

# Parent's Choice or School's Choice? Discrimination Against Students in Admission to Private, Charter, and Traditional Public Schools

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# School Choice Programs are Expanding Rapidly

- **Universal voucher programs are being implemented in many states, specially red states**
  - Private schools can legally discriminate against students except race
  - Even racial discrimination is hard to prove
- **Charter schools are also expanding**
  - Charter schools tend to be small and accountability could create incentives to discriminate
- **To what extent do these programs discriminate against students is an open question**

# We will conduct an audit experiment of all schools in the US

- We will send emails to receive admission information
- We will randomize several characteristics of the students to test for discrimination
  - Race/Ethnicity: Black, Hispanic, White, Arab
  - LGBTQ+ Status: gay/lesbian vs. presumed straight and transgender vs. presumed cis
  - Disability Status: ADHD, autism, no disability disclosed
  - Academic achievement: High vs low
  - Discipline: Disciplinary record vs. no disciplinary record
  - Socioeconomic Status (SES)/Income: High, middle, low paying jobs

# We contribute to the literature in several ways

- We will be the first audit study to test for discrimination in access to education in public, charter, and private schools
  - No previous audit studies included private schools
- First study to test for a wide range of characteristics
  - LGBTQ+ and Arab

# Data



# National Longitudinal School Database (NLSD)

- NLSD is a census of all schools in the US
  - Includes all private, charter, and traditional public schools from 1990-2019
- We will supplement the NLSD with data about voucher participation, discrimination law (e.g., don't say gay), and political leaning of the state
- We will also supplement NLSD with MDR Education's contact data

# Study Design



# We will consider many dimensions

- At least 7 types of schools
  - Private: Catholic, Protestant, secular, and single-sex
  - Charter: No-excuses/other, district/other authorizer
  - Traditional public schools
- 6 dimensions of potential discrimination
  - Race/ethnicity (Black, Hispanic, White, Arab)
  - LGBTQ+ status (sexual orientation or transgender status)
  - Disability status (ADHD, autism, no disability disclosed)
  - Academic achievement (high vs. low)
  - Socioeconomic status (high, middle, low paying jobs)



# Assigning treatment arms

- We will assign each school to either the sexual orientation and gender identity treatment arms (65%) or the disability treatment arm (35%)
  - We randomize these separate treatment arms to avoid detection
  - Signaling SOGI is unusual for younger children
  - We want to avoid signaling too many uncommon characteristics in the same email
  - We also want to avoid signals that could complicate the interpretation of the results

# We will use names to signal race and ethnicity

- The names have been tested by Gaddis (2022; White, African American, and Hispanic names) and Baert, Lippens & Van Borm (2022; Arab)
- We will assign a different race and ethnicity to each family in our email pairs:
  - Emails assigned to the disability treatment: probabilities 33% White, 23% Black, 23% Hispanic, and 21% Arab
  - Emails assigned to the SOGI treatment: probabilities 40% White, 30% Black, and 30% Hispanic

# Signaling sexual orientation or gender identity

- We will only use high school for this treatment arm
- When we do signal SOGI, the mother's email mentions that the child is either gay (20%), lesbian (20%), transgender (15% trans girl, 15% trans boy), or non-binary (10%) by adding
  - "[He/She/They] [is/are] [gay/lesbian/trans], and we are hoping to find a school that is [supportive / LGBT friendly]"
  - Mirroring language used in Pfaff et al. (2021) of religious beliefs

# Signaling disability status

- For schools assigned to the disability treatment arm we will randomly assign the child to have:
  - Equal probabilities of ADHD or autism
  - The remaining emails will not mention a disability
- We will add a sentence:
  - "[She/he] has an IEP for [her/his] ADHD"
  - "[She/he] is on the spectrum and will need to be taught in a separate classroom"

# Signaling academic achievement, socioeconomic status (SES), and voucher

- We will signal academic achievement by mentioning that the child:
  - "typically gets As and Bs"
  - "typically gets Cs"
- We will signal SES by either including or omitting degree information like "MD" or "PhD" in the mother's email signature
- For schools that accept vouchers, we will include signals of voucher eligibility

# Coding response data

- Primary outcome: positive response
  - It will be coded as 1 if the school responds to our email in a way that is helpful (e.g., answers a question) or encouraging within two weeks and 0 otherwise
- Secondary outcome: response quality which includes:
  - Wait time to the response
  - Reply is helpful
  - Affirming
  - Polite

# Communication with the Schools

- There is an extensive literature on how to write the emails to the schools (Patrick is the expert)
- We will send two emails to school administrators (available in the MDR Education data)
- We will randomize the characteristics of the students in the emails to signal our dimensions of interest
- The emails will be realistic and will ask for information about the admissions process
  - We will use some of Doug's extensive contacts with educators to ensure the emails are realistic

# Emailing Strategy

- We will send two emails to each school
  - One email will be "treatment" (e.g. parent mention their child is transgender) and the other will be "control" (no mention)
  - We will randomize the order of the emails
  - Send at least one month apart
- Sending two emails substantially increases statistical power



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- This is the place where we in most need of suggestions

# Statistical Analysis



# Short regression model

We will estimate a linear probability model (LPM) called the "short" model (following Muralidharan, Romero & Wüthrich, 2019):

$$\begin{aligned} \text{PositiveResponse}_i = & \beta_1 \text{Black}_i + \beta_2 \text{Hispanic}_i + \beta_3 \text{Arab}_i + \beta_4 \text{LGT}_i + \beta_5 \text{Disability}_i \\ & + \beta_6 \text{FemmeName}_i + \beta_7 \text{LowGrades}_i + \beta_8 \text{HighGrade}_i + \beta_9 \text{SESMD}_i \\ & + \beta_{10} \text{SESPHD}_i + \text{EmailCongrols}_i \beta_{11} + \text{SchoolControls}_i \beta_{12} + \epsilon_i \end{aligned}$$

Where  $i$  indexes each email:

- $\text{PositiveResponse}_i$  is a binary outcome variable for receiving a positive response
- $\text{Black}_i$ ,  $\text{Hispanic}_i$ , and  $\text{Arab}_i$  are indicator variables for race and ethnicity
- $\text{LGT}_i$  is an indicator variable for lesbian, gay, trans, or non-binary students
- $\text{Disability}_i$  is an indicator variable for students with ADHD or autism
- $\text{FemmeName}_i$  is an indicator variable for a feminine name

# Short regression model (continued)

$$\begin{aligned} \text{PositiveResponse}_i = & \beta_1 \text{Black}_i + \beta_2 \text{Hispanic}_i + \beta_3 \text{Arab}_i + \beta_4 \text{LGT}_i + \beta_5 \text{Disability}_i \\ & + \beta_6 \text{FemmeName}_i + \beta_7 \text{LowGrades}_i + \beta_8 \text{HighGrade}_i + \beta_9 \text{SESMD}_i \\ & + \beta_{10} \text{SESPHD}_i + \text{EmailControls}_i \beta_{11} + \text{SchoolControls}_s \beta_{12} + \epsilon_i \end{aligned}$$

Where  $i$  indexes each email and  $s$  indexes each school:

- $\text{LowGrades}_i$  and  $\text{HighGrades}_i$  are indicator variables for low and high academic achievement
- $\text{SESMD}_i$  and  $\text{SESPHD}_i$  are indicator variables for high socioeconomic status (SES) parents with MD or PhD degrees
- $\text{EmailControls}_i$  includes indicator variables for different randomized email features, and controls for email timing
- $\text{SchoolControls}_s$  which includes state fixed effects and school characteristics from the NLSD

# Thanks!

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