PAP - Name discrimination

Study Design

Figure 1 summarizes the research design.

Participants are first randomized into one of five name "batches" that include a total of six names. Names are grouped so that each batch includes one female and male name that is predominately Black, White, or ambiguous. The categorization is based on preliminary data collection of name associations. We pick names from a population of workers for which we measured productivity in a transcription task (Abel 2022).

Table 1: Name choices

Name batch	W-M	W-F	A-M	A-F	B-M	B-F
1	Brandon	Christine	Michael	Rachel	Deshawn	Aliyah
2	Ryan	Melanie	Greg	Jazmine	Isaiah	Deshawnta
3	Josh	Sara	Kevin	Krystal	Tyrone	Charisma
4	Adam	Rebecca	Robert	Gina	Terell	Deja
5	Colin	Heather	Darryl	Ashley	Jackson	Shanice

In the first stage, we elicit participants' beliefs about characteristics of people with each of the six names (presented in random order) in their assigned batch. Specifically, we ask how many out of 10 people with that name are of certain i) race groups, ii) education levels, iii) age groups, and iv) hold certain soft skills. Last, we elicit their beliefs about how productive a person with that name is in transcribing financial receipts. Belief elicitation is incentive compatible as participants earn additional bonuses for correct answers based on population averages (e.g. race, age) and worker-specific productivity data we elicited.

We use this data to estimate how perceived productivity and hiring preferences vary across perceived races and how much of this gap can be explained by beliefs about age, education and soft skill levels.

Randomization

After the belief elicitation participants will play the role of a hiring manager. They are presented with 10 choices or pairs of workers (in random order) drawn from the six names of their assigned batch and are

asked to "hire" the person they think is more productive. We inform them that we collected actual productivity data from these workers and that for every correct choice they receive a bonus of 10 cents.

Figure 1: Randomization Design
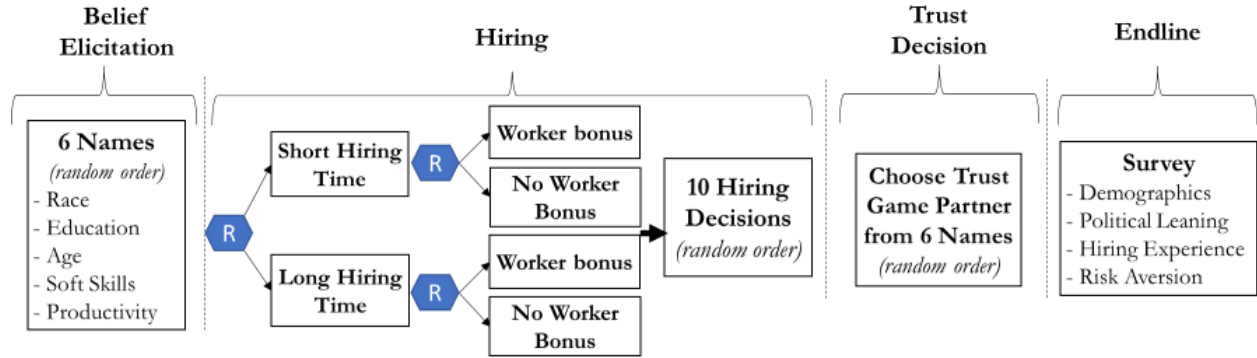
Our design features a cross randomization of two variations. First, we randomize whether hiring managers have to make a decision within 2 seconds (or otherwise forego the chance of earning a bonus for that choice) or instead have unlimited time. The choice of 2 seconds was close to the median time people took in preliminary data collection and should thus produce reasonable but rushed decisions.

Second, we randomize whether managers are informed that workers benefit from being chosen (details below).

Since these variations are used to investigate specific mechanisms, we will cross randomize the two treatments and assign one third to both the bonus and short time frame arm. The exact overall sample size depends on the number of people that can be recruited for a nationally representative sample using the research platform Prolific. We aim for a total of 1,500 participants to act as hiring managers.

Effect of Race Perception on Hiring Decisions

We estimate the following specification:

$$Hiring_{ij} = \beta_1 \, \Delta Black_{ij} + \beta_2 \, \Delta Producti v_{ij} + \beta_3 \, \Delta Educ_{ij} + \beta_4 \, \Delta Age_{ij} + \beta_5 \, \Delta SoftSk_{ij} + \lambda_r + \epsilon_i$$

with Hiring as an indicator variable for hiring manager i choosing candidate 1 for the hiring decision j. $\Delta Black_{ij}$ measures the difference in perceived blackness between names of candidate 1 and candidate 2 scaled between 0% and 100%. Coefficient β_1 thus measures the effect of race if the difference in perceived blackness to whiteness is 100%. In the same way, we control for perceived differences in names being associated as Hispanic, Asian, and other. However, since our choice of names do not create much variation along these perceptions of race, we do not focus on these estimates.

We will conduct stepwise regressions to test how much the raw race gap in hiring β_1 changes as we control for differences in perceived productivity, education, age, and soft skills. We will include indicator variables for the (randomized) hiring round λ_r and cluster standard errors at the individual level i.

Short vs. Long decision time

1/3 of participants are randomized to have a short time-window available to make a hiring decision. Specifically, we inform them that the hiring choice disappears after 2 seconds and that they do not receive any payout if they haven't made a decision in this time. We hypothesize that a shorter decision frame leads to more heuristic-based decisions (system 1) that are more influenced by people's race perceptions.

We will estimate the effect of a short time (*Short*) frame through a model with interaction effects:

$$Hiring_{ij} = \beta_1 \Delta Black_{ij} + \beta_2 \Delta X_{ij} + \gamma_1 \Delta Black_{ij} x\ Short_i + \gamma_2 \Delta X_{ij} x\ Short_i + \delta_i\ Short_i + \lambda_r + \epsilon_i$$

Coefficient γ_1 measures how the race gap changes when workers receive a bonus for being hired. We will also explore how the (reduction in the) race gap evolves as we control for differences in beliefs about hard and soft skills (ΔX_{ij}) as done in our previous specification.

Worker bonus

Before making hiring decisions, we inform a random subset of 1/3 of hiring managers that workers will enter a lottery to win $200 every time that they are chosen. This treatment does not change the payout structure of the hiring manager and only affects hiring decisions if hiring managers care about the wellbeing of workers. The directional effect of the worker bonus is ambiguous. If the hiring manager is averse to inequality, we would expect the worker bonus to decrease the race gap in hiring. If hiring managers care more about the wellbeing of white workers, which is evidence for taste-based discrimination, we would expect the race gap in hiring to increase.

We will estimate the effect of the bonus through a model with interaction effects:

$$Hiring_{ij} = \beta_1 \Delta Black_{ij} + \beta_2 \Delta X_{ij} + \gamma_1 \Delta Black_{ij} x\ Bonus_i + \gamma_2 \Delta X_{ij} x\ Bonus_i + \delta_i\ Bonus_i + \lambda_r + \epsilon_i$$

Coefficient γ_1 measures how the race gap changes when workers receive a bonus for being hired. We will also explore how the (reduction in the) race gap evolves as we control for differences in beliefs about hard and soft skills (ΔX_{ij}) as done in our previous specification.

II. Exploratory Analyses:

1) *Validation of soft skill elicitation*: In order to assess whether participants' stated soft skill beliefs are predictive of behavior, we correlate responses of perceived trustworthiness to choices in an incentivized trust game.

2) *Interaction of worker bonus and time frame*: To test for the interaction of systems 1 and 2 thinking and sources of discrimination (e.g. taste-based) we will explore the interaction of the two randomizations.

3) *Cognitive reflection task (CRT)*: We will collect data on people's performance in the cognitive reflection task and conduct exploratory analyses using their CRT score as a proxy of their reliance on intuitive thinking (system 1).

4) *Drift Diffusion Model* (DDM): We will collect data on how long people take to make a decision and use this data to estimate a DDM.

5) *Subgroups*: We will explore how discrimination varies by the following characteristics of hiring managers: race, age, education, gender, location, political affiliation, support for race based affirmative action, risk aversion, sector of employment and previous experience in hiring workers.

6) *Interaction* between race and gender: We test how race discrimination varies by the gender of the worker.

7) The role of *uncertainty*: We test how uncertainty in the hiring is process related to the race of candidates and whether uncertainty can help explain the race gap in hiring.

Note: this version of the PAP, posted on 2024/02/01 is identical to the version posted before the data collection began, except for a section at the end of the document called "THINGS NOT TO INCLUDE IN PAP BUT FOR US TO EXPLORE" which was mistakenly included in the initial upload.