LGBTQ (Health) Economics
Economics of Health Equity seminar

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HKS

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Context
Definitions

- **Sex** and **gender** core determinants of health

  - Sex – biological differences
    - Anatomy, chromosomes, hormones, genes, etc.
    - Assigned at birth (mostly)

  - Gender – social and cultural dimensions
    - Multidimensional
    - Psychological, social, behavioral
    - Gender identity, gender expression
Definitions: trans and nonbinary

- **Trans(gender):** Gender identity or expression different than sex assigned at birth
  - Cultural variations in terminology and concept: Hijra, travesti, waria, twospirit etc
  - ‘Gender minorities’ (NIH)
- **Cisgender:** Not transgender
- **Nonbinary:** Gender identity or expression not exclusively male or female
LGBTQ health

2-10% of most populations self-identify as LGBTQ when asked (Badgett et al., 2021)

- Precise figure depends heavily on survey methodology and wording: e.g. attraction vs behaviour vs identity
- USA: Gallup found the share of Americans identifying as LGBT as 3.5% in 2012, 4.5% in 2017
- Millennials/GenZ cohort rose to 8.2% in 2017

Data sources for LGB identity: National Health Interview Survey, American Community Survey

Data source for trans identity: Behavioral Risk Factor Surveillance System

Major health disparities include mental health conditions, substance misuse, specific STIs

- Results vary by gender and trans status
Trans+ individuals face a particular mental health crisis:

- Higher anxiety, depression, and substance misuse rates (*Burgess, et al., 2008*)
  E.g. 30-40% of trans+ individuals attempted suicide - 26x the general population (*Safet et al., 2016*)


- Minority stress compounds for members of multiple minorities (e.g. BIPOC trans women) (*Bockting, et al., 2013*)
Effects of Access to Legal Same-Sex Marriage on Marriage and Health

Christopher Carpenter, Samuel T. Eppink, Gilbert Gonzales Jr., Tara McKay
Novel Contribution

Presents the first comprehensive, national review of the health effects of the legalization of same-sex marriage (SSM) in the US. Authors identify three separate health effects.

Legal SSM, for men specifically:

- Increased insurance coverage
- Access to care
- Healthcare utilization

Health effects of SSM between women remain inconclusive (more on that later).
Previous Work

Research on the health effects legalized SSM is sparse, primarily due to lack of data that plausibly identifies same-sex households (SSH).

Previous literature that has attempted to identify health effects of SSM:

- Legal SSM was associated with **lower youth suicide** (Raifman et al. 2017)
- Bans on SSM in a series of states was documented alongside an **increase in psychiatric disorders** for sexual minorities compared to their heterosexual counterparts (Hatzenbuehler et al. 2010)
- Legalization of domestic partnerships were associated with a **decrease in Syphilis transmissions** in Europe (Dee 2008).
**Data**

**Behavioral Risk Factor Surveillance System (BRFSS)** - Collection of telephone surveys designed to be state representative. Focus on health outcomes, access to healthcare, and health behaviors.

- Spans 2000-2017
- Sample of over 400,000 individuals in most recent years
- Individual demographics (age, race, education, marital status).
- Restrict sample to ages 25+
- **Sex composition of household**

To identify SSH authors restrict sample to households with exactly 2 adults (older than 25) of the same sex. Validation of this identifying technique yields 29% of male-male households are non-heterosexual and 11% of female-female households are non-heterosexual. Hypothesizes that there is lack of power to identify effects in female-female SSH.
Empirical Strategy

Estimate a two-way fixed effects model using variation in the timing that states legalized SSM where $B_2$ estimates the effect of legalization of SSM on a series of health outcomes.

\[
Y_{ist} = \beta_0 + \beta_1 X_{ist} + \beta_2 (\text{LEGAL SAME-SEX MARRIAGE})_{st} + \beta_3 Z_{st} + \beta_4 S_s + \beta_5 T_t + \beta_6 S_s^* \text{TREND}_t + \varepsilon_{ist}
\]

- $Y_{ist}$ - Whether individual is insured or not, whether they had a "usual source of care", whether they had "unmet medical needs", a set of subjective measures of well being, drinking status, and an indicator for having gotten a series of screenings for age appropriate diseases.
- $X_{ist}, Z_{st}, S_s, T_t$ - Individual controls, state-time varying controls, state dummies, and time dummies respectively.
- $Z_{st}$, importantly, also includes state LGBTQ policy environments such as "bathroom bills".
Results

The primary, statistically significant results, in male-male SSH:

- 4.1% increase in individuals insured
- 3.9% increase in individuals who reported having a usual source of care
- 6.6% increase in individuals who had gotten a check-up in the past year

The authors conclude that the primary health benefits of legalized SSM is increased access to spousal employer sponsored insured and subsequent ability to seek care.
Overall comments

What this paper does well:

- Ambitious in trying to identify same-sex marriages - creative use of data
- Interesting null results on physical and mental health compared to literature

What could be improved:

- Empirical strategy problematic: put in a lot of controls and FEs, and hope time+state variation is exogeneous. However, early legalisation is very likely correlated with health outcomes (in red v blue states).
- Slight attenuation for states that had already legalized some sort of domestic partnership so already had dependent insurance
- External validity outside US - mostly works through employer insurance
Gender Identity, Race, and Ethnicity Discrimination in Access to Mental Health Care

Patrick Button, Eva Dils, Benjamin Harrell, Luca Fumarco, David Schwegman
The authors conduct a large-scale field experiment to answer the questions:

- Do transgender and nonbinary (TNB) individuals face discrimination in access to appointments with mental health practitioners (MHPs)?
- If so, to what extent is this discrimination moderated by race and specific gender identity?
Motivation: direct or indirect discrimination by MHPs would worsen health disparities

Experimental evidence of discrimination in access to primary care based on other sociodemographic factors:
- SES (Olah et al. 2013; Angerer et al. Forthcoming)
- insurance status (Bisgaier and Rhodes 2011; Rhodes et al. 2014; Polsky et al. 2015; Olin et al. 2016; Sharma et al. 2015, 2018)
- race/ethnicity (Sharma et al. 2015, 2018; Wisniewski and Walker, 2019)
- gender (Olah et al. 2013; Sharma et al. 2015, 2018)

Some small-scale experimental evidence of race and SES discrimination in access to therapy appointments (Shin et al., 2013; Kugelmass, 2016, 2018)
The study audits the behavior of Mental Health Providers (MHPs) in response to fictitious prospective patients who email requesting appointments:

- Construct 100 fictitious patients to contact selected MHPs. Each patient contacts 10 MHPs (so N=1,000)
  - $\frac{1}{2}$ are TNB (stated in email), $\frac{1}{2}$ are cisgender
  - $\frac{1}{2}$ are white, $\frac{1}{4}$ Hispanic, $\frac{1}{4}$ African-American (signalled with names, following Bertrand and Mullainathan (2003) etc)
  - $\frac{1}{2}$ of all the above are female
- Email nationally representative sample of MHPs pretending to be potential patients looking for an appointment.
- Experimentally vary important patient characteristics to examine to what extent therapists respond differentially to different characteristics
- If providers significantly under-respond to a group (say, transgender individuals) relative to others, view that as evidence of discrimination against that group.
A selected MHP will receive an email that looks something like this:

Looking for a Therapist

Hi,

My name is DeShawn Jefferson.

I'm contacting you because I've been feeling anxious lately and I want to talk to a therapist. I am a transgender man and am looking for a therapist who is trans-friendly. Can we set up an appointment?

Best,
DeShawn Jefferson
Results: trans status

- Primary outcome variable is a binary variable equal to 1 for appointment or call/consultation offer, 0 otherwise
- TNB patients received appointments and consultation calls at lower rates (52.8%) compared to (60.6%) cisgender patients (p=0.013)

### Table 2. Positive Response Rates by Gender Identity

<table>
<thead>
<tr>
<th>Response Rates by Trans/Cis Status:</th>
<th>Positive</th>
<th>Negative</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cisgender</td>
<td>60.6% (291)</td>
<td>39.4% (189)</td>
<td>480</td>
</tr>
<tr>
<td>Transgender or non-binary</td>
<td>52.8% (275)</td>
<td>47.2% (245)</td>
<td>520</td>
</tr>
<tr>
<td>Total</td>
<td>56.6% (566)</td>
<td>43.4% (434)</td>
<td>1,000</td>
</tr>
</tbody>
</table>

**Test of independence, p-value** 0.013
Results: race/ethnicity

- Non-significant differences in response rate by race/ethnicity (p=0.51 for W vs. AA and p=0.42 for W vs H; p=0.86 for AA vs H)
- What about intersectionality?

<table>
<thead>
<tr>
<th>Race/Region</th>
<th>Positive (%)</th>
<th>Negative (%)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>58.0% (290)</td>
<td>42.0% (210)</td>
<td>500</td>
</tr>
<tr>
<td>African American</td>
<td>55.5% (150)</td>
<td>45.5% (120)</td>
<td>270</td>
</tr>
<tr>
<td>Hispanic</td>
<td>54.8% (126)</td>
<td>45.2% (104)</td>
<td>230</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>56.6% (566)</strong></td>
<td><strong>43.4% (434)</strong></td>
<td><strong>1,000</strong></td>
</tr>
</tbody>
</table>

**Tests of independence, p-values**

<table>
<thead>
<tr>
<th></th>
<th>White</th>
<th>African American</th>
<th>Hispanic</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>…</td>
<td>…</td>
<td>…</td>
</tr>
<tr>
<td>African American</td>
<td>0.514</td>
<td>…</td>
<td>…</td>
</tr>
<tr>
<td>Hispanic</td>
<td>0.415</td>
<td>0.862</td>
<td>…</td>
</tr>
</tbody>
</table>

*Notes: Responses are coded as positive if the MHP’s response was an appointment offer or a call or consultation offer. P-values come from a t-test (two-sided).*
Main finding: "it appears that the discrimination against TNB prospective patients is largely discrimination against TNB African-Americans and Hispanics"

Table 7: Differences in Positive Response Rates, Intersectional Results by Trans/Cisgender Status and Race/Ethnicity

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transgender or non-binary</td>
<td>.0123</td>
<td>...</td>
</tr>
<tr>
<td>(Transgender or non-binary)</td>
<td>(.0426)</td>
<td></td>
</tr>
<tr>
<td>...and white</td>
<td>...</td>
<td>.0998*</td>
</tr>
<tr>
<td>(African American)</td>
<td></td>
<td>(.0574)</td>
</tr>
<tr>
<td>...and African American</td>
<td>...</td>
<td>-.1333**</td>
</tr>
<tr>
<td>(African American)</td>
<td></td>
<td>(.0613)</td>
</tr>
<tr>
<td>...and Hispanic</td>
<td>...</td>
<td>-.1025</td>
</tr>
<tr>
<td>(Hispanic)</td>
<td></td>
<td>(.0625)</td>
</tr>
<tr>
<td>Cisgender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>...and African American</td>
<td>...</td>
<td>-.0241</td>
</tr>
<tr>
<td>(Cisgender)</td>
<td></td>
<td>(.0659)</td>
</tr>
<tr>
<td>...and Hispanic</td>
<td>...</td>
<td>-.0321</td>
</tr>
<tr>
<td>(Cisgender)</td>
<td></td>
<td>(.0673)</td>
</tr>
<tr>
<td>All African American</td>
<td>-.1333**</td>
<td>...</td>
</tr>
<tr>
<td>(All African American)</td>
<td>(.0404)</td>
<td></td>
</tr>
<tr>
<td>All Hispanic</td>
<td>-.1302**</td>
<td>...</td>
</tr>
<tr>
<td>(All Hispanic)</td>
<td>(.0495)</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>1,000</td>
<td>1,000</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.1070</td>
<td>0.1100</td>
</tr>
</tbody>
</table>

Notes: All regressions include the controls in column (5) of Table 5: mental health concern (depression and anxiety)
What this paper does well:

- Getting at something inherently hard to measure/find data on
- Accounts for intersectional identities
  - Main finding would have gone hidden if the experiment didn't also randomize by race

What could be improved:

- Results do not take MHP characteristics into account
  - Who is driving the discrimination?
  - Effect of concordant/discordant identities
- No ability to unpack source/type of discrimination (animus, statistical, unconscious etc)
- Circumstances: end of data collection period overlaps with first Covid lockdown