Work in progress!

Birkbeck
UNIVERSITY OF LONDON

Widely prevalent, unevenly declining: implicit and explicit biases since 2006

LUKAS WALLRICH, MARTHA BORRAS-GUEVARA & BEATRICE GINI

✉ l.wallrich@bbk.ac.uk   🐦 @lukaswallrich

Comparing biases

- Racism, colorism, homophobia, transphobia, islamophobia, antisemitism, ageism, ableism and anti-fat bias

- All exist,
  all cause substantial injustice,
  all extensively researched

- But, **little comparative work**

Our questions

- **How strong** are biases against different low-status groups? How widespread?

- Are biases **internalised**, i.e. shared by members of low-status groups?

- How has bias **changed over time**?
  Are we on track towards egalitarian attitudes?

  ➡️ ▪ Focus on both *implicit* and *explicit* bias
      - What people spontaneously feel
      - What people are willing to report

Unique dataset from Project Implicit

- **Many standardized implicit attitudes tests** –
  6+**4** included here: test association of high-status
  and low-status group/category with "good" and "bad"
  - **Race**: African Americans – European Americans
  - **Skin color**: dark skin – light skin
  - **Sexuality**: gay – straight
  - **Age**: old – young
  - **Weight**: fat – thin
  - **Disability**: disabled – abled
  - **Transgender**: transgender – cisgender
  - **Religion**: 3 pairs (e.g., Islam vs Christianity)

- Standardized – though crude – explicit measure.

- **Responses over time**.
  Mostly use data from 2006-2020
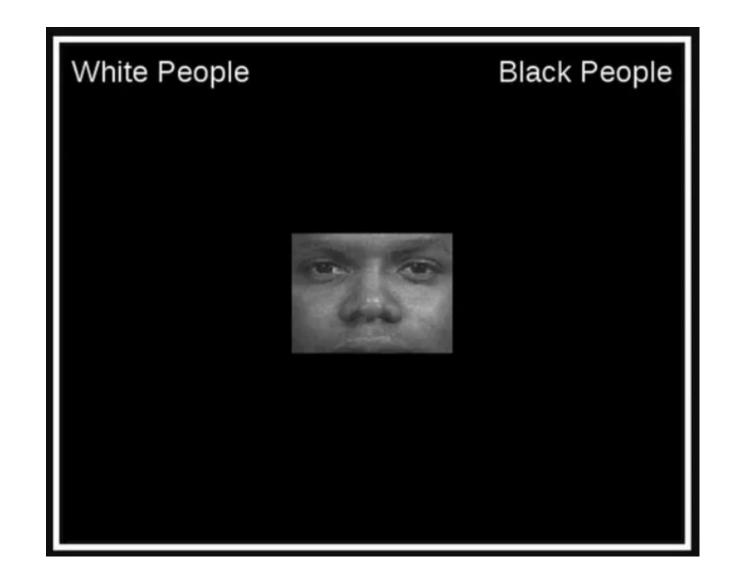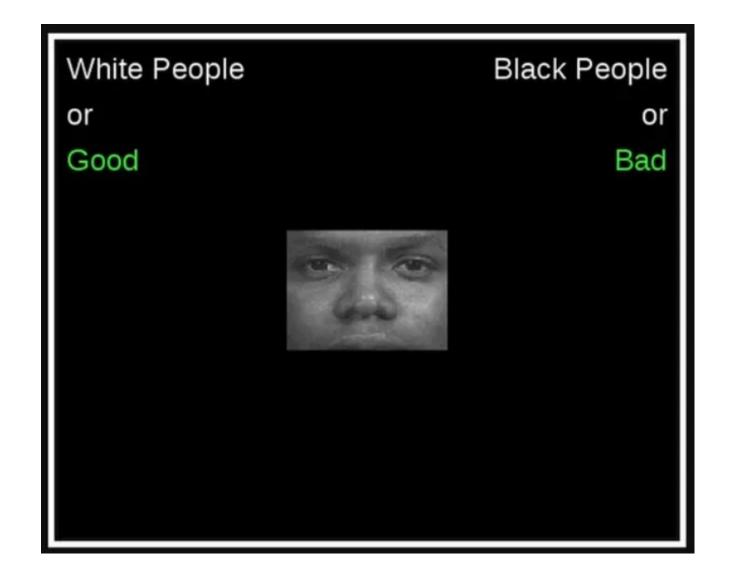 Newer tests (religion & transgender) only included for 2020

Implicit bias

- Popular concept - cornerstone of diversity training

- **Highly celebrated measure** (Implicit Association Test – IAT)
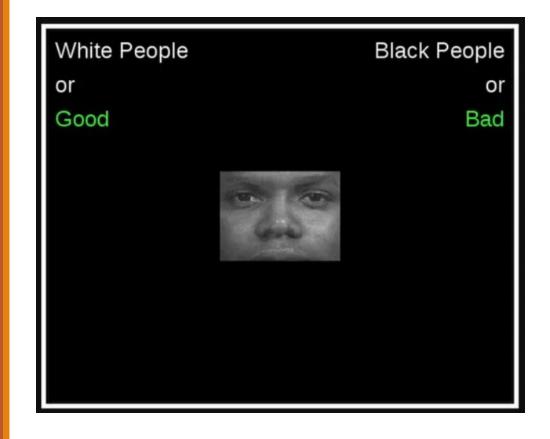 **has become controversial**

- Test-retest reliability poor, individual results unstable

- Some conceptual confusions and concerns

In essence: read our preprint & let's discuss ☺

- *BUT*: even if psychometric properties are weak, **large-sample averages**
  likely to reflect structural inequality (cf. Vuletich & Payne, 2019)

- **Less blatant** measure than explicit bias questions –
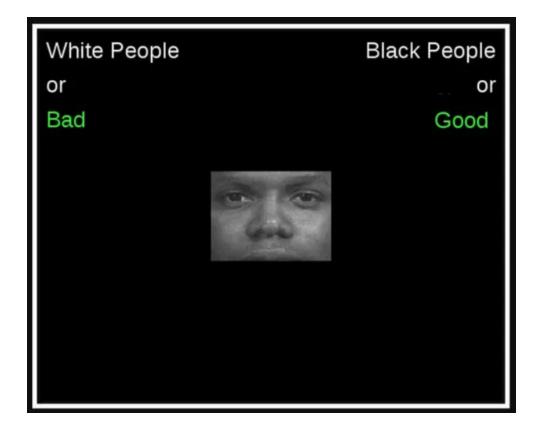 so *comparisons* might help understand nature of bias

vs.

The sample

- **Large, self-selected**, **diverse samples**, mostly from US; data freely shared on OSF

- Considered US respondents only – across 6 tests and 15 years:
  - **10 mn responses**. (from 4.4 mn on race IAT to 500k on disability IAT)
  - 66.6% female
  - *M* age: 28.5 years (SD: 12.4 years)
  - 13% Conservatives, 37% Liberals
  - 67% non-Hispanic White

- 35 – 72k respondents on 2020-only tests

Approach

- Calculation of post-stratification **weights** to align demographic sample composition across *tests* and *years*:
  - sample still young, educated and liberal

- **Focus on effect sizes:**
  - almost any comparison will be significant (99% power to detect d = .01) but many will be uninteresting

NB: Charlesworth & Banaji (2019) conducted similar work, with data from 2007-2016, focusing only on the trends
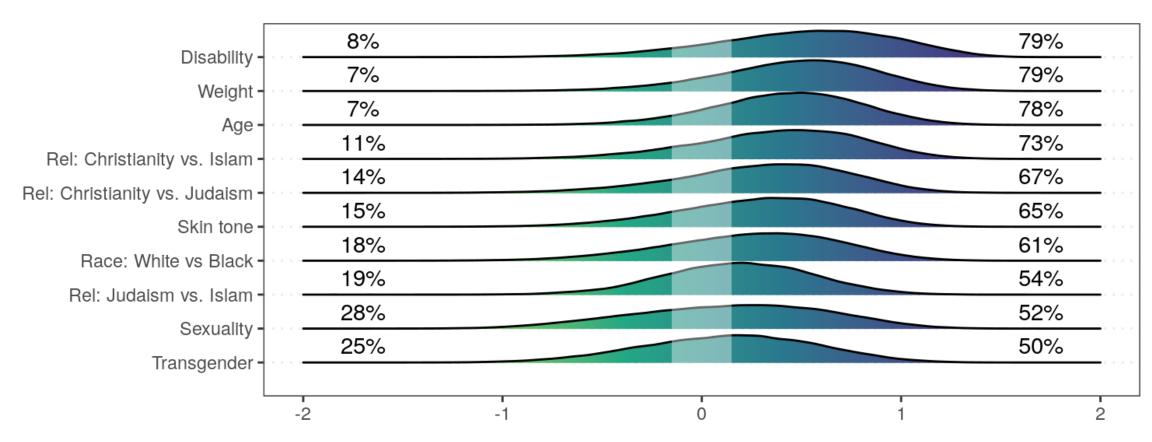
Results

Prevalence of bias in 2020 → Trends since 2006

Implicit bias in 2020
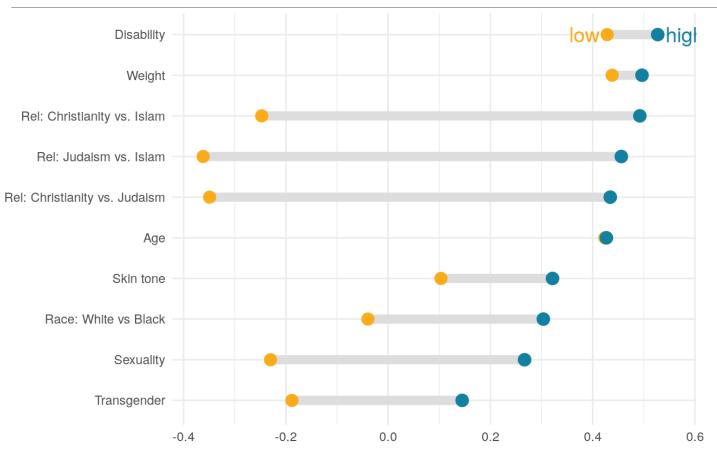

Substantial bias = |D| > 0.15 (Nosek et al., 2007)

Is bias internalized?
Mean IAT scores by status
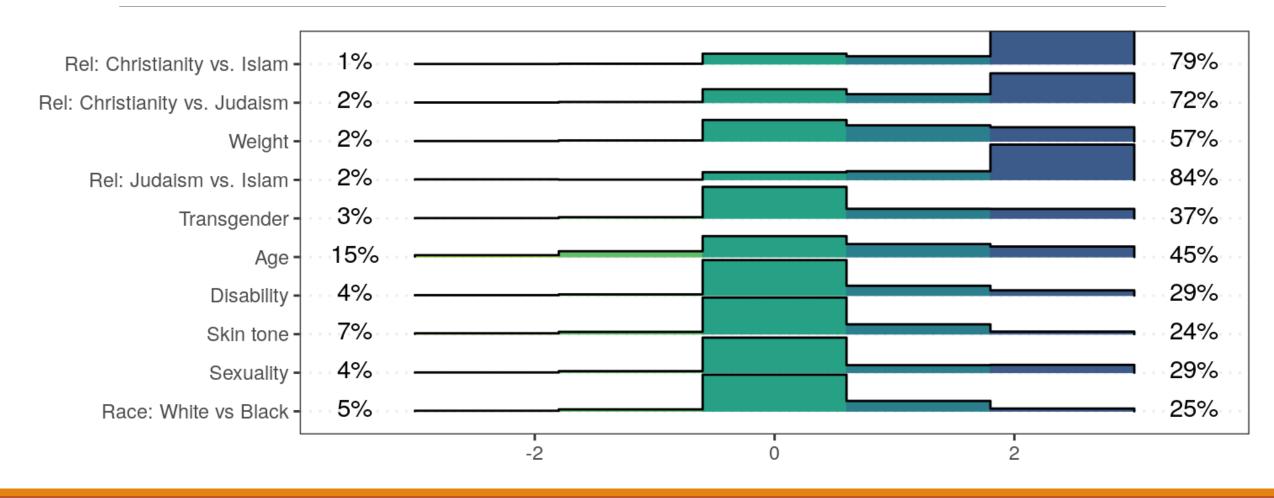
Different answers

- *Yes*: fitness categories

- *Somewhat:* skin color, (race)

- *No:* religion, sexual orientation, transgender status
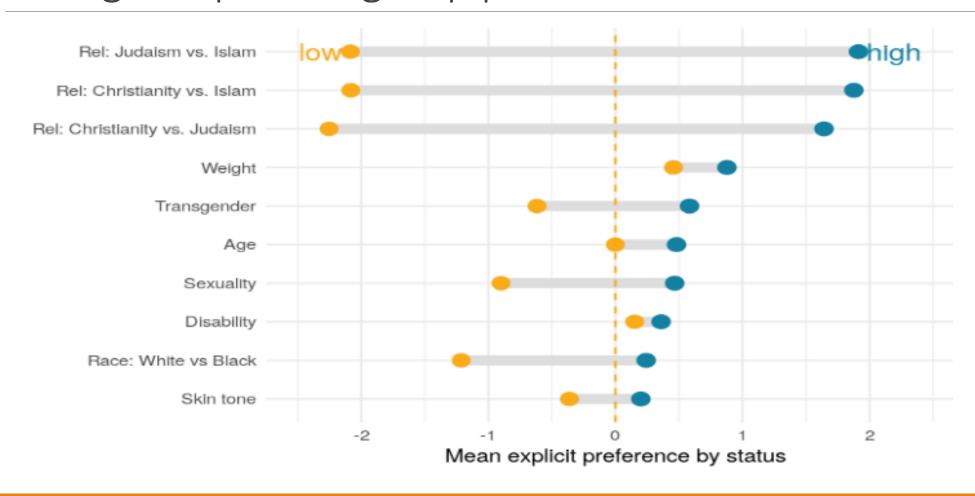
Explicit bias in 2020: **high** status respondents

Rel: Christianity vs. Islam	1%	79%
Rel: Christianity vs. Judaism	2%	72%
Weight	2%	57%
Rel: Judaism vs. Islam	2%	84%
Transgender	3%	37%
Age	15%	45%
Disability	4%	29%
Skin tone	7%	24%
Sexuality	4%	29%
Race: White vs Black	5%	25%

Low-status groups often express stronger explicit in-group preferences …

… except for fitness-related biases

Results

Prevalence of bias in 2020 → Trends since 2006
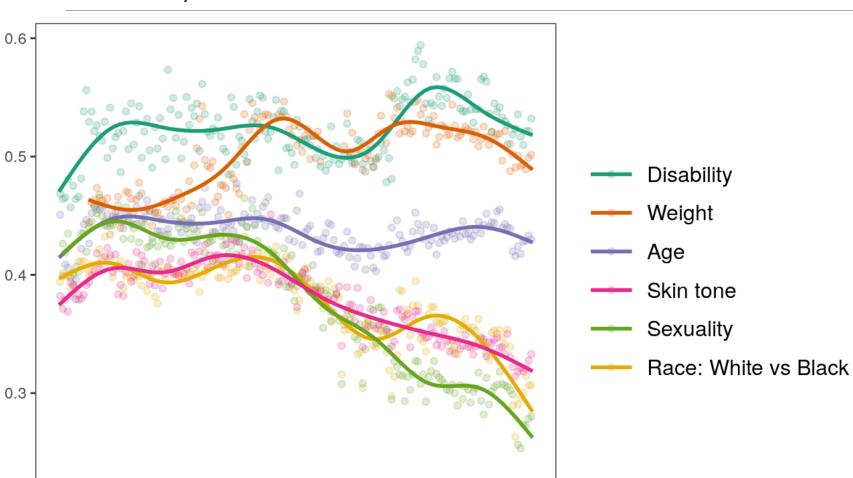
Implicit biases since 2005 (high-status only)
Monthly means and GAM trendlines

Understanding trends:
- Polynomial regression (Westgate et al., 2015)
- Timeseries analysis (Charlesworth & Banaji, 2019)
- KISS: linear regression

Linear trends in *implicit* bias
(High-status only)

Test	R2	Annual change	Years to neutral
Sexuality	2.52%	-0.017	7
Race	0.38%	-0.006	42
Skin tone	0.37%	-0.006	49
Age	0.01%	-0.001	540
Disability	0.01%	0.001	---
Weight	0.42%	0.006	---
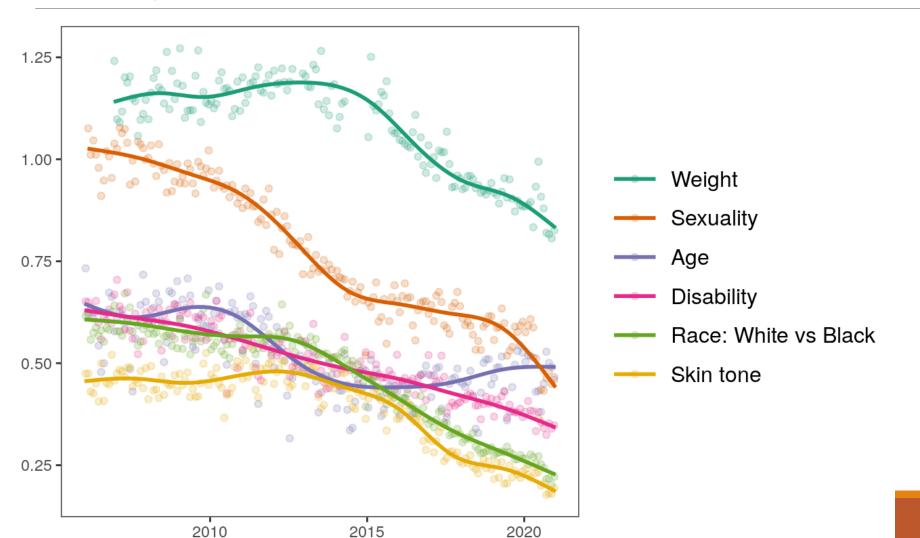
Not a forecast!

Possibly due to a change in stimuli in 2011 – tbc.

Explicit biases since 2005 (high status only)
Monthly means and GAM trendlines

Linear trends in *explicit* bias
(High-status only)

Test	R2	Annual change	Years to neutral
Race	2.50%	-0.029	9
Skin tone	1.31%	-0.022	9
Sexuality	2.59%	-0.039	11
Disability	0.98%	-0.02	17
Weight	1.12%	-0.027	31
Age	0.24%	-0.013	37

Not a forecast!

Key findings: prevalence & internalization

Implicit bias

- **Widespread:** 51-82% of high-status respondents showed substantial in-group preference
- Some internalized / commonly held, i.e., fitness
- Others express symmetric in-group love, e.g., sexual orientation

Explicit bias

- **Less commonly expressed,** but still by 24-57% of high-status respondents (70+% for religion)
- Apart from fitness, **more strongly expressed by low-status** than high-status respondents

Key findings: trends

Implicit bias

- **Diverse trajectories:**
  - Sexuality declining fast
  - Race and skin tone declining slowly
  - Fitness-related flat

Explicit bias

- **Decline across all tests**
  - Most rapidly for sexuality
  - Race and skin tone *could* reach neutrality within 10 years

26

Questions for discussion

- What does the faster decrease in explicit than implicit bias mean?
    - Social desirability / PC encourages people to say what they don't believe?
    - Implicit ingroup preference is "normal" – cognitive strategies and processes need to deal with that?

- What explains the distinction between fitness-related biases and others?
    - More contact with & less threat from elderly, overweight and disabled?
    - *Why* are these biases stronger, more internalized and more stable over time?

- (When) is ingroup love a problem?
    - "General" preference for ingroup members is a human universal (see Social Identity Theory), yet also a pre-condition for discrimination
    - Which groups are "allowed" to express ingroup preferences?
    - So, what do ingroup-outgroup IATs and preference measures capture?

Widely prevalent, unevenly declining:
implicit and explicit biases since 2006

Thanks for listening!
Download this presentation and our full results:
https://github.com/LukasWallrich/bias-trends

SCAN ME

LUKAS WALLRICH, MARTHA BORRAS-GUEVARA & BEATRICE GINI

✉ l.wallrich@bbk.ac.uk   🐦 @lukaswallrich

Wallrich, L., Borras-Guevara, M. & Gini, B. (2022). *Widely prevalent, unevenly declining: trajectories of implicit and explicit biases in the US since 2005.* Manuscript under preparation