

PINK PAPERS ON LGBTQ+ ECONOMICS SPONSORED BY CSQIEP<sup>‡</sup>

Knowledge about Federal Employment Nondiscrimination  
Protections on the Basis of Sexual Orientation<sup>†</sup>

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Nondiscrimination policies on the basis of age, sex, race, nationality, disability, religious affiliation, and other characteristics are widespread throughout the United States. These policies generally prohibit discrimination in hiring, firing, wages, and promotions on the basis of protected characteristics. Substantial literatures in economics have studied the effects of these laws on labor market outcomes for the demographic groups directly targeted by the protections (see, among others, Klawitter and Flat 1998; Neumark and Stock 1999; Acemoglu and Angrist 2001; Martell 2013; Burn 2018).

A key condition for any such policy to improve outcomes is that individuals are aware of such protections. This is especially important for the individuals in the protected categories so that they can take appropriate actions such as filing a complaint with a state or federal enforcement authority (e.g., an Equal Employment Opportunities Commission). And yet, little work has examined whether individuals in the targeted groups are aware that they are protected from discrimination.

We provide new evidence on knowledge about antidiscrimination laws related

to numerous demographic characteristics. In particular, most of our analysis is focused on employment nondiscrimination protections on the basis of sexual orientation. Indeed, in 2020, the US Supreme Court issued a ruling in *Bostock v. Clayton County* that sexual and gender minorities are entitled to federal nondiscrimination protection in employment, following Title VII of the Civil Rights Act of 1964 that prohibits discrimination on the basis of sex. We are not aware of any studies examining whether people are aware that sexual minorities—lesbian women, gay men, bisexual people, and other nonheterosexual people—are protected from employment discrimination. We therefore fielded a nationally representative online survey in January 2022 to examine participants' knowledge about federal employment antidiscrimination laws. Specifically, we asked them to indicate which characteristics, including sexual orientation, are protected by federal employment nondiscrimination laws.

Our results uncover a great deal of variation regarding which characteristics our nationally representative sample thinks are protected by federal employment nondiscrimination law. Specifically, we find that significantly fewer individuals (70.9 percent of respondents) think that sexual orientation is a protected characteristic as compared to race, disability, or sex (all above 90 percent).

Moreover, using information on respondents' self-reported sexual orientation, we show that sexual minorities in our sample are no more likely than heterosexual people to know that sexual minorities enjoy federal nondiscrimination protections in employment. This suggests a possible role for an information intervention to raise awareness that sexual orientation is covered by such nondiscrimination policies.

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In addition, among sexual minorities, we find that respondents living in states that did not previously have statewide employment nondiscrimination protections in both public and private employment on the basis of sexual orientation prior to the *Bostock* ruling are significantly less likely (by 10.6 percentage points) to correctly report that federal law prohibits discrimination on the basis of sexual orientation compared to sexual minorities living in other states. Nevertheless, even among the sexual minorities living in states that had statewide employment nondiscrimination protection covering sexual orientation prior to *Bostock*, we estimate that over a quarter of those individuals do not correctly respond that there was federal nondiscrimination protection on the basis of sexual orientation in early 2022. Moreover, we find no such difference in reported knowledge for heterosexual respondents stratified along this same dimension of preexisting statewide protection. Even if awareness of employment nondiscrimination laws covering sexual orientation is far from universal across the country, these patterns suggest that prior experience with statewide employment protections may contribute to knowledge among sexual minorities.

### I. Data and Methodology

The survey data used in this paper were collected as part of a larger project. More details, including all study instructions, can be found in Aksoy, Carpenter, and Sansone (2022). The dataset and code are available in Aksoy, Carpenter, and Sansone (2023).

As part of our survey, participants answer standard demographic and socioeconomic questions. We also ask participants to indicate, based on their understanding, which characteristics are protected against employment discrimination by federal law. The characteristics we asked about are the following: race, disability, sex, sexual orientation, political beliefs, and eye color.<sup>1</sup> The order in which these were presented was randomized at the participant level. Participants were asked to select all that apply.

<sup>1</sup>We included political beliefs and eye color as response options because we did not want to only list categories that are protected at the federal level.

The survey was coded using oTree (Chen, Schonger, and Wickens 2016), and the data were collected on an online platform, Prolific. We ran our experiment in late January 2022 using Prolific's representative sample of the US population with respect to race, sex, and age. A total of 1,806 participants completed the study. Participants never disclosed any identifying information, and the survey was completely anonymous. The study took about 7 minutes on average to complete, and subjects who successfully completed the study received \$1.30. We provide a more thorough discussion and evidence of the representativeness of our sample and data quality in Aksoy, Carpenter, and Sansone (2022).

## II. Results

### A. Knowledge about Federal Employment Nondiscrimination Protections

First, we study whether our participants know that federal law prohibits employment discrimination based on race, disability, sex, and sexual orientation. Figure 1 presents the proportion of participants who indicate each individual category included in the survey question (i.e., the four protected categories in addition to political beliefs and eye color) as a protected class under federal employment nondiscrimination law.

Over 90 percent of our participants correctly indicate that employment discrimination based on race, disability, and/or sex is prohibited by federal law. Yet, even though federal law also prohibits employment discrimination based on sexual orientation as of 2020, only about 71 percent of our participants think this is the case.<sup>2</sup> In other words, the fact that the federal employment nondiscrimination protection has been extended to sexual minorities via the *Bostock* ruling is not as well known as more long-standing prohibitions on employment discrimination based on race, sex, or disability.

<sup>2</sup>We also find that about 38 percent and 16 percent of our participants indicated that the federal law prohibits employment discrimination based on political beliefs and eye color, respectively.

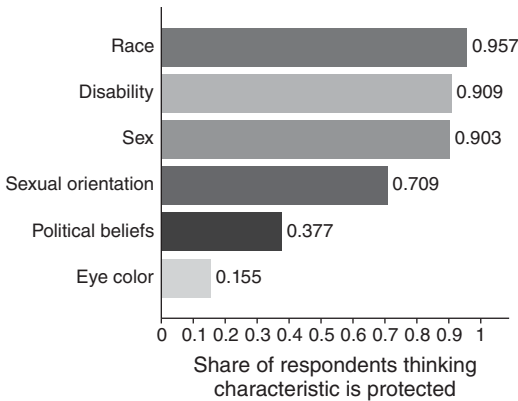


FIGURE 1. KNOWLEDGE ABOUT FEDERAL EMPLOYMENT NONDISCRIMINATION LAWS

Notes: The federal employment nondiscrimination protection question is “Based on your understanding, federal law prohibits employment discrimination on the basis of which of the following characteristics? [Select all that apply.]” The numbers next to each bar represent the share of the sample that indicate that they think the given characteristic is protected. Number of observations: 1,806.

B. Heterogeneity by Sexual Orientation, Sex, and Race

Given that knowledge about sexual orientation being a protected class is not universal, it is interesting to study whether heterosexual individuals and sexual minorities have different levels of knowledge. As can be seen in Figure 2, we find that sexual minorities in our sample are *not* more likely to know that their sexual minority status is a protected class due to the *Bostock* ruling.<sup>3</sup>

Moreover, when we examine this across the sex and race of the participants, we do not see any significant difference in the knowledge of sexual orientation being a protected characteristic either (see column 4 of Table B2 in the online Appendix).

We also examine whether the knowledge of the federal employment nondiscrimination law based on sex, race, and disability is different across participants’ own sex, race, and sexual orientation. Findings are presented in the first

<sup>3</sup>When asked whether they were heterosexual or straight, 13.8 percent of respondents answered “No” (see Table B1 in the online Appendix).

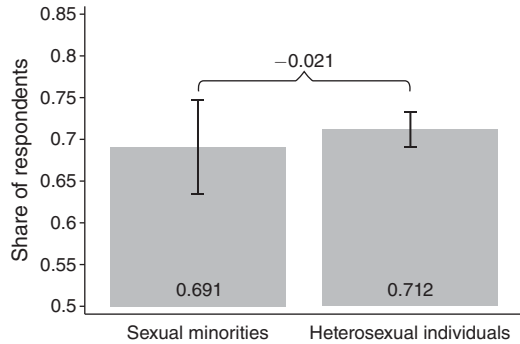


FIGURE 2. KNOWLEDGE ABOUT SEXUAL ORIENTATION BEING A PROTECTED CLASS BY SEXUAL ORIENTATION

Notes: 95 percent confidence intervals reported with vertical range plots. The numbers on each bar represent the height of the bar. The number above the horizontal line is the difference between the two groups at the top of each horizontal bar. See Figure 1 note for the federal employment nondiscrimination protection question. The sexual orientation question is: “Are you heterosexual/straight?” This figure reports the share of participants who select “Sexual Orientation” as a protected class separately by the sexual orientation of the participants. Number of observations: 1,806.

three columns of online Appendix Table B2. First, looking at knowledge of sex being a protected class, we find that individuals, independent of their sex, race, or sexual orientation, are equally like to report sex being a protected class. Second, our participants are again equally like to select race as a protected class independent of their sex, race, or sexual orientation. Third, findings are also similar for disability, although White individuals are slightly more likely to choose disability as a protected characteristic compared to individuals of other or multiple races.

C. Heterogeneity by State of Residence

Before the 2020 *Bostock* ruling, whether or not employment discrimination based on sexual orientation was prohibited by law was determined at the state level. In 25 states and the District of Columbia, state law either explicitly prohibited discrimination in both public and private employment based on sexual orientation or explicitly interpreted existing prohibition on sex discrimination to include sexual orientation (Freedom for All Americans 2022; MAP 2022). Given that the *Bostock* ruling is a new

and binding policy treatment for those who live in states that previously did not include such protections (Deal 2022), we examine the knowledge of sexual orientation being a protected class across individuals who live in these previously protected states versus others.

Figure 3 presents the proportion of participants who select sexual orientation as a protected class separately for heterosexual individuals and sexual minorities, as well as whether these individuals currently reside in states where sexual orientation was previously a protected class by state law prior to *Bostock*.<sup>4</sup>

Figure 3 reveals no difference in knowledge for heterosexual individuals. However, the pattern is different for sexual minorities: sexual minorities who reside in states that did not have a statewide sexual orientation–based nondiscrimination protection in both public and private employment prior to *Bostock* are significantly (at a 10 percent level) *less likely* to choose sexual orientation as a federally protected class compared those who live in a protected state.<sup>5</sup> A caveat worth noting is that the sample of sexual minorities living in states with or without a statewide sexual orientation–based nondiscrimination protection prior to *Bostock* is relatively small ( $N = 128$  and  $121$ , respectively), thus leading to large confidence intervals.

*D. Heterogeneity by Employment Status and Managerial Experience*

One may also wonder whether employed people, who are more likely to be affected by such nondiscrimination laws than those unemployed

<sup>4</sup>Online Appendix A provides additional details on the classification of states. About 50 percent of our participants currently reside in states that did not offer statewide employment nondiscrimination protection in both public and private employment based on sexual orientation prior to the 2020 *Bostock* ruling. This proportion is the same for both heterosexual individuals and sexual minorities. See Table B1 in the online Appendix for our sample size by sexual orientation and state of residence across protected versus not protected states. These estimates are in line with the estimates by MAP (2022).

<sup>5</sup>Similarly, we also study knowledge about sex, race, and disability being protected classes across sexual orientation and state of residence. Unlike our findings regarding the knowledge about sexual orientation being a protected class, we do not find a significant difference for sex, race, or disability being protected classes. These findings are reported in Figure B1.

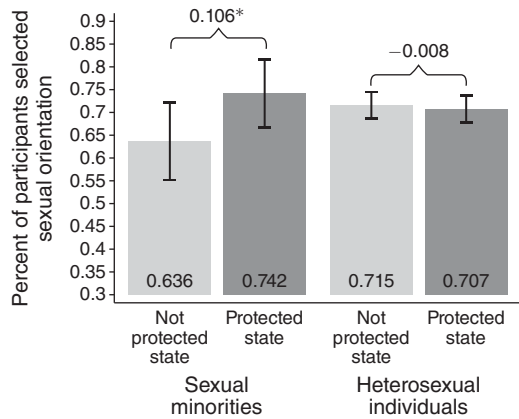


FIGURE 3. KNOWLEDGE ABOUT SEXUAL ORIENTATION BEING A PROTECTED CLASS BY SEXUAL ORIENTATION AND STATE OF RESIDENCE

Notes: 95 percent confidence intervals reported with vertical range plots. The numbers on each bar represent the height of the bar. The numbers above the horizontal lines are the differences between the two groups at the top of each horizontal bar. See Figures 1–2 notes for the federal employment nondiscrimination protection and sexual orientation questions. This figure reports the share of participants who select “Sexual Orientation” as a protected class separately by the sexual orientation and the state of residence of the participants. “Not Protected State” indicates participants who currently reside in one of the 25 states where sexual orientation was not a protected class before June 2020. Full list of states is provided in online Appendix A. Number of observations: 1,806.

or not in the labor force, are more aware of the list of protected categories. As reported in panel A of Table B3 in the online Appendix, respondents who are employed or self-employed are not significantly more likely to know that employment discrimination based on sex, race, or sexual orientation is illegal under federal law. However, we find that those who are either employed or self-employed are significantly (at a 10 percent level) more likely to indicate disability as a protected class.

Similarly, it is worth emphasizing that respondents who have managerial experience—that is, those who are more likely to make hiring decisions and to potentially discriminate against certain groups—are not significantly more knowledgeable about employment antidiscrimination laws than those without any managerial experience (panel B of Table B3).

### III. Conclusion

Our survey—which was fielded after federal nondiscrimination protections on the basis of sexual orientation and gender identity in employment were extended nationwide—shows that almost 30 percent of Americans are not aware that sexual orientation is a protected category under federal employment nondiscrimination law. Moreover, sexual minorities are no more likely than heterosexual individuals to be aware of this fact.

From a policy perspective, these findings strongly supports an informational campaign to raise knowledge of recent changes in employment laws following *Bostock v. Clayton County*, especially in states without statewide discrimination protection laws.

### REFERENCES

- Acemoglu, Daron, and Joshua D. Angrist.** 2001. “Consequences of Employment Protection? The Case of the Americans with Disabilities Act.” *Journal of Political Economy* 109 (5): 915–57.
- Aksoy, Billur, Christopher S. Carpenter, and Dario Sansone.** 2022. “Understanding Labor Market Discrimination against LGBT People in the US: Evidence from a Double List Experiment and a Survey.” NBER Working Paper 30483.
- Aksoy, Billur, Christopher S. Carpenter, and Dario Sansone.** 2023. “Data and code for: Knowledge about Federal Employment Nondiscrimination Protections on the Basis of Sexual Orientation.” American Economic Association [publisher], Inter-university Consortium for Political and Social Research [distributor]. <https://doi.org/10.3886/E184002V1>.
- Burn, Ian.** 2018. “Not All Laws Are Created Equal: Legal Differences in State Non-discrimination Laws and the Impact of LGBT Employment Protections.” *Journal of Labor Research* 39: 462–97.
- Chen, Daniel L., Martin Schonger, and Chris Wickens.** 2016. “OTree—an Open-Source Platform for Laboratory, Online, and Field Experiments.” *Journal of Behavioral and Experimental Finance* 9: 88–97.
- Deal, Cameron.** 2022. “Bound by *Bostock*: The Effect of Policies on Attitudes.” *Economics Letters* 217: 110656.
- Freedom for All Americans.** 2022. “LGBTQ Americans Aren’t Fully Protected from Discrimination in 29 States.” <https://freedomforallamericans.org/states/> (accessed November 22, 2022).
- Klawitter, Marieka M., and Victor Flatt.** 1998. “The Effects of State and Local Antidiscrimination Policies on Earnings for Gays and Lesbians.” *Journal of Policy Analysis and Management* 17 (4): 658–86.
- MAP (Movement Advancement Project).** 2022. “Equality Maps: Employment Nondiscrimination Laws.” New Democracy Maps. [https://www.lgbtmap.org/equality\\_maps/employment\\_non\\_discrimination\\_laws](https://www.lgbtmap.org/equality_maps/employment_non_discrimination_laws) (accessed November 22, 2022).
- Martell, Michael E.** 2013. “Do ENDAs End Discrimination for Behaviorally Gay Men?” *Journal of Labor Research* 34 (2): 147–69.
- Neumark, David, and Wendy A. Stock.** 1999. “Age Discrimination Laws and Labor Market Efficiency.” *Journal of Political Economy* 107 (5): 1081–125.