DEMAND FOR SAFE SPACE: AVOIDING HARASSMENT AND STIGMA

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MOTIVATION

• Sexual harassment shockingly common in public places worldwide:
  – 50% physically harassed in public

• Violence against women restricts mobility and reduces women's access to education and market participation
  – (Burd and Linden 2013; Muralidharan and Prakash 2017; Cheema et al. 2017; Borker 2018; Jayachandran 2019)

• Women-reserved “safe spaces” are a common policy response; may allow women to avoid harassment
  – (Aguilar et al. 2018)

• Are there unintended consequences - reinforcing perception that women outside the reserved space provoke harassment?
THE STUDY

• We use crowdsourced data from 22,000 rides on public transit in Rio de Janeiro, Brazil to capture the costs of sexual harassment
  – elicit revealed preferences for women-reserved space by varying payouts to ride in different spaces
  – randomly assign riders across spaces to measure differences in the incidence of physical harassment

• We then document a potential general equilibrium effect of reserved spaces: stigma against women who choose the public space instead of reserved space
  – Interview male and female commuters on the platform and administer 948 social norms survey and 291 Implicit Association Tests
• Since 2006 metro and train operators required to provide a women-reserved car in each train during rush hours (6-9AM and 5-8PM)
  – 1 in 8 carriages are dedicated to women; 50% of riders are women
• Women can choose which space to ride
DATA CROWDSOURCING

• We recruit 357 female participants from train stations; most are regular commuters
• Recruitment material did not mention space reservation or harassment to avoid self-selection
• Participants paid $4.5 per ride to capture data through a phone application
PRESENTATION OF TASKS

- Elicit revealed preference willingness to pay:
  - Riders can ride either car but are offered varying opportunity cost (additional payment for public space)
- Estimate reduction in harassment from riding the reserved car:
  - Randomize offer of paid ride only on the women-reserved or only on the public car
  - Partial equilibrium - not a measure of policy impact
- Combine estimates to quantify cost of harassment

(a) Revealed preference: zero opportunity cost
(b) Revealed preference: positive opportunity cost
(c) Randomized assignment to space
ON AVERAGE
31% OF RIDERS IN THE RESERVED SPACE ARE MALE;
62% IN THE PUBLIC SPACE
PHYSICAL HARASSMENT IN THE PUBLIC SPACE: 2.6% OF RIDES = ONCE A MONTH

26% OF WOMEN GIVE UP $0.20 TO USE THE RESERVED SPACE ON SOME RIDES

RIDING THE RESERVED SPACE REDUCES PHYSICAL HARASSMENT BY 50%

![Graph showing the percent of riders who take up reserved space at least once.](image)

![Graph showing the marginal effect of riding reserved space on percent of rides with harassment reported.](image)
RESERVED SPACE CREATES STIGMA FOR WOMEN IN PUBLIC SPACE

• Women who choose the public space are blamed for harassment
• Half of the men agree that women who choose to ride in the public space are more sexually open
• 20-40% agree that if a woman is harassed in the public space, it is partially her fault: she could have chosen the reserved space
WOMEN IN PUBLIC SPACE ARE NOW VIEWED AS PROVOKING

Implicit Association Test respondents associate:

• the reserved space with safety
• the public space with provocation
CONCLUSION

In a setting with a women-reserved space on the public transit system we find:

• Women willing to pay to choose reserved space

• Choice driven by avoiding harassment:
  – randomized assignment demonstrates harassment much lower in women only cars

• Low-bound cost of harassment on intensive margin is equivalent to $1.17 per incident, or 0.39% of minimum wage

• Stated and implicit attitudes reveal that gender norms put the burden on the victim for not taking up the reserved space - potential unintended consequence in general equilibrium
THANK YOU

Data collection

Step by step guidance

Data analysis

Distributional impact