Ability, and Diversity*, 94 J. APPLIED PSYCH. 298, 299-301 (2009) (empirically testing whether certain recruitment practices increase candidate diversity).

¹⁹ See, e.g., Nilanjana Dasgupta, *Ingroup Experts and Peers as Social Vaccines Who Inoculate the Self-Concept: The Stereotype Inoculation Model*, 22 PSYCH. INQUIRY 231, 235-37 (2011) (providing a theoretical account of how role models increase social belonging in organizations); Dana Kabat-Farr & Lilia M. Cortina, *Sex-Based Harassment in Employment: New Insights into Gender and Context*, 38 LAW & HUM. BEHAV. 58, 67-69 (2014) (showing that gender underrepresentation in a career domain appears to be correlated with gender harassment).

in hiring processes²⁰ and legislation²¹ often focus on restricting applicant information in support of candidate diversity.

But in the absence of this information, employers may engage in unnecessary speculation, turning to more stereotypical ways of thinking about candidates. Although information restrictions assume that employers and other decision-makers will not rely on information that is unavailable, it may actually increase the desire for such information. Theories from psychology might explain the counterintuitive results above. In promising equal consideration of applicants but not following through, employers continue to perpetuate systemic disparities.

To underscore the empirical importance of this puzzle, I offer two studies as a proof of concept of how additional information might reduce discriminatory behavior. These surveys, which include over six hundred people, ask respondents to make a series of hiring decisions. Importantly, the respondents in these surveys have previous experience hiring people in the United States, and the survey itself uses a novel method — providing a real-life hiring budget and simulation — to increase the probability that respondents will answer truthfully.

In the first survey, I show how employers might behave under conditions of information restrictions. Consistent with social science theories, I find that employers explicitly seek out information about age, race, and gender — and are willing to pay for it — believing it may contain useful information about an individual's performance and in hopes of finding “the most productive worker.”

I then use a subsequent survey to shift employers' attentions away from focusing on restricted information. I find that introducing the opportunity for employers to purchase performance-based characteristics about candidates leads employers to *not seek out*

²⁰ See, e.g., Olof Åslund & Oskar Nordström Skans, *Do Anonymous Job Application Procedures Level the Playing Field?*, 65 INDUS. & LAB. RELS. REV. 82, 85-86 (2012) (policy pilot that anonymized job applications); Lucas Nathe & Ryan Sandler, *Paid and Low-Balance Medical Collections on Consumer Credit Reports*, CONSUMER FIN. PROT. BUREAU (Jul. 27, 2022), <https://www.consumerfinance.gov/data-research/research-reports/paid-and-low-balance-medical-collections-on-consumer-credit-reports/> [https://perma.cc/J6S5-3D2D] (removing medical debt from credit reports).

²¹ See, e.g., Avery & Lu, *supra* note 8 (Ban the Box legislation); *Salary History Bans*, HR DIVE, <https://www.hrdiver.com/news/salary-history-ban-states-list/516662/> (last updated Aug. 2, 2023) [https://perma.cc/7UCK-5X7H] (salary history bans).

information about race, gender, and age — as opposed to simply not relying on them.

Importantly, I argue that combatting employment discrimination is not simply a matter of providing more information about candidates to employers. In contrast to the current policy focus on restricting information for employers, a renewed approach that emphasizes job performance *and the policy goals* of diversity interventions might help shift employers towards relevant criteria and clarify antidiscrimination enforcement.

And by accounting for the fact that providing more information might shift not just employer reliance on demographic characteristics but employer *interest* in characteristics themselves, these surveys provide not only a new, simple methodology for measuring discrimination, but also exploratory evidence that emphasizes adding performance information, rather than restricting demographic information, may be an important strategy.

Accordingly, the Article proceeds in three parts. In Part I, I provide a brief overview of the legal landscape that employers currently face when hiring employees and subsequent guidance resulting from this jurisprudence. I then look to the social science literature concerning employment discrimination and suggest that guidance that calls for restricting applicant information has relied on a flawed reading of this literature. Specifically, I look to two psychological findings that might suggest how restrictions could backfire.

Part II then introduces two studies to explore the extent to which “employers” seek out the information policymakers wish to restrict, followed by a potential intervention: introducing other information. Lastly, Parts III and IV examine the legal and policy implications of these studies. In part III, I explore and ultimately challenge the concept that more information will simply displace stereotypical assumptions about candidates. Instead, I argue in Part IV that any policy that seeks to enable diversity in hiring should be carefully considered before and during implementation for its unintended consequences. And in light of the many empirical findings about discrimination — and confusion about what discrimination is — a focus on examining outcomes and unintended consequences of antidiscrimination policy is necessary.

I. THE PROMISE OF INFORMATION RESTRICTIONS

A. *The Current Landscape*

1. Existing Antidiscrimination Legislation

Title VII of the Civil Rights Act, along with various state laws,²² governs most hiring practices in prohibiting discrimination based on race, color, religion, sex, and national origin.²³ Other federal legislation²⁴ prohibits discrimination on the basis of age, disability, or pregnancy status. Together, these demographic factors are frequently termed “protected characteristics.”²⁵

Where anti-discrimination legislation applies, an employer might be subject to discrimination claims via theories of disparate impact or disparate treatment. Under claims brought under the former,²⁶ hiring

²² See Iris Hentze & Rebecca Tyus, *Discrimination and Harassment in the Workplace*, NAT’L CONF. OF STATE LEGIS., <https://www.ncsl.org/research/labor-and-employment/employment-discrimination.aspx> (last updated Aug. 12, 2021) [<https://perma.cc/N2JJ-GD4L>]; *Discrimination — Employment Laws*, NAT’L CONF. OF STATE LEGIS., <https://www.ncsl.org/labor-and-employment/discrimination-and-harassment-in-the-workplace> [<https://perma.cc/8DDR-BQ7Q>] (50-state surveys of protected classes as seen in state legislation).

²³ 42 U.S.C. § 2000e-2. Whereas the Supreme Court has discussed sexual orientation in the Title VII context, *Bostock v. Clayton County*, 140 S. Ct. 1731, 1737 (2020), some states also expressly prohibit discrimination based on sexual orientation. See JEROME HUNT, CTR. FOR AM. PROGRESS, *A STATE-BY-STATE EXAMINATION OF NONDISCRIMINATION LAWS AND POLICIES*, 6-7 (2012), https://cdn.americanprogress.org/wp-content/uploads/issues/2012/06/pdf/state_nondiscrimination.pdf [<https://perma.cc/3NQS-VWEQ>].

²⁴ See Age Discrimination in Employment Act (“ADEA”), 29 U.S.C. § 623; Pregnancy Discrimination Act (“PDA”), 42 U.S.C. § 2000e(k); Americans with Disabilities Act (“ADA”), 42 U.S.C. § 12112; Genetic Information Nondiscrimination Act, 42 U.S.C. § 2000ff.

²⁵ See, e.g., Christine Jolls, *Antidiscrimination and Accommodation*, 115 HARV. L. REV. 642, 643 (2001) (showing parallels between antidiscrimination and accommodation legislation as well as a key example of the term “protected characteristics”).

²⁶ Disparate impact refers to hiring “practices that are fair in form, but discriminatory in operation.” *Griggs v. Duke Power Co.*, 401 U.S. 424, 431 (1971). In the canonical example of *Griggs*, the Supreme Court forbade the use of certain general intelligence tests that resulted in race-based hiring disparities. See *id.* at 433-34. In another example, height requirements might appear to be an objective standard, but could disproportionately affect female applicants. See *Dothard v. Rawlinson*, 433 U.S. 321,

practices that yield race-based or other disparities along other protected characteristics are examined for whether they are job-related²⁷ and consistent with business necessity,²⁸ i.e., closely related to job-specific performance.

Under a disparate treatment analysis,²⁹ courts look to differences in employer behavior. Interview questions may be scrutinized where an

331 (1977). “Invidious intent” is not required to strike down a qualification that leads to disparate outcomes; rather, the qualification must be “a reasonable measure of job performance.” *Griggs*, 401 U.S. at 429, 436.

²⁷ Criteria are considered job-related when they are correlated with performance, see *Gulino v. N.Y. Educ. Dep’t*, 460 F.3d 361, 383 (2d Cir. 2006) (required exam for a teaching license), or serve as a minimum standard of qualification; *Lanning v. Southeastern Pa. Transp. Auth.*, 181 F.3d 478, 481 (3d Cir. 1999) (1.5 mile run time requirement for transit officers). But a hypothesized correlation between a particular measure and performance is insufficient. See *Easterling v. Connecticut*, 783 F. Supp. 2d 323, 329 (D. Conn. 2011).

²⁸ See *Griggs*, 401 U.S. at 431. Business necessity is defined as “a manifest relationship” between the qualification and job “necessary to the safe and efficient operation of the business.” *Id.* at 432; *Fahn v. Cowlitz County*, 610 P.2d 857, 864 (Wash. 1980) (citing *Robinson v. Lorillard Corp.*, 444 F.2d 791, 798 (4th Cir. 1971)). In some cases, business necessity is an *essential* qualification. See *Fahn v. Cowlitz County*, 610 P.2d at 864 (citing *United States v. Jacksonville Terminal Co.*, 451 F.2d 418, 451 (5th Cir. 1971)). In *Wards Cove Packing Co., v. Atonio*, 490 U.S. 642 (1989), the Supreme Court held that “the dispositive issue is whether a challenged practice serves, in a significant way, the legitimate employment goals of the employer. . . . The touchstone of this inquiry is a reasoned review of the employer’s justification for his use of the challenged practice. . . . [T]here is no requirement that the challenged practice be ‘essential’ or ‘indispensable’ to the employer’s business for it to pass muster.” *Wards Packing Co.*, 490 U.S. at 659. In response, the Civil Rights Act of 1991 was passed to explicitly include disparate impact claims. See Charles A. Sullivan, *Disparate Impact: Looking Past the Desert Palace Mirage*, 47 WM. & MARY L. REV. 911, 962 (2005) (citing Civil Rights Act of 1991, Pub. L. No. 102-166, § 105(b), 105 Stat. 1071, 1074 (1991) (codified as amended at 42 U.S.C. § 1981)).

²⁹ Although disparate treatment refers to an employer’s intentional, differential treatment of employees across protected characteristics, it is worth noting that scholars have noted the blurry line between theories of disparate impact and treatment theories. See Michael C. Harper, *Confusion on the Court: Distinguishing Disparate Treatment from Disparate Impact in Young v. UPS and EEOC v. Abercrombie & Fitch, Inc.*, 96 B.U. L. REV. 543, 545 (2016); Deborah C. Malamud, *The Last Minuet: Disparate Treatment After Hicks*, 93 MICH. L. REV. 2229, 2265 (1995); Joseph A. Seiner, *Disentangling Disparate Impact and Disparate Treatment: Adapting the Canadian Approach*, 25 YALE L. & POL’Y REV. 95, 97 (2006).

employer selectively or inconsistently asks or applies a question that implicates protected characteristics.³⁰ Consider, for instance, *King v. Trans World Airlines, Inc.*,³¹ in which an airline conducted an interview with a female applicant that discussed her pregnancy, marital status, current children, and “future childbearing plans,”³² but did not ask such questions of male applicants. These inquiries may serve as evidence of disparate treatment, though as scholars and courts agree, intent is always difficult to prove.³³

2. Social Science Evidence

In parallel with this antidiscrimination jurisprudence, the social sciences have much to say about discrimination. As a threshold matter, the fields of law and social science work with very different theorized behavioral assumptions.³⁴ As described in the previous Subsection, to establish liability under Title VII and other antidiscrimination laws, courts seek a specific form of causation, where liability turns on the

³⁰ See, e.g., *Merritt v. Old Dominion Freight Line, Inc.*, 601 F.3d 289, 297 (4th Cir. 2010) (only a female driver had to complete a physical exam post-injury); *King v. Trans World Airlines, Inc.*, 738 F.2d 255, 257 (8th Cir. 1984) (citing *EEOC v. Spokane Concrete Products, Inc.*, 534 F. Supp. 518, 523 (E.D. Wash. 1982)) (“female applicant for truck driving position was given perfunctory interview different than interview given male applicant”); *United States v. City of New York*, 631 F. Supp. 2d 419, 426 (S.D.N.Y. 2009) (experience requirement applied differently to female bridge painters); see also *EEOC v. Abercrombie & Fitch Stores, Inc.*, 575 U.S. 768, 774 (2015) (when a Muslim applicant was not hired because the manager believed her headscarf conflicted with the store’s “Look Policy,” this fell under a disparate treatment claim, not disparate impact).

³¹ *Trans World Airlines*, 738 F.2d 255.

³² *Id.* at 256-58.

³³ See George Rutherglen, *Disparate Impact Under Title VII: An Objective Theory of Discrimination*, 73 VA. L. REV. 1297, 1299 (1987); Michael Selmi, *Was the Disparate Impact Theory a Mistake?*, 53 UCLA L. REV. 701, 706 (2006) (citing Mark S. Brodin, *Costs, Profits, and Equal Employment Opportunity*, 62 NOTRE DAME L. REV. 318, 358 (1987) & Rutherglen, *supra*).

³⁴ See Robert L. Nelson, Ellen C. Berrey & Laura Beth Nielsen, *Divergent Paths: Conflicting Conceptions of Employment Discrimination in Law and the Social Sciences*, 4 ANN. REV. L. & SOC. SCIS. 103, 115 (2008).

degree to which forbidden discrimination stands out as a *singular* cause.³⁵

In contrast, social science researchers focus on demographic differences in outcomes, like hiring and wages, that cannot be explained by any other measurable variables.³⁶ To determine whether these differences exist, researchers most prominently use correspondence-type studies, in which researchers send out fictionalized job applications to various employers. These applications are virtually identical to one another except for the criteria being measured.³⁷ For instance, a correspondence study testing gender discrimination will keep all the information virtually identical across resumes, except for the applicant's name.³⁸

By maintaining all characteristics across resumes identically, correspondence studies assume that if callback rates vary on a characteristic (i.e., if fictional white candidates receive more callbacks than fictional Black candidates), then the employer is relying on that difference in their employment decision.³⁹ And because the resume typically encapsulates all work-relevant information, the correspondence study also typically assumes that any difference in outcomes is a result of an employer's belief about a certain group, whether that be grounded in animus or stereotype.⁴⁰

³⁵ This is not to discount the mixed-motives framework, but rather to emphasize the presence of forbidden discrimination as a requirement. See *Price Waterhouse v. Hopkins*, 490 U.S. 228, 250 (1989) (“In saying that gender played a motivating part in an employment decision, we mean that, if we asked the employer at the moment of the decision what its reasons were and if we received a truthful response, one of those reasons would be that the applicant or employee was a woman.”).

³⁶ See David Neumark, *Experimental Research on Labor Market Discrimination*, 56 J. ECON. LIT. 799, 808 (2018).

³⁷ See *id.* at 823-60 (extensive review of audit and correspondence studies).

³⁸ See *id.* at 823.

³⁹ See Marianne Bertrand & Esther Duflo, *Field Experiments on Discrimination*, in HANDBOOK OF ECONOMIC FIELD EXPERIMENTS 309, 320 (Abhijit Vinayak Banerjee & Esther Duflo eds., 2017).

⁴⁰ See *id.* at 311; Dennis J. Aigner & Glen G. Cain, *Statistical Theories of Discrimination in Labor Markets*, 30 INDUS. & LAB. RELS. REV. 175, 186 (1977); David Bjerk, *Glass Ceilings or Sticky Floors? Statistical Discrimination in a Dynamic Model of Hiring and Promotion*, 118 ECON. J. 961, 963 (2008).

Using these studies, researchers have discovered hiring disparities along different dimensions, including race,⁴¹ gender,⁴² age,⁴³ immigration status,⁴⁴ and religious status.⁴⁵ The empirical research is clear: patterns of systematic disparities exist in hiring, promotion, and callback rates between white and minority employees⁴⁶ and other important demographic identities protected by antidiscrimination law.⁴⁷ The underlying mechanisms for these differences can be due to

⁴¹ See Bertrand & Duflo, *supra* note 39, at 320-22 (citing Marianne Bertrand & Sendhil Mullainathan, *Are Emily & Greg More Employable than Lakisha and Jamal? A Field Experiment on Labor Market Discrimination*, 94 AM. ECON. REV. 991 (2004)); Nicolas Jacquemet & Constantine Yannelis, *Indiscriminate Discrimination: A Correspondence Test for Ethnic Homophily in the Chicago Labor Market*, 19 LAB. ECON. 824, 825 (2012); Patrick Kline, Evan K. Rose & Christopher R. Walters, *Systemic Discrimination Among Large U.S. Employers*, 137 Q.J. ECON. 1963, 1966 (2022); John M. Nunley, Adam Pugh, Nicholas Romero & R. Alan Seals, *Racial Discrimination in the Labor Market for Recent College Graduates: Evidence from a Field Experiment*, 15 B.E. J. ECON. ANALYSIS POL'Y 1093, 1122 (2015).

⁴² See Bertrand & Duflo, *supra* note 39, at 325 (citing Alison Booth & Andrew Leigh, *Do Employers Discriminate by Gender? A Field Experiment in Female-Dominated Occupations*, 107 ECON. LETTERS 236, 238 (2010)); Kline, Rose & Walters, *supra* note 41, at 1966 (finding that employers differ on whether they discriminate against male or female applicants).

⁴³ See Bertrand & Duflo, *supra* note 39, at 327 (citing Ali M. Ahmed, Lina Andersson & Mats Hammarstedt, *Does Age Matter for Employability? A Field Experiment on Ageism in the Swedish Labour Market*, 19 APPLIED ECON. LETTERS 403 (2012)); Joanna N. Lahey, *Age, Women and Hiring: An Experimental Study*, 43 J. HUM. RES. 30, 39 (2010); Peter A. Riach, Judith Rich, *An Experimental Investigation of Age Discrimination in the English Labor Market*, 99/100 ANNALS ECON. & STAT. 169, 174-77 (2010).

⁴⁴ See Bertrand & Duflo, *supra* note 39, at 322 (citing Philip Oreopoulos, *Why Do Skilled Immigrants Struggle in the Labor Market? A Field Experiment with Thirteen Thousand Resumes*, 3 AM. ECON. J. ECON. POL'Y. 148, 167 (2011)).

⁴⁵ See *id.* at 330-31 (citing Alessandro Acquisti & Christina M. Fong, *An Experiment in Hiring Discrimination via Online Social Networks*, 66 MGMT. SCI. 1005 (2013) (showing bias against Muslim job candidates in the U.S.)).

⁴⁶ See *id.* at 320-25 (hiring); Susan Y. Ortiz & Vincent J. Roscigno, *Discrimination, Women and Work: Processes and Variations by Race and Class*, 50 SOCIO. Q. 336, 346-53 (2009) (promotion); Sheryl Skaggs & Jennifer Bridges, *Race and Sex Discrimination in the Employment Process*, 7 SOCIO. COMPASS 404, 405-07 (2013).

⁴⁷ See Bertrand & Duflo, *supra* note 39, at 320 (hiring); Kline, Rose & Walters, *supra* note 42 at 1966 (hiring); Ortiz & Roscigno, *supra* note 46, at 347 (promotion); Skaggs & Bridges, *supra* note 46, at 410 (division of labor).

structural differences in how employers interact with employees or applicants.

To list just a few of these mechanisms:

- in workplace settings, female employees may be routed to worse-performing teams, making success or promotion at higher levels difficult.⁴⁸
- Compared to minority candidates, white candidates may be more frequently hired on the stated basis of potential, rather than performance.⁴⁹
- Candidates who are disabled may be eliminated from contention at jobs based on the anticipated costs of accommodation.⁵⁰

While these behaviors are not necessarily indicative of deliberate animus, they may also be formed and sustained by implicit bias.⁵¹

⁴⁸ See, e.g., Janice Fanning Madden, *Performance-Support Bias and the Gender Pay Gap Among Stockbrokers*, 26 GENDER & SOC'Y 488, 513 (2012); Michelle K. Ryan & S. Alexander Haslam, *The Glass Cliff: Evidence that Women are Over-Represented in Precarious Leadership Positions*, 16 BRIT. J. MGMT. 81, 86-87 (2005).

⁴⁹ See Shelley J. Correll, Katherine R. Weisshaar, Alison T. Wynn & JoAnne Delfino Wehner, *Inside the Black Box of Organizational Life: The Gendered Language of Performance Assessment*, 85 AM. SOCIO. REV. 1022, 1025 (2020).

⁵⁰ See Christine Jolls & J.J. Prescott, *Disaggregating Employment Protection: The Case of Disability Discrimination*, (Nat'l Bureau of Econ. Rsch., Working Paper No. 10740, 2004).

⁵¹ See generally Anthony G. Greenwald & Linda Hamilton Krieger, *Implicit Bias: Scientific Foundations*, 94 CALIF. L. REV. 945 (2006) (discussing the relationship between implicit bias and antidiscrimination law). Despite surface-level similarities between the theories of disparate impact and implicit bias, as both appear to occur without "racial purpose or invidious intent," *Griggs v. Duke Power Co.*, 401 U.S. 424, 429 (1971), the two theories are analytically distinct: disparate impact focuses on how neutral-seeming rules might generate differential outcomes, whereas implicit bias suggests that employers might unconsciously enforce rules or interact differentially across groups. See *id.* at 430; Alexandra Brewer, Melissa Osborne, Anna S. Mueller, Daniel M. O'Connor, Arjun Dayal & Vineet M. Arora, *Who Gets the Benefit of the Doubt? Performance Evaluations, Medical Errors, and the Production of Gender Inequality in Emergency Medical Education*, 85 AM. SOCIO. R. 247, 263 (2020); Greenwald & Krieger, *supra*, at 954. In this way, implicit bias would be more appropriate for disparate treatment claims, but courts have not uniformly agreed with this argument. See *Ahmed v. Johnson*, 752 F.3d 490, 503 (2014);

3. Putting It Together: Informational Restrictions

Given the body of empirical literature showing systematic race-, gender- and age-based disparities in the hiring process, reducing these disparities is a key societal goal. But while courts may rely on social framework evidence in a discrimination case, they do not have to adopt the social science literature wholesale.⁵² And although the EEOC has enforcement powers over both Title VII⁵³ and the ADEA,⁵⁴ its rulemaking powers under Title VII are limited to procedural regulations.⁵⁵ Thus, much advancement in workplace diversity policies

Christopher Cerullo, Note, *Everyone's a Little Bit Racist? Reconciling Implicit Bias and Title VII*, 82 FORDHAM L. REV. 127, 146-54 (2013).

⁵² See Melissa Hart & Paul M. Secunda, *A Matter of Context: Social Framework Evidence in Employment Discrimination Class Actions*, 78 FORDHAM L. REV. 37, 39 (2010).

⁵³ See 42 U.S.C. § 2000e-5(a); *id.* § 2000e-12(a).

⁵⁴ See 42 U.S.C. § 12116; see also Eric Dreiband & Blake Pulliam, *Deference to EEOC Rulemaking and Sub-Regulatory Guidance: A Flip of the Coin?*, 32 ABA J. LAB. & EMP. L. 93, 104 (citing *Smith v. City of Jackson*, 544 U.S. 228, 232-33 (2005)).

⁵⁵ See 29 U.S.C. § 628; 42 U.S.C. § 2000e-12(a). The EEOC also has broader authority over the ADA. See *Prohibited Employment Policies/Practices*, EQUAL EMP. OPPORTUNITY COMM'N, <https://www.eeoc.gov/prohibited-employment-policiespractices> (last visited Sept. 19, 2023) [<https://perma.cc/STN5-UTM8>] (citing 42 U.S.C. §12116). For instance, while the EEOC suggests that employers should not engage in questions about an applicant's identity because it might be indicative of illegal discrimination, these statements serve as merely interpretive guidance. ("Although state and federal equal opportunity laws do not clearly forbid employers from making pre-employment inquiries that relate to, or disproportionately screen out members based on race, color, sex, national origin, religion, or age, such inquiries may be used as evidence of an employer's intent to discriminate unless the questions asked can be justified by some business purpose.")

See *Taite v. Alabama*, No. 2:11CV739, 2012 WL 3631619, at *1 n.1 (M.D. Ala. July 16, 2012) (quoting EEOC Decision No. 75-S-68, 21 Fair Empl. Prac. Cas. (BNA) 1766 (1974): "[T]he EEOC observed that 'Title VII of the Civil Rights Act of 1964 does not expressly prohibit pre-employment inquiries concerning a job applicant's race, color, religion or national origin'"); Theodore W. Wern, *Judicial Deference to EEOC Interpretations of the Civil Rights Act, the ADA, and the ADEA: Is the EEOC a Second Class Agency?*, 60 OHIO STATE L.J. 1533, 1552-53 (citing *Phillips v. Martin Marietta Corp.*, 400 U.S. 542, 545 (1971)). As described earlier, questions about disability are forbidden. See 42 U.S.C. § 12112(d)(2)(A).

has taken place via guidance by third parties.⁵⁶ Scholars,⁵⁷ activists⁵⁸ and politicians⁵⁹ have suggested a variety of legal and policy solutions to regulate reliance on protected characteristics.

One category of solutions includes proactively removing information about candidates that include protected characteristics, or closely correlated characteristics (“masking information”). In a classic study, economists found that the expansion of anonymous audition practices resulted in an increase in the number of female musicians winning positions in major American orchestras.⁶⁰ This oft-cited study has led to

⁵⁶ See Lauren Edelman, Sally Riggs Fuller & Iona Mara-Drita, *Diversity Rhetoric and the Managerialization of Law*, 106 AM. J. SOCIO. 1589, 1598 (2001).

⁵⁷ See generally, e.g., Henry & Jacobs, *supra* note 8 (discussing the promise and potential limitations of Ban the Box); O’Connell, *supra* note 8 (advocating for federal Ban the Box legislation).

⁵⁸ See generally MAURICE EMSELLEM & BETH AVERY, NAT’L EMP. L. PROJECT, RACIAL PROFILING IN HIRING: A CRITIQUE OF NEW “BAN THE BOX” STUDIES (2016), <https://www.nelp.org/wp-content/uploads/Policy-Brief-Racial-Profiling-in-Hiring-Critique-New-Ban-the-Box-Studies.pdf> [<https://perma.cc/G56X-7Y6U>] (arguing that empirical studies regarding Ban the Box demonstrate the entrenchment of stereotypes).

⁵⁹ See, e.g., Kristin Wong, *Don’t Ask Me About My Salary History*, N.Y. TIMES (Oct. 22, 2019), <https://www.nytimes.com/2019/10/22/us/dont-ask-me-about-my-salary-history.html> [<https://perma.cc/3D3T-WHMN>] (describing the passage of salary history bans across the United States).

⁶⁰ See Claudia Goldin & Cecilia Rouse, *Orchestrating Impartiality: The Impact of “Blind” Auditions on Female Musicians*, 90 AM. ECON. REV. 715, 726 (2000).

much publicity,⁶¹ policy changes,⁶² and even entrepreneurial endeavors⁶³ that seek to anonymize applicants, and, in turn, create a meritocratic hiring process.

Another related but distinct practice is to limit specific topics of conversation between employer and applicant during an application process or interview.⁶⁴ Frequently, the operationalization of this practice is then codified by third parties.⁶⁵ Consider the advice that career websites give job applicants and employers:

⁶¹ See, e.g., Paul Gompers & Silpa Kovvali, *The Other Diversity Dividend*, HARV. BUS. REV. (July–Aug. 2018), <https://hbr.org/2018/07/the-other-diversity-dividend> [<https://perma.cc/UY9Z-B75S>] (discussing the study in the context of anonymous job applications); Curt Rice, *How Blind Auditions Help Orchestras to Eliminate Gender Bias*, GUARDIAN (Oct. 14, 2013, 7:00 AM EDT), <https://www.theguardian.com/women-in-leadership/2013/oct/14/blind-auditions-orchestras-gender-bias> [<https://perma.cc/R4L9-P4PL>] (discussing the study in the context of gender bias); *Princeton Economist Finds that Auditioning Behind Screens Helps Women Win Orchestra Positions*, PRINCETON UNIV. (Apr. 25, 1997), <https://pr.princeton.edu/news/97/q2/0425orch.html> [<https://perma.cc/7T4Z-F4PU>] (press release describing the study).

⁶² See, e.g., ULF RINNE, IZA WORLD LAB., ANONYMOUS JOB APPLICATIONS AND HIRING DISCRIMINATION (2018), <https://wol.iza.org/uploads/articles/454/pdfs/anonymous-job-applications-and-hiring-discrimination.pdf?v=1> [<https://perma.cc/KT9B-X3FC>] (discussing policy changes in France, Germany, the Netherlands, Sweden, Canada, and Australia); Annabelle Krause, Ulf Rinne & Klaus F. Zimmermann, *Anonymous Job Applications in Europe*, IZA J. EURO. LAB. STUD., Dec. 2012, at 2-4 (discussing policy changes in France, Germany and Sweden).

⁶³ See, e.g., Claire Cain Miller, *Is Blind Hiring the Best Hiring?*, N.Y. TIMES (Feb. 25, 2016), <https://www.nytimes.com/2016/02/28/magazine/is-blind-hiring-the-best-hiring.html> [<https://perma.cc/QBB2-CC4G>] (featuring startups that offer software to standardize hiring practices); Iris Bohnet, Siri Chilazi, Anisha Asundi & Lili Gil Valletta, *Be Like an Orchestra: How to Eliminate Gender Bias in Venture Capital Funding*, KING'S COLL. LONDON (Oct. 29, 2019), <https://www.kcl.ac.uk/news/be-like-an-orchestra-how-to-eliminate-gender-bias-in-venture-capital-funding> [<https://perma.cc/93KC-AH9F>] (suggesting hiring processes that might increase the share of women in venture capital); FAIRHIRE, <http://www.fairhire.org> [<https://perma.cc/Z2Z4-24DR>] (example of a startup that offers software to standardize hiring practices).

⁶⁴ See, e.g., Minna J. Kotkin, *Uberizing Discrimination: Equal Employment and Gig Workers*, 87 TENN. L. REV. 73, 82 (2019) (demographic identities); Orly Lobel, *Knowledge Pays: Reversing Information Flows and the Future of Pay Equity*, 120 COLUM. L. REV. 547, 590-91 (2020) (salary history). See generally IRIS BOHNET, WHAT WORKS (2016) (gender).

⁶⁵ See Edelman et al., *supra* note 56, at 1598.

Google “illegal interview questions” and you get over six million examples. But there’s really one easy rule of thumb for knowing if something is legal or not — the question must be job-related. If it doesn’t pertain to the job it shouldn’t be asked . . . there are seven basic categories an employer should avoid:

- Age
- Race, ethnicity, or color
- Gender (sex) — including gender identity
- Country of national origin or birth place
- Religion
- Disability status (currently or previous)
- Marital or family status or pregnancy⁶⁶

This excerpt is just one example of how recruiters,⁶⁷ human resources groups,⁶⁸ and others⁶⁹ have attempted to translate antidiscrimination law into concrete advice.

Compared to masking full applications, restricting topics of conversation may seem more feasible and low cost. Restrictions with recent traction not only include Ban the Box but also salary history bans,⁷⁰ which prohibit employers from asking about an applicant’s salary

⁶⁶ Eileen Hoenigman Meyer, *How to Respond to Inappropriate Interview Questions*, HIGHEREDJOBS (Aug. 28, 2017), <https://www.higheredjobs.com/Articles/articleDisplay.cfm?ID=1388> [<https://perma.cc/Q3ST-XJVR>] (quoting a talent acquisition manager).

⁶⁷ See *How to Ask Legal Interview Questions*, MONSTER, <https://hiring.monster.com/resources/recruiting-strategies/interviewing-candidates/legal-job-interview-questions/> [<https://perma.cc/4E2K-SUSZ>].

⁶⁸ See Dawn Onley, *These Interview Questions Could Get HR in Trouble*, SOC’Y OF HUM. RES. MANAGERS, <https://www.shrm.org/resourcesandtools/hr-topics/talent-acquisition/pages/interview-questions-hr-trouble.aspx> (last visited Sept. 20, 2023) [<https://perma.cc/FQ9L-SKM4>].

⁶⁹ See Alison Green, *Is That Interview Question Illegal?*, ASK A MANAGER (Jan. 10, 2011), <https://www.askamanager.org/2011/01/is-that-interview-question-legal.html> [<https://perma.cc/GL3V-FC4D>].

⁷⁰ See Tyler M. Wood, *Never Ask a Woman Her Wage: The Constitutionality of Salary-History Bans*, 88 U. CHI. L. REV. 1247, 1254-57 (2021); *Salary History Bans*, HRDIVE <https://www.hrdiver.com/news/salary-history-ban-states-list/516662/> (last updated Aug. 2, 2023) [<https://perma.cc/2487-8MGF>] (50-state overview).

history during an interview;⁷¹ the ban is meant to prevent the continued entrenchment of systematic pay differences between women and men.⁷²

For both practices — masking and restricting — the intuition given is that because studies show differences in hiring on the basis of one characteristic, if that characteristic is expressly forbidden, then people cannot distinguish between individuals — and therefore cannot rely on — the basis of that variable. If race is (or signals of race are) hidden from a resume, then the employer cannot be said to have made a decision based on race.

B. *Where Information Restrictions Might Fail*

The above procedures are meant to help employers understand complex law and applicants understand their rights. Yet, in practice, both employers and applicants face several problems in the implementation of these restrictions.

Employment restrictions rely on the assumption that people will not think about what is not in front of them. But a variety of empirical studies suggest that people are drawn to information that is restricted, such that it is perceived as more meaningful. Second, in the absence of information, legal decision-makers may infer negative or stereotypical information about a candidate (i.e., potentially false signals). Third, restrictions may also lead to unconscious bias elsewhere. This next Section draws from literature and findings from social science to understand how information restrictions might perpetuate the behavior it seeks to prevent.

⁷¹ See Torie Abbott Watkins, Note, *The Ghost of Salary Past: Why Salary History Inquiries Perpetuate the Gender Pay Gap and Should Be Ousted as a Factor Other Than Sex*, 103 MINN. L. REV. 1041, 1055-56 (2018).

⁷² See Jesse Davis, Paige Ouimet & Xinxin Wang, *Hidden Performance: Salary History Bans and the Gender Pay Gap*, 11 REV. CORP. FIN. STUD. 511, 511-12 (2022); Watkins, *supra* note 71, at 1065.

1. Restrictions May Increase Interest in Missing Information

Literature in cognitive psychology suggests that people are likely to recall information when they are asked to discard it;⁷³ to be interested in information when they are asked to disregard it;⁷⁴ and to rely on information when it takes more effort to uncover it.⁷⁵ In short, restrictions can cause unintended consequences on the things they restrict.

Consider a classic psychological study from 1945, in which a group of young men were put on a “starvation diet.”⁷⁶ Researchers found that the young men “would dream and fantasize about food, read and talk about food and savor the two meals a day they were given.”⁷⁷ This experiment was one of the earliest findings of how restrictions might inadvertently cause people to focus on what was being limited, and it has been cited

⁷³ See Robert S. Wyer, Jr. & William H. Unverzagt, *Effects of Instructions to Disregard Information on Its Subsequent Recall and Use in Making Judgments*, 48 *ATTITUDES & SOC. COGNITION* 533, 545-47 (1985).

⁷⁴ See Leslie K. John, Kate Barasz & Michael I. Norton, *Hiding Personal Information Reveals the Worst*, 113 *PROC. NAT. ACAD. SCI.* 954, 958 (2016); Joel D. Lieberman & Jamie Arndt, *Understanding the Limits of Limiting Instructions: Social Psychological Explanations for the Failures of Instructions to Disregard Pretrial Publicity and Other Inadmissible Evidence*, 6 *PSYCH., PUB. POL’Y, & L.* 677, 692 (2000).

⁷⁵ See Maia J. Young, Christopher W. Bauman, Ning Chen & Anthony Bastardi, *The Pursuit of Missing Information in Negotiation*, 117 *ORGANIZATIONAL BEHAV. & HUM. DECISION PROCESSES* 88, 92 (2012) (citing A. Bastardi & Eldar Shafir, *On the Pursuit and Misuse of Useless Information*, 75 *J. PERSONALITY & SOC. PSYCH.* 19, 30 (1998)).

⁷⁶ See Josef Brozek, *Psychology of Human Starvation and Nutritional Rehabilitation*, 70 *SCI. MONTHLY* 270, 271 (1950); Zohar Lederman & Teck Chuan Voo, *The Minnesota Starvation Experiment and Force Feeding of Prisoners — Relying on Unethical Research to Justify the Unjustifiable*, 18 *J. BIOETHICAL INQUIRY* 407, 409 (2021) (for a critical perspective).

⁷⁷ David Baker & Natacha Keramidias, *The Psychology of Hunger*, 44 *AM. PSYCH. ASS’N. MONITOR* 66 (Oct. 2013), <https://www.apa.org/monitor/2013/10/hunger> [<https://perma.cc/48CC-MLPB>].

as evidence across many domains, from health outcomes⁷⁸ to financial decision-making.⁷⁹

In fact, similar effects have been previously discussed at length in the legal setting, via the context of jury instructions.⁸⁰ As much evidence shows, jurors have difficulty disregarding information⁸¹ and a backfire effect sometimes occurs. When jurors are given an explicit instruction to disregard information, it may lead them to weigh that information more heavily,⁸² manifesting in increased attributions of culpability⁸³ and even damages.⁸⁴

Several theories may explain these results, where dieters, frugal savers, and jurors all reverse course. First, the cognitive theory of mental control proposes that when people are told to not consider or act on certain information, the mention of the subject raises the issue for them *again*.⁸⁵ Other scholars argue that psychological reactance may

⁷⁸ See Vivienne M. Hazzard, Katie A. Loth, Laura Hooper & Carolyn Black Becker, *Food Insecurity and Eating Disorders: A Review of Emerging Evidence*, 22 CURRENT PSYCHIATRY REPS. 74, 75 (2020); see also Jeni L. Burnette & Eli J. Finkel, *Buffering Against Weight Gain Following Dieting Setbacks: An Implicit Theory Intervention*, 48 J. EXPERIMENTAL SOC. PSYCH. 721, 721 (2012); Natalie Ling Yum Sin & Lenny R. Vartanian, *Is Counter-Regulation Among Motivated Eaters A Result of Motivated Overeating?*, 59 APPETITE 488, 488 (2012) (both papers do not cite the Minnesota experiment but demonstrate significant resistance to a restriction).

⁷⁹ See Anuj K. Shah, Jiaying Zhao, Sendhil Mullainathan & Eldar Shafir, *Money in the Mental Lives of the Poor*, 36 SOC. COGNITION 4, 16 (2018).

⁸⁰ See Alison Cook, Jamie Arndt & Joel D. Lieberman, *Firing Back at the Backfire Effect: The Influence of Mortality Salience and Nullification Beliefs on Reactions to Inadmissible Evidence*, 28 LAW & HUM. BEHAV. 389, 390 (2004); Lieberman & Arndt, *supra* note 74, at 677.

⁸¹ See Lieberman & Arndt, *supra* note 74, at 677; Cook et al., *supra* note 80.

⁸² See Lieberman & Arndt, *supra* note 74, at 689.

⁸³ See David Crump, *Does Impeachment by Conviction Create Undue Prejudice? An Experiment and an Analysis*, 53 AKRON L. REV. 1, 16 (2019); Roselle L. Wissler & Michael J. Saks, *On the Inefficacy of Limiting Instructions: When Jurors Use Prior Conviction Evidence to Decide on Guilt*, 9 LAW & HUM. BEHAV. 37, 41 (1985).

⁸⁴ See Roselle L. Wissler, Katie A. Rector & Michael J. Saks, *The Impact of Jury Instructions on the Fusion of Liability and Compensatory Damages*, 25 LAW & HUM. BEHAV. 125, 132-33 (2001).

⁸⁵ See Daniel M. Wegner, David J. Schneider, Samuel R. Carter III & Teri L. White, *Paradoxical Effects of Thought Suppression*, 53 J. PERSONALITY & SOC. PSYCH. 5, 9 (1987).

play a complementary role.⁸⁶ That is, employees may subconsciously chafe at restrictions and react in the opposite manner by considering protected characteristics. Regardless, directives against considering certain information appear to backfire, particularly when those instructions are made salient.⁸⁷ I argue that a similar mechanism may occur in the antidiscrimination setting.

In one study, researchers found that diversity training videos that explicitly instructed individuals to try to suppress age-related thoughts rated older job applicants less favorably than other individuals.⁸⁸ And in another ethnographic study, a sociologist has found that even though employers were aware that they could not ask questions about candidates' marital status, they continued to seek information on social media or through mutual parties about a candidate's marital status to evaluate the candidate's probability of taking the job.⁸⁹

Protected categories like age, race, and gender — and similarly salient characteristics like criminal or salary history — are protected *precisely because* they are salient and because some employers perceive meaningfulness (whether accurate or not) from those characteristics.⁹⁰ Indeed, experiments suggest that if employers are able to obtain information about protected categories, they may put undue weight on

⁸⁶ See JACK W. BREHM, A THEORY OF PSYCHOLOGICAL REACTANCE 3-4 (1966); Lieberman & Arndt, *supra* note 74, at 693.

⁸⁷ See Lieberman & Arndt, *supra* note 74, at 699 (citing Kari Edwards & Tamara S. Bryan, *Judgmental Biases Produced by Instructions to Disregard: The (Paradoxical) Case of Emotional Information*, 23 PERSONALITY & SOC. PSYCH. BULL. 849, 853 (1997)); Molly J. Walker Wilson, Barbara A. Spellman & Rachel York, *Beyond Instructions to Disregard: When Objections Backfire and Interruptions Distract* 28-29 (St. Louis Univ. Legal Studies, Working Paper No. 2014-11, 2014), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2432527 [<https://perma.cc/4L6C-NULT>].

⁸⁸ See Carol T. Kulik, Elissa L. Perry & Anne C. Bourhis, *Ironic Evaluation Processes: Effects of Thought Suppression on Evaluations of Older Job Applicants*, 21 J. ORG. BEHAV. 689, 703 (2000).

⁸⁹ See Lauren A. Rivera, *When Two Bodies Are (Not) a Problem: Gender and Relationship Status Discrimination in Academic Hiring*, 82 AM. SOC. REV. 1111, 1120-21 (2017); see also Chris Jones & Susan Behling, *Uncharted Waters: Using Social Networks in Hiring Decisions*, 11 ISSUES INFO. SYS. 589, 591-93 (2010).

⁹⁰ See Joseph G. Altonji & Charles R. Pierret, *Employer Learning and Statistical Discrimination*, 116 Q.J. ECON. 313, 342-43 (2001).

this information when it is procured.⁹¹ If information restrictions might cause increased interest in that information, then information restrictions must be virtually airtight to be effective. Otherwise, this desire to know information may cause employers to seek out information.

Yet airtight restrictions are an unlikely scenario. Motivated employers are able to find ways to elicit protected information about individuals prior to hiring, whether from social media⁹² or looking to other cues like graduation year on a resume as a proxy for age.⁹³ Despite restrictions, applicants may also face pressure, implicit or otherwise, from employers to reveal information during the interview.⁹⁴ One qualitative study finds that in jurisdictions where salary history bans have occurred, hiring managers ask about “salary expectations” instead, knowing that this is strongly correlated with salary history.⁹⁵

Furthermore, information restrictions technically only shift a decision to consideration further back in the hiring process,⁹⁶ as the intuition is that restricting information for a limited period will “nudge” employers from looking at the information. Thus, restrictions’ effectiveness hinges on the fact that the information should not matter for employers. But the restriction itself may make protected characteristics even more salient for employers as a “tiebreaker” later in the process.

⁹¹ See Rinne, *supra* note 62, at 7.

⁹² See Jones & Behling, *supra* note 89, at 591; Robert Sprague, *Googling Job Applicants: Incorporating Personal Information into Hiring Decisions*, 23 LAB. LAW. 19, 20 (2007).

⁹³ See Eva Derous & Jeroen Decoster, *Implicit Age Cues in Resumes: Subtle Effects on Hiring Discrimination*, 8 FRONTIERS PSYCHOLOGY 1, 2 (2017).

⁹⁴ See Amanda Agan, Bo Cowgill & Laura K. Gee, *Do Workers Comply with Salary History Bans? A Survey on Voluntary Disclosure, Adverse Selection, and Unraveling*, 110 AM. ECON. ASS’N PAPERS & PROC. 215, 215 (2020).

⁹⁵ INST. FOR GENDER & THE ECON., A RESEARCH BRIEF ON THE GENDER WAGE GAP 2 (2019), https://www.gendereconomy.org/wp-content/uploads/2019/04/GATE_GenderWageGap_ResearchBrief_Digital.pdf [<https://perma.cc/D6AA-LN88>] (citing Laura Adler, *You’re Worth What You’re Paid: Why Employers Use Past Pay to Set Future Pay* (Harv., Working Paper)).

⁹⁶ See Angela Onwuachi-Willig & Ifeoma Ajunwa, *Combating Discrimination Against the Formerly Incarcerated in the Labor Market*, 112 N.W. L. REV. 1385, 1392 (2018).

2. People Systematically Draw Stereotypical Inferences from Absent Information

Even if information restrictions *were* airtight, they might lead to other unanticipated consequences. Theories in psychology suggest that people continually use narratives to make sense of the world around them.⁹⁷ Informational gaps in these narratives trigger negative feelings and a desire for “cognitive closure” — to find information that completes the narrative.⁹⁸ In doing so, people engage in “backwards inferences” to fill in gaps.⁹⁹ These theories have long been understood to apply to legal contexts as well, primarily in trial settings.¹⁰⁰

⁹⁷ See Nick Chater & George Loewenstein, *The Under-Appreciated Drive for Sense-Making*, 126 J. ECON. BEHAV. & ORG. 137, 138-41 (2016) (reviewing the desires for people to make sense of their surroundings); Sara M. Constantino & Elke U. Weber, *Decision-Making Under the Deep Uncertainty of Climate Change: The Psychological and Political Agency of Narratives*, 42 CURRENT OP. PSYCH. 151, 153-54 (2021) (discussing sense-making with regard to climate change); Dan Simon, *A Third View of the Black Box: Cognitive Coherence in Legal Decision Making*, 71 U. CHI. L. REV. 511, 560 (2004) (discussing sense-making with regard to legal decision-making).

⁹⁸ See, e.g., Karl Ask & Pär Anders Granhag, *Motivational Sources of Confirmation Bias in Criminal Investigations: The Need for Cognitive Closure*, 2 J. INVESTIGATIVE PSYCH. & OFFENDER PROFILING 43, 57-58 (2005) (experiment showing that suspects are only perceived as guilty when a motive is presented to participants acting as jurors); Frank R. Kardes, Bob M. Fennis, Edward R. Hirt, Zakary L. Tormala & Brian Bullington, *The Role of the Need for Cognitive Closure in the Effectiveness of the Disrupt-Then-Reframe Influence Technique*, 34 J. CONSUMER RSCH. 377, 378 (2007) (experiments suggesting that statements that reduce ambiguity have impacts on consumer behavior); Cynthia T. F. Klein & Donna M. Webster, *Individual Differences in Argument Scrutiny as Motivated by Need for Cognitive Closure*, 22 BASIC & APPLIED SOC. PSYCH. 119, 127 (2000) (showing that individuals who desire cognitive closure are more susceptible to stereotypic-based judgments); Marta Marchlewska, Aleksandra Cichocka & Malgorzata Kossowska, *Addicted to Answers: Need for Cognitive Closure and the Endorsement of Conspiracy Beliefs*, 48 EURO. J. SOC. PSYCH. 109, 115 (2018) (experiments suggesting a link between an individual’s need for cognitive closure and belief in conspiracies); Donna M. Webster & Arie W. Kruglanski, *Individual Differences in Need for Cognitive Closure*, 67 J. PERSONALITY & SOC. PSYCH. 1049, 1061 (1994) (discussing different measurements of cognitive closure).

⁹⁹ See Frank Papenmeier, Alisa Brockhoff & Markus Huff, *Filling the Gap Despite Full Attention: The Role of Fast Backward Inferences for Event Completion*, 4 COGNITIVE RSCH.: PRINCIPLES & IMPLICATIONS 1, 15 (2019); Simon, *supra* note 97, at 514.

¹⁰⁰ See Simon, *supra* note 97, at 512-13. Specifically, the story model posits that jurors fit evidence into a narrative in their process of coming to a verdict. See Nancy

Similar behaviors in hiring practices are also documented in the management literature. Hiring managers and other employer representatives look to understand who an employee is through creating a story of their experience. In theory, information restrictions that tell employers not to ask for certain information are supposed to prevent negative inferences. Yet when there is missing information about a candidate, employers view these gaps with suspicion: they are more likely to argue that this information is missing because of misconduct.¹⁰¹ Declining to ask, or simply avoiding sensitive questions in an employment context might suggest that applicants are perceived as less likable and less trustworthy.¹⁰² For instance, as seen from one experimental study, female job candidates may be perceived as less hireable if they do not explain an unexplained gap in work history,¹⁰³ more so than if they outright attributed the gap to full time parental status.¹⁰⁴

Employers may account for these missing signals by making stereotypical inferences,¹⁰⁵ consistent with theories of statistical discrimination in economics.¹⁰⁶ Consider the long-standing historical stereotype, alluded to just above, that young female employees may be less productive if they are more likely to exit the workplace after marriage. And as it relates to racial stereotypes, economist Steven Raphael notes in an analysis of “credit checks, occupational licensing,

Pennington & Reid Hastie, *A Cognitive Theory of Juror Decision Making: The Story Model*, 13 *CARDOZO L. REV.* 519, 520-28 (1991); Nancy Pennington & Reid Hastie, *The Story Model for Juror Decision Making*, in *INSIDE THE JUROR* 192-221 (Reid Hastie ed., 1993). The story model has become the preeminent model for understanding jury decision making. See David A. Sklansky, *Evidentiary Instructions and the Jury as Other*, 65 *STAN. L. REV.* 407, 413 (2013) (“The story model has become the orthodox understanding of jury decisionmaking among psychologists and, increasingly, among legal academics . . .”).

¹⁰¹ See Carolyn M. Jagacinski, *Personnel Decision Making: The Impact of Missing Information*, 76 *J. APPLIED PSYCH.* 19, 19 (1991).

¹⁰² See John et al., *supra* note 74, at 958.

¹⁰³ See Joni Hersch & Jennifer Bennett Shinall, *Something to Talk About: Information Exchange Under Employment Law*, 165 *U. PA. L. REV.* 49, 85 (2016).

¹⁰⁴ See *id.* at 85.

¹⁰⁵ See Meraiah Foley & Sue Williamson, *Does Anonymising Job Applications Reduce Gender Bias? Understanding Managers' Perspectives*, 33 *GENDER MGMT.: AN INT'L J.* 623, 625 (2018).

¹⁰⁶ That is, absent additional information, an employer might believe that different groups have different levels of productivity. See Altonji & Pierret, *supra* note 90, at 342-48.

and drug testing,” “in the absence of objective information, employers place weight on stereotypes about the characteristics of Black workers that are generally negative and inaccurate.”¹⁰⁷ That is, employers may wrongly assume that a Black worker may have lower credit scores or a positive drug test, making them less employable.

All these examples suggest that employers are relying on inferred or assumed information despite that information being obscured. This behavior may especially emerge when employers have limited time or resources to review these materials in depth (i.e., conditions that are frequently associated with implicit bias).¹⁰⁸ And as the previous Section detailed, because this information is easily stereotyped *and* restricted, employers and other decision-makers may rely or even over-rely on these speculations.¹⁰⁹

3. Restrictions May Create Room for Moral Licensing

Finally, information restrictions can cause employers to feel more comfortable exhibiting biases elsewhere in the process. The term “moral licensing” is frequently used to describe the phenomenon that individuals justify certain behavior given their past reputation for moral behavior.¹¹⁰ In one example, people “who established their non-prejudiced attitudes by . . . selecting a Black person for a consulting firm job were subsequently more likely to make pro-White judgments.”¹¹¹ Employers may feel “morally licensed” to make decisions based on their bias, given their knowledge that information restrictions are meant to act as a guardrail; this behavior is consistent with other results that

¹⁰⁷ Steven Raphael, *The Intended and Unintended Consequences of Ban the Box*, 3 ANN. REV. CRIMINOLOGY 191, 193 (2021).

¹⁰⁸ See Anton J. Dijker & Willem Koomen, *Stereotyping and Attitudinal Effects Under Time Pressure*, 26 EUR. J. SOC. PSYCH. 61, 69-70 (1996).

¹⁰⁹ See Young et al., *supra* note 75, at 92.

¹¹⁰ See Irene Blanken, Niels van de Ven & Marcel Zeelenberg, *A Meta-Analytic Review of Moral Licensing*, 41 PERSONALITY & SOC. PSYCH. BULL. 540, 540 (2015).

¹¹¹ *Id.* at 541 (citing Benoît Monin & Dale T. Miller, *Moral Credentials and the Expression of Prejudice*, 81 J. PERSONALITY & SOC. PSYCH. 33, 37 (2001)).

suggest that diversity initiatives do not often correspond to increases in diversity.¹¹²

The performance of diversity can make it seem like procedures are fair to candidates — even if substantive outcomes do not change. And these sentiments may be more difficult to combat because courts may use the presence of these initiatives to infer that employers and firms are acting in good faith.¹¹³

Yet, this performance creates adverse consequences for applicants. For instance, in one study, researchers found that the presence of a diversity statement in corporate recruitment materials caused applicants to use non-English names more frequently.¹¹⁴ However, the callback rate in a follow-up simulation was lower for applicants who used their non-English names,¹¹⁵ consistent with other research in discrimination.¹¹⁶ The results suggest that signals of diversity are not as strong in practice: while employers were ready to claim that they would not discriminate, they continued to do so.

Finally, if protected characteristics are leaked, there is no clear answer or remedy to the violation of this seemingly bright-line guidance. As the career advice website from the previous Section continues:

Many institutions are careful and thorough in prepping their staff to conduct interviews, but inappropriate questions can still slip through. When this happens, there's no textbook right or wrong way to proceed. You have to decide what's best for you.¹¹⁷

¹¹² See Alexandra Kalev, Frank Dobbin & Erin Kelly, *Best Practices or Best Guesses? Assessing the Efficacy of Corporate Affirmative Action and Diversity Policies*, 71 AM. SOCIO. REV. 589, 610-11 (2006); Lisa M. Leslie, *Diversity Initiative Effectiveness: A Typological Theory of Unintended Consequences*, 44 ACAD. MGMT. REV. 538, 544 (2019); Sandra Portocarrero & James T. Carter, *Diversity Initiatives in the U.S. Workplace: A Brief History, Their Intended and Unintended Consequences*, 16 SOCIO. COMPASS 1, 4-5 (2022).

¹¹³ See *Kolstad v. Am. Dental Ass'n*, 527 U.S. 526, 544 (1999).

¹¹⁴ See Sonia K. Kang, Katherine A. DeCelles, András Tilcsik & Sora Jun, *Whitened Résumés: Race and Self-Presentation in the Labor Market*, 61 ADMIN. SCI. Q. 469, 485 (2016).

¹¹⁵ See *id.* at 491.

¹¹⁶ See Philip Oreopoulos, *Why Do Skilled Immigrants Struggle in the Labor Market? A Field Experiment with Thirteen Thousand Resumes*, 3 AM. ECON. J.: ECON. POL'Y. 148, 167 (2011).

¹¹⁷ Meyer, *supra* note 66.

Given that information restrictions are only required to restrict information *until* the last stage, employers may still make distinctions based on the criterion in question. If certain criteria are indeed salient to employers, then restrictions on this information may have their limits. If a masking mechanism is not perfectly operationalized, or carried to the point of a job offer, it is likely to not change the ultimate outcome given high levels of discretion at later stages.¹¹⁸

4. Seeking a Way Forward

Although calls to restrict pre-employment inquiries of applicants typically cite results from correspondence or audit-type studies, the correspondence method itself typically focuses on comparing two groups that differ based on a demographic characteristic. But, to determine whether information restrictions are effective at reducing racial and gender disparities in hiring, the relevant comparison should be whether employers behave differently when information *is* included versus when

¹¹⁸ By way of popular example, consider what might be the modern-day example of the orchestra study: the television show “The Voice.” On “The Voice,” unknown singers perform for four celebrity judges and a studio audience. See 16 *Memorable Four-Chair Turns on “The Voice”*, ROLLING STONE (Dec. 26, 2013), <https://www.rollingstone.com/music/music-lists/16-memorable-four-chair-turns-on-the-voice-22172/> [https://perma.cc/DT62-L85G]. Crucially, the celebrity judges listen to each singer “anonymously”; the judges’ backs are turned to the singer and their massive chairs prevent them from even spotting the singer in their peripheral vision. See *id.* At the time of its premiere, The Voice was considered novel television by touting the idea of diverse voices. Contra Hillary Busis, *The Voice Series Premiere Recap: Vocal News*, ENT. WKLY. (Apr. 14, 2015), <https://ew.com/recap/the-voice-season-1-episode-1/> [https://perma.cc/2PG9-GY8P]; Michael Slezak, *The Voice Premiere Recap: I’m Already Addicted. Does That Make Me Crazy?*, TVLINE (Apr. 27, 2011, 9:55 AM), <https://tvline.com/2011/04/27/the-voice-premiere-recap-adam-levine-cee-lo-christina-aguilera-blake-shelton/> [https://perma.cc/8QRF-33V6]. In the first episodes of each season, the judges are amazed when the visual image of the singer does not match their vision or stereotype of who is behind the “voice.” See ROLLING STONE, *supra*. Yet the eventual winners of the show are virtually similar, with the vast majority being country musicians. See Raven Brunner, “The Voice” Slammed as “Racist” After Season 22 Semifinals: “The Producers Should Be Embarrassed,” DECIDER (Dec. 7, 2022, 11:26 AM EST), <https://decider.com/2022/12/07/the-voice-racist-season-22-semifinals-producers-should-be-embarrassed/> [https://perma.cc/ZV52-RUKD]; Charlie Mason, *The Voice’s Loss of Blake Shelton May Actually Be Good for the Show*, TVLINE (Dec. 7, 2022, 10:18 AM), <https://tvline.com/2022/12/07/the-voice-blake-shelton-season-22-controversy-finalists/> [https://perma.cc/L5AL-XGZG].

it is not. Instead, there is little empirical evidence on what information employers seek *ex ante* and the contexts in which they do so.

To that end, it is important to understand the underlying motivation for what signals employers choose to gather from applicants and why. Without collecting information about what employers seek and what they are motivated by, advocates and courts have less information to support or dispute a finding of discrimination. To my knowledge, only one laboratory group in the social sciences to date has experimentally measured what employers explicitly seek.¹¹⁹

In a set of two field experiments, economist Vojtěch Bartoš and colleagues examined the effect of stigmatized minority identities in hiring and housing settings in two European countries.¹²⁰ In each of the applications, the researchers included a link to a fictional individual's website or resume.¹²¹ They found that when selecting a "best candidate," minority outgroups (such as immigrants) are not considered fully before eliminated. In contrast, when a decision-maker was focused on avoiding a bad outcome (versus finding the best candidate), a candidate who belonged to the minority outgroup was scrutinized more carefully than majority candidates before being accepted.¹²²

As it relates to information restrictions in hiring and other selective processes, examining what employers seek out about applicants might help to determine how these patterns occur and what employers' motivations are. Indeed, there is a dearth of research explaining how individuals seek information to begin with, *rather* than how they react

¹¹⁹ Other studies have been observational, collecting data about what appears on job applications. See Rodney J. Brown, *A Study of the Degree to Which School Districts in Virginia Include Legal or Illegal Inquiries on Employment Application Forms for Teachers at 10* (Dec. 2016) (Ph.D. dissertation, College of William and Mary), <https://scholarworks.wm.edu/cgi/viewcontent.cgi?article=1124&context=etd> [<https://perma.cc/SE8H-8CYD>]. As mentioned earlier, Lauren Rivera's work suggests that faculty hiring committees search for and place more emphasis on partners of female faculty candidates relative to male faculty candidates, suggesting that a search regarding protected characteristics can be driven or shaped by the candidate's gender. See Rivera, *supra* note 89, at 1128.

¹²⁰ See Vojtěch Bartoš, Michal Bauer, Julie Chytilová & Filip Matějka, *Attention Discrimination: Theory and Field Experiments with Monitoring Information Acquisition*, 106 *AM. ECON. REV.* 1437, 1439 (2016).

¹²¹ See *id.* at 1439.

¹²² See *id.* at 1440.

to it. While reactions to this information often inform whether an employer relies on that data, it seems possible that actively seeking out this information is a stronger signal of reliance — or the intent to rely upon this data as a consideration.

In this next Part, I use two studies as a proof of concept to first demonstrate and measure employers' interest in sensitive topics and to show that limits on information increase their interest in these topics.

II. WHAT DO EMPLOYERS ACTIVELY SEEK AND WHEN: EVIDENCE FROM ORIGINAL EXPERIMENTAL RESEARCH

In this Part, I present a pair of original studies that provide exploratory evidence that restrictions on information about candidates' protected characteristics may result in employers' increased interest in those protected characteristics.¹²³ Both studies in this Part drew from the same outline by design: I created an economically realistic scenario in which survey respondents chose between two job candidates. Before choosing a candidate, respondents were allowed to pay for information about the candidate across a variety of domains, from employment and education level to protected characteristics like age, race, and gender.

The setting of these experiments incorporated several novel features that make it especially realistic: first, respondents were given a "hiring budget" to hire candidates. Each piece of information they purchased would cost one cent per candidate, and they would keep the remainder of the hiring budget as an additional bonus payment. With this amount, respondents would only be able to purchase half of all available information about candidates at most, making it an actual working budget.

This feature was important for several reasons: it simulated a true hiring setting in which search costs are real, and it imposed a budget constraint such that respondents are forced to only pick information that they deem important. By charging people for specific information about applicants, rather than simply making it available, the game sought to elicit a willingness to pay for different characteristics. That is, it operated under the assumption that employers would only want to click on data that they deemed meaningful to their assessment of an

¹²³ Data on file with author.

applicant. Importantly, respondents could choose to purchase no information at all and keep their hiring budget as an easy, quick, and relatively substantial bonus.

Second, to enhance the realism of this survey, candidates' profiles were drawn from actual people, who had been paid to proofread for this project, and respondents were aware of this fact.¹²⁴ Finally, respondents were recruited based on whether they had previous hiring experience in the real world; this experience ensured that relative to other populations in online surveys, respondents would be relatively more familiar with hiring practices generally (i.e., a general intuition of not making decisions on the basis of race, gender, or age).

With this design, I could examine what information individuals are willing to pay for. Specifically, explicitly requesting information about applicants' age, race, or gender would be a strong form of the interview questions employers might otherwise ask benignly. By providing a "blank canvas" in which individuals pay for information about applicants, this study considered what employers gravitate towards.

A. Study 1

1. Method

Study 1 served as a baseline measure for the research question of what individuals look at in determining suitability for a job and follows the basic procedures described above. In Study 1, respondents were able to purchase information about a participant's demographics, as well as their language and educational skills. Respondents were United States residents recruited through the online experimental platform Prolific; the survey was administered through Qualtrics survey software.

After providing consent, respondents were asked to imagine that they were a hiring manager hiring individuals for a proofreading task. Figure 1 shows the first page of the instructions respondents encountered, in which they were asked to imagine that they were a hiring manager choosing between pairs of individuals to hire for a proofreading job. All

¹²⁴ See *infra* Figure 1. These studies were approved by Institutional Review Boards at Harvard University and the University of Pennsylvania.

respondents would encounter ten pairs of individuals; for each pair, they would choose one candidate to “hire.”

In the task, respondents were instructed that they could select one candidate each from ten pairs of these candidates and would earn a fifteen-cent bonus, based on whether the candidate they had personally chosen had performed better than the candidate on another proofreading task. To make sure respondents understood the scenario and how much money they could earn or spend, they completed a sample scenario and quizzes after the initial instructions.¹²⁵

Figure 1. Initial Instructions

Hello! In this study, you are a hiring manager who must choose which candidates to hire for a proofreading job.

Over the next few pages, you will view 10 different pairings of candidates. For each pairing, you will pick one candidate in each pair to hire. (Note that the pairs will not appear in alphabetical order!)

After you pick a candidate, the following screen will show you how each candidate did on the task.

You will be paid 15 cents if the candidate you chose correctly identified more errors, compared to the candidate that you did not choose.

So, if you identify the more promising candidate in all 10 pairs, you will receive a bonus of $10 \cdot .15$ cents = \$1.50.

These are actual results from a screening task we created for this process. In this previous screening task, we asked candidates to identify up to 15 errors (i.e., typos, grammatical and spelling errors) correctly in a short period of time for two different reading passages.

In addition, you have the opportunity to purchase information about each candidate before choosing which candidate to hire.

We are giving you 70 cents — in addition to the participation fee for this study — so that you can purchase information about candidates. This dollar, which we call the “hiring budget,” is meant to be budgeted

¹²⁵ Sample scenario available by request.

across all 10 pairs of candidates. The remainder of the “hiring budget” will be yours to keep at the end of this study.

Then, after reading the full instructions and the quizzes, respondents began the task and were presented with a pair of candidates labeled by letter (e.g., A & B). As seen below, respondents would click on the boxes for which they wanted information. Table 1 shows what information respondents could see for each applicant. The items shown here were meant to approximate what is generally available on many resumes.

Table 1. What Respondents Could Purchase in Study 1¹²⁶

Please click to learn more information about each candidate. Please note that once you click next, you will not be able to return to select more information.	
Candidate A	Candidate B
<i>_Educational background</i>	<i>_Educational background</i>
<i>_Favorite school subject</i>	<i>_Favorite school subject</i>
<i>_Age</i>	<i>_Age</i>
<i>_Native English speaker</i>	<i>_Native English speaker</i>
<i>_Diversity considerations</i>	<i>_Diversity considerations</i>
<i>_Other language experience</i>	<i>_Other language experience</i>
<i>_Employment status</i>	<i>_Employment status</i>

After selecting characteristics for view, respondents then saw this information and made their choice between the two candidates. On the next screen, they were informed about the performance of both candidates, specifically whether they would receive a bonus from choosing the “better performing” candidate. After repeating this process nine times, for a total of ten paired choices, respondents finished the study by completing a demographic survey.

2. Results

Two hundred and fifty-two respondents completed Study 1; 53.2% of respondents were male and the median age of respondents was thirty-

¹²⁶ Note that the categories in Table 1 were randomized to prevent applicants from automatically being drawn to the first or last categories in each list.

nine years. All respondents are included in the following results, with no exclusions. Table 1 in the Appendix shows further applicant demographics.

Figure 1 shows the percentage of respondents who purchased each category.¹²⁷ Overall, 7.1% of respondents chose not to purchase any information, but the remaining majority of respondents used 32.2 cents to purchase some information — slightly under half of their seventy-cent hiring budget.

Figure 1. Percentage of respondents who purchased information in Study 1

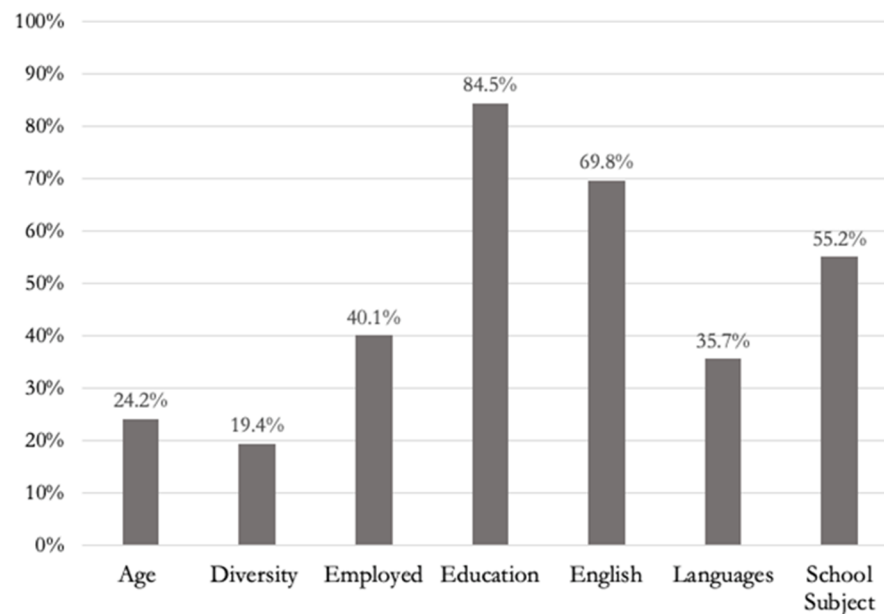


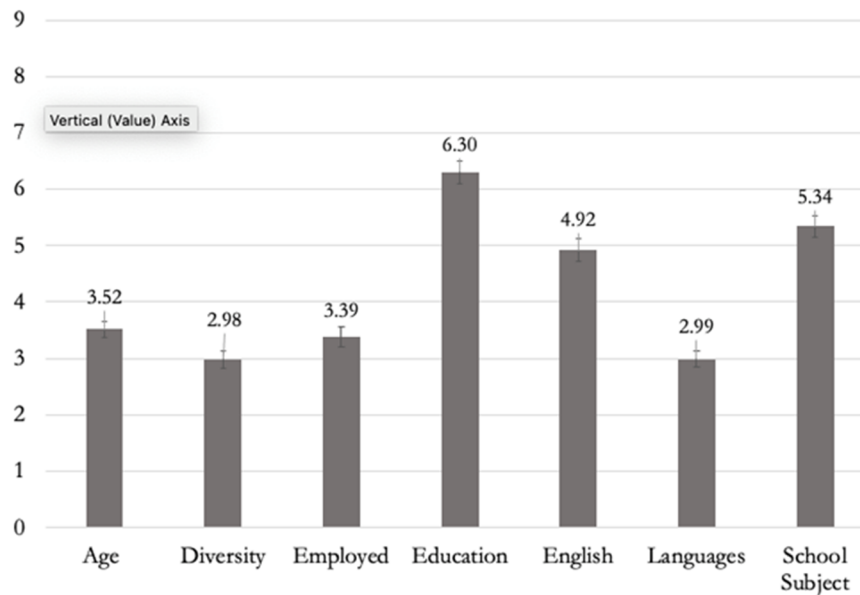
Figure 2 shows the average frequency of purchase in each category (out of ten rounds). Across all ten pairings a respondent viewed, the majority of respondents examined educational background. 84.5% of respondents viewed this information at least once, for a mean of 6.30 times per respondent (out of ten). After this, the most frequently selected category was previous experience in proofreading: 69.8% of respondents viewed this information, purchasing it about half the time.

¹²⁷ See *infra* Appendix Tbl. 2 for a descriptive table of respondents' purchases.

Importantly, between a fifth and a quarter of respondents *still* elected to view information about protected characteristics even though they had information about education and other variables typically relevant on a resume: 24.2% and 19.4% of respondents purchased information on the age and race/gender of the applicants, respectively.

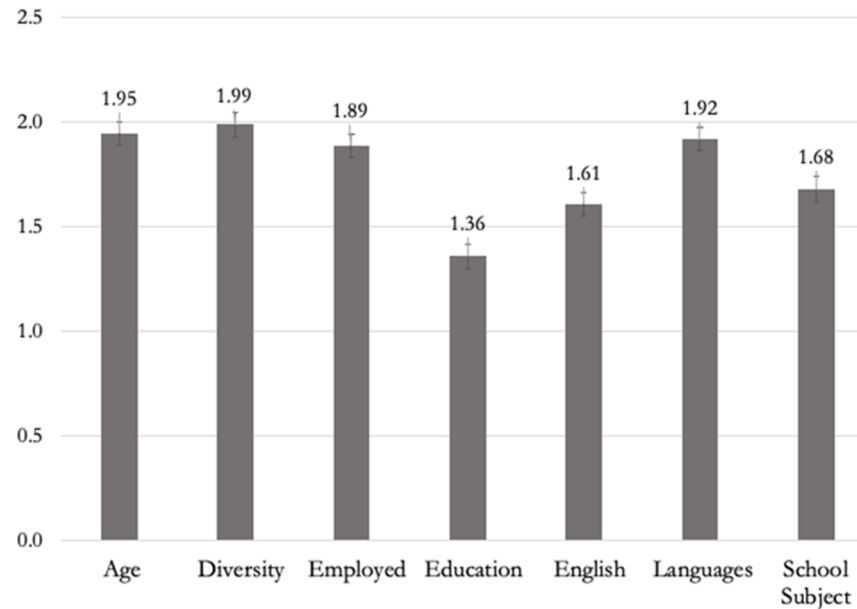
Furthermore, those respondents who purchased “diversity characteristics,”¹²⁸ i.e., information about a candidate’s race and gender, did not appear to purchase more categories compared to other respondents (Figure 3), suggesting that the purchase of protected categories was not necessarily due to curious respondents who were purchasing all categories, including diversity characteristics. Rather, these numbers suggest that those respondents purchasing diversity characteristics intended to purchase this information, at the cost of other categories.

Figure 2. Average number of categories purchased by respondents in Study 1



¹²⁸ Note that in a later replication of this study, the overall results did not differ when race and gender were labeled as such or as “diversity considerations,” underscoring the fact that respondents were explicitly purchasing information about race and gender. As one respondent commented, “[D]iversity is not a strength. [W]omen are good at finding errors.”

Figure 3. Average number of other categories purchased by respondents in Study 1



Certainly, there might be several reasons why respondents might look at this information. They may be simply curious about an applicant, although the setup of this experiment makes it unlikely since they would pay a cost for curiosity. Alternatively, it seems likely that respondents might have thought that certain characteristics benefit them in some way. Accordingly, as a follow-up question, respondents were asked “what strategy, if any, did you follow?”

Of those characteristics that are considered “protected,” age had the highest rate of purchases, as twenty-four percent of respondents purchased information about an applicant’s age.¹²⁹ Based on responses to this question, respondents who purchased age information appeared to suggest that distinguishing candidates based on age was relatively acceptable:

¹²⁹ See *supra* Figure 1; see also *infra* Appendix Tbl. 2.

“Education Background was the top consideration [sic]. I then also included age as the life experience would help with being more cautious in the task.”

“I just wanted age to see if anyone was really old or really young”

“the age and education categories told me more about candidates than the other subjective ones”

“Also, age played a factor. Older people, by virtue of experience, tend to be more diligent.”

“Age and Education would be the most important factors in quality”¹³⁰

The comments above are consistent with theories of statistical discrimination, in which additional information about employees helps to mitigate discrimination by offsetting employers’ assumptions about applicants’ productivity. In fact, whether someone purchased protected characteristics was correlated with a win in the same round,¹³¹ suggesting that respondents who purchased protected characteristics were able to successfully “pick” the candidate with the proofreading performance.¹³²

But separate from those theories, we see the intent to capture information about demographics and the goal of using them. Although respondents might be simply engaging in pattern recognition regarding

¹³⁰ Data on file with author.

¹³¹ A respondent was 1.57 times more likely to pick the “right” candidate if they had purchased diversity characteristics. See *infra* Appendix Table 3.

¹³² Indeed, performance on the previous proofreading task was highly correlated with an “applicant’s” performance. That is, the pairings were deliberately arranged in such a way that if the respondent picked only female respondents in any of the studies, they would win all 10 rounds. In this way, I attempted to simulate conditions for statistical discrimination and look at who respondents picked. Because the female candidates had “higher scores,” if respondents purchase gender data but did not pick the female candidate in a pair, they would “lose.” But if they purchased past experience data or had picked the female candidate several times before, respondents should hire the woman if statistically discriminating. By “rigging” the game, I can see to what extent respondents are “learning,” much like employers do, about how certain characteristics correlate with applicant performance, and what they do in response. This result may suggest that participants may have picked up on the pattern that female candidates had higher scores on average in this simulation and chose to act on that stereotype.

gender and what candidate to pick, this is still a form of stereotyping. Moreover, the “round” (out of ten) in which a respondent picked a candidate was not correlated with their victory, suggesting whatever strategy respondents engaged in generally did not improve over time and that they were not learning from their experiences.¹³³

Altogether, these results suggest that respondents did focus on characteristics that could plausibly be related to proofreading ability such as education, nearly a quarter of respondents purchased information on age and a fifth purchased information on race and gender — a surprising proportion. While respondents appear to be acting strategically, they are still relying on personal characteristics in a way that may be troubling to policymakers and those concerned about equality.

How might we guide respondents — and thereby employers — from this practice? One logical consequence might be to restrict less information by shifting employers to other informational characteristics and away from salient information as a substitute. Study 2 tests this theory by whether providing more information about performance might reduce the rate at which respondents purchase “protected characteristics.”

B. *Study 2*

1. Method

Study 2 proceeded identically to Study 1, except for one key difference: respondents in this survey could now purchase access to direct performance information about applicants.¹³⁴ Specifically, respondents

¹³³ See *infra* Appendix Tbl. 3.

¹³⁴ It is important to note that Study 2 by design does not include the opportunity to purchase information about an applicant’s criminal history, credit score or previous salary. This is for several reasons: first, the people paid to proofread for this study would likely feel uncomfortable providing these sensitive pieces of information for the small proofreading tasks that they did. Second, whether these pieces of information are actually correlated with applicant performance is less important than whether employers *believe* it is. Rather, this study generally tests whether the availability of actual performance information helps to offset the desire for protected characteristics and other channels for discrimination, like sensitive information subject to information restrictions.

could purchase two additional pieces of information: whether the participant had previous experience in proofreading (e.g., for pay) and how the candidate did on an identical proofreading task (e.g., the number of typos they were able to identify). Table 2 shows the list of characteristics respondents viewed in the survey.

Table 2. What Respondents Could Purchase in Study 2

Please click to learn more information about each candidate. Please note that once you click next, you will not be able to return to select more information.	
Candidate A	Candidate B
<i>_Educational background</i>	<i>_Educational background</i>
<i>_Favorite school subject</i>	<i>_Favorite school subject</i>
<i>_Age</i>	<i>_Age</i>
<i>_Native English speaker</i>	<i>_Native English speaker</i>
<i>_Diversity considerations</i>	<i>_Diversity considerations</i>
<i>_Other language experience</i>	<i>_Other language experience</i>
<i>_Employment status</i>	<i>_Employment status</i>
<i>_Previous proofreading experience</i>	<i>_Previous proofreading experience</i>
<i>_Score on proofreading task</i>	<i>_Score on proofreading task</i>

The difference between Studies 1 and 2 allows for the simulation and measurement of differences in employer behavior that might come out of an information restriction. In Study 1, “employers” already have access to many indirect variables that might capture performance, like education or favorite school subject, but salient information was restricted. But in Study 2, respondents were now able to pay for more targeted information.

Therefore, Study 2 explored whether introducing new performance information might cause respondent-“employers” to seek out demographic or other salient information less. If the introduction of performance information was associated with lower rates of purchasing demographic information, it would be consistent with both the ideas that employers are actively seeking out information and doing so because they wish to use demographic characteristics as proxies for performance.

2. Results

Four hundred and two individuals (53.6% male, median age: 39 years) were recruited on Prolific and completed Study 2 via Qualtrics survey software. As with Study 1, Table 4 in the Appendix captures further demographics.

Compared to Study 1, respondents in Study 2 purchased more information: 4.2% of respondents elected not to look at information at all and to keep their entire hiring budget. However, the majority of respondents did view at least some information, spending an average of 43.6 cents from their one dollar hiring budget.

Figures 4 and 5 show the percentage and frequency of purchases in each category, parallel to Figures 1 and 2 for Study 1. As theorized, here the introduction of performance information was appealing to respondents. Across all ten pairings a respondent viewed, most respondents examined performance on the proofreading task: 91.3% of respondents viewed this information at least once, for a mean of 8.32 times per respondent. After this, the most frequently selected category was another new category, previous experience in proofreading: 82.6% of respondents viewed this information.

Conversely, the rates of purchase of the other categories fell, but followed the same general pattern in Study 1. Importantly, the percentage of respondents who elected to view information about protected characteristics appeared to fall when performance information was available: 11.4% and 10.7% of respondents in Study 2 purchased information on the age and race/gender of the applicants, respectively, compared to 24.2% and 19.4% in Study 1.

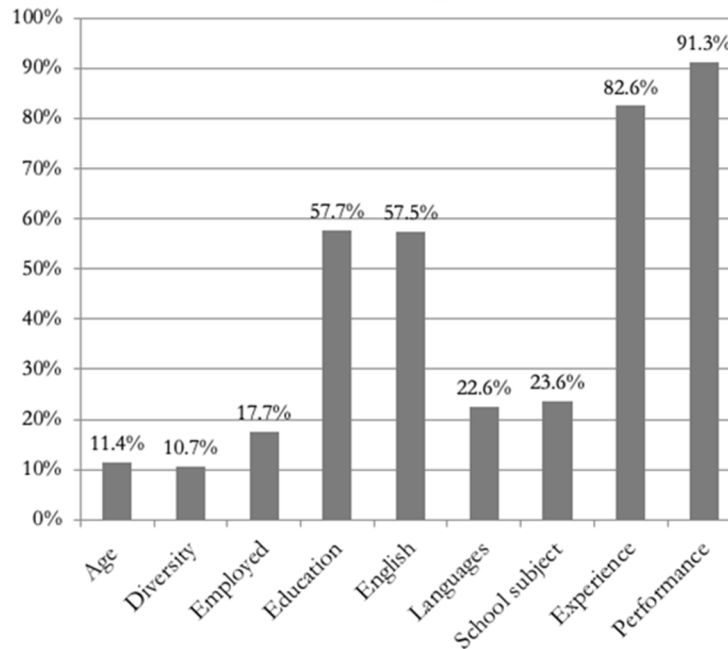
And compared to other categories that participants could have purchased like education or language ability, the drop-in purchase rates for age, race, and gender information were relatively high. For instance, whether respondents purchased information about an applicant's native English speaker status remained relatively stable across the two studies (Study 1: 69.2% vs Study 2: 57.5%).

Moreover, as expected, whether someone purchased performance information was correlated with a respondent winning. But the purchase of protected characteristics in the current round was *no longer* correlated with a win. This suggests that respondents, on the whole,

shifted their reliance *towards* additional information and *away from* demographic characteristics.

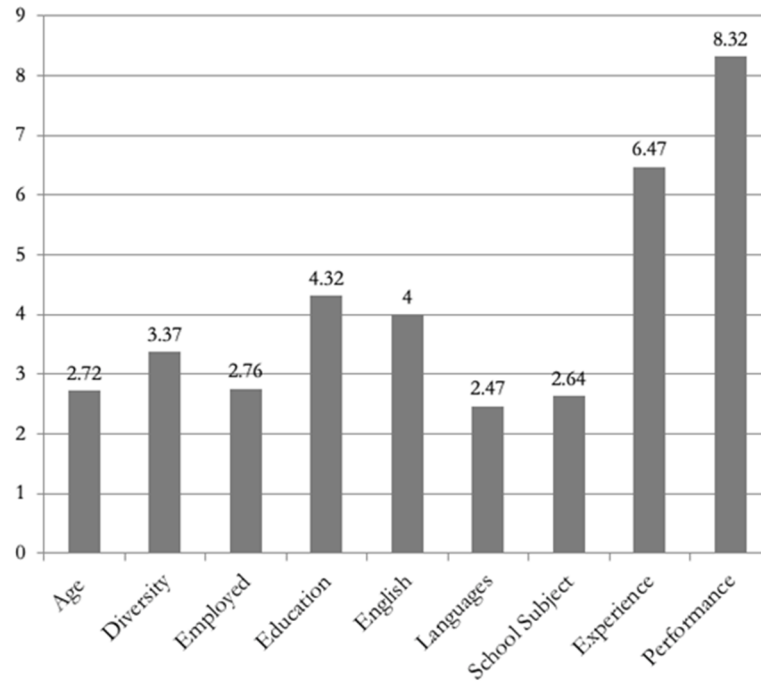
Altogether, introducing performance and experience information appeared to decrease participants' purchases of other characteristics and in particular demographic information as perceived proxies for performance. Instead, respondents shifted their purchasing behavior away from age, race, and gender information and instead towards more performance-oriented information.¹³⁵

Figure 4. Percentage of respondents who purchased information in Study 2



¹³⁵ Further, those that purchased information about performance were more successful in the survey, whereas those respondents who purchased gender or racial information in Study 2 did not gain any additional bonuses from doing so, suggesting that — true to theory — emphasizing performance information mitigated statistical discrimination, where employers are purchasing information to predict a job candidate's performance. See Altonji & Pierret, *supra* note 90 at 342-43.

Figure 5. Average number of categories purchased by respondents in Study 2



C. Implications

Using an economically realistic scenario study with over 650 respondents, I establish baseline findings about what individuals look at when hiring an applicant. Real-life people with previous experience in hiring processes *do* seek out demographic characteristics when situated as employers. They are more likely to desire this demographic information when their access to other information is restricted, to the point where they are willing to actively pay for knowing an applicant's age, race, and gender.

Respondents in these studies suggest that they seek out information about applicants' age, for instance, based on beliefs about older workers' lack of familiarity with technology or grammar — not because they seek to enable affirmative action policies. In this way, they are motivated by statistical discrimination. Accordingly, I show as an exploratory matter that providing information that appears more meaningful, like

performance information, causes respondents to shift their desire away from demographic information. Specifically, the share of respondents who continued to purchase information about demographics dropped to less than half of those who had previously purchased. The availability of performance information successfully caused employers to pivot away from stereotypical assumptions. In this way, the survey links social science theories of discrimination (in determining what people look at and the fact that they are willing to pay for it) with legal theories.

Thus far, I have suggested that overly salient restrictions might cause people to not only consider “hidden” information, but to view it as valuable enough to pay for. The juxtaposition of Studies 1 and 2 suggest that some baseline of employers do seek out protected characteristics about employees as a proxy for performance, but that providing additional information offsets this reliance on and desire for this information. When more performance information is available, employers purchase that information, instead of weaker proxies (i.e., protected characteristics). In this way, the studies illustrate the general intuition that (1) people seek to fill information with information that is stereotype-conditional and (2) the availability of other information may displace this desire.

By definition, information restrictions rely on the assumption that people make decisions — consciously or unconsciously — based on a person’s observed characteristics. The logic is that removing salient information related to these characteristics takes away information. But the studies thus suggest that in contrast to information restrictions, focusing on the availability of other information may be helpful, not necessarily because it leads employers to make the “right decision” on a candidate, but because it causes them to *shift away* their interest from other issues. Specifically, this theory distinguishes itself from typical arguments about discrimination,¹³⁶ in that it argues that restrictions about information make the information more salient itself.

To be sure, these studies simulate a situation in which hiring processes start out as anonymous. One concern might be that typically hiring processes often start out with some information about the applicant already in hand, and that in reality, information restrictions

¹³⁶ See *id.* at 342-43.

are meant to restrict only overly biased information, not productivity-related information.

However, the features of these studies allow the survey to serve as a conservative test for whether respondents would seek out demographic or sensitive information in other contexts. That is, employers and legal decision-makers already believe that requesting information about criminal records or credit history is relatively acceptable and legal compared to protected characteristics generally. If those categories had been available to purchase in Study 1, we should expect purchases of those categories to be *even higher* than what we observed with protected characteristics.

Furthermore, respondents could have simply chosen not to purchase any information besides performance-related information because they could receive a large payoff from pocketing the hiring budget at the end of the survey.¹³⁷ Yet, they went out of their way to search for this information despite other potentially relevant variables like education. As both enforcement agencies and researchers have noted, the deliberate seeking of information might be reflective of motive and disparate treatment; in fact, scholars have called for more focus on “attention discrimination.”¹³⁸

Thus, the implications of this research can also be extended to other emerging areas in information restrictions, such as salary history bans¹³⁹

¹³⁷ Because respondents were given feedback immediately after each respondent was chosen and because this was a one-off survey, we would not expect respondents to be interested in knowing everything about an applicant (i.e., compared to a longer-term job). As mentioned earlier, a few respondents did not even look at any information prior to selecting a candidate, selecting candidates randomly.

¹³⁸ See Bartoš et al., *supra* note 120, at 1471-72; see also Bertrand & Duflo, *supra* note 39, at 335.

¹³⁹ See generally Agan et al., *supra* note 94 (discussing workers voluntarily offering their salary history in states with salary history bans); Davis et al., *supra* note 72 (finding that wages for newly hired workers decreased after the implementation of salary history bans); Benjamin Hansen & Drew McNichols, *Information and the Persistence of the Gender Wage Gap: Early Evidence from California's Salary History Ban* (Nat'l Bureau of Econ. Rsch, Working Paper No. 27054, 2020), https://www.nber.org/system/files/working_papers/w27054/w27054.pdf [<https://perma.cc/G8BV-NZ3E>] (finding women's wages increased relative to men after California banned salary histories).

or credit report data.¹⁴⁰ For instance, economists find that hiding credit score histories may yield lower employment rates among Black applicants.¹⁴¹ They suggest this policy causes employers to then overly rely on discretionary interviews, which result in higher proportions of white applicants being hired.¹⁴² The results of this particular study also highlight the relative prevalence of stereotypes about age.¹⁴³

More broadly, the intuition that additional information can help to displace interest, not just reliance on restricted information, is one that can be generalized to other areas of law. While the results of these studies are a starting point for how we should think about employers' preferences, legal decision-makers and gatekeepers frequently must triage whom to provide benefits to¹⁴⁴ and which witnesses to listen to.¹⁴⁵

But any policy change should be considered thoughtfully. While the next Part details what one vision of potential information provision — rather than restriction — might look like, importantly, I challenge its wholesale promises as well.

While additional information might help an individual applicant's case, it too has its own intended consequences and should not be the only intervention in play. Rather, a better approach might be when employers and courts define and document desired outcomes from these diversity interventions with greater specificity. Structures of accountability might make applicant information less likely to be interpreted stereotypically.

¹⁴⁰ See generally Barbara Kiviat, *Credit Scoring in the United States*, 21 *ECON. SOC.* 33, 37-40 (2019) (discussing the racial history of credit scoring and its current expansion in America); Alexander W. Bartik & Scott T. Nelson, *Deleting a Signal: Evidence from pre-Employment Credit Checks* (Univ. of Chi., Working Paper No. 2019-137, 2019) (discussing the impact of banning credit reports on the hiring of Black job applicants).

¹⁴¹ See Bartik & Nelson, *supra* note 140, at 2.

¹⁴² See *id.*

¹⁴³ See Alexander A. Boni-Saenz, *Age Diversity*, 94 *S. CAL. L. REV.* 303, 310-311 (2021).

¹⁴⁴ See Deborah Epstein & Lisa A. Goodman, *Discounting Women: Doubting Domestic Violence Survivors' Credibility and Dismissing Their Experiences*, 167 *U. PA. L. REV.* 399, 421-22 (2019).

¹⁴⁵ See Cheryl R. Kaiser, Bryn Bandt-Law, Nathan N. Cheek & Rebecca Schachtman, *Gender Prototypes Shape Perceptions of and Responses to Sexual Harassment*, 31 *CURRENT DIRECTIONS PSYCH. SCI.* 254, 255, 259 (2022).

III. AN INITIAL APPROACH: MORE INFORMATION

A. *Credentialization and Assessment*

Researchers, primarily in economics, argue that providing additional information helps to dispel the focus that employers have on demographic or potentially charged information by providing other narratives in play. Information might serve two purposes: to offset suspicions about a candidate or to confirm a candidate's strengths for the job, ultimately refining or displacing employers' assumptions.¹⁴⁶ Accordingly, one interpretation of the results in Part II is that employees ought to provide as much information to employers as possible, and employers ought to make sure that information is truly performance related.

Under this interpretation, information could be provided in several different ways. As it relates to offsetting negative assumptions,¹⁴⁷ employers could offer applicants the opportunity to offer additional information about their candidacy, whether in their resume or in an "additional information category." Then, a candidate might provide proof of credentialing, i.e., external signals of previous performance like licenses or awards.¹⁴⁸

If a job applicant listed a credential on their application, employers might rely less on the applicant's race, gender, or age as a proxy for performance, knowing that the credential involved a significant investment of resources, time, and external testing.¹⁴⁹ For instance, Hersch and Shinall suggest that female applicants might want to explicitly attribute gaps in their resumes to previous full-time childcare

¹⁴⁶ That is, further information individuates employees. Edward H. Chang & Katherine L. Milkman, *Improving Decisions that Affect Gender Equality in the Workplace*, 49 ORGANIZATIONAL DYNAMICS 1, 5 (2020).

¹⁴⁷ See Agan & Starr, *supra* note 13, at 196; Doleac & Hansen, *supra* note 13, at 361; Hersch & Shinall, *supra* note 103, at 86.

¹⁴⁸ See David Neumark, *Wage Differentials by Race and Sex: The Roles of Taste Discrimination and Labor Market Information*, 38 IND. RELS. 414, 416 (1999).

¹⁴⁹ See Peter Q. Blair & Bobby W. Chung, *Job Market Signaling through Occupational Licensing 5-7* (Nat'l Bureau of Econ. Rsch., Working Paper No. 24791, 2018).

responsibilities, so that employers would not attribute their absence to lack of performance.¹⁵⁰

Others have suggested that individuals with criminal records should have the opportunity to obtain a certificate of rehabilitation.¹⁵¹ Both of these suggestions are consistent with literature that suggests that occupational licensing¹⁵² or additional signaling behaviors, like credit reports,¹⁵³ would allow individual candidates to distinguish themselves. At times, proponents of these theories then suggest that this would lead to greater racial and gender equality in the aggregate because employers would hire more female and minority employees based on these characteristics and credentials instead.¹⁵⁴

The general consensus is that as it relates to hiring the “best candidate,” the best example of future performance is directly observed, repeated performance over time.¹⁵⁵ Although resumes are the easiest and default option to evaluate a candidate, they might be subject to

¹⁵⁰ See Hersch & Shinall, *supra* note 103, at 87, 89.

¹⁵¹ See Jennifer L. Doleac, *Encouraging Desistance from Crime*, 61 J. ECON. LITERATURE 383, 406-07 (2023); Arthur Four, *Think Twice, It's All Right: The Use of Conviction Histories in Hiring Decisions Under California Law*, 49 LOY. L.A. L. REV. 453, 469 (2016).

¹⁵² See Blair & Chung, *supra* note 150, at 4.

¹⁵³ See Bartik & Nelson, *supra* note 140, at 29.

¹⁵⁴ See *id.*

¹⁵⁵ See *Can We Predict Future Performance Based on Past Behavior*, AM. SOC'Y OF EMPLOYERS (Feb. 27, 2018), <https://www.aseonline.org/News-Events/Articles/can-we-predict-future-performance-based-on-past-behavior> [https://perma.cc/LPV4-GV24]; Alison Beard, *Experience Doesn't Predict a New Hire's Success*, HARV. BUS. REV. (Sept.-Oct. 2019), <https://hbr.org/2019/09/experience-doesnt-predict-a-new-hires-success> [https://perma.cc/Y63S-D9CX]. Beard's article notes that frequently, employers assume that experience is equivalent to performance measures, but that more direct measures of performance in past jobs are preferable.

exaggeration and deception among applicants,¹⁵⁶ and, as discussed, discrimination among employers.¹⁵⁷

Accordingly, a second way for employers to obtain more information about an applicant might be for them or trusted intermediaries to collect *current* performance information about an applicant. In this study, I collected real-world proofreading data from individuals that was highly correlated with their later performance. In this realistic survey setting, respondents repeatedly chose the “best” person in a pair of potential candidates. This scenario resembles hiring situations in which an employer has relatively decent odds of hiring a competent candidate. Similarly, anonymized work samples have gained in public popularity: in these settings, applicants might complete a task in person or over the computer, as is common with some coding interviews in computer science.¹⁵⁸ The idea is to closely simulate the job to which people are applying, consistent with the law’s emphasis on “business necessity.”

More complex tasks may bring in more subjectivity, and with it, the questions of what makes a good performance and who decides what a good performance looks like.¹⁵⁹ To measure “soft skills” like communication, applicants might be observed on a brief team project, a

¹⁵⁶ See Jamie Guillory & Jeffrey T. Hancock, *The Effect of LinkedIn on Deception in Resumes*, 15 *CYBERPSYCHOLOGY, BEHAV., & SOC. NETWORKING* 135, 135 (2012); Jennifer L. Wood, James M. Schmidtke & Diane L. Decker, *Lying on Job Applications: The Effects of Job Relevance, Commission, and Human Resource Management Experience*, 22 *J. BUS. PSYCH.* 1, 1 (2007); Matthew Boyle, *George Santos’s Defense that Everyone Lies on Their Resumes Has Truth to It*, *BLOOMBERG* (Jan. 13, 2023, 7:01 AM PST), <https://www.bloomberg.com/news/articles/2023-01-13/george-santos-says-everyone-lies-on-their-resume-he-s-telling-the-truth> [<https://perma.cc/8C6G-BSCC>].

¹⁵⁷ See *supra* Part I.A.2.

¹⁵⁸ See, e.g., Sarah Buhr, *Interviewing.io Hopes to Close the Engineer Diversity Gap with Anonymous Interviews*, *TECHCRUNCH* (Sept. 27, 2017, 4:30 AM PDT), <https://techcrunch.com/2017/09/27/interviewing-io-hopes-to-close-the-engineer-diversity-gap-with-anonymous-interviews/> [<https://perma.cc/CPH7-XMYW>] (discussing how one startup allows applicants to anonymously show work quality prior to an interview); Frederic Lardinois, *Google’s Area 120 Launches Byteboard to Improve Technical Interviews*, *TECHCRUNCH* (July 17, 2019, 7:00 AM PDT), https://techcrunch.com/2019/07/17/googles-area-120-launches-byteboard-to-improve-technical-interviews [<https://perma.cc/RS5K-4QGR>].

¹⁵⁹ See Uwe Jirjahn & Gesine Stephan, *Gender, Piece Rates and Wages: Evidence from Matched Employer-Employee Data*, 28 *CAMBRIDGE J. ECON.* 683, 686 (2004); Victor S. Maas & Raquel Torres-González, *Subjective Performance Evaluation and Gender Discrimination*, 101 *J. BUS. ETHICS* 667, 667-69 (2011).

slide deck to present or an email to write, or on previous work that they can share. Structured interviews where candidates receive the same questions or tasks may allow for more direct comparison.¹⁶⁰ Finally, several scholars have suggested that, with more resources, internship programs that recruit underrepresented groups can help offset hiring disparities by showing clear evidence of interns' job performance over time.¹⁶¹

Certainly, standardized procedures may be easier to anonymize and gather information from, such as the proofreading setting presented in this Article.¹⁶² To that end, it may be the case that the results and structure of this study may be more applicable to labor markets that relate to one-off interactions, e.g., contract workers, rather than a longer-term job hiring process,¹⁶³ or to situations in which an employer must sift through many unknown candidates to find the best candidate. In contrast, in situations where a small minority of the job candidates are desired *ex ante* (e.g., superstars), anonymized processes may help by making it more difficult to identify these elite candidates.¹⁶⁴ Different tasks will require different processes, and more research should be done in this area. Ultimately, the idea is to hire on performance and not

¹⁶⁰ See Iris Bohnet, *supra* note 64, at 138-39.

¹⁶¹ See Ashley C. Craig & Roland G. Fryer, Jr., *Complementary Bias: A Model of Two-Sided Statistical Discrimination* 25 (Nat'l Bureau of Econ. Rsch., Working Paper No. 23811, 2017). Moreover, college recruiting programs appear to be a successful diversity intervention. Frank Dobbin & Alexandra Kalev, *Why Diversity Programs Fail*, HARV. BUS. REV. (July 2016), <https://hbr.org/2016/07/why-diversity-programs-fail> [<https://perma.cc/WKJ5-7GD2>].

¹⁶² See Rinne, *supra* note 62, at 1, 6.

¹⁶³ Indeed, studies about online workers suggest that there might be disparities in how different groups are perceived. See, e.g., Katharine T. Bartlett & Mitu Gulati, *Discrimination by Customers*, 102 IOWA L. REV. 223, 224 (2016) (citing Benjamin Edelman & Michael Luca, *Digital Discrimination: The Case of Airbnb.com* 9 (Harv. Bus. Sch. Negot., Orgs. & Mkts. Unit, Working Paper No. 14-054, 2014), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2377353 [<https://perma.cc/6CEK-E43G>]).

¹⁶⁴ See Helen De Cruz, *Prestige Bias: An Obstacle to a Just Academic Philosophy*, 5 ERGO 259, 259-60, 281 (2018). Of course, employers would have to be open to anonymous hiring in the first place. See Krause et al., *supra* note 62, at 14-15.

potential in order to minimize the discretion that employers might have in preferring certain groups.¹⁶⁵

B. More Information, More Problems?

But while additional information via credentialization and applicant data collection is one solution social scientists might promote, these problems may be problematic from a systems-wide approach for several reasons. I cover three of these issues in turn.

1. Additional Information Provides Other Channels for Discrimination

First, asking or “nudging” applicants to provide additional information about their candidacy does not solve the problem of discrimination; it may simply delay the process. If the ultimate goal of information restriction and its associated interventions is to minimize employers from making distinctions based on applicants’ protected characteristics, providing more information could also compound this issue if additional information about an applicant is filtered through a stereotypical lens.

Recall that in correspondence studies, gender and racial differences emerge even when resumes are identical, i.e., contain the same credentials. That is, even if a male or female candidate had the same

¹⁶⁵ It is important to note that a focus on these tasks would not conflict with affirmative action policies required of federal contractors and subcontractors. 29 U.S.C. § 793(a); 38 U.S.C. § 4212(a); Exec. Order No. 11,246, 30 Fed. Reg. 12,319 (Sept. 24, 1965). Typically, affirmative action plans include two key components, each associated with a data collection process for potential EEOC review: employers must report the demographic characteristics of its existing employees using the Department of Labor’s EEO-1 form, *see* 41 C.F.R. § 60-1.12(c) (2023), and contractors’ affirmative action plans must incorporate outreach and recruitment. 41 C.F.R. §60-741.44(f) (2023).

For plans focusing on applicants with disabilities, employers are required to invite applicants to submit their demographic information but “the pre-offer invitation to self-identify . . . must be separate from the application.” *Section 503 Regulations Frequently Asked Questions*, DEP’T OF LAB., <https://www.dol.gov/agencies/ofccp/faqs/section-503> (last updated Apr. 26, 2023) [<https://perma.cc/UJL9-3SQ2>]. Thus, an individual’s disability status is not meant as an input or motivating factor for whether they are hired or not, but for data collection purposes only. Rather, affirmative action plans seek to produce diversity in the aggregate and not impact individualized hiring decisions.

work and educational experience listed on their resumes, employers might interpret that information differently for each candidate. And that interpretation might be based in stereotype: for instance, in one field experiment using law student resumes for on-campus recruiting, the researchers found that signals of social class on a resume via a list of hobbies were interpreted differently for men and women.¹⁶⁶ Evaluators suggested that female candidates who were perceived as wealthy were also perceived to be “flight risks” to the law firm because they had independent wealth,¹⁶⁷ whereas male candidates who were perceived as wealthy were flagged as “good [people] to have at your firm”¹⁶⁸ because it was assumed that the latter group could bond over similar hobbies as their clients,¹⁶⁹ while remaining committed to the firm.¹⁷⁰

Moreover, people may be motivated to change their mind about the relative relevance of selection criteria when they anticipate the likely beneficiaries of that policy.¹⁷¹ For instance, in one experiment, respondents stated that GPA was a better predictor of performance when Black students scored higher than white students on the SAT, but favored the SAT when Black students had higher GPAs than white students.¹⁷² Additional information, while standardizing comparison between candidates, can also provide more points of discretion.

Proponents of simply providing additional information might argue that credentialization creates an equal playing field between candidates. But that neglects preexisting disparities and the fact that frequently, credentialization is used as a silver bullet to “make up” for intersectional discrimination: in Devah Pager’s study, she noted that

¹⁶⁶ See Lauren A. Rivera & Andrés Tilcsik, *Class Advantage, Commitment Penalty: The Gendered Effect of Social Class Signals in an Elite Labor Market*, 81 AMER. SOC. REV. 1097, 1109 (2016).

¹⁶⁷ See *id.* at 1119.

¹⁶⁸ See *id.* at 1120-21.

¹⁶⁹ See *id.* at 1119.

¹⁷⁰ See *id.* at 1120.

¹⁷¹ See Michael I. Norton, Samuel R. Sommers, Joseph A. Vandello & John M. Darley, *Mixed Motives and Racial Bias: The Impact of Legitimate and Illegitimate Criteria on Decision Making*, 12 PSYCH., PUB. POL., & L. 36, 40 (2006).

¹⁷² See *id.* at 42-43, 46.

callback rates for Black men without criminal records were similar to those of white men *with* criminal records.¹⁷³

The debate over the American Bar Association's Section 503¹⁷⁴ provides a useful example of the fine line between credentialization, discretion, and preexisting disparities. Under Section 503, the ABA had proposed dropping the requirement to collect LSAT scores from students.¹⁷⁵ In comments to the Association, law school deans noted that a high LSAT score can provide opportunities to students that might otherwise get overlooked in admissions piles.¹⁷⁶ In contrast, disposing of the LSAT in admissions considerations may cause law schools to focus on other proxies like an undergraduate institution's prestige, potentially entrenching other correlates such as class, race, or SAT score.¹⁷⁷ At the same time, the deans recognized that the LSAT itself is an imperfect measure marked by racial and class disparities¹⁷⁸ — and

¹⁷³ See Pager, *supra* note 1, at 957-78.

¹⁷⁴ AM. BAR ASS'N, *Admissions and Student Services*, in ABA STANDARDS AND RULES OF PROCEDURE FOR APPROVAL OF LAW SCHOOLS 2017-2018, at 33 (2017), https://www.americanbar.org/content/dam/aba/publications/misc/legal_education/Standards/2017-2018ABASStandardsforApprovalofLawSchools/2017_2018_standards_chapter5.authcheckdam.pdf [<https://perma.cc/9H7B-KPR>].

¹⁷⁵ See Letter from L. Sch. Deans to Leo Martinez, Council Chair & Joe West, Council Chair-Elect, Am. Bar Ass'n (Sept. 1, 2022), https://www.americanbar.org/content/dam/aba/administrative/legal_education_and_admissions_to_the_bar/council_reports_and_resolutions/comments/2022/june/22-sept-comment-various-deans.pdf [<https://perma.cc/J4NZ-4ZB9>] [hereinafter Letter from L. Sch. Deans]; Letter from Kevin Washburn, Dean of the Univ. of Iowa L. Sch., to Leo Martinez, Council Chair & Joe West, Council Chair-Elect, Am. Bar Ass'n (Aug. 19, 2022), https://www.americanbar.org/content/dam/aba/administrative/legal_education_and_admissions_to_the_bar/council_reports_and_resolutions/comments/2022/june/22-aug-comment-kevin-washburn.pdf [<https://perma.cc/9HP7-C9FL>] [hereinafter Letter from Kevin Washburn].

¹⁷⁶ See Letter from L. Sch. Deans, *supra* note 175, at 1; Letter from Kevin Washburn, *supra* note 175, at 1.

¹⁷⁷ See Letter from L. Sch. Deans, *supra* note 175, at 2.

¹⁷⁸ Letter from Garry Jenkins, Dean of the Univ. of Minnesota L. Sch. & John Valery White, former Dean of the Univ. of Nevada, Las Vegas Boyd Sch. of L., to Leo Martinez, Council Chair, Am. Bar Ass'n (Oct. 31, 2021), https://www.americanbar.org/content/dam/aba/administrative/legal_education_and_admissions_to_the_bar/council_reports_and_resolutions/comments/2021/casma/21-jenkins-white-casma-report-comment.pdf [<https://perma.cc/893S-S5YB>].

ultimately argued for a middle path in which the LSAT should neither be the sole factor for admission nor excluded.¹⁷⁹

2. Providing More Information May Create Perverse Norms

Second, the opportunity to provide additional information can create a norm of employers requiring more information. Thus, providing additional information may undermine some of the symbolic benefits of restricting information,¹⁸⁰ with longer term downstream consequences. First, employers have already discovered ways in which they might stay compliant with Ban the Box laws while still eliciting applicant information, by disclosing that they will condition hiring on a background check.¹⁸¹ Instead of asking about salary history, hiring managers now ask about salary *expectations*.¹⁸²

Some recent work in psychology does seek to manage these interactions between employers and applicants: as psychologists Brad Bitterly and Maurice Schweitzer point out, deflecting a sensitive question by asking the interviewer another question — rather than answering them directly or declining to respond — might be another approach for managing pre-employment inquiries.¹⁸³ Yet, this strategy may not deter a motivated employer and places the onus on applicants. Disclosing sensitive information may help an individual applicant's candidacy, but it is not clear that it changes employers' mental stereotypes in the aggregate.

¹⁷⁹ See Letter from L. Sch. Deans, *supra* note 175, at 1-2.

¹⁸⁰ See EMSELLEM & AVERY, *supra* note 58, at 4.

¹⁸¹ MICHAEL CERDA-JARA, AMINAH ELSTER & DAVID J. HARDING, CRIMINAL RECORD STIGMA IN THE COLLEGE-EDUCATED LABOR MARKET 4 (May 19, 2020), https://irle.berkeley.edu/wp-content/uploads/2020/05/Harding_Jara-Cerda-Elster-brief-1.pdf [<https://perma.cc/5QD3-KBDN>]; Lesley E. Schneider, Mike Vuolo, Sarah E. Lageson & Christopher Uggen, *Before and After Ban the Box: Who Complies with Anti-Discrimination Law?*, 47 LAW & SOC. INQUIRY 749, 771-72 (2022).

¹⁸² INST. FOR GENDER & THE ECON., *supra* note 95, at 2; see also ROBIN BLEIWEIS, CTR. FOR AM. PROGRESS, WHY SALARY HISTORY BANS MATTER TO SECURING EQUAL PAY 4 (Mar. 24, 2021), <https://www.americanprogress.org/wp-content/uploads/sites/2/2021/03/Securing-Equal-Pay.pdf> [<https://perma.cc/B83P-VER3>] (acknowledging the practice).

¹⁸³ T. Bradford Bitterly & Maurice E. Schweitzer, *The Economic and Interpersonal Consequences of Deflecting Direct Questions*, 118 J. PERSONALITY & SOC. PSYCH.: INTERPERSONAL RELS. & GROUP PROCESSES 1, 21 (2019).

In these moments, employees may face pressure, implicit or otherwise, from employers to reveal information.¹⁸⁴ Their choice is to decline to respond and be perceived negatively¹⁸⁵ or perhaps to engage in an arms race of costly credentialization. These requests for further information might entrench stereotypes and in turn, stigmatize groups further: for instance, compared to a previously incarcerated person with a certificate of rehabilitation, a person without a certificate may be perceived as less “trustworthy.”

3. Assessments May Be Correlated with Protected Characteristics

Finally, even if employers do not seek out additional information — and engage in a masked hiring process, for instance — the performance metrics or information employers choose to consider may themselves be correlated with protected characteristics. For instance, if employers favor a particular kind of expressive style or risk-taking that is correlated with gender stereotypes, they may hire a higher proportion of one gender compared to another. One recent empirical study shows that in an anonymous hiring setting, female hiring managers rated female applicants more highly, all else constant.¹⁸⁶ These situations are more likely to occur if employers are to rely heavily on a single input of performance. Indeed, these issues become heightened in anonymized or automated processes. As both the EEOC¹⁸⁷ and scholars in employment

¹⁸⁴ See, e.g., *Illegal Interview Questions and Female Applicants*, FINDLAW (last reviewed Sept. 6, 2018), <https://www.findlaw.com/employment/hiring-process/illegal-interview-questions-and-female-applicants.html> [<https://perma.cc/44K5-2NLA>] (discussing how female applicants may be asked questions about their pregnancy status); Rachel Pelta, *Illegal Interview Questions and How to Answer Them*, FLEXJOBS (Dec. 3, 2019), <https://www.flexjobs.com/blog/post/illegal-interview-questions-answer-v2> [<https://perma.cc/9A7X-DHWW>] (providing advice on how to answer interview questions concerning protected characteristics).

¹⁸⁵ Bitterly & Schweitzer, *supra* note 183, at 1.

¹⁸⁶ Heidi H. Liu, *Masked Evaluations: The Role of Gender Homophily*, 50 J. LEGAL STUD. 303, 304, 314 (2021).

¹⁸⁷ See Equal Emp. Opportunity Comm’n, Meeting — Big Data in the Workplace: Examining Implications for Equal Employment Opportunity Law — Transcript (Oct. 13, 2016), <https://www.eeoc.gov/meetings/24068/transcript> [<https://perma.cc/EC7F-WH37>].

discrimination¹⁸⁸ and algorithmic fairness¹⁸⁹ have noted, automated processes may be capturing traits that do not actually capture the skills necessary for a job.

IV. AN UPDATED APPROACH: DEFINING THE HIRING PROCESS

How might we address the fact that information restrictions and information provision *both* impact employers' desire to see information about and stereotype candidates? That less information increases employers' desire while more information increases their ability to exercise biased discretion?

I suggest that the information norm should actually point in the opposite direction, towards employers. From a practical and measurement perspective, restricting whether employers may ask certain pieces of information may make it *more* difficult to observe whether there are differences in hiring, conditional on impermissible characteristics. That is, information restrictions might also make it more difficult to measure discrimination when it occurs.

But instead of focusing on what should be provided or restricted, more appropriate enforcement could more productively look to what happens *after* these restrictions or provisions are enacted. In the next Section, I focus on one policy example to demonstrate that a fuller consideration of outcomes and distributional consequences are necessary. In subsequent sections, I argue that employers can and should collect information about the metrics they use to select candidates, rather than focusing on what is not available.

¹⁸⁸ See, e.g., Pauline T. Kim & Matthew T. Bodie, *Artificial Intelligence and the Challenges of Workplace Discrimination & Privacy*, 35 J. LAB. & EMP. L. 289, 299 (2018) (noting statistical correlations should not on their own satisfy that a trait is job related).

¹⁸⁹ See LEADERSHIP CONF. ON CIV. & HUM. RTS., CIVIL RIGHTS PRINCIPLES FOR HIRING ASSESSMENT TECHNOLOGIES 2 (2020), http://civilrightsdocs.info/pdf/policy/letters/2020/Hiring_Principles_FINAL_7.29.20.pdf [<https://perma.cc/Y39H-FAYS>]; AIRLIE HILLIARD, EMRE KAZIM, ADRIANO KOSHIYAMA, SARA ZANNONE, MARKUS TRENGOVE, NIGEL KINGSMAN & ROSELINE POLLE, REGULATING THE ROBOTS: NYC MANDATES BIAS AUDITS FOR AI-DRIVEN EMPLOYMENT DECISIONS 2 (2022), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4083189 [<https://perma.cc/UKE9-HR7C>].

A. *Defining Outcomes*

Consider again the example of “Ban the Box.” Some commentaries regarding the recent studies suggest that Ban the Box backfires as a whole,¹⁹⁰ given that hiring rates among Black applicants appear to be lower compared to white applicants.¹⁹¹ Although informational restrictions have their cognitive limits, as I have discussed in Part I, such commentary can sometimes dismiss the history of racial policing practices.¹⁹²

Tracing the history of criminal history databases, economist Lauren Russell finds that their creation and expansion in the 1970s led to a “[d]ecrease in employment for non-college educated black men” overall.¹⁹³ Russell speculates that this net decrease in employment is largely driven by the fact that non-college educated Black men with criminal records experienced unemployment, although non-college educated Black men without records may have experienced an increase in employment.¹⁹⁴

Russell’s careful study raises two issues. First, it provides an example of how greater access to applicant information might entrench an expectation for more information. Fifty years later after the creation of

¹⁹⁰ See, e.g., Jennifer L. Doleac, “*Ban the Box*” Does More Harm Than Good, BROOKINGS (May 31, 2016), <https://www.brookings.edu/articles/ban-the-box-does-more-harm-than-good/> [<https://perma.cc/6TWJ-N5K5>] (contending that Ban the Box led to lower minority hiring through employers’ use of statistical discrimination); Katie McNally, *Unintended Consequences: How “Ban the Box” Backfires for Minority Job-Seekers*, UVA TODAY (Aug. 5, 2016), <https://news.virginia.edu/content/unintended-consequences-how-ban-box-backfires-minority-job-seekers> [<https://perma.cc/YZ3S-U8PW>] (press release explaining how banning the box may have led to decreased minority hiring); Alana Semuels, *When Banning One Kind of Discrimination Results in Another*, ATLANTIC (Aug. 4, 2016), <https://www.theatlantic.com/business/archive/2016/08/consequences-of-ban-the-box/494435/> [<https://perma.cc/KJ7S-ZDU4>] (noting the purpose and potential backfiring of Ban the Box policies).

¹⁹¹ See Agan & Starr, *supra* note 13, at 222; Doleac & Hansen, *supra* note 13, at 324-25.

¹⁹² See Ajunwa & Onwuachi-Willig, *supra* note 96, at 1391-92.

¹⁹³ Lauren Russell, “*The New Jim Crow*” Employer Access to Criminal Record Information and Racial Differences in Labor Market Outcomes 25 (Working Paper, 2022), https://scholar.harvard.edu/files/laurenrussell/files/jmp_12.21.2022.pdf [<https://perma.cc/5XVR-FJU8>].

¹⁹⁴ *Id.*

these databases, many employers require criminal background checks.¹⁹⁵ Employers may shy away from hiring applicants with records given a seemingly increased risk of negligent hiring claims.¹⁹⁶ But this norm is malleable with the law. In one study of more than 600 businesses in Los Angeles, Michael Stoll and Shawn Bushway found that frequently, employers that were not legally forced to check criminal records did not do so.¹⁹⁷

Second, these differential effects call us to look at the bigger picture: what are the distributional consequences?¹⁹⁸ In Stoll and Bushway's work, the majority of employers that were required to check in their sample were retailers,¹⁹⁹ suggesting that the impact of checking criminal records might be clustered among lower-income jobs. And based on Russell's results, it would be simplistic to say that the expansion of criminal history records impacted Black men uniformly. Rather, it is important to note that the expansion of criminal history databases might benefit those without records, yet whether someone has a record is often determined by racially discriminatory practices in policing and incarceration.

Without addressing these discriminatory practices, informational norms will have limited effects. If the relevant policy problem is addressing the stigma that employers attach to criminal records generally²⁰⁰ — then Ban the Box may be one (incomplete) tool of many to address these normative concerns. But if the problem is people

¹⁹⁵ See Naomi F. Sugie, Noah D. Zatz & Dallas Augustine, *Employer Aversion to Criminal Records: An Experimental Study of Mechanisms*, 58 CRIMINOLOGY 5, 6 (2020).

¹⁹⁶ See *id.* at 8-9.

¹⁹⁷ See Michael Stoll & Shawn D. Bushway, *The Effect of Criminal Background Checks on Ex-Offenders*, 7 CRIMINOLOGY & PUB. POL. 371, 376 (2008).

¹⁹⁸ See Noah Zatz, *Ban the Box and Perverse Consequences, Part II*, ONLABOR (Aug. 3, 2016), <https://onlabor.org/ban-the-box-and-perverse-consequences-part-ii/> [<https://perma.cc/37V8-WDL7>] (“The aggregate employment metric’s flaw is its insensitivity to the mechanisms that generate aggregate disparities. It is brutally consequentialist. All members of a racial group are treated as fungible: it doesn’t matter who gets a job or loses a job and why, all that matters is the total number. . . . Employment discrimination doctrine rightly rejects such aggregate thinking.”).

¹⁹⁹ See Stoll & Bushway, *supra* note 197, at 385-86.

²⁰⁰ See Sugie et al., *supra* note 195, at 27.

forming racial stereotypes from absent information, then there also needs to be interventions that target racial discrimination itself.²⁰¹

Ultimately, before designing, implementing, or challenging an intervention, policymakers need to determine who are the specific populations they are seeking to help and consider the potential tradeoffs. Not only is further research necessary to understand the impacts of information restrictions — before, during, and after implementation — but context is important for determining what the outcome should be (e.g., an increase in employment among a specified population or a reduction in racial disparities). Regardless, what an appropriate outcome should look like is outside the scope of this Article. My argument is that diversity policies such as information restrictions ought to be consistent with their stated goals — and those goals ought to be clearly articulated in order to determine the relevant intervention.

As it relates to information restrictions, further research should test how salient certain pieces of information are to employers' decision-making processes because it may affect the effectiveness of information restrictions. For instance, as of July 2022, the three major credit reporting companies agreed to “no longer report[] medical collections . . . less than 180 days past due and . . . [those] paid by insurance.”²⁰² But employers have articulated that when medical debt is visible on a job candidate's credit history, they actively shape procedures so that it is not “counted” in a background check.²⁰³ That is, employers already

²⁰¹ See, e.g., Noah Zatz, *Ban the Box and Perverse Consequences, Part I*, ONLABOR (Aug. 2, 2016), <https://onlabor.org/ban-the-box-and-perverse-consequences-part-i/> [<https://perma.cc/AY5W-RAM8>] (“Clearly the first best solution would be to suppress both forms of discrimination. We should ban the box and vigorously prevent employers from racially profiling.”).

²⁰² CONSUMER FIN. PROT. BUREAU, PAID AND LOW-BALANCE MEDICAL COLLECTIONS ON CONSUMER CREDIT REPORTS 3 (2022), https://files.consumerfinance.gov/f/documents/cfpb_paid-and-low-balance-medical-collections-on-consumer-credit-reports_2022-07.pdf [<https://perma.cc/777Y-DFTB>].

²⁰³ See Barbara Kiviat, *The Art of Deciding with Data: Evidence from How Employers Translate Credit Reports into Hiring Decisions*, 17 SOCIO-ECON. REV., 283, 297 (2019) (“As a recruiter . . . explained: ‘We typically won’t hold [delinquent medical debt] against you. You might just be working it out with your healthcare, trying to get insurance to pay.’ The moral ambiguity of unpaid medical debt was so great that one company taking a calculative approach baked it into the rules. A recruiter for a financial data firm said that

acknowledge that medical debt is a poor approximation for whether someone will be a good, moral employee and discount it consciously.²⁰⁴ Accordingly, this might suggest that an information restriction for medical debt might be *helpful* for applicants. Employers will not speculate about medical debt because it is not particularly salacious or meaningful to them. And not only might it benefit applicants through a higher credit score that employers *will* view, but an additional outcome might be applicant financial stability: applicants can direct their income towards other higher interest debts instead.

B. *Defining Accountability*

Once desired outcomes are determined — whether it be to reduce disparities between similarly situated individuals or to increase the diversity of applicants or employees more broadly — then operationalizing these outcomes should incorporate performance information at the aggregate level.

Legal claims of discrimination are already difficult to establish. Employers may fear being forthright about beliefs grounded in stereotype, as it may be evidence of disparate treatment.²⁰⁵ That is, even though disparate treatment is actionable when employers incorrectly treat applicants differently based on *perceived* protected

while company policy was not to hire anyone with more than two accounts in default, medical debts did not count toward the total.”).

²⁰⁴ See *id.* (“Hiring professionals did this by understanding certain debts as sacred and particularly bad to default on, by attributing moral weight to the amount of outstanding debt, and by casting certain sorts of spending as frivolous. One frequently cited indication that the situation, not the job candidate, was to blame was if the debt had to do with medical treatment. Medical debt is not always labeled as such on a credit report, but when it was, employers generally assumed that people had been overwhelmed by unexpected but necessary bills; that the structure of the US healthcare system frequently left people with large debts they could not legitimately be expected to quickly pay off in full. Some respondents also imagined job candidates with unpaid medical debt as rightful non-payers.”). Note the construction of a narrative here by employers.

²⁰⁵ See Linda Hamilton Krieger & Susan T. Fiske, *Behavioral Realism in Employment Discrimination Law: Implicit Bias and Disparate Treatment*, 94 CALIF. L. REV. 997, 1032 (2006).

characteristics,²⁰⁶ it might be difficult to prove if employers made gendered or other inferences about applicants via missing information. But if further information was captured about applicants' interactions with employers, a plaintiff might, for example, be able to show that their rejection was based in stereotyping.²⁰⁷ These points suggest that information about the application process itself, not just applicant information, should be collected.

Accordingly, employers could be required to provide *ex ante* commitments to concrete criteria for deciding on a candidate. Certainly, most firms use some form of this process already (e.g., a rubric). But to the extent that employers compare candidates to the job description versus a concrete performance metric, this leaves a high amount for employers to potentially exploit discretion and to change their mind about what criteria matter *post hoc*. If employers are collecting multiple points of assessment about an applicant, then they should decide what matters first.

Then, this precommitment to selection criteria could be coupled with an *ex post* measurement: whether the metric used fits “business necessity” by measuring the correlation between the test or metric itself and future performance of the candidate at another later point. That is, more proactive audits of hiring processes can capture whether employers are seeking — and using — restricted information about a candidate.

By requiring measurements at both time points, data collection can focus on whether employer behavior is consistent with stated goals. As evidence from field studies suggest, transparency and accountability help managers make decisions about promotions in a more balanced manner. Furthermore, aggregated data collection allows for agencies and employers to not only empirically test whether applicant

²⁰⁶ See, e.g., Harper, *supra* note 29 (noting Abercrombie's lower-BMI requirement can be perceived as a protected characteristic under the ADA and thus be actionable even if it is not always a protected characteristic); Malamud, *supra* note 29 (discussing the state of law in employment discrimination and disparate treatment cases).

²⁰⁷ See Barnett v. PA Consulting Grp., 715 F.3d 354 (2013) (citing Reid v. Google, 235 P.3d 988 (2010)); Stephanie Bornstein, *Unifying Antidiscrimination Law Through Stereotype Theory*, 20 LEWIS & CLARK L.J. 920, 963 (2018); Stan Malos, *Overt Stereotype Biases and Discrimination in the Workplace: Why Haven't We Fixed This by Now?*, 27 EMP. RESPS. & RTS. J. 271, 275-76 (2015).

performance is a good predictor of performance and a matter of “business necessity,” but also whether it is a proxy for protected characteristics or might result in further discrimination. As other scholars like Orly Lobel and discussions of algorithmic fairness have noted, collecting data about the precise protected characteristics that applicants share allows for better auditing processes.²⁰⁸ Excluding certain proxies from consideration make it more difficult to understand when those proxies are playing out in the background.²⁰⁹

Indeed, infrastructure for these processes already exists. To provide some examples of operational feasibility, many firms already collect much of the data needed for an audit, as they are required to compile and report demographic information to the Department of Labor.²¹⁰ And while subject to criticism and in need of reform,²¹¹ the 1978 Uniform Guidelines on Employee Selection Procedures, which provides guidance on compliance with the “business necessity” test, establishes audits as a viable starting point.²¹²

²⁰⁸ See Orly Lobel, *The Law of the Platform*, 101 MINN. L. REV. 87, 166 (2016); Orly Lobel, *The Law of AI for Good* 48 (San Diego Legal Stud. Working Paper No. 23-001, 2023). To be sure, there may be concerns with employer monitoring of employee activity, which ongoing performance collection might implicate. See Matthew T. Bodie, *The Law of Employee Data: Privacy, Property, Governance*, 97 IND. L.J. 707, 717 (2022); Matthew T. Bodie, Miriam A. Cherry, Marcia L. McCormick & Jintong Tang, *The Law & Policy of People Analytics*, 88 U. COLO. L. REV. 961, 987-88 (2017). An additional purpose of such an audit, however, is to be clear about whether the information employers collect is meaningful to their hiring and promotion processes — or excessive.

²⁰⁹ See Talia Gillis, *The Input Fallacy*, 106 MINN. L. REV. 1175, 1221 (2022).

²¹⁰ See 41 C.F.R. § 60-1.12(a) (2006); see also Stoll & Bushway, *supra* note 199; *infra* note 165 (detailing the data collection employers must undergo for potential EEOC review).

²¹¹ See Darrell S. Gay & Abigail M. Kagan, *Big Data and Employment Law: What Employers and Their Legal Counsel Need to Know*, 33 ABA J. LAB. & EMP. L. 191, 207-08 (2018) (arguing that the Uniform Guidelines should be revised to incorporate algorithmic bias); Michael A. McDaniel, Sven Kepes & George C. Banks, *The Uniform Guidelines Are a Detriment to the Field of Personnel Selection*, 4 INDUS. & ORG. PSYCH. 494, 496-503 (2011) (discussing the Uniform Guidelines’ statistical vagueness).

²¹² See 29 C.F.R. §§ 1607.4, 1607.11 (1978); see also Ifeoma Ajunwa, *An Auditing Imperative for Automated Hiring Systems*, 34 HARV. J.L. & TECH. 621, 666 (2021); Solon Barocas & Andrew D. Selbst, *Big Data’s Disparate Impact*, 104 CALIF. L. REV. 671, 702 (2016); Andrés Páez, *Negligent Algorithmic Discrimination*, 84 LAW & CONTEMP. PROBS. 19, 24 (2021).

Perhaps employers might argue that their sector-specific expertise requires further autonomy in their decision-making processes.²¹³ But an approach towards collecting performance and outcome information does not preclude employer decision-making. It defers to their expertise about what information is valuable but asks simply that the employer be held accountable for those choices, by providing a measurable way to determine what applicant characteristics employers have acted on.

C. *Defining Discrimination*

Finally, I argue that regulators and courts can and should take a proactive role in defining what discrimination looks like and when it can be enforced. As Talia Gillis has pointed out, “the exact criteria to be used in outcome analysis cannot be defined without clear definition of what discrimination law, and disparate impact in particular, is meant to achieve.”²¹⁴

A definition and argument for what disparate impact should achieve is beyond the ken of this Article, but one starting point could be to help refine our understanding of reliance on protected factors. Courts have previously articulated that correlations between a job measure and protected characteristics do not necessarily rise to the level of Title VII mechanisms, absent an articulated causal mechanism.²¹⁵ But for the most part, informal guidance reigns supreme.²¹⁶ This lay understanding of employment law can cause confusion: for instance, in another ethnographic study, university hiring committees spent a great deal of time seeking information about female faculty members’ partners.²¹⁷ But they expressly denied that this was discrimination based on gender; rather, they argued they were simply seeing whether a faculty member’s partner would also be willing to move.²¹⁸ Instead, based on the results of the two surveys in this Article, it might be possible to suggest an intent

²¹³ See Earl M. Maltz, *Title VII and Upper Level Employment — A Response to Professor Bartholet*, 77 NW. U. L. REV. 776, 790 (1983).

²¹⁴ Gillis, *supra* note 209, at 1248.

²¹⁵ See *Texas Dep’t of Hous. & Cmty. Affs. v. Inclusive Cmty. Project*, 576 U.S. 519, 531 (2015).

²¹⁶ See Edelman et al., *supra* note 56, at 1597.

²¹⁷ See Rivera, *supra* note 89, at 1119-20.

²¹⁸ See Rivera, *supra* note 89, at 1129, 1133.

to view this information *at the expense* of other available information could be considered indirect evidence of a motivating factor that courts look for.²¹⁹

Second, the Supreme Court has previously attempted to encourage employers in implementing anti-discrimination measures *ex ante* by creating a “safe harbor” in which companies with EEO policies would be assumed to be acting in good faith.²²⁰ Under *Kolstad v. American Dental Association*, Justice O’Connor noted that these employers could be shielded from punitive damages.²²¹ In subsequent years, scholars have used the presence of the “safe harbor” to suggest that employers should have the freedom to implement innovative diversity interventions.²²² But as sociologists have noted, subsequent EEOC guidance may have led to the entrenchment of a standardized set of human resources practices that limit more robust diversity interventions.²²³ I join the calls of scholars who wish to ensure that the safe harbor is defined with more specificity²²⁴ and limited to practices that integrate empirical knowledge of how discrimination can persist, particularly in algorithmic settings.²²⁵ Preventative measures should not be simply performative;²²⁶ the ability to audit applicant and personnel data should not be a substantial administrative burden among employers covered by Title VII.

As this Article shows, in the absence of information, employers will seek out protected characteristics. This desire is amplified when one solution is touted as the ultimate diversity intervention — whether it be

²¹⁹ Under Title VII, either but-for or mixed motives causation are sufficient to establish liability. *See* *Desert Palace, Inc. v. Costa*, 539 U.S. 90, 100-02 (2003). Of course, there may be confusion about the definition of a “motivating factor” itself. *See* Andrew Verstein, *The Jurisprudence of Mixed Motives*, 127 *YALE L.J.* 1106, 1115 (2018).

²²⁰ *See* *Kolstad v. Am. Dental Ass’n*, 527 U.S. 526, 544 (1999).

²²¹ *See id.* at 545-46.

²²² *See* Ajunwa, *supra* note 212, at 665-66 (citing Pauline Kim, *Safe Harbors for Algorithms?* (unpublished manuscript) (on file with Ifeoma Ajunwa)); Steven A. Ramirez, *Diversity and the Boardroom*, 6 *STAN. J. L. BUS. & FIN.* 85, 86-87 (2000).

²²³ *See* Edelman et al., *supra* note 56, at 1630-31; Kalev et al., *supra* note 112, at 610.

²²⁴ *See* Susan Bisom-Rapp, *The Role of Law and Myth in Creating a Workplace that ‘Looks Like America’*, 43 *BERKELEY J. EMP. & LAB. L.*, 251, 296-98 (2022).

²²⁵ *See id.*; LEADERSHIP CONF. ON CIV. & HUM. RTS., *supra* note 189; Hilliard et al., *supra* note 189, at 2.

²²⁶ *See* Edelman et al., *supra* note 56, at 1592.

information restrictions or information gathering. But using methods from psychology and behavioral research, we can test when employers seek out this information. Incorporating law, we can also shift the responsibility to employers themselves.

D. *Methodological Concerns*

Finally, courts and policymakers may wish to know whether the conclusions drawn here truly reflect employers' goals. As a general matter, while survey data is not always representative of the real world, there is typically a high degree of external validity in online data collection.²²⁷

The studies in this Article are particularly realistic for several reasons. First, sample respondents were explicitly recruited based on having previous hiring experience in the United States. The survey's respondent group is also unique among employment discrimination studies: other surveys concerning employment discrimination typically include hiring managers.²²⁸ While hiring managers are certainly close to the action, they are not always empowered to make the final decision on candidates, whereas this pool of respondents — from different employment sectors — is more likely to have made that decision before.

Second, by simulating a hiring process while using real money, this study more realistically explores how employers relatively rank their preferences for applicant information — a feature called “incentive compatibility” that is a key of experimental economics literature²²⁹ but

²²⁷ See Alexander Coppock, Thomas J. Leeper & Kevin J. Mullinix, *Generalizability of Heterogeneous Treatment Effect Estimates Across Samples*, 115 PROC. NAT'L. ACAD. SCI. 12441, 12441-46 (2018). See generally Stefan Palan & Christian Schitter, *Prolific.ac — A Subject Pool for Online Experiments*, 17 J. BEHAV. & EXPERIMENTAL FIN. 22 (2018) (introducing a now commonly used online platform to recruit participants for online experiments).

²²⁸ See, e.g., Deros & Decoster, *supra* note 93, at 6.

²²⁹ Incentive compatibility signifies that the incentives in the experiment are reflective of a real-life scenario; it is important in experiments because it helps buffer against claims of external invalidity. See Alvin E. Roth, *Introduction to Experimental Economics* 5, in HANDBOOK OF EXPERIMENTAL ECONOMICS (J.H. Kagel & Al Roth eds., 1995); Rachel Croson, *The Method of Experimental Economics*, 10 INT'L. NEGOT. 131, 133-35 (2005); John A. List & Craig A. Gallet, *What Experimental Protocol Influence Disparities Between Actual and Hypothetical Stated Values?*, 20 ENV'T. & RES. ECON. 241, 250 (2001).

uncommon among law and social science studies.²³⁰ Experiments are sometimes criticized for only approximating the real world. But an incentive-compatible experiment asks respondents to put their money where their mouth is, by giving respondents a “hiring budget”²³¹ with real payoffs.²³² Although the study is a vignette, by observing respondents’ behavior rather than asking them directly, this setup allows us to see peoples’ honest preferences for different information.

The studies here serve as proof-of-concept that information restrictions may not mitigate employers’ desire for information. But given the rate at which respondents viewed data about protected characteristics, it would not have been statistically sound to consider what percentage of applicants who purchased gender information, for example, picked the female candidate. Further research should be done in understanding the precise contexts in which additional information will hold employers’ attentions.

From a methodological perspective, these studies put forth a new survey paradigm that can be used to measure what individuals want and how they learn. This ranking is important because it allows

In this experiment specifically, the respondent earns a real-life payout when their employee performs well, but also faces search costs in hiring. The amount spent on one category represents the frequency to which a respondent would have been interested in a particular piece of information, whereas the total amount of information considers the extent to which that participant might simply be curious about applicants. Because respondents must pay per piece of information, this represents an “incentive-compatible” setup: as in the real world, employers must make cost-based tradeoffs in hiring candidates.

With a hiring budget of one dollar in Study 2, a respondent could purchase up to 100 pieces of information during the entire experiment, out of 200 total pieces of information available (10 pieces of information multiplied by 20 job candidates). Because respondents would have insufficient funds to purchase information about every candidate, this represents an effective budget constraint.

²³⁰ See Tess Wilkinson-Ryan, *Experimental Psychology & The Law*, in OXFORD HANDBOOK L. & ECON. 106 (Francesco Parisi ed., 2017).

²³¹ Note that Institutional Review Boards generally prohibit respondents from using their own money to pay for information; rather, the appropriate method is to give a bonus budget for respondents to do so.

²³² Moreover, the repeated nature of the experiment — versus one-off hiring surveys — also allows for more efficient measurements compared to previous survey studies. By having respondents engage in multiple decisions, this survey experiment allowed us to see *how* an individual respondent’s behavior might change over time.

policymakers to assess the extent of these preferences and accordingly triage resources towards potential inequities. To my knowledge, this project is the first to establish a relative preference for what information employers are motivated to seek.

CONCLUSION

As Kimani Paul-Emile describes, “[A]lthough seemingly straightforward, inquir[ies] into the employer’s mental state presents thorny practical problems.”²³³ This Article seeks to make these problems less thorny, by leveraging what we know from social science.

Information restrictions have unintended consequences because they do not directly address what information employers seek. Instead, they may make “forbidden” information more salient and more sought out. Yet, simply providing more information to employers may not offset these problems. But more outwardly shifting the responsibility to employers for *how* they use this information may limit both their desire and reliance on this information. Seeing what employers seek allows us to address the inquiries Paul-Emile describes.²³⁴ To attempt workplace equality successfully, we must define it clearly: who is affected, when are they affected and how are they affected.

²³³ Kimani Paul-Emile, *Beyond Title VII: Rethinking Race, Ex-offender Status and Employment Information in the Information Age*, 100 VA. L. REV., 893, 924-25 (2014).

²³⁴ See *id.* at 924.

APPENDIX

Table 1. Characteristics of Study 1 respondents

Gender	N	Share
Male	134	46.0%
Female	116	53.2%
Non-binary/other	2	.8%
Age		
18-24	3	1.2%
25-34	65	26.5%
35-44	94	38.4%
45-54	38	15.5%
55-64	26	11.8%
65 and above	16	6.5%
Race		
White	204	81.3%
Black	12	4.8%
Asian	14	5.2%
Multiracial/other	24	8.5%
Education		
High school diploma	11	4.4%
Some college	55	21.8%
Bachelor's degree or above	186	73.8%
Native English speaker		
Yes	249	99.6%
No	1	0.4%
Proofreading experience		
Yes	104	41.3%
No	148	58.7%

Table 2. Rates of information seeking by category in Study 1

Category	Mean number of times purchased	Number of participants that purchased	Percentage of participants that purchased	Mean number of times purchased, among those who purchased (SD)	Mean number of other categories purchased per round, among those who purchased (SD)
All participants (N=252)					
Age	0.85 (1.86)	61	24.2%	3.52 (2.21)	1.95 (0.88)
Diversity considerations	0.58 (1.64)	49	19.4%	2.98 (2.60)	1.99 (0.92)
Employment status	1.36 (2.43)	101	40.1%	3.39 (2.81)	1.89 (0.87)
Educational background	5.33 (3.77)	213	84.5%	6.30 (3.26)	1.36 (0.91)
Native English speaker	3.44 (3.55)	176	69.8%	4.92 (3.28)	1.61 (0.88)
Other languages spoken	1.07 (2.02)	90	35.7%	2.99 (2.38)	1.92 (0.90)
Favorite school subject	2.94 (3.55)	139	55.2%	5.34 (3.18)	1.68 (0.95)

Table 3. Predictors of winning a round in Study 1

Purchased protected characteristics in current round	1.57**
Purchased English characteristics in previous round	0.67**
Purchased other characteristics in previous round	0.98
Number of rounds won	0.80
Round (first round=1, last round=10)	1.11
Participant age	0.98
Participant gender (Male=1, Female=0)	1.04
Participant ethnicity (Nonwhite=1, White=0)	0.96
N	2,400
df	30
Wald	152.33

Notes: * $p = 0.05$, ** $p = 0.01$, *** $p < 0.001$. All results are in odds ratios. Other predictors include block, budget constraint, the number of cents purchased in other categories this round, and respondent characteristics (native English speaker, employment, and educational status).

Table 4. Characteristics of Study 2 respondents

Gender	N	Share
Male	200	49.9%
Female	200	49.9%
Non-binary/other	1	.3%
Age		
18-24	14	3.5%
25-34	110	27.4%
35-44	128	31.9%
45-54	85	21.2%
55-64	43	10.7%
65 and above	21	5.2%
Race		
White	323	80.4%
Black	22	5.5%
Asian	16	4.0%
Multiracial/other	41	10.2%
Education		
High school diploma	21	5.2%
Some college	111	27.6%
Bachelor's degree or above	270	67.2%
Native English speaker		
Yes	393	98.0%
No	8	2.0%
Proofreading experience		
Yes	183	46.3%
No	216	53.7%

Table 5. Rates of information seeking by category in Study 2

Category	Mean number of times purchased	Number of respondents that purchased	Percentage of respondents that purchased	Mean number of times purchased, among those who purchased (SD)	Mean number of other categories purchased per round, among those who purchased (SD)
All respondents (N = 402)					
Age	0.31 (1.09)	46	11.4%	2.72 (1.97)	2.34 (1.13)
Diversity considerations	0.36 (1.36)	43	10.7%	3.37 (2.67)	2.34 (1.12)
Employment status	2.5 (3.22)	71	17.7%	2.76 (2.52)	2.32 (1.10)
Educational background	2.49 (3.22)	232	57.7%	4.32 (3.17)	2.09 (1.02)
Native English speaker	2.30 (3.06)	231	57.5%	4.00 (3.08)	2.12 (1.01)
Other languages spoken	0.56 (1.42)	91	22.6%	2.47 (2.06)	2.32 (1.11)
Favorite school subject	0.62 (1.56)	95	23.6%	2.64 (2.25)	2.32 (1.11)
Previous experience in proofreading	5.34 (3.82)	332	82.6%	6.47 (3.22)	1.77 (0.98)
Performance on the first proofreading task	7.59 (3.46)	367	91.3%	8.32 (2.66)	1.43 (1.16)