Media Matters

Media as a development tool

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EAGxBerkeley

December 2022

Slides at timhua.me/eagx.pdf

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Motivation

• By the end of this talk, I hope to convince you that Media—which includes stuff like TV shows, radio broadcasts, and news channels—changes the way people act.

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- The power of media to induce economic development is *extremely promising*.

Economists like to take utility/preferences as given

• Gary Becker: "Since economists have little to contribute ... to the understanding of how preferences are formed, preferences are assumed not to change substantially over time, nor to be very different between wealthy or poor persons, or even between persons in different societies and cultures."

Evidence on Global Preference Heterogeneity: Falk et al. (2018), published in the *Quarterly Journal of Economics*



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 - Religious organizations try convert other people all the time.
- I feel like there's a lot more attempts to convince people in political science/social psychology/public health because they don't have this aversion towards changing preferences [Claim not systematically checked. I'm 70% certain this is the case].
 - Cavaet: There is a small and growing literature studying preference formation in economics.

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- The movie showing costs \$3 for the ticket and \$2 to transport students to the movie theater.
- Approx. one malaria net per pupil.

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- Two years later, the tenth graders who saw *The Queen of Katwe* are 12 percentage points more likely to take the final 12th grade exam (once again closing the gender gap with males).

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There are a lot more examples: Download the slides at timhua.me/eagx.pdf to see one-sentence summaries of some of these in the appendix

- Media in general
 - Alatas et al. (2019) Banerjee et al. (2019) Kearney and Levine (2015) Jensen and Oster (2009) Armand et al. (2020) Jacobsen (2011) Yanagizawa-Drott (2014) Ang (2022) Wang (2021) Adena et al. (2015) Chen (2021) Gagliarducci et al. (2020) Rubin (2014) La Ferrara et al. (2012) Xiong (2021) Olken (2009)
- Fox news
 - DellaVigna and Kaplan (2007) Martin and Yurukoglu (2017) Clinton and Enamorado (2014) Knill et al. (2022) Crabtree and Poyker (2021) Ananyev et al. (2021) Ash and Poyker (2021) Ash et al. (2020) Ash et al. (2022) Li and Martin (2022)
- EA Forums poston cost effectiveness of various mass media public health interventions [link]

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Concrete steps

• Media should be a part of the Development Economist's toolkit

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Concrete steps

- Media should be a part of the Development Economist's toolkit
- Someone should convince Disney to broadcast *Queen of Katwe* for free in Uganda.

• Beyond simple health interventions and changing attitudes, can we use media to bring about *systematic cultural change* and promote macroeconomic growth?

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- Can we make people want to work harder? (There is evidence of media increasing aspirations (Bernard et al., 2022))

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- Can we make people want to work harder? (There is evidence of media increasing aspirations (Bernard et al., 2022))
- My guess? Media could almost certainly shift these attitudes, but it would be very hard for us to do this consciously.

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Some more cavaets

• You might be more interested in this type of research if you believe that culture is an important driver of economic growth (Henrich, 2021)

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Some more cavaets

- You might be more interested in this type of research if you believe that culture is an important driver of economic growth (Henrich, 2021)
- Example of major media-driven cultural change in the past: "Cities with at least one printing press by 1500 were at minimum 29 percentage points more likely to be Protestant by 1600." (Rubin, 2014)

Some more cavaets

- You might be more interested in this type of research if you believe that culture is an important driver of economic growth (Henrich, 2021)
- Example of major media-driven cultural change in the past: "Cities with at least one printing press by 1500 were at minimum 29 percentage points more likely to be Protestant by 1600." (Rubin, 2014)
- Power of media to do harm is enormous. (See appendix)

 Previous studies have shown that Fox convinces people to vote for Republicans (DellaVigna and Kaplan, 2007; Martin and Yurukoglu, 2017; Ash et al., 2022), increase police killings of Blacks in Florida (Crabtree and Poyker, 2021), and more

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- Reach out to me if you're interested in learning more/ have advice about my thesis! I have plenty of time for one-on-ones tomorrow.

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- Thesis slides: timhua.me/thesis.pdf
- Slides: timhua.me/eagx.pdf
- Personal Website: timhua.me

Appendix

Appendix

More goodies

Slides at timhua.me/eagx.pdf

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Appendix

Evidence on Global Preference Heterogeneity: Falk et al. (2018), published in the *Quarterly Journal of Economics*

 Normalized score, blue means more altruistic, measured using two survey questions asking about how much someone would donate 1000 euros/their general willingness to "give to good causes without expecting anything in return"



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Evidence on Global Preference Heterogeneity: Falk et al. (2018)



Trust

Global Preference Heterogeneity: Almås et al. (2020): Lower numbers means more egalitarian when unfair outcomes are due to luck)



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Global Preference Heterogeneity: Almås et al. (2020): Lower numbers means more egalitarian when unfair outcomes are due to merit/skill



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Past research on Fox

- Fox news was rolled out starting December 1996, and by around 2006 it was available in most zip code.
- DellaVigna and Kaplan (2007) found a 0.4-0.7 percentage point increase in votes for Bush in the 2000 share among counties that have rolled out Fox compared to those who haven't.
- Martin and Yurukoglu (2017) found that one-standard-deviation decrease in Fox News's channel position is associated with 0.3 percentage point increase in Republican vote share
- There's a lot more! There's Clinton and Enamorado (2014) Knill et al. (2022) Crabtree and Poyker (2021) Ananyev et al. (2021) Ash and Poyker (2021) Ash et al. (2020) Ash et al. (2022) Li and Martin (2022)

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Examples of media doing good: I

- Breza et al. (2021) ran Ads on Facebook featuring short videos by physicians and nurses telling Americans to stay home during Thanksgiving and Christmas, found that they are effective in telling individuals to stay home and led to a a 3.5% reduction in COVID-19 cases.
- Kate Orkin [link] has a lot of work on using media to shift aspirations. They showed rural individuals in Ethiopia in 2010 these documentary videos of how others have escaped poverty. They found that, "five years later, treated household heads report higher labour supply, more use of agricultural inputs and increased education spending. They have accumulated more assets, their children have attained more years of schooling, and they have increased asset wealth, housing quality and food security." (Bernard et al., 2022)
- Celebrity endorsements on Twitter is effective in driving a vaccination campaign (Alatas et al., 2019)
- Banerjee et al. (2019) showed individuals a TV show that educated them about HIV, increased individuals testing for HIV, and reduced Chlamydia rates.

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Examples of media doing good: II

- MTV's *16 and Pregnant* reduced teen pregnancies by 4.2% between 2009 and 2010, which represents 24% of the total decline in that period (Kearney and Levine, 2015)
- Chen (2021) Exposure to the Amos 'n' Andy show—the first Black sitcom—reduced the Black-White infant mortality gap and increased the probability that a white child will attend an integrated school.
- "Introduction of cable TV decreases the differences in attitudes and behaviors [towards women] between urban and rural areas by 45% to 70%" (e.g., Is it acceptable to for a husband to beat his wife) (Jensen and Oster, 2009)
- "A one standard deviation increase in signal strength [of BBC Radio in Fascist Italy] increases the number of episodes of Nazi-fascist violence related to partisan and civilian resistance by almost three times" (Gagliarducci et al., 2020)

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Examples of media doing good: III

- Broadcasting radio messages urging a rebel group to defect causes defections, reduces fatalities, and reduces attackes on civilians. (Armand et al., 2020)
- Watching Al Gore's *An Inconvenient Truth* lead to more purchases of carbon offsets, but the effect fades a year later (Jacobsen, 2011)

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Examples of media doing bad:

- A single pro-genocide radio station is accountable for 10% of the violance in the Rwandan Genocide (Yanagizawa-Drott, 2014)
- "Instrumenting for roadshow destinations using the location of theaters prior to the movie's release, I show that [*The Birth of a Nation*] significantly increased local Klan support in the 1920s...for counties in Kansas, where *The Birth of a Nation* was banned by the governor, historical theater stock is uncorrelated with future Klan presence." (Ang, 2022)
- A one standard deviation increase in exposure to Father Coughlin's anti-semetic radio station "was associated with 15 percent lower per capita purchase of war bonds in 1944" (Wang, 2021)
- Nazi radio propaganda was effective overall and especially effective in areas with historically hight anti-semetic views. It has the opposite effect in areas with historically low anti-semetic views (Adena et al., 2015)

Media doing things:

- "Cities with at least one printing press by 1500 were at minimum 29 percentage points more likely to be Protestant by 1600." (Rubin, 2014)
- Soup Operas featuring small families caused birth rates to fall among its viewers, especially among poorer women (La Ferrara et al., 2012).
- TV led to less social groups and less trust in rural Indonesia (Olken, 2009)
- Reagon's tenure as the host of *The G.E. Show* increased votes for him in the 1980 presidential election (Xiong, 2021)

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