

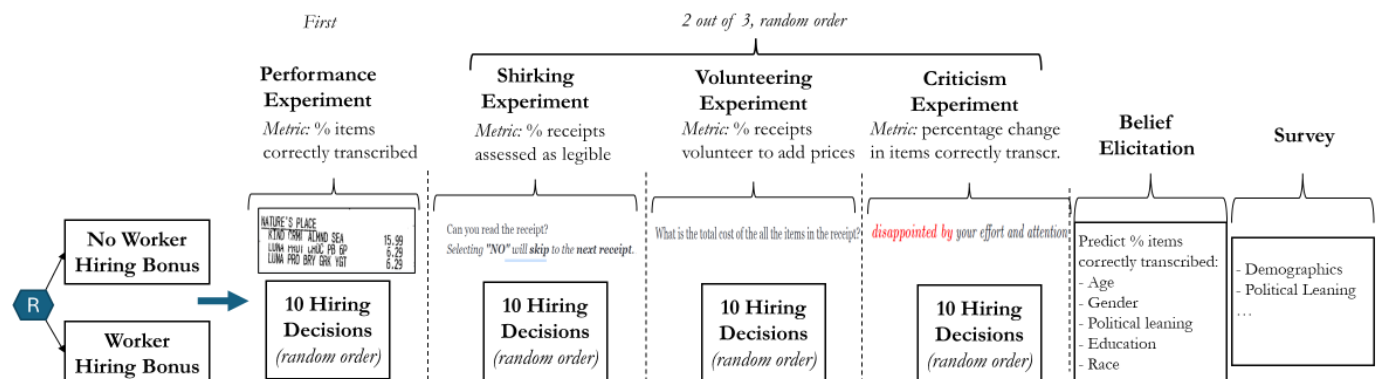
Pre-analysis Plan: Political Polarization and Labor Market Discrimination

I. Research Design

Overview:

In this experiment, we recruit participants to serve as hiring managers. They learn that past participants have previously completed a task involving transcription of receipts and will learn the average performance. They will see several profiles of workers, which includes the person's political affiliation, age range, gender, whether they have a college degree, country, and race. For each, they will state their willingness to pay to hire this individual. They know that a random "market wage" will be drawn and they will "hire" the worker only if their willingness to pay is greater than or equal to the random wage. In this case, the hiring manager's payoff will be the worker's actual productivity minus the market wage for one randomly drawn decision. As shown in the figure below, we randomize participants into a worker bonus group or no worker bonus group. In the bonus group, workers actually receive the wage when being hired for the randomly drawn hiring decision.

Additionally, there are four distinct work task experiments. First, all participants complete the "performance experiment." In this part, the workers' output is considered to be the % of receipts they correctly transcribe, and so this is the outcome that determines the participants' payoff. After making ten wage decisions of this type, the hiring manager is then randomly assigned to complete two of the three additional types of experiments (in random order), which differ only in how the worker's output is measured (and thus how the hiring manager is paid). In the "shirking experiment," the worker's output is the % of receipts the worker assessed as legible. Since all receipts were actually legible, this captures the worker's willingness to shirk. In the "volunteering experiment," the output is the % of receipts the worker volunteered to add up. In the "criticism experiment," the output is how the worker's transcriptions changed after being criticized for poor performance. Again, the participant makes ten wage decisions for each of these two additional experiments. Finally, we elicit the participants' beliefs about the actual productivity in the "performance experiment" of workers with each demographic characteristic and the participant completes a final survey.



Recruitment of Workers:

Workers were previously recruited via Cloud Research as part of a separate experiment. We explained to those participants that we may use their de-identified data in future experiments and collected their consent.

Recruitment of Hiring Managers

We will recruit a sample of study participants online through Prolific. Our selection criteria are Democrats and Republicans living in the United States. Participants must also be fluent in English. Our target sample size is 1,100.

Randomization and Protocol:

The experiment is programmed in Qualtrics and we use the Qualtrics randomization to assign participants to the bonus or no bonus treatment and to assign them to two of the three additional work task experiments. Regarding the ten profiles that the participant sees, we created 36 distinct profiles based on the actual worker characteristics in the previous experiment. Among the ten wage decisions, each participant sees five “matched pairs” of profiles, where a profile pair is exactly the same except for partisan affiliation. The ten profiles were presented in random order, such that the elements in the pair usually did not occur sequentially.

II. Analysis Plan:

Every study participant acts as a “hiring manager,” making maximum wage offers in ten rounds for each of three hiring tasks resulting in thirty wage offer observations per participant. Our main outcome of interest y_{itr} is the wage offer of participant i in round r in hiring task t .

A. Pooled analysis

As our first specification, we can estimate the following regression:

$$(1) y_{itr} = \alpha + \beta_1 Ind_{tr} + \beta_2 OutParty_{tr} + \beta_3 Black_{tr} + \beta_4 College_{tr} + \beta_5 Old_{tr} + \beta_6 Fem_{tr} + \delta X_i + \omega_t + \epsilon_{itr}$$

Details on variables:

- Ind is an indicator variable equal to one if the political affiliation on the worker profile is Independent.
- $OutParty$ is an indicator variable equal to one if a hiring manager who identifies as Democrat (Republican) sees a profile of a Republican (Democratic) worker.
- $Black$ is an indicator variable equal to one if the worker profile is Black.
- $College$ is an indicator variable equal to one if the worker profile has a college degree.
- Old is an indicator variable equal to one if the worker profile is over 40.
- Fem is an indicator variable equal to one if the worker profile is female.
- X_i presents a vector of the participant’s demographic characteristics.
- ω_t is an indicator variable for hiring task t .
- Standard errors ϵ_{itr} are clustered at the participant level. We will also estimate regressions with participant fixed effects.

The main coefficients of interest β_1 and β_2 thus measure the effect of workers being independent and out-partisan, respectively, relative to seeing a worker who is a co-partisan. (Note that for our main specification, we only include hiring managers who identify as either Democrat or Republican.) We will present results estimated with and without controlling for covariates. We will report coefficients β_3 , β_4 , β_5 , and β_6 . These are not the main interest of this paper but will serve as benchmarks to interpret the magnitude of the Ind and $OutParty$ coefficients. To help with the comparison of coefficients, we will report results from a stepwise regression in which we estimate the effect of each worker characteristic separately and jointly.

B. Subgroup Analysis

We will estimate specification (1) separately for participants who identify as Democrats and Republicans. We then test whether the difference in coefficients of interest across regressions is statistically significant.

For our second key interaction of interest - strength of polarization - we estimate:

$$(2) \quad y_{itr} = \alpha + \beta_1 Ind_{tr} + \beta_2 OutParty_{tr} + \beta_3 Ind_{tr} \times Polar_i + \beta_4 OutParty_{tr} \times Polar_i + \beta_5 Polar_i + \delta X_i + \omega_t + \epsilon_{itr}$$

β_3 (β_4) measures whether the effect of workers being Independent (out-partisan) varies along participants' level of affective polarization. We focus on the effect of politics but will estimate specification (2) with and without controlling for other worker profile characteristics.

In addition, we will report in the appendix how results differ across participants' age, gender, and education level. These should be as secondary results that present descriptive results of interest.

C. Effects by Hiring Task

We will estimate specification (1) separately for each of the four hiring tasks. (These will not include hiring task fixed effects.)

D. Effect of Worker Bonus

To test the effect of the worker bonus, we will estimate:

$$(3) \quad y_{itr} = \alpha + \beta_1 Ind_{tr} + \beta_2 OutParty_{tr} + \beta_3 Ind_{tr} \times Bonus_i + \beta_4 OutParty_{tr} \times Bonus_i + \beta_5 Bonus_i + \delta X_i + \omega_t + \epsilon_{itr}$$

$Bonus_i$ is an indicator variable equal to one if the participant is randomized to the worker bonus treatment arm. We will estimate regression (3) in the sample that pools observations across all experiments. We will also report results across the two subgroups specified in section B.

III. Mechanisms

Our design offers tests for three main mechanisms that may explain discrimination:

- A. **Other-regarding preferences:** The randomly assigned worker bonus treatment measures if participants care differentially about the payouts of certain workers. Since it does not affect their own payouts, we interpret this as a measure of other-regarding preferences that is closely related to concepts of taste-discrimination.
- B. **Productivity beliefs:** We collect data on participants' beliefs about how productivity in the transcription task varies across the following demographic characteristics: political leaning, age, gender, race, education. We will compare beliefs about productivity levels for co-partisan and out-partisans as an explanation for why participants may offer different wages in the "performance experiment".

Recent models of discrimination include models with incorrect beliefs. To assess the accuracy of beliefs we compare them to productivity differences in our worker sample.

- C. **Attention:** Evidence suggests that decision makers pay selective attention to information. In our setting, participants may pay attention to certain worker characteristics. We measure patterns in attention by asking participants after seeing the last profile about what characteristics they remember from the profile.

We are also recording the time people take to make decisions and whether this differs across worker characteristics.

IV. Robustness

- 1) **Comprehension check:** Participants will need to pass a first comprehension check to participate in the study. We also include comprehension checks for each subsequent hiring task. We will test if results are robust to excluding participants who fail these tests in a given experiment.
- 2) **Inattention:** We will test how robust results are to dropping observations of participants who give seemingly conflicting answers, such as those who give a higher thermometer score to out-party than in-party members.
- 3) **Standard errors:** We test how robust estimates are to two-way clustering of standard errors (by participant and task).
- 4) **Purpose of study:** We ask participants after the hiring decisions (and before our survey) what they think was the purpose of the study. We will test whether results differ for the group that suspects that the study is about the role of politics.
- 5) **Hiring experience:** To test concerns about the external validity of our study, we will test if results differ depending on whether participants have real-world experience in hiring.