

Online Appendix

“Understanding Labor Market Discrimination Against Transgender People: Evidence from a Double List Experiment and a Survey”

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Appendix A. Experimental design details and quality checks

A1. Experimental design details

Although it is common practice in the literature not to randomize the order of the lists, we chose to incorporate some randomization into our design to control for potential order effects (here, we refer to the order of the lists, not the order of the statements within the list). More specifically, we created the following four paths that a participant follows:

Path 1 - (Manager List A), (Manager List B + KS 1), (Employ Non-Discrim List A), (Employ Non-Discrim List B + KS 2)

Path 2 - (Manager List A + KS 1), (Manager List B), (Employ Non-Discrim List A + KS 2), (Employ Non-Discrim List B)

Path 3 - (Employ Non-Discrim List B), (Employ Non-Discrim List A + KS 2), (Manager List B), (Manager List A + KS 1)

Path 4 - (Employ Non-Discrim List B + KS 2), (Employ Non-Discrim List A), (Manager List B + KS 1), (Manager List A)

KS 1 and KS 2 stand for transgender manager key statement and transgender employment non-discrimination protection key statement, respectively. Manager List A, Manager List B, Employ Non-Discrim List A, and Employ Non-Discrim List B can be seen in the instructions in Online Appendix C. As can be seen above, half of our participants saw List As first, and the other half saw List Bs first. When we compare the distribution of answers across these two orders using Pearson’s chi-square test (i.e., comparing responses in Path 1 to Path 4 and Path 2 to Path 3), we do not see any significant differences between the paths.

A2. Further quality checks

A.2.1. Data quality checks

As discussed in Section 3.2., we carefully constructed each list to avoid floor and ceiling effects (i.e., participants reporting zero items or all items, thus removing the privacy protection provided by the list experiment). We check for ceiling and floor effects and present findings in Figures B1-B2. As can be seen in these figures, only a very small share of our participants reports the highest

and lowest possible items in each of the lists. Thus, we conclude that the floor and ceiling effects are negligible in our experiment.

Additionally, if the distributions of responses had followed a uniform distribution, then it would have indicated that most respondents provided random answers (Coffman, Coffman, and Ericson 2017). As shown in Figures B1 and B2, it is therefore reassuring to note that our distributions of responses do not follow such a uniform distribution.

Next, we check the robustness of our main list experiment findings by excluding participants who completed the study very quickly or very slowly since they may not be paying as much attention to the study instructions. On average, it took 420 seconds (7 minutes) to complete the experiment. The results presented in Panel D of Table B3 show that our findings are robust when we exclude 183 participants who took less than 211 seconds (top 5%) or more than 796 seconds (bottom 5%).

Following our pre-analysis plan, we also checked if some respondents provided the same number for all list experiments (which might be an indication of participants not paying attention). Across all five lists, nobody provided the same number. Looking at the first four lists (thus excluding the list that serves as an attention check), 64 participants provided the same number for all four lists. Our main findings (Figure 1 and Table B3) are robust to the exclusion of these 64 participants.

Finally, we note that although one of the co-authors' name (Billur Aksoy) was mentioned on the consent form (as required by her institution's IRB), her website did not experience any unusual level of visits on the days of the experiment. This provides some evidence that the participants were not trying to acquire additional information about this research other than what they read in the study materials.

A.2.2. List experiment assumptions

The validity of a list experiment relies on three assumptions: 1) treatment randomization, 2) no design effect, and 3) 'no liar'. The first assumption means that the sample is split at random. The second assumption means that respondents do not give different answers to non-key statements depending on whether they are in the long list group. The third assumption means that respondents answer the key statement truthfully.

A common practice to check the first assumption – treatment randomization – is to test for differences between the short list and long list groups' responses to important variables in the survey. We do this in Table B19 where we check the differences between the two groups in terms of their demographic covariates. We do not see a significant difference between the two groups except for sex where one group has slightly more females than the other. We conclude that our randomization of treatment was effective. Moreover, following Gerber and Green (2012) and Detkova, Tkachenko, and Yakovlev (2021), we do not only rely on means comparisons but also

employ regression analyses where we control for observable characteristics (as discussed in Section 4.1).

The second assumption – no design effect – requires respondents not to change their answers to non-key statements depending on whether the key statement appears in the list (i.e., whether they see the long list). To clarify, suppose that a respondent in the short list group answers two non-key statements affirmatively. If they were assigned to the long list group, their answer must be either ‘2’ or ‘3’ (that is, they either answer two non-key statements affirmatively or answer two non-key statements plus the key statement affirmatively). It is worth noting that we do not assume that subjects give truthful answers to these non-key statements, we only assume that the answers are consistent in short and long list groups. Blair and Imai (2012) proposed a statistical test for the no-design-effect assumption. The first step is to estimate the probabilities of all possible types of item-count responses. If some of these estimated probabilities were a nonsensical value (e.g., a negative value), it would raise doubts about the validity of the no-design-effect assumption. One can then test whether such negative estimates have arisen by chance. In our two list experiments regarding transgender managers (Lists 1A and 1B), none of the estimated probabilities is below zero or above one. The same can be said about List 2A regarding employment non-discrimination protection. For List 2B regarding employment non-discrimination protection, two out of the ten estimated probabilities are slightly below zero.¹ Nevertheless, one cannot reject the null that such estimates have arisen by chance. Therefore, it is possible to conclude that the available evidence supports the “no design effect” assumption.

It is not statistically feasible to check the ‘no liar’ assumption, not only because respondents’ answers to the key statement are by design unobserved, but also because their truthful answers are unknown (otherwise there would be no point in using the list experiment technique). By running this experiment in an online anonymized platform and by making sure when designing the lists that agreeing to all or none of the statement is highly unlikely, we have tried to limit any concerns about this assumption. Indeed, Figures B1 and B2 present the distribution of responses for each list and key statements: the modal response in all lists is 2. Moreover, as noted in the previous section, the percentage of times where the responses are 0 or 4 (5 for long lists) is negligible, meaning that the privacy of responses was protected.

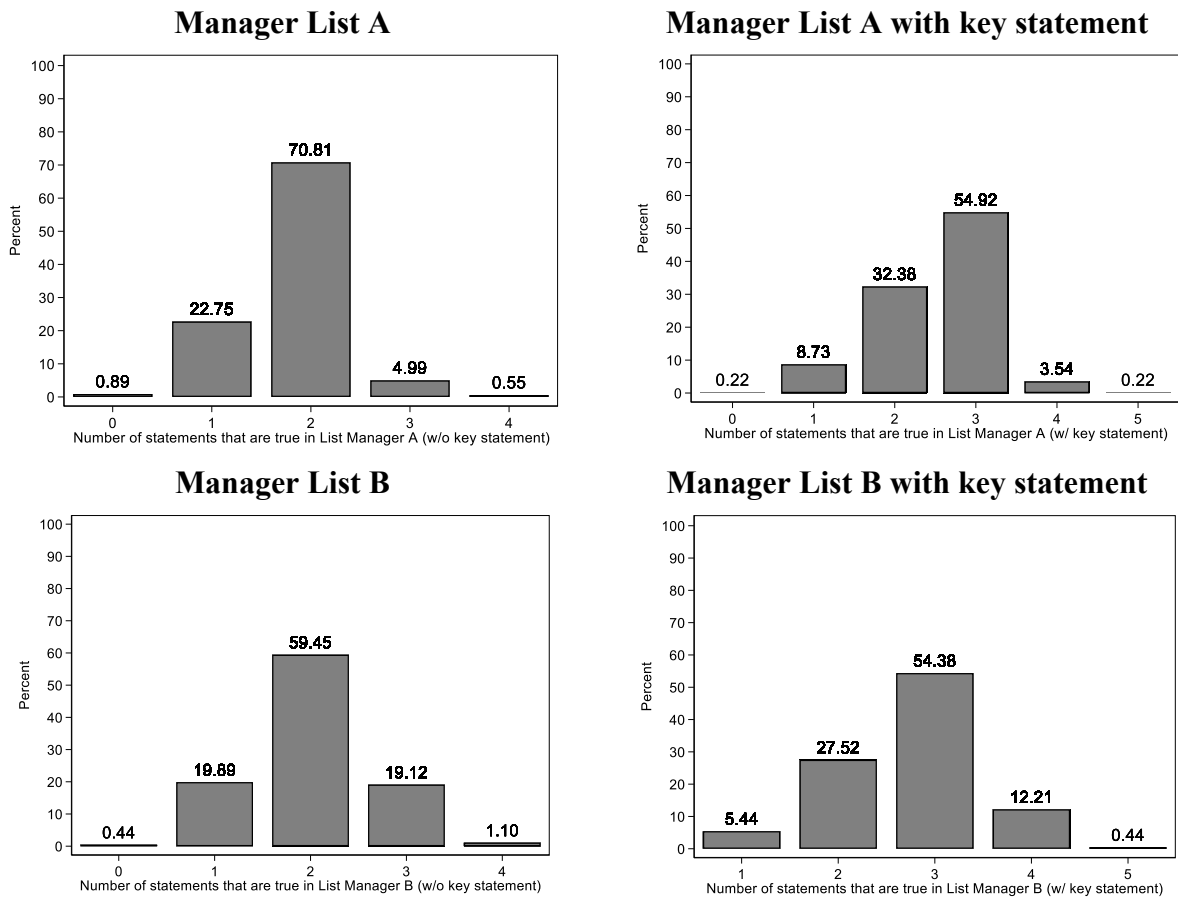
¹ We use the Stata command *kict deff* (Tsai 2019). For Lists 2A and 2B, since no respondent answered “5” when provided with the long list, the command was not able to distinguish between the long list and the short list. Therefore, in order to conduct this test, we increased the number of items in Lists 2A and 2B reported by one respondent, randomly chosen, from “4” to “5”. Our conclusions do not change when we randomly choose different respondents.

References in Online Appendix A

- Blair, Graeme, and Kosuke Imai. 2012. "Statistical Analysis of List Experiments." *Political Analysis* 20 (1): 47–77.
- Coffman, Katherine B., Lucas C. Coffman, and Keith M. Marzilli Ericson. 2017. "The Size of the LGBT Population and the Magnitude of Antigay Sentiment Are Substantially Underestimated." *Management Science* 63 (10): 3168–86.
- Detkova, Polina, Andrey Tkachenko, and Andrei Yakovlev. 2021. "Gender Heterogeneity of Bureaucrats in Attitude to Corruption: Evidence from List Experiment." *Journal of Economic Behavior & Organization* 189 (September): 217–33.
- Gerber, Alan S., and Donald P. Green. 2012. *Field Experiments: Design, Analysis, and Interpretation*. New York, NY: W. W. Norton & Company.
- Tsai, Chi Lin. 2019. "Statistical Analysis of the Item-Count Technique Using Stata." *Stata Journal* 19 (2): 390–434.

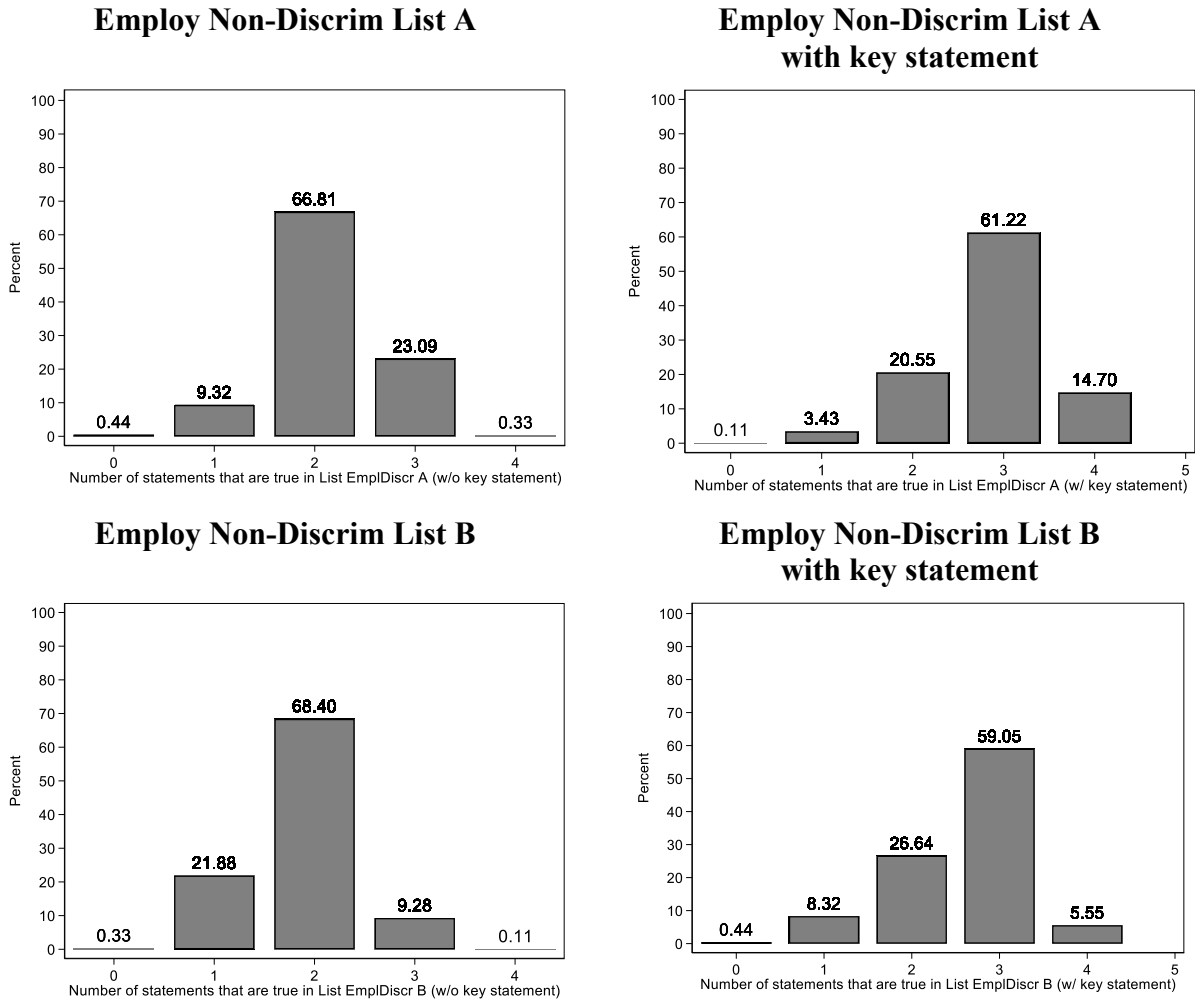
Appendix B. Additional figures and tables

Figure B1: Distribution of responses by list. Transgender manager.



Key statement in the list: “I would be comfortable with having a transgender manager at work.” Number of observations: 1,806. Source: 2022 Prolific List Experiment.

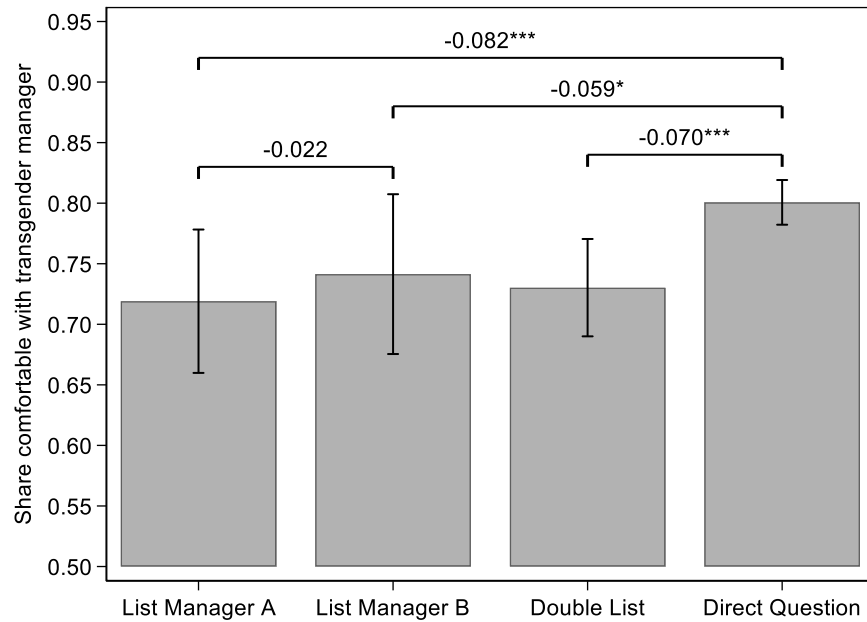
Figure B2: Distribution of responses by list. Transgender employment non-discrimination protection.



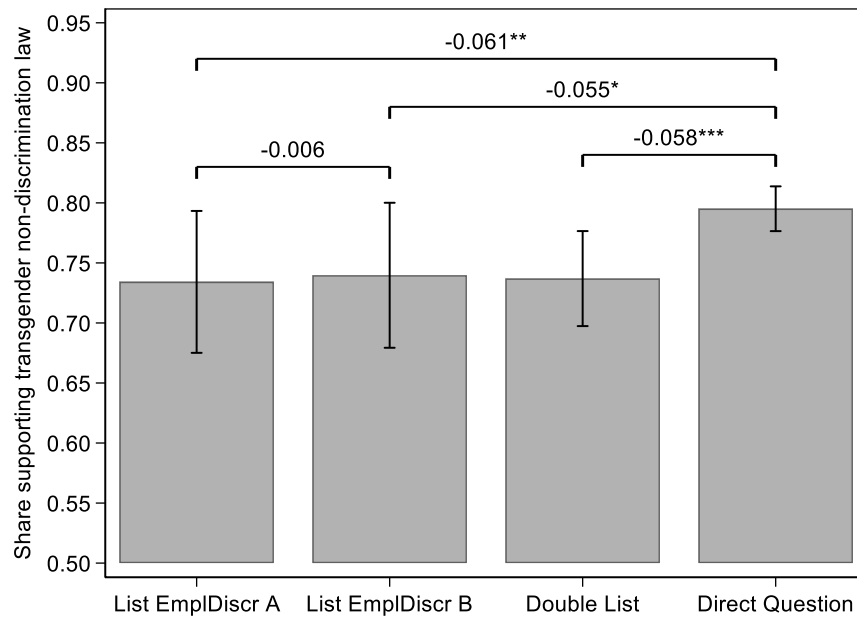
Key statement in the list: “I think the law should prohibit employment discrimination against transgender individuals.”
 Number of observations: 1,806. Source: 2022 Prolific List Experiment.

Figure B3: Main list experiments including List A and List B.

Panel A: Transgender managers.

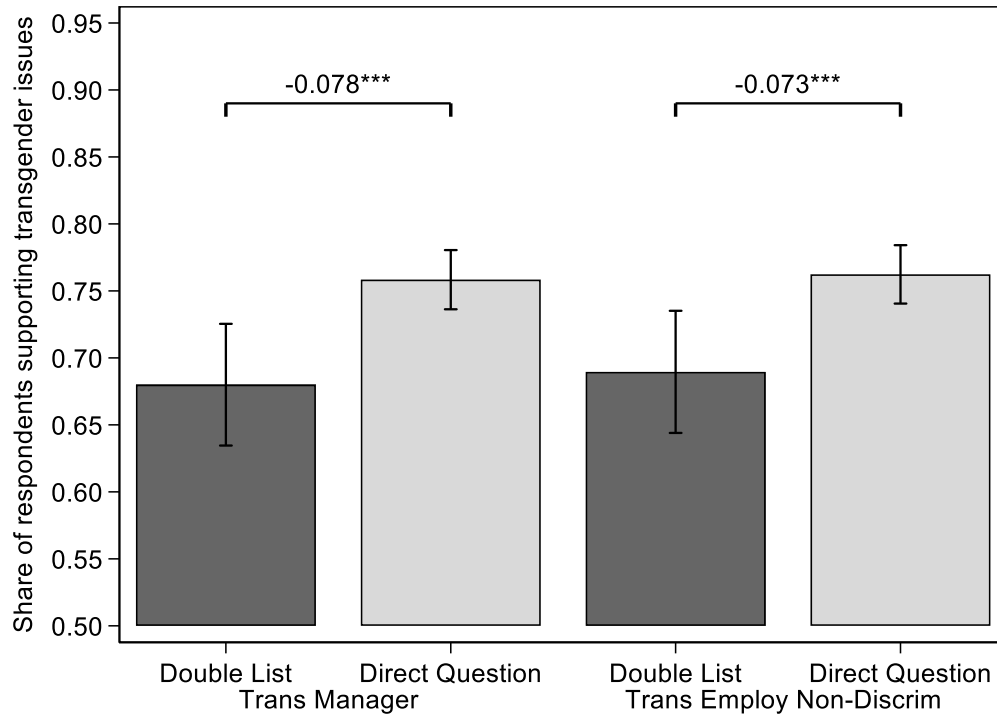


Panel B: Employment non-discrimination protection for transgender individuals.



* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. 95-percent confidence intervals reported with vertical range plots. The numbers above the horizontal bars are the differences between the two groups at the base of each horizontal bar. Number of observations: 1,806. Source: 2022 Prolific List Experiment.

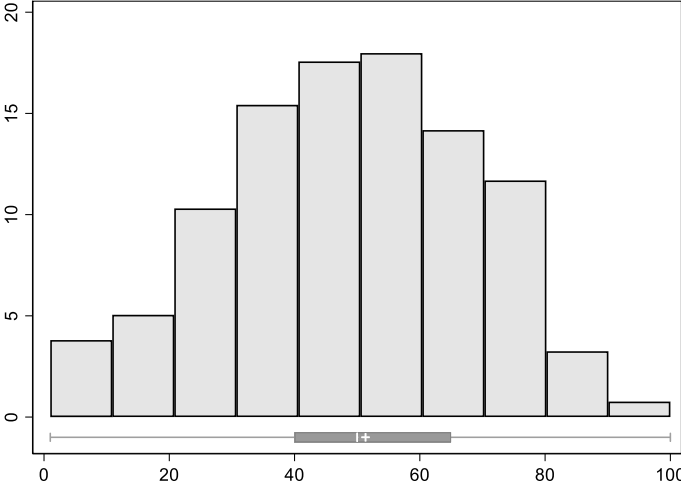
Figure B4: List experiments on attitudes towards transgender people using weighted sample.



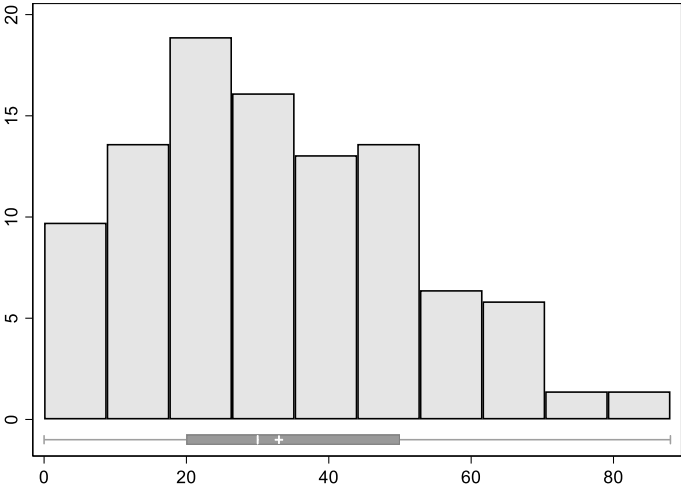
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Estimates obtained using a weighted sample as explained in Section 4.1. 95-percent confidence intervals reported with vertical range plots. The numbers above the horizontal bars are the differences between the two groups at the base of each horizontal bar. Trans Manager key statement: “I would be comfortable having a transgender manager at work.” Trans Employ Non-Discrim key statement: “I think the law should prohibit employment discrimination against transgender individuals.” Number of observations: 1,806. Source: 2022 Prolific List Experiment Weighted Sample.

Figure B5: Respondent thinks X/100 would be comfortable having a transgender manager at work. By responses to direct question.

Panel A: Respondent would be comfortable with transgender manager.



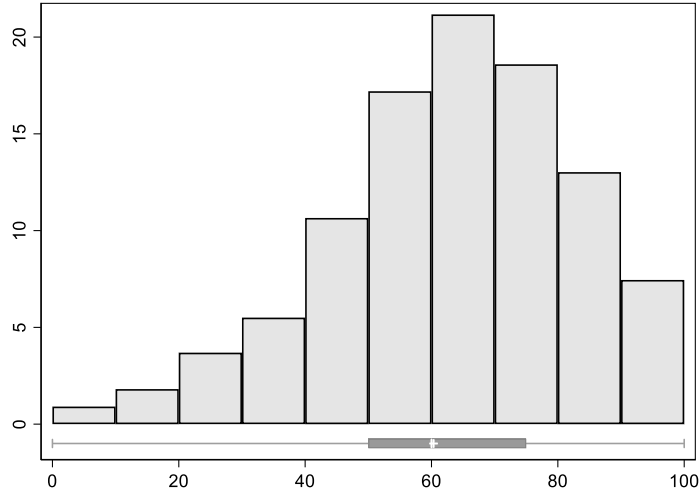
Panel B: Respondent would not be comfortable with transgender manager.



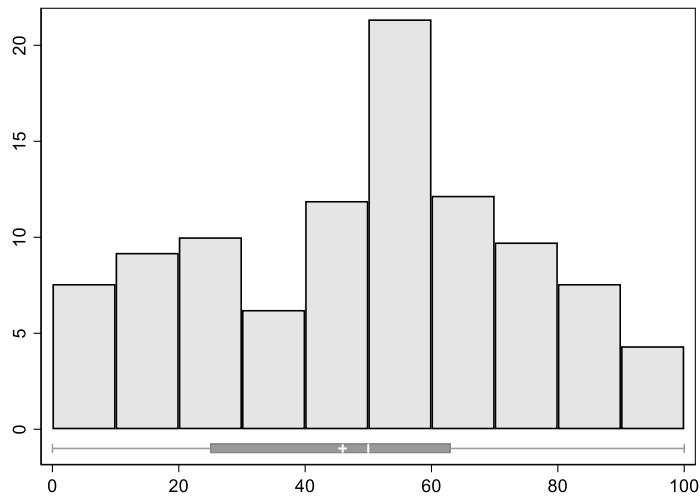
The original survey question is “Out of every 100 people in the general US population, I think approximately __ out of 100 would be comfortable with having a transgender manager at work.” The box plot below each histogram reports minimum and maximum values, 25th and 75th percentiles, as well as mean and median. Within each box plot, the white vertical line “|” indicates the median, the white “+” symbol indicates the mean. Number of observations: 1,806. Source: 2022 Prolific List Experiment.

Figure B6: Respondent thinks X/100 would agree that the law should prohibit employment discrimination against transgender individuals. By responses to direct question.

Panel A: Respondent supports transgender employment non-discrimination protection.



Panel B: Respondent does not support transgender employment non-discrimination protection.



The original survey question is “Out of every 100 people in the general US population, I think approximately __ out of 100 would agree that the law should prohibit employment discrimination against transgender individuals.” The box plot below each histogram reports minimum and maximum values, 25th and 75th percentiles, as well as mean and median. Within each box plot, the white vertical line “|” indicates the median, the white “+” symbol indicates the mean.. Number of observations: 1,806. Source: 2022 Prolific List Experiment.

Table B1: Sample sizes by gender identity and sex at birth.

Gender identity	Sex assigned at birth			Total
	Female	Male	Total	
	(1)	(2)	(3)	(4)
Female	906	5	911	50.70%
Male	7	862	869	48.36%
Transgender	4	6	10	0.56%
Non-binary/other	11	9	20	1.11%
Total	922	875		
	51.31%	48.69%		

Original question (columns): “What sex were you assigned at birth, on the original birth certificate?”. Original question (rows): “How do you describe yourself? (Check all that apply)”. Note that participants could select more than one option for gender. Note that 9 participants (6 female at birth, 3 male at birth) did not select any option for gender. Source: 2022 Prolific List Experiment.

Table B2: Sample sizes by sexual orientation.

	Non-heterosexual	Heterosexual	Total	
	(1)	(2)	(3)	(4)
Gay or Lesbian	71	1	72	3.99%
Straight	3	1,528	1,531	84.77%
Bisexual	140	9	149	8.25%
Something else	31	12	43	2.38%
Don't know	4	7	11	0.61%
Total	249	1,557	1,806	
	13.79%	86.21%		

Original question (columns): “Are you heterosexual/straight?” Original question (rows): “Which of the following best represents how you think of yourself?” Source: 2022 Prolific List Experiment.

Table B3: List experiments. Difference-in-means comparisons and robustness checks.

	List A	List B	Double list	Direct question	(1)-(2)	(3)-(4)
	(1)	(2)	(3)	(4)	(5)	(6)
<i>Panel A: Pooled data</i>						
Transgender manager	0.719 (0.030)	0.741 (0.034)	0.730 (0.020)	0.801 (0.009)	-0.022	-0.070***
Transgender employment non-discrimination	0.734 (0.030)	0.740 (0.031)	0.737 (0.020)	0.795 (0.010)	-0.006	-0.058***
<i>Panel B: Excluding first wave data</i>						
Transgender manager	0.723 (0.033)	0.738 (0.036)	0.731 (0.022)	0.801 (0.010)	-0.016	-0.071***
Transgender employment non-discrimination	0.743 (0.033)	0.749 (0.033)	0.746 (0.022)	0.795 (0.010)	-0.006	-0.049**
<i>Panel C: Adjusted standard errors for stratification</i>						
Transgender manager	0.719 (0.030)	0.741 (0.034)	0.730 (0.021)	0.801 (0.009)	-0.022	-0.070***
Transgender employment non-discrimination	0.734 (0.030)	0.740 (0.031)	0.737 (0.020)	0.795 (0.009)	-0.006	-0.058***
<i>Panel D: Excluding too slow and too fast responses</i>						
Transgender manager	0.708 (0.032)	0.730 (0.035)	0.719 (0.022)	0.795 (0.010)	-0.021	-0.076***
Transgender employment non-discrimination	0.738 (0.032)	0.740 (0.033)	0.739 (0.021)	0.794 (0.010)	-0.003	-0.055***

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors in parentheses. Standard errors in Panel C have been adjusted for age, sex, and race stratification using the command *svyset* in Stata. In Panel D, we exclude responses (a total of 183 responses) that were submitted very fast (top 5% in terms of speed) or very slow (bottom 5% in terms of speed). Transgender manager key statement: “I would be comfortable having a transgender manager at work.” Transgender employment non-discrimination key statement: “I think the law should prohibit employment discrimination against transgender individuals.” Number of observations: 1,806 (Panels A and C), 1,505 (Panel B), and 1,623 (Panel D). Source: 2022 Prolific List Experiment.

Table B4: List experiments. Multivariate analysis using weighted sample.

	List A				List B			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>Panel A: Transgender manager</i>								
Subject saw list with key statement	0.686 (0.035)	0.688 (0.034)	0.687 (0.033)	0.685 (0.033)	0.674 (0.038)	0.656 (0.037)	0.656 (0.036)	0.654 (0.036)
R ²	0.208	0.258	0.323	0.330	0.173	0.238	0.269	0.279
Estimated bias	7.2	7.0	7.1	7.3	8.4	10.2	10.2	10.4
<i>Panel B: Transgender employment non-discrimination protection</i>								
Subject saw list with key statement	0.695 (0.035)	0.682 (0.034)	0.685 (0.034)	0.685 (0.034)	0.684 (0.037)	0.691 (0.036)	0.692 (0.035)	0.696 (0.034)
R ²	0.213	0.251	0.273	0.274	0.195	0.255	0.292	0.301
Estimated bias	6.7	8.0	7.7	7.7	7.8	7.1	7.0	6.6
<i>Controls for:</i>								
State fixed effects		✓	✓	✓		✓	✓	✓
Demographic controls		✓	✓	✓		✓	✓	✓
Socio-economic factors and beliefs			✓	✓			✓	✓
Additional controls				✓				✓
Observations	1,806	1,806	1,806	1,806	1,806	1,806	1,806	1,806

OLS estimates using weighted sample as explained in Section 4.1. Standard errors in parentheses. “Estimated bias” reports the difference (in percentage points) between the estimated percentage of participants who agreed to the key statement in each corresponding column and the weighted estimate obtained from the corresponding direct question (which is 0.758 for Panel A and 0.762 for Panel B). See also notes in Table 3. Source: 2022 Prolific List Experiment Weighted Sample.

Table B5: List experiments. Difference-in-means comparisons. Heterogeneity analysis by sex assigned at birth.

	Double list	Direct question	(1)-(2)
	(1)	(2)	(3)
<i>Panel A: Transgender manager</i>			
Female at birth, N=928	0.801 (0.027)	0.852 (0.012)	-0.052**
Male at birth, N=878	0.658 (0.031)	0.746 (0.015)	-0.088***
Difference between female and male	0.143***	0.106***	0.037
<i>Panel B: Transgender employment non-discrimination protection</i>			
Female at birth, N=928	0.768 (0.028)	0.843 (0.012)	-0.075***
Male at birth, N=878	0.701 (0.029)	0.745 (0.015)	-0.044
Difference between female and male	0.067*	0.098***	-0.031

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors in parentheses. Transgender manager key statement: “I would be comfortable having a transgender manager at work.” Transgender employment non-discrimination protection key statement: “I think the law should prohibit employment discrimination against transgender individuals.” Sex at birth question: “What sex were you assigned at birth, on the original birth certificate?”. The results are similar, and our conclusions do not change, when comparing individuals by gender: estimates for women are similar to those obtained for individuals who were assigned female at birth, and estimates for men are similar to those obtained for individuals who were assigned male at birth. Unfortunately, the number of individuals who identify as transgender, gender non-binary, or ‘other’ when asked about their gender identity is too small to obtain meaningful estimates. Number of observations: 1,806. Source: 2022 Prolific List Experiment.

Table B6: List experiments. Difference-in-means comparisons. Heterogeneity analysis by sexual orientation.

	Double list (1)	Direct question (2)	(1)-(2) (3)
<i>Panel A: Transgender manager</i>			
Heterosexual, N=1,557	0.688 (0.022)	0.775 (0.011)	-0.087***
Non-heterosexual, N=249	0.986 (0.044)	0.960 (0.012)	0.026
Difference by sexual orientation	-0.298***	-0.185***	-0.113**
<i>Panel B: Transgender employment non-discrimination protection</i>			
Heterosexual, N=1,557	0.721 (0.022)	0.776 (0.011)	-0.055**
Non-heterosexual, N=249	0.838 (0.042)	0.916 (0.018)	-0.077*
Difference by sexual orientation	-0.117**	-0.140***	0.023

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors in parentheses. Transgender manager key statement: “I would be comfortable having a transgender manager at work.” Transgender employment non-discrimination protection key statement: “I think the law should prohibit employment discrimination against transgender individuals.” Sexual orientation question: “Are you heterosexual/straight?” Number of observations: 1,806. Source: 2022 Prolific List Experiment.

Table B7: List experiments. Difference-in-means comparisons. Heterogeneity analysis by political party affiliation.

	Double list (1)	Direct question (2)	(1)-(2) (3)
<i>Panel A: Transgender manager</i>			
Democrats, N=873	0.879 (0.025)	0.930 (0.009)	-0.052**
Republicans, N=350	0.424 (0.050)	0.509 (0.027)	-0.084*
Independents, N=583	0.685 (0.037)	0.782 (0.017)	-0.098***
Difference between Democrats and Republicans	0.454***	0.422***	0.033
Difference between Democrats and Independents	0.194***	0.148***	0.046
Difference between Republicans and Independents	-0.260***	-0.274***	0.013
<i>Panel B: Transgender employment non-discrimination protection</i>			
Democrats, N=873	0.875 (0.024)	0.899 (0.010)	-0.024
Republicans, N=350	0.481 (0.052)	0.534 (0.027)	-0.053
Independents, N=583	0.688 (0.038)	0.796 (0.017)	-0.108***
Difference between Democrats and Republicans	0.394***	0.365***	0.029
Difference between Democrats and Independents	0.187***	0.103***	0.083*
Difference between Republicans and Independents	-0.207***	-0.262***	0.055

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors in parentheses. Transgender manager key statement: “I would be comfortable having a transgender manager at work.” Transgender employment non-discrimination protection key statement: “I think the law should prohibit employment discrimination against transgender.” Political party affiliation question: “Generally speaking, do you usually think of yourself as a Republican, Democrat, or Independent/Other? Choose the option that best describes you.” Number of observations: 1,806. Source: 2022 Prolific List Experiment.

Table B8: List experiments. Difference-in-means comparisons. Heterogeneity analysis by race.

	Double list	Direct question	(1)-(2)
	(1)	(2)	(3)
<i>Panel A: Transgender manager</i>			
White individuals, N=1,345	0.730 (0.023)	0.799 (0.011)	-0.069***
Other or multiple races, N=448	0.723 (0.042)	0.808 (0.019)	-0.085**
Difference between racial groups	0.007	-0.009	0.016
<i>Panel B: Transgender employment non-discrimination protection</i>			
White individuals, N=1,345	0.719 (0.023)	0.797 (0.011)	-0.078***
Other or multiple races, N=448	0.797 (0.041)	0.797 (0.019)	0.000
Difference between racial groups	-0.078	0.000	-0.078*

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors in parentheses. Transgender manager key statement: “I would be comfortable having a transgender manager at work.” Transgender employment non-discrimination protection key statement: “I think the law should prohibit employment discrimination against transgender individuals.” Race question: “What is your race? Choose all that apply.” “Other or multiple races” includes Black or African American, American Indian or Alaskan Native, Asian or Native Hawaiian or Pacific Islander, Some Other Race, and individuals who selected more than one race (including those who selected “White” as one of their race categories). 13 participants who did not select any race have been excluded from this analysis. Number of observations: 1,793. Source: 2022 Prolific List Experiment.

Table B9: List experiments. Difference-in-means comparisons. Heterogeneity analysis by age.

	Double list (1)	Direct question (2)	(1)-(2) (3)
<i>Panel A: Transgender manager</i>			
Below median age (18-44), N=913	0.795 (0.028)	0.843 (0.012)	-0.048**
Above median age (45 or older), N=893	0.654 (0.030)	0.757 (0.014)	-0.103***
Difference between younger and older group	0.141***	0.086***	0.055
<i>Panel B: Transgender employment non-discrimination protection</i>			
Below median age (18-44), N=913	0.794 (0.026)	0.841 (0.012)	-0.048*
Above median age (45 or older), N=893	0.684 (0.031)	0.748 (0.015)	-0.064**
Difference between younger and older group	0.110***	0.093***	0.017

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors in parentheses. Transgender manager key statement: “I would be comfortable having a transgender manager at work.” Transgender employment non-discrimination protection key statement: “I think the law should prohibit employment discrimination against transgender individuals.” Age question: “What is your age in years?” Number of observations: 1,806. Source: 2022 Prolific List Experiment.

Table B10: List experiments. Difference-in-means comparisons. Heterogeneity analysis by sexual attraction.

	Double list (1)	Direct question (2)	(1)-(2) (3)
<i>Panel A: Transgender manager</i>			
Exclusively attracted to a different sex, N= 1,328	0.668 (0.025)	0.752 (0.012)	-0.084***
Other, N= 478	0.908 (0.034)	0.935 (0.011)	-0.028
Difference by sexual attraction	-0.239***	-0.183***	-0.057
<i>Panel B: Transgender employment non-discrimination protection</i>			
Exclusively attracted to a different sex, N=1,328	0.703 (0.025)	0.758 (0.012)	-0.055**
Other, N=478	0.829 (0.033)	0.900 (0.014)	-0.071**
Difference by sexual attraction	-0.126***	-0.142***	0.016

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors in parentheses. Transgender manager key statement: “I would be comfortable having a transgender manager at work.” Transgender employment non-discrimination protection key statement: “I think the law should prohibit employment discrimination against transgender individuals.” The sexual attraction category “Other” includes participants attracted to both females and males, participants attracted to same-sex individuals, and participants who selected the option “Other” when asked about their sexual attraction. Number of observations: 1,806. Source: 2022 Prolific List Experiment.

Table B11: List experiments. Difference-in-means comparisons. Heterogeneity analysis by income.

	Double list (1)	Direct question (2)	(1)-(2) (3)
<i>Panel A: Transgender manager</i>			
Below median income (<\$60,000), N=862	0.722 (0.030)	0.796 (0.014)	-0.074***
Above median income (≥\$60,000), N=944	0.738 (0.028)	0.805 (0.013)	-0.067***
Difference between below and above \$60,000	-0.016	-0.009	-0.007
<i>Panel B: Transgender employment non-discrimination protection</i>			
Below median income (<\$60,000), N=862	0.754 (0.030)	0.794 (0.014)	-0.039
Above median income (≥\$60,000), N=944	0.721 (0.027)	0.797 (0.013)	-0.075***
Difference between below and above \$60,000	0.033	-0.003	0.036

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors in parentheses. Transgender manager key statement: “I would be comfortable having a transgender manager at work.” Transgender employment non-discrimination protection key statement: “I think the law should prohibit employment discrimination against transgender individuals.” Income question: “What is your household income before taxes?” Number of observations: 1,806. Source: 2022 Prolific List Experiment.

Table B12: List experiments. Difference-in-means comparisons. Heterogeneity analysis by education.

	Double list (1)	Direct question (2)	(1)-(2) (3)
<i>Panel A: Transgender manager</i>			
Less than a Bachelor's degree, N=753	0.690 (0.033)	0.776 (0.015)	-0.086***
Bachelor's degree or higher, N=1,053	0.759 (0.026)	0.819 (0.012)	-0.060**
Difference between education groups	-0.069*	-0.043**	-0.026
<i>Panel B: Transgender employment non-discrimination protection</i>			
Less than a Bachelor's degree, N=753	0.741 (0.032)	0.786 (0.015)	-0.045
Bachelor's degree or higher, N=1,053	0.735 (0.026)	0.802 (0.012)	-0.067***
Difference between education groups	0.006	-0.015	0.021

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors in parentheses. Transgender manager key statement: "I would be comfortable having a transgender manager at work." Transgender employment non-discrimination protection key statement: "I think the law should prohibit employment discrimination against transgender individuals." Education question: "What is the highest level of education you've completed? (choose one) (If currently enrolled, mark the previous grade or highest degree received.)" Number of observations: 1,806. Source: 2022 Prolific List Experiment.

Table B13: List experiments. Difference-in-means comparisons. Heterogeneity analysis by employment status.

	Double list	Direct question	(1)-(2)
	(1)	(2)	(3)
<i>Panel A: Transgender manager</i>			
Employed or self-employed, N=1,210	0.715 (0.025)	0.794 (0.012)	-0.079***
Unemployed or not in the labor force, N=596	0.758 (0.037)	0.814 (0.016)	-0.056*
Difference between employment groups	-0.043	-0.020	-0.024
<i>Panel B: Transgender employment non-discrimination protection</i>			
Employed or self-employed, N=1,210	0.734 (0.024)	0.793 (0.012)	-0.059**
Unemployed or not in the labor force, N=596	0.741 (0.036)	0.799 (0.016)	-0.057
Difference between employment groups	-0.007	-0.005	-0.002

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors in parentheses. Transgender manager key statement: “I would be comfortable having a transgender manager at work.” Transgender employment non-discrimination protection key statement: “I think the law should prohibit employment discrimination against transgender individuals.” “Unemployed or not in the labor force” includes homemakers, students, retired individuals, individuals unable to work, and individuals out of work. Number of observations: 1,806. Source: 2022 Prolific List Experiment.

Table B14: List experiments. Difference-in-means comparisons. Heterogeneity analysis by managerial experience.

	Double list (1)	Direct question (2)	(1)-(2) (3)
<i>Panel A: Transgender manager</i>			
Has managerial experience, N=983	0.690 (0.028)	0.784 (0.013)	-0.095***
No managerial experience, N=749	0.787 (0.031)	0.821 (0.014)	-0.034
Difference by managerial experience	-0.098**	-0.037*	-0.061
<i>Panel B: Transgender employment non-discrimination protection</i>			
Has managerial experience, N=983	0.705 (0.028)	0.774 (0.013)	-0.069**
No managerial experience, N=749	0.775 (0.031)	0.829 (0.014)	-0.054*
Difference by managerial experience	-0.070*	-0.055***	-0.015

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors in parentheses. Transgender manager key statement: “I would be comfortable having a transgender manager at work.” Transgender employment non-discrimination protection key statement: “I think the law should prohibit employment discrimination against transgender individuals.” Managerial experience question (collected by Prolific): “Do you have any experience being in a management position?” Number of observations: 1,732 (74 missing values are excluded). Source: 2022 Prolific List Experiment.

Table B15: List experiments. Difference-in-means comparisons. Heterogeneity analysis by current religious affiliation.

	Double list	Direct question	(1)-(2)
	(1)	(2)	(3)
<i>Panel A: Transgender manager</i>			
Christian (any denomination), N=826	0.622 (0.032)	0.706 (0.016)	-0.084**
Not religious, N=836	0.824 (0.027)	0.891 (0.011)	-0.067**
Difference by current religious affiliations	-0.202***	-0.185***	-0.017
<i>Panel B: Transgender employment non-discrimination protection</i>			
Christian (any denomination), N=826	0.648 (0.032)	0.717 (0.016)	-0.068**
Not religious, N=836	0.829 (0.026)	0.870 (0.012)	-0.041
Difference by current religious affiliations	-0.180***	-0.153***	-0.027

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors in parentheses. Transgender manager key statement: “I would be comfortable having a transgender manager at work.” Transgender employment non-discrimination protection key statement: “I think the law should prohibit employment discrimination against transgender individuals.” Religion question: “What is your current religious affiliation?” Number of observations: 1,662 (144 participants with other religious affiliations excluded from this comparison). Source: 2022 Prolific List Experiment.

Table B16: List experiments. Difference-in-means comparisons. Heterogeneity analysis by religion importance in participant’s life.

	Double list (1)	Direct question (2)	(1)-(2) (3)
<i>Panel A: Transgender manager</i>			
Religion important in life, N=754	0.627 (0.035)	0.686 (0.017)	-0.059*
Religion not important in life, N=1,052	0.805 (0.025)	0.883 (0.010)	-0.078***
Difference by religion importance	-0.178***	-0.197***	0.020
<i>Panel B: Transgender employment non-discrimination protection</i>			
Religion important in life, N=754	0.613 (0.033)	0.704 (0.017)	-0.091***
Religion not important in life, N=1,052	0.824 (0.024)	0.860 (0.011)	-0.036
Difference by religion importance	-0.211***	-0.156***	-0.055

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors in parentheses. Transgender manager key statement: “I would be comfortable having a transgender manager at work.” Transgender employment non-discrimination protection key statement: “I think the law should prohibit employment discrimination against transgender individuals.” Religiosity question: “How important is religion in your life?” Participants who answered “Very Important” or “Somewhat important” coded as “Religion important in life”. Participants who answered “Not too important” or “Not at all important” coded as “Religion not important in life”. Number of observations: 1,806. Source: 2022 Prolific List Experiment.

Table B17: List experiments. Difference-in-means comparisons. Heterogeneity analysis by geographic location.

	Double list	Direct question	(1)-(2)
	(1)	(2)	(3)
<i>Panel A: Transgender manager</i>			
North-East, N=381	0.787 (0.044)	0.877 (0.017)	-0.090**
Midwest, N=389	0.754 (0.042)	0.820 (0.020)	-0.066*
West, N=271	0.706 (0.050)	0.786 (0.025)	-0.080*
South, N=765	0.698 (0.033)	0.758 (0.015)	-0.060**
<i>Panel B: Transgender employment non-discrimination protection</i>			
North-East, N=381	0.758 (0.041)	0.866 (0.017)	-0.108**
Midwest, N=389	0.735 (0.044)	0.789 (0.021)	-0.054
West, N=271	0.801 (0.051)	0.790 (0.025)	0.011
South, N=765	0.704 (0.032)	0.765 (0.015)	-0.061*

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors in parentheses. Transgender manager key statement: “I would be comfortable having a transgender manager at work.” Transgender employment non-discrimination protection key statement: “I think the law should prohibit employment discrimination against transgender individuals.” Participants are divided in groups based on the US state where they lived at the time of the survey. Number of observations: 1,806. Source: 2022 Prolific List Experiment.

Table B18: List experiments. Difference-in-means comparisons. Heterogeneity analysis by beliefs regarding attitudes of the general U.S. population.

	Double list (1)	Direct question (2)	(1)-(2) (3)
<i>Panel A: Transgender manager</i>			
Respondents believe 50% or more of Americans would be comfortable with a transgender manager at work, N=963	0.837 (0.027)	0.899 (0.010)	-0.063**
Respondents believe less than 50% of Americans would be comfortable with a transgender manager at work, N=843	0.610 (0.030)	0.688 (0.016)	-0.078***
Difference by beliefs	0.226***	0.211***	0.015
<i>Panel B: Transgender employment non-discrimination protection</i>			
Respondents believe 50% or more of Americans would agree that the law should prohibit employment discrimination against transgender individuals, N=1,316	0.765 (0.023)	0.845 (0.010)	-0.080***
Respondents believe less than 50% of Americans would agree that the law should prohibit employment discrimination against transgender individuals, N=490	0.661 (0.040)	0.661 (0.021)	0.000
Difference by beliefs	0.104**	0.184***	-0.080*

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors in parentheses. Transgender manager key statement: “I would be comfortable having a transgender manager at work.” Transgender employment non-discrimination protection key statement: “I think the law should prohibit employment discrimination against transgender individuals.” Number of observations: 1,806. Source: 2022 Prolific List Experiment.

Table B19: Balance table.

Variables	List A with key statement (List B without key statement)	List A without key statement (List B with key statement)	Difference
Age: between 18 and 34	0.316	0.352	-0.036
Age: between 35 and 49	0.255	0.252	0.003
Age: between 50 and 64	0.286	0.278	0.008
Age: 65 or over	0.142	0.117	0.025
Sex assigned at birth: Female	0.534	0.494	0.040*
Race: White only	0.752	0.737	0.015
Race: Black or African American only	0.145	0.125	0.021
Race: Asian or Native Hawaiian or Pacific Islander only	0.062	0.069	-0.006
Ethnicity: Hispanic	0.046	0.062	-0.016
Marital status: Now married	0.454	0.428	0.026
Marital status: Widowed	0.024	0.030	-0.005
Marital status: Separated	0.008	0.012	-0.004
Marital status: Divorced	0.127	0.115	0.012
Marital status: Never married	0.387	0.415	-0.028
Education: High school, GED, or less	0.104	0.109	-0.005
Education: Some college credits, no degree	0.205	0.194	0.011
Education: Associate's degree	0.115	0.105	0.010
Education: Bachelor's degree or equivalent	0.390	0.383	0.006
Education: Master's degree or higher	0.185	0.208	-0.022
Employment: Employed for wages	0.542	0.529	0.012
Employment: Self-employed	0.144	0.125	0.019
Employment: Out of work for 1 year or more	0.052	0.063	-0.011
Employment: Out of work for less than 1 year	0.011	0.015	-0.004
Employment: Homemaker	0.058	0.042	0.016
Employment: Student	0.047	0.062	-0.015
Employment: Retired	0.125	0.133	-0.007
Employment: Unable to work	0.021	0.031	-0.010
Household income: less than \$60,000	0.481	0.474	0.007
Political party affiliation: Democrat	0.484	0.483	0.001
Political party affiliation: Republican	0.201	0.187	0.014
Political party affiliation: Independent	0.315	0.330	-0.015
Urbanicity: Rural area	0.115	0.136	-0.020
Urbanicity: Small city or town	0.296	0.285	0.011
Urbanicity: Suburb near a large city	0.361	0.335	0.026
Urbanicity: Large city	0.228	0.244	-0.017
Currently live in: North-East	0.208	0.214	-0.007
Currently live in: Midwest	0.201	0.230	-0.029
Currently live in: South	0.437	0.410	0.027
Currently live in: West	0.154	0.146	0.008
Observations	901	905	

Source: 2022 Prolific List Experiment. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Appendix C. List experiment and survey instructions

Prolific ID Entry

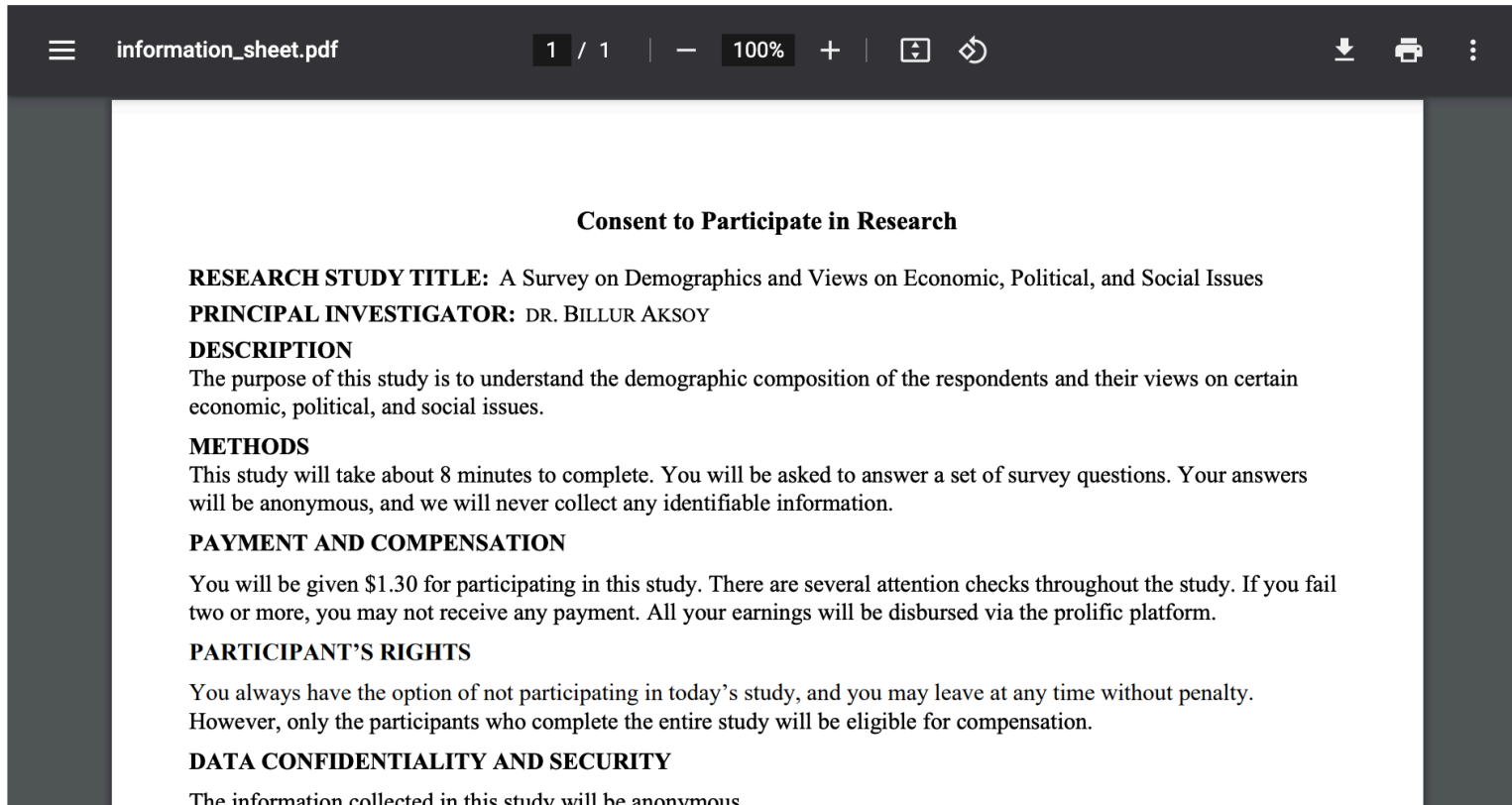
Thank you for participating in this survey. Before we begin, please fill out the field below.

Paste your Prolific ID here

Next

Consent Page

Please review the information contained in the form below.



The screenshot shows a PDF viewer interface. The title bar at the top reads 'information_sheet.pdf' and includes navigation icons for back, forward, and search. The main content area displays the following text:

Consent to Participate in Research

RESEARCH STUDY TITLE: A Survey on Demographics and Views on Economic, Political, and Social Issues

PRINCIPAL INVESTIGATOR: DR. BILLUR AKSOY

DESCRIPTION
The purpose of this study is to understand the demographic composition of the respondents and their views on certain economic, political, and social issues.

METHODS
This study will take about 8 minutes to complete. You will be asked to answer a set of survey questions. Your answers will be anonymous, and we will never collect any identifiable information.

PAYMENT AND COMPENSATION
You will be given \$1.30 for participating in this study. There are several attention checks throughout the study. If you fail two or more, you may not receive any payment. All your earnings will be disbursed via the prolific platform.

PARTICIPANT'S RIGHTS
You always have the option of not participating in today's study, and you may leave at any time without penalty. However, only the participants who complete the entire study will be eligible for compensation.

DATA CONFIDENTIALITY AND SECURITY
The information collected in this study will be anonymous.

If you do not consent to participate in this study, please go back to Prolific now and mark this study as Incomplete. By clicking below, you confirm that you are at least 18 years of age and that you consent to participation in the research study described above.

Next

Overview of Study

Welcome!

In this study, you will be asked to answer some questions. Please try to answer these questions truthfully. Your answers will be anonymous.

The study will take about 8 minutes.

How much payment will I receive for my participation?

You will be paid 1.30 USD for completing the study.

Attention Checks

There will be several **Attention Check** questions throughout this study meant to test whether you are paying attention. If you fail to correctly complete two or more of these Attention Check questions, you may not be paid.

Next

Instructions

In the following pages, you will be presented with lists of statements that may or may not be true for you. The statements will be about yourself and your views on social issues. We would like to know how many of the statements within each list are true for you. In these lists, we are **not** asking which specific statements are true for you, we are only asking **how many** of them are true for you.

On the following page, we will give you an example. Please click next when you are ready.

Next

Example:

We want to be sure that you understand how this works. Here is an example:

There are three statements in the list below. We would like to know how many of them are true for you.

- I own an orange t-shirt.
- My household has at least four pets.
- I regularly recycle.

Please enter the total number of the above statements that are true for you:

Suppose that you do own an orange t-shirt and your household has at least four pets. But you do not recycle. In that case, two of the above statements are true for you. Hence, you would indicate this by entering 2 in the answer box.

Please Note: We are not asking which specific statements in these lists are true for you. We are only asking how many of them are true for you.

Please click NEXT when you are ready.

Next

If you would like to review the instructions one more time, please [Click Here](#)

In the following pages, you will be presented with lists of statements that may or may not be true for you. The statements will be about yourself and your views on social issues. We would like to know how many of the statements within each list are true for you. In these lists, we are not asking which specific statements are true for you, we are only asking how many of them are true for you.

When you are ready, please click next to start.

[Next](#)

{Manager List A}

There are four statements in the list below. How many of the following statements are true for you?

- I support the Black Lives Matter movement.
- I can fluently speak at least three languages.
- I have a driver's license.
- I think COVID-19 health risks were overstated.

Please enter the total number of the above statements that are true for you:

Next

{Manager List B}

There are five statements in the list below. How many of the following statements are true for you?

- I think parents should be able to opt their children out of a COVID-19 school mask mandate for any reason.
- I would be comfortable having a transgender manager at work.
- I own a car.
- I have visited more than twenty countries.
- I think the law should prohibit employment discrimination against African Americans.

Please enter the total number of the above statements that are true for you:

Next

{Employ Non-Discrim List A}

There are four statements in the list below. How many of the following statements are true for you?

- I would vote for a political candidate who is pro-life (anti-abortion).
- I have personally met the current Pope.
- I think recreational marijuana use should be legal.
- I own a smartphone.

Please enter the total number of the above statements that are true for you:

Next

{Employ Non-Discrim List B}

There are five statements in the list below. How many of the following statements are true for you?

- I would vote for a political candidate who is pro-choice (supports abortion rights).
- I think gun control laws should be relaxed.
- I have at least one social media account (e.g., Facebook, Twitter, Instagram).
- I have personally met the current U.S. President.
- I think the law should prohibit employment discrimination against transgender individuals.

Please enter the total number of the above statements that are true for you:

Next

There are five statements in the list below. How many of the following statements are true for you?

- I usually respond to my emails within 24 hours.
- I am concerned that the media in the United States is biased.
- Please put seven as your answer below regardless of how many of the others are true for you.
- This is because we would like to see whether you are reading each item carefully.
- Again, please put seven for your answer below.

Please enter the total number of the above statements that are true for you:

Next

Survey

Next, we will ask you some demographics questions about yourself as well as your opinion on certain issues. Please answer the following questions to the best of your ability. Again, please remember that your answers will be completely anonymous.

Next

Survey

What is your race? Choose all that apply.

- White
- Black or African American
- American Indian or Alaskan Native
- Asian or Native Hawaiian or Pacific Islander
- Some Other Race

Are you of Hispanic, Latino, or Spanish origin?

- Yes
- No

What is your age in years?

What is your marital status? (choose one)

- Now married
- Widowed
- Divorced
- Separated
- Never married

Next

Survey

How many people live in your household including yourself?

How many children less than 18 years of age live in your household? If none, please put 0. Number of children:

What is the highest level of education you've completed? (choose one) (If currently enrolled, mark the previous grade or highest degree received.)

- High school, GED, or less
- Some college credits, no degree
- Associate's degree (for example: AA, AS)
- Bachelor's degree or equivalent (for example: BA, BS)
- Master's degree or higher (for example: MA, MS, MEng, MEd, MSW, MBA, MD, DDS, DVM, LLB, JD, PhD, EdD)

Are you currently...?

- Employed for wages
- Self-employed
- Out of work for 1 year or more
- Out of work for less than 1 year
- A homemaker
- A student
- Retired
- Unable to work

Next

Survey

What type of community do you live in?

- Rural area
- Large city
- Small city or town
- Suburb near a large city

In which US state/territory do you currently live?

In which US state/territory did you spend the most time for the first 18 years of your life?

Next

Survey

Would you be comfortable having a transgender manager at work?

- Yes
- No

Do you think the law should prohibit employment discrimination against transgender individuals?

- Yes
- No

Next

Survey

Do you think the law should prohibit housing discrimination against transgender individuals?

- Yes
- No

Would you be comfortable having a transgender person as a neighbor?

- Yes
- No

Next

Survey

Would you be comfortable having an openly lesbian, gay, or bisexual manager at work?

- Yes
- No

Do you think the law should prohibit employment discrimination against lesbian, gay, or bisexual individuals?

- Yes
- No

Do you think the law should prohibit housing discrimination against lesbian, gay, or bisexual individuals?

- Yes
- No

Would you be comfortable having an openly lesbian, gay, or bisexual person as a neighbor?

- Yes
- No

Next

Survey

Do you think that private businesses (such as cake decorators or florists) should be able to refuse service to same-sex couples or other LGBTQ+ individuals for religious reasons?

- Yes
- No

Next

Survey

What sex were you assigned at birth, on your original birth certificate? (choose one)

- Male
- Female

How do you describe yourself? (check all that apply)

- Male
- Female
- Transgender
- Non-Binary/Other

Are you heterosexual/straight?

- Yes
- No

Which of the following best represents how you think of yourself?

- Gay or Lesbian
- Straight, that is, not gay or lesbian
- Bisexual
- Something else
- I don't know the answer

Since age 18, have you had at least one same-sex sexual partner?

- Yes
- No

People are different in their sexual attraction to other people. Which category below best describes your feelings?

- Only attracted to females
- Mostly attracted to females
- Equally attracted to females and males
- Mostly attracted to males
- Only attracted to males
- Other (please specify below)

Before providing an answer, one should always read the text carefully. To check whether you have been reading the text carefully, we ask you to select the third option below as your answer.

- First
- Second
- Third
- Fourth

Next

Survey

What is your current religious affiliation?

- Christian (any denomination)
- Jewish
- Muslim (any denomination)
- Hindu
- Buddhist
- Asian Folk Religion (e.g., Taoist, Confucian)
- I am not religious
- Some other religious affiliation (please specify below)

Which of the following religious affiliations best describes how you were raised?

- Christian (any denomination)
- Jewish
- Muslim (any denomination)
- Hindu
- Buddhist
- Asian Folk Religion (e.g., Taoist, Confucian)
- I was not raised in any religion
- Some other religious affiliation (please specify below)

How important is religion in your life?

- Very important
- Somewhat important
- Not too important
- Not at all important

Generally speaking, do you usually think of yourself as a Republican, Democrat, or Independent/Other? Choose the option that best describes you.

- Republican
- Democrat
- Independent or Other

On a scale of 1-7, 1 being extremely liberal and 7 being extremely conservative, how liberal/conservative would you say your political views on social issues are?

- 1. Extremely liberal
- 2. Liberal
- 3. Slightly liberal
- 4. Moderate, middle of the road
- 5. Slightly conservative
- 6. Conservative
- 7. Extremely conservative

We would like to be sure that you are reading these questions and not making random decisions. Thus, please select the last option for this question.

- First
- Second
- Last

Who did you vote for in the 2016 presidential election?

- Donald Trump
- Hillary Clinton
- Other
- Did not vote
- Not eligible to vote
- I do not remember

Who did you vote for in the 2020 presidential election?

- Joe Biden
- Donald Trump
- Other
- Did not vote
- Not eligible to vote
- I do not remember

What is your household income before taxes?

- Less than \$20,000
- \$20,000 - \$39,999
- \$40,000 - \$59,999
- \$60,000 - \$79,999
- \$80,000 - \$99,999
- \$100,000 - \$149,999
- \$150,000 - \$199,999
- \$200,000 or higher

Next

Survey

Based on your understanding, federal law prohibits employment discrimination on the basis of which of the following characteristics? (check all that apply)

- Race
- Disability
- Sexual orientation
- Sex
- Eye color
- Political beliefs

Next

Survey

In this part of our survey, we want to know what you think about public perceptions on certain issues in the U.S. When you answer the following questions, please think about the **general U.S. population**.

"Out of every 100 people in the general US population, I think approximately out of 100 would be comfortable with having a transgender manager at work."

"Out of every 100 people in the general US population, I think approximately out of 100 would agree that the law should prohibit employment discrimination against transgender individuals."

Next



Finally, please answer the following question.

Is there anything else you would like share with the researchers?

Next

Prolific ID Entry

Thank you for participating in this survey. We will process your payment shortly.

Please enter your Prolific ID again.

Next

Thank you for participating in this study. Please follow the link below to return to Prolific.

[Return to Prolific](#)

List Experiment Instructions Used in First Wave:

Instructions

In the following pages, you will be presented with lists of statements that may or may not be true for you. The statements will be about yourself and your views on social issues. And we will ask you **how many** of those statements in each list are true for you.

Please note that there is no way for us to know which specific statements in these lists are true for you: we will only know how many of them are true for you.

On the following page, we will give you an example. Please click next when you are ready.

Next

Example:

We want to be sure that you understand how this works. Here is an example:

There are three statements in the list below. We would like to know how many of them are true for you.

- I own an orange t-shirt.
- My household has at least four pets.
- I regularly recycle.

Please enter the total number of the above statements that are true for you:

Suppose that you do own an orange t-shirt and your household has at least four pets. But you do not recycle. In that case, two of the above statements are true for you. Hence, you would indicate this by entering 2 in the answer box.

Please Note: There is no way for us to know which specific statements in these lists are true for you. We will only know how many of them are true for you.

Please click NEXT when you are ready.

Next

If you would like to review the instructions one more time, please [Click Here](#)

In the following pages, you will be presented with lists of statements that may or may not be true for you. The statements will be about yourself and your views on social issues. We would like to know how many of them are true for you. We do not want to know which specific ones are true for you. Instead, we just want to know how many of the statements are true for you.

When you are ready, please click next to start.

Next