

# The Importance of Research: Or, Why Most of What You *Think* is True is False

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# A Little About Me (I'm Not Very Interesting)

- Ph.D. in clinical psychology
- Hobbies: DnD, guitar, kayaking, listening to girly goth bands
- Now at Stetson University
- Formerly at TAMIU (2005-2013)
- Married, 19-year-old son
- Research: Societies are dumb, but why?



LET THE DICE DECIDE!



# Trigger Warning!

- This talk may offend or traumatize you!
  - Themes of:
    - Suicide
    - Violence
  - Criticisms of:
    - Black Lives Matter
    - Former President Trump (maybe?)
- Run now, while there's still a chance for you!



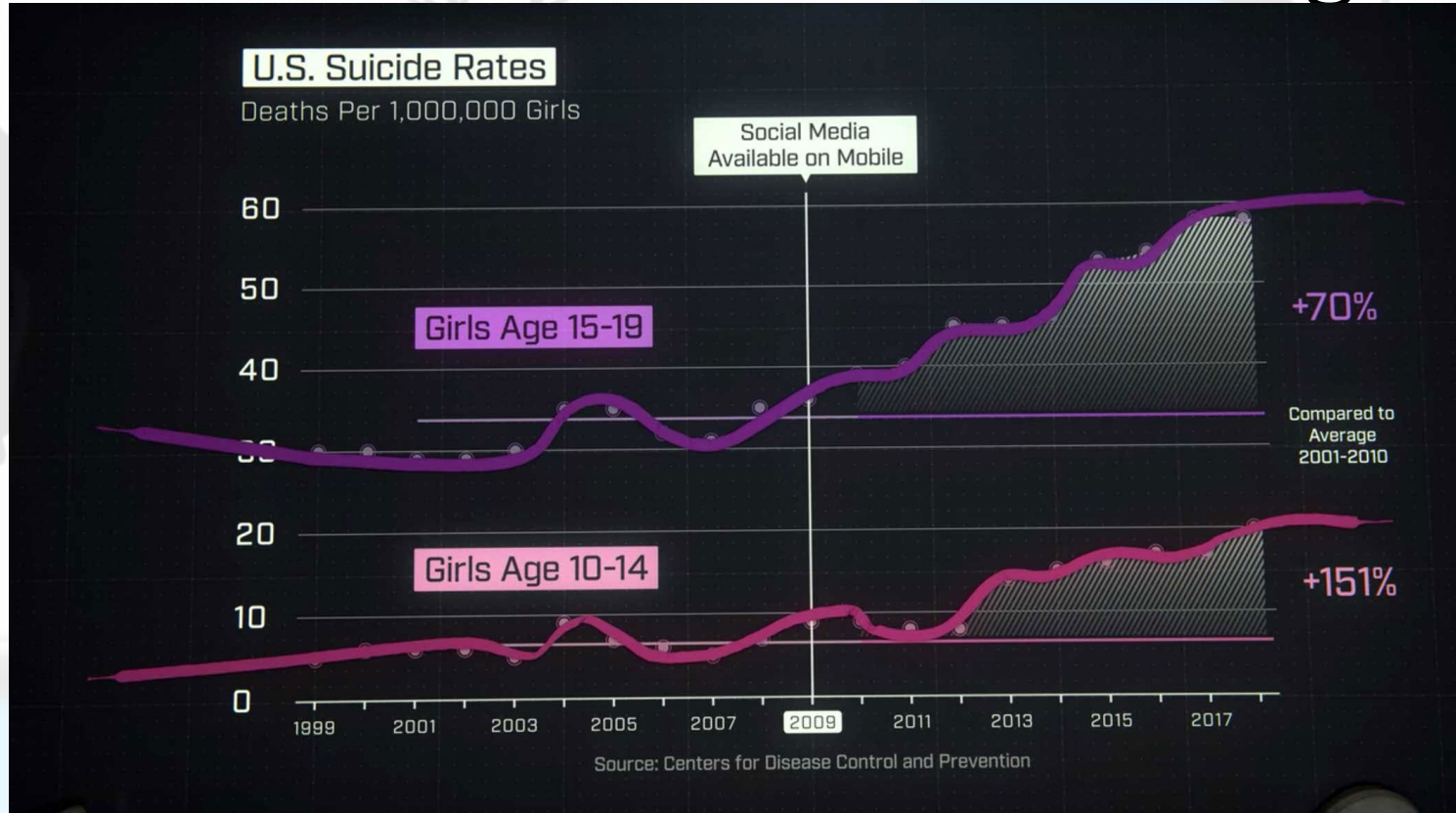
# Oh...About Trigger Warnings...

- ...they don't work.
- Either don't do anything or *increase* people's anxiety, including trauma survivors (Jones et al., 2020)
- This is what interests me:
  1. People have a good intention (maybe...)
  2. They start doing a thing...
  3. That thing turns out to be a colossal mistake...
  4. They keep doing it anyway...
  5. Why?
- My conclusion...people leap into #2 without waiting for science (which can be slow), then end up with sunk costs.

# Why We Should Wait for Science

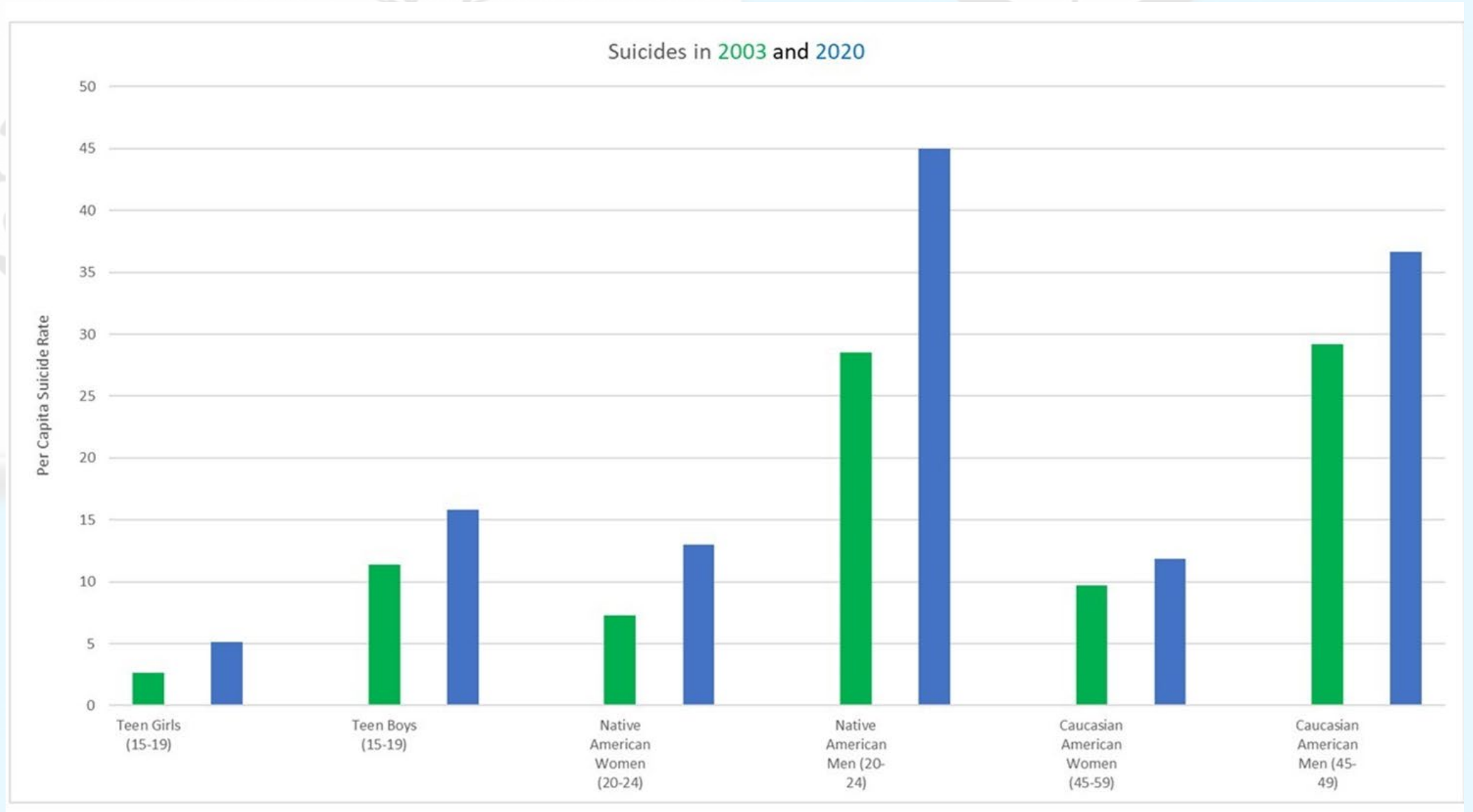
- Why not wait: It's slow
- But without it, we almost always make bigger mistakes, then stick to those mistakes, even when the science is in.
- Good science:
  - Is preregistered (hypotheses and data-analysis published in advance)
  - Is open/transparent (data openly available for checking)
  - Is replicated
  - Is honest about effect sizes
  - Is honest about limitations
- Bad science: Doesn't do these things...

# We all Know Social Media is Killing Teen Girls

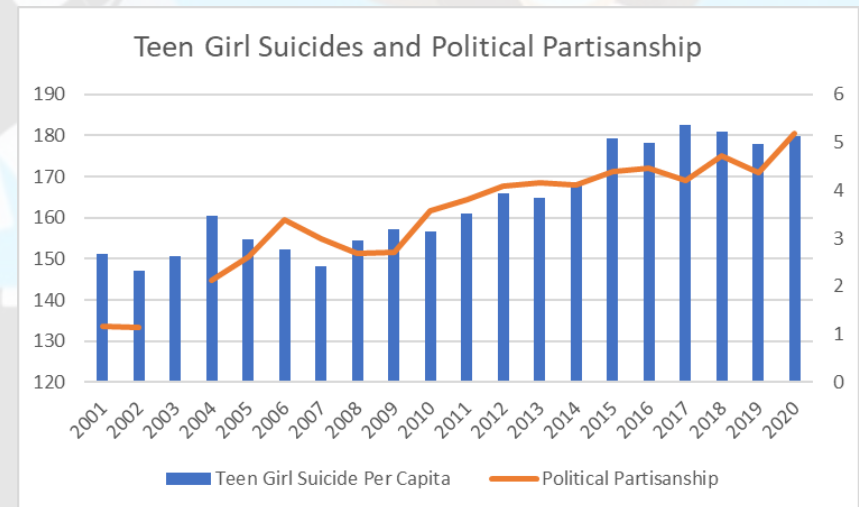
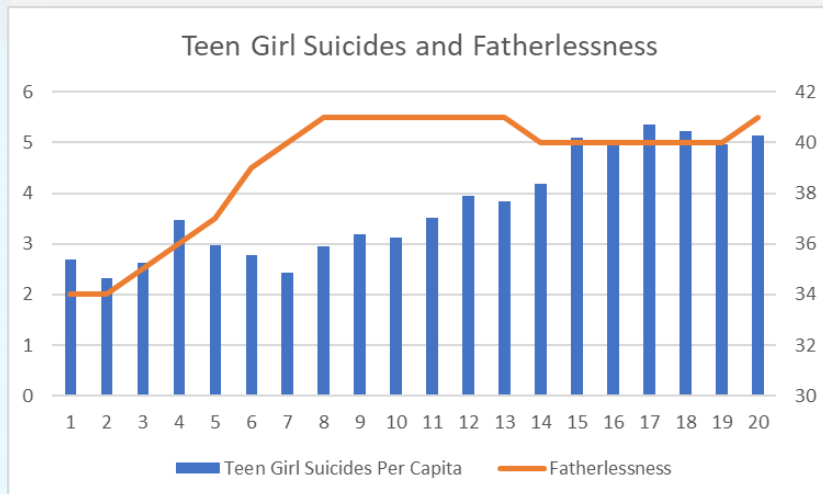
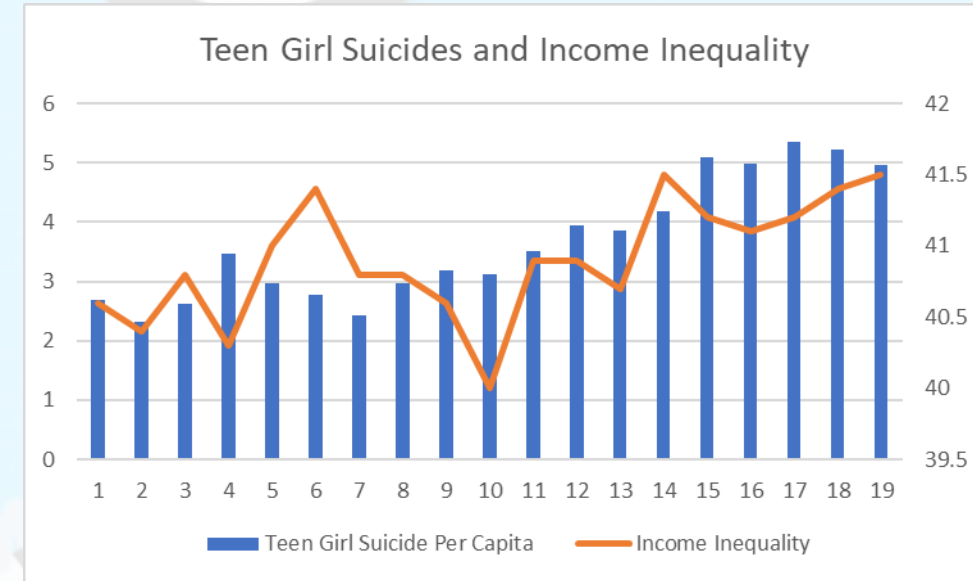
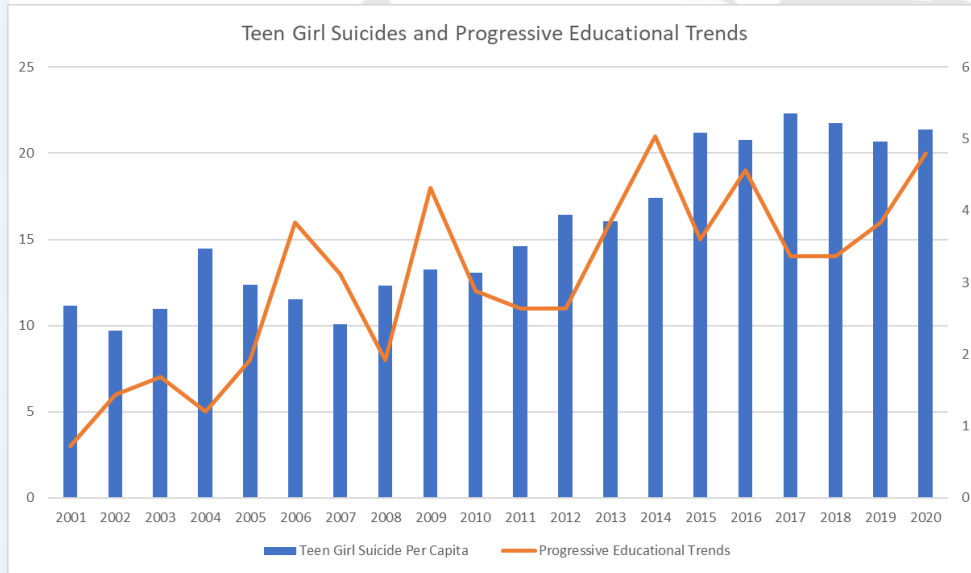


- You'll be delighted to know your government officials are working to limit teens' exposure to social media.

# Or is it?



# Turns Out Lots of Things Correlate With the Increase in Teen Girl Suicide





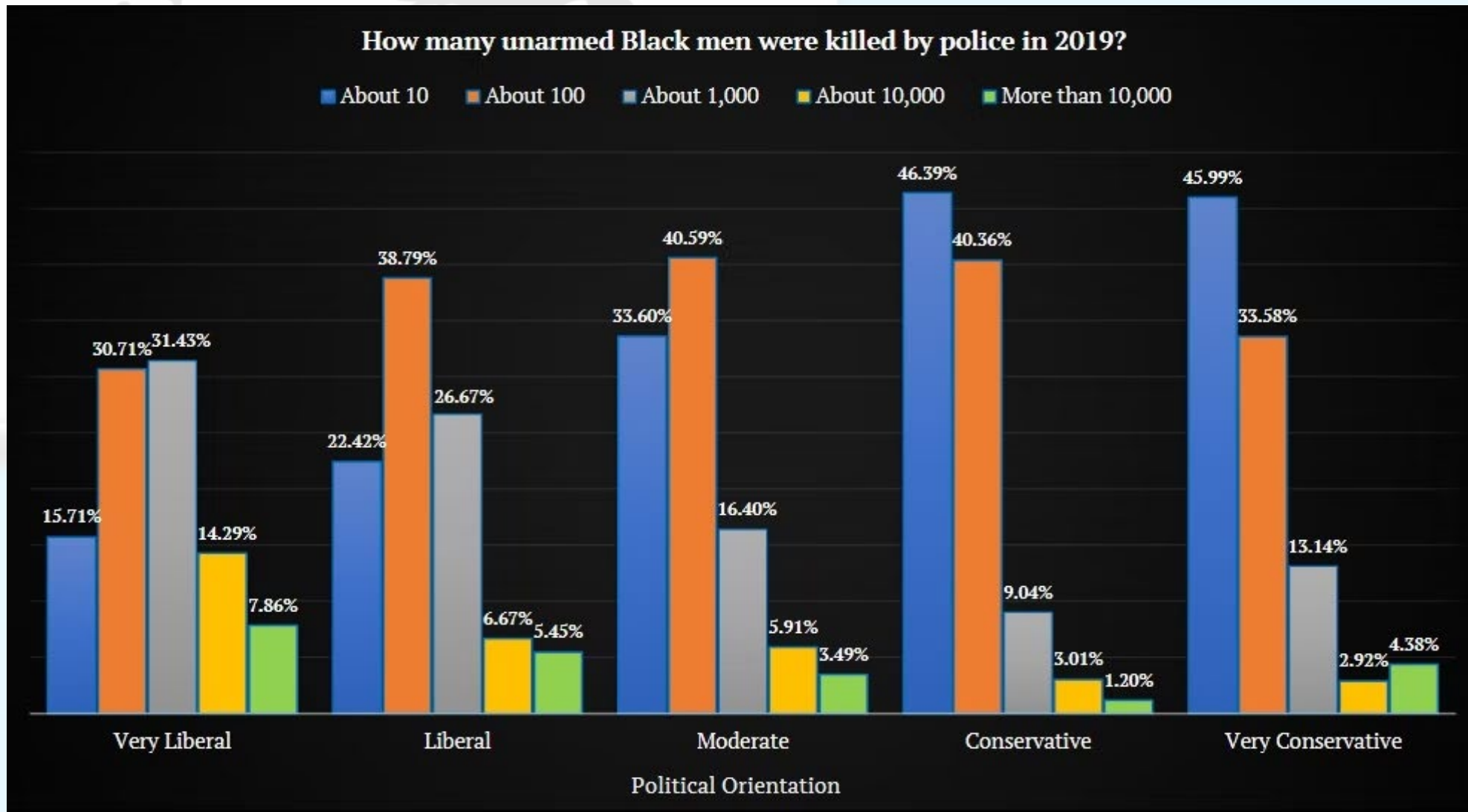
# The Actual Science

- Little evidence time spent on social media is associated with mental health (e.g., Ferguson et al., 2022; Orben & Przybylski, 2019; Heffner et al., 2019; Jensen et al., 2019)
- Remember effect sizes? An important point:
  - In very large samples, miniscule “noise” effects can become “statistically significant”.
  - Suicide, potatoes and eyeglasses (Orben & Przybylski, 2019)
  - This is why dietary science can’t make up its mind whether eggs, or wine, or chocolate or coffee is good or bad for you.
- How we use social media may matter, but it’s not the catastrophe people make it out to be

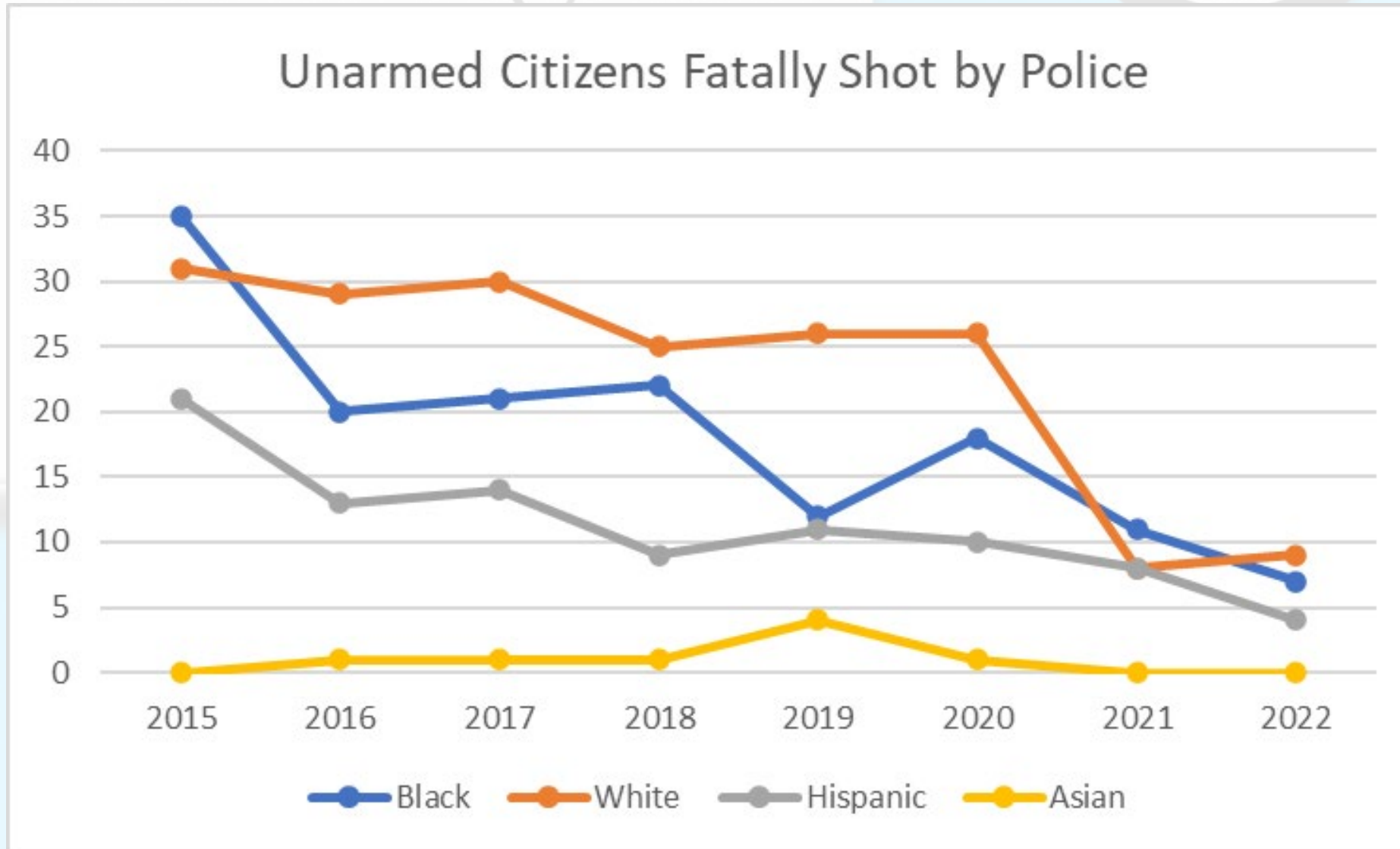
# We All Know the US Criminal Justice System is Biased Against Racial Minorities

- Unarmed Black men shot by police keep showing up in the news
- Black Lives Matter has been telling us this for a decade
- Defunding or even abolishing the police (and yes activists have literally pushed for this) may be the only solution
- How many unarmed Black men are shot by the police in the US each year?

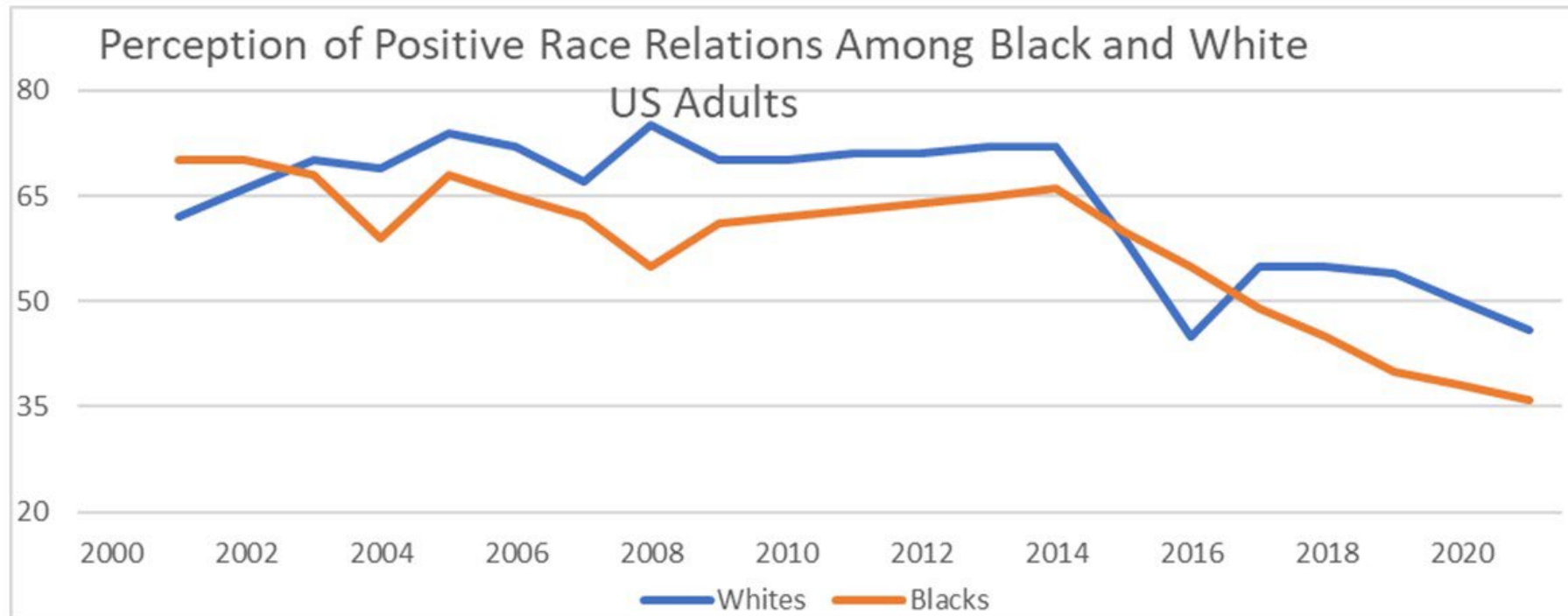
# The public perception (McCaffrey & Said, 2021)



# Actual Numbers (Washington Post)



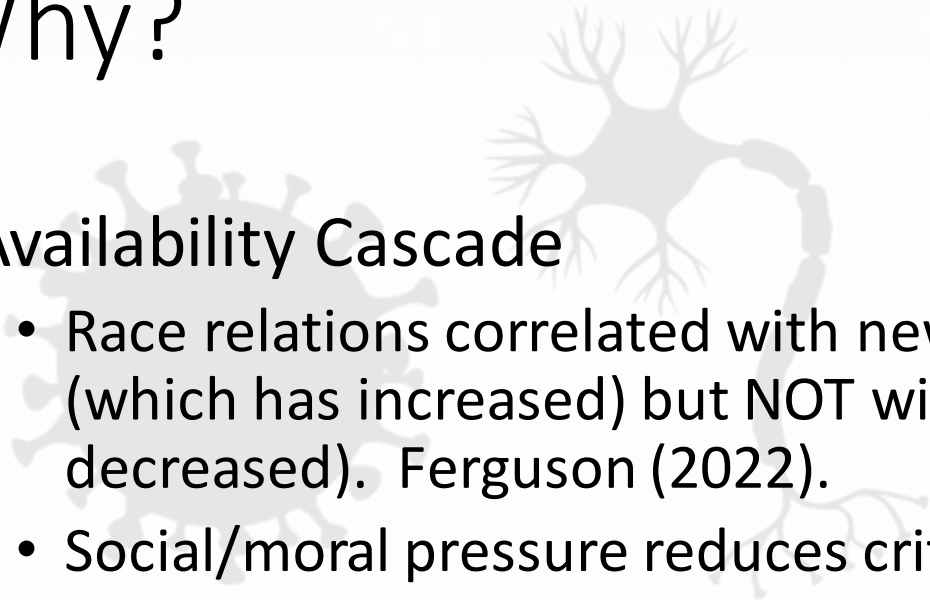
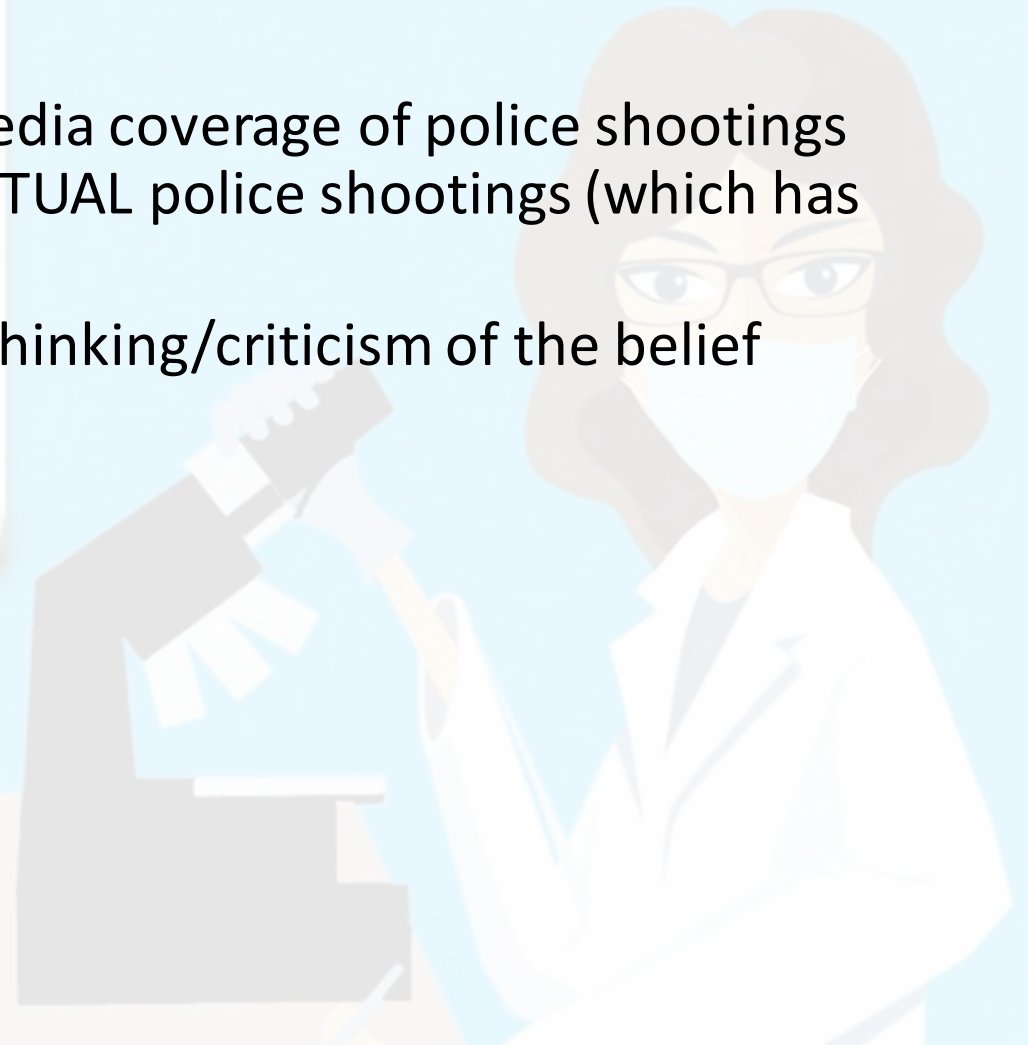
# Declining Shootings Trend for All Races, Yet...



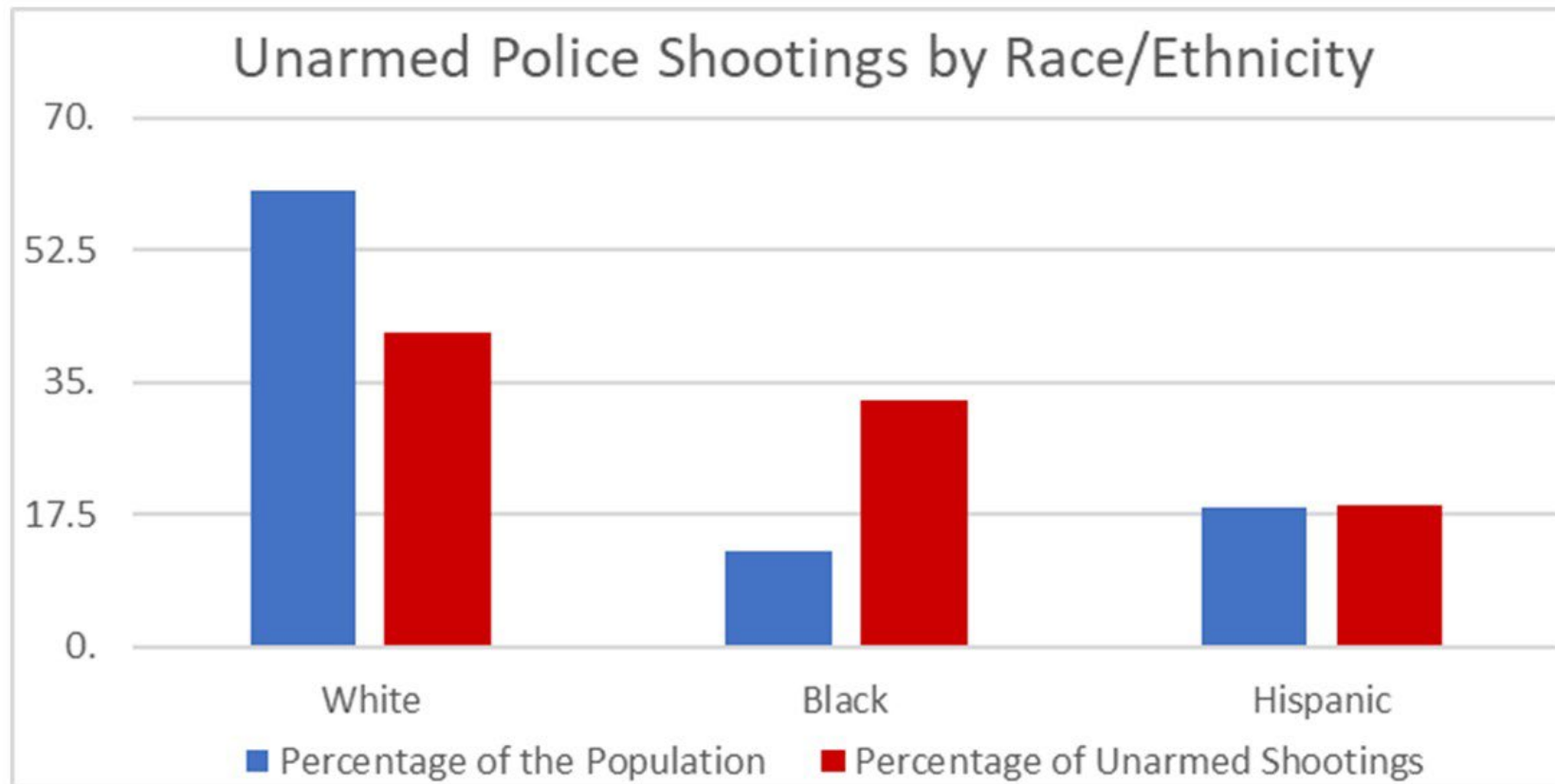
# Why?

- Availability Cascade

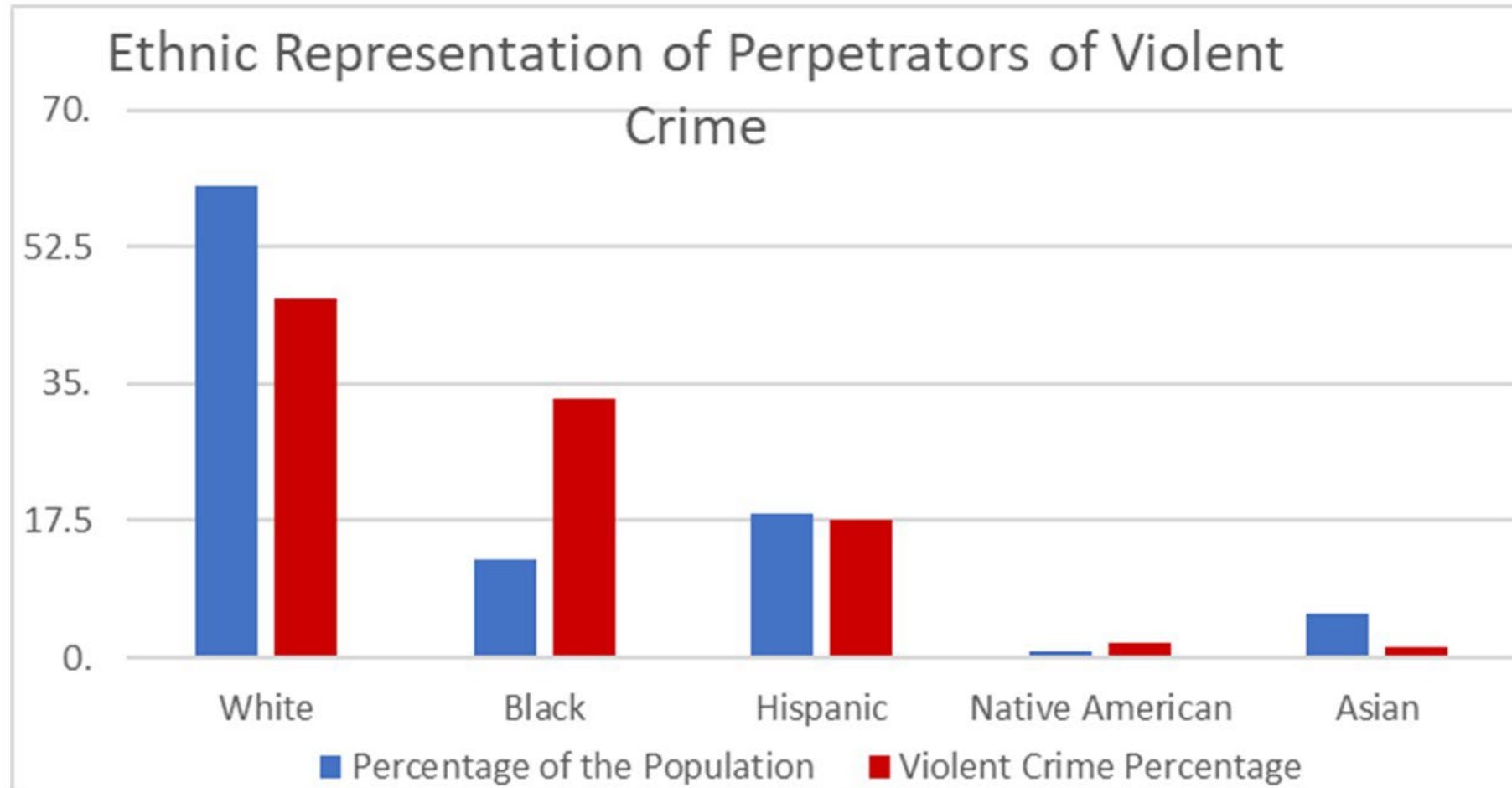
- Race relations correlated with news media coverage of police shootings (which has increased) but NOT with ACTUAL police shootings (which has decreased). Ferguson (2022).
- Social/moral pressure reduces critical thinking/criticism of the belief



# To be Fair...Proportional Overrepresentation...



# But Also to be Fair...





# Class, not Race May be Key

- To be fair (again!), scholars do disagree on this.
- My read: once class is controlled, ethnicity is a poor predictor of police misconduct
- Class and mental health are *much* better predictors (Ferguson, Smith, San Miguel, Ynalvez & Henderson, in press).
- The “Defund the Police” movement may have increased homicides.
  - Increased police retirements (Mourtgos et al., 2021)
  - Decreased police patrols in high-risk neighborhoods (Mikdash & Zaiour, 2022)
  - Correlated with increased homicides (Cassell, 2020)

# What about Criminal Justice Sentencing?

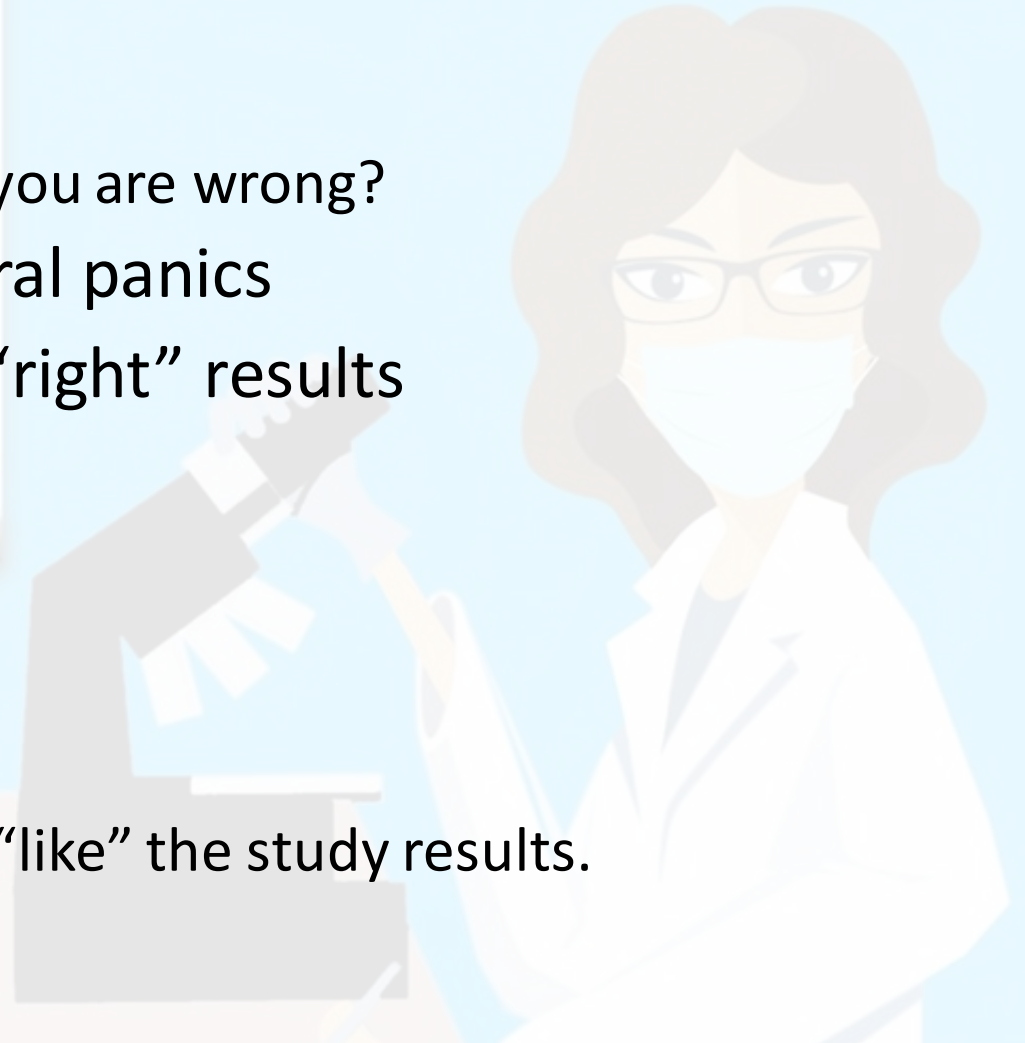
- We all KNOW the US criminal justice system sentences racial minorities more harshly than Whites. But...
- Meta-analysis:
  - Ferguson and Smith (forthcoming)
  - No ethnic differences in sentencing for most crimes (violent, property, juvenile) once other factors controlled (prior crimes, etc.)
  - Small disparities for drug crimes only
- Primary fault: Overcommunication of “noise” effects from large sample studies (being honest about effect size matters!)

# Point being...

- Morality (particularly the emotional, self-serving kind) blinds us to the complexities and nuances of data.
  - The better a person you think your public positions make you, the worse decisions you are probably making.
- Rushing to a bad decision can create bad results (even costs lives)
- Police reform *is good*, but it must focus on what matters:
  - Poor training for mental illness
  - Too much focus on “warrior training”
  - More focus on community policing
- The science is now making clear that BLM (who mostly spent donations on mansions anyway) was wrong and the policies they advocated likely harmed the very communities they ostensibly represented

# Maybe you disagree (but that can be good!)

- What is your hypothesis then?
  - How would you *falsify* it?
  - What evidence would you accept that you are wrong?
- Even scholars get wound up into moral panics
- Stop pressuring scholars to find the “right” results
- Become savvy consumers of science
  - Is the study preregistered?
  - Is the data openly available?
  - What were the effect sizes?
  - What are the study weaknesses?
  - Ask these questions *particularly* if you “like” the study results.



# Don't Believe Me?...Then Do Good Science!

- Science is fun when you're *really* interested in the topic. But...
  - Don't let your moral beliefs get in the way. We need much less, not more "activist scholarship".
  - You shouldn't be out to make "your group" look good and "their group" look bad.
  - Adversarial collaboration
  - Open science
- "The science" isn't a static, unchanging thing like a set of religious beliefs.
- I will welcome science that proves me wrong...so long as it is done well.



# Contact me

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- Declarations/Col: None to declare

