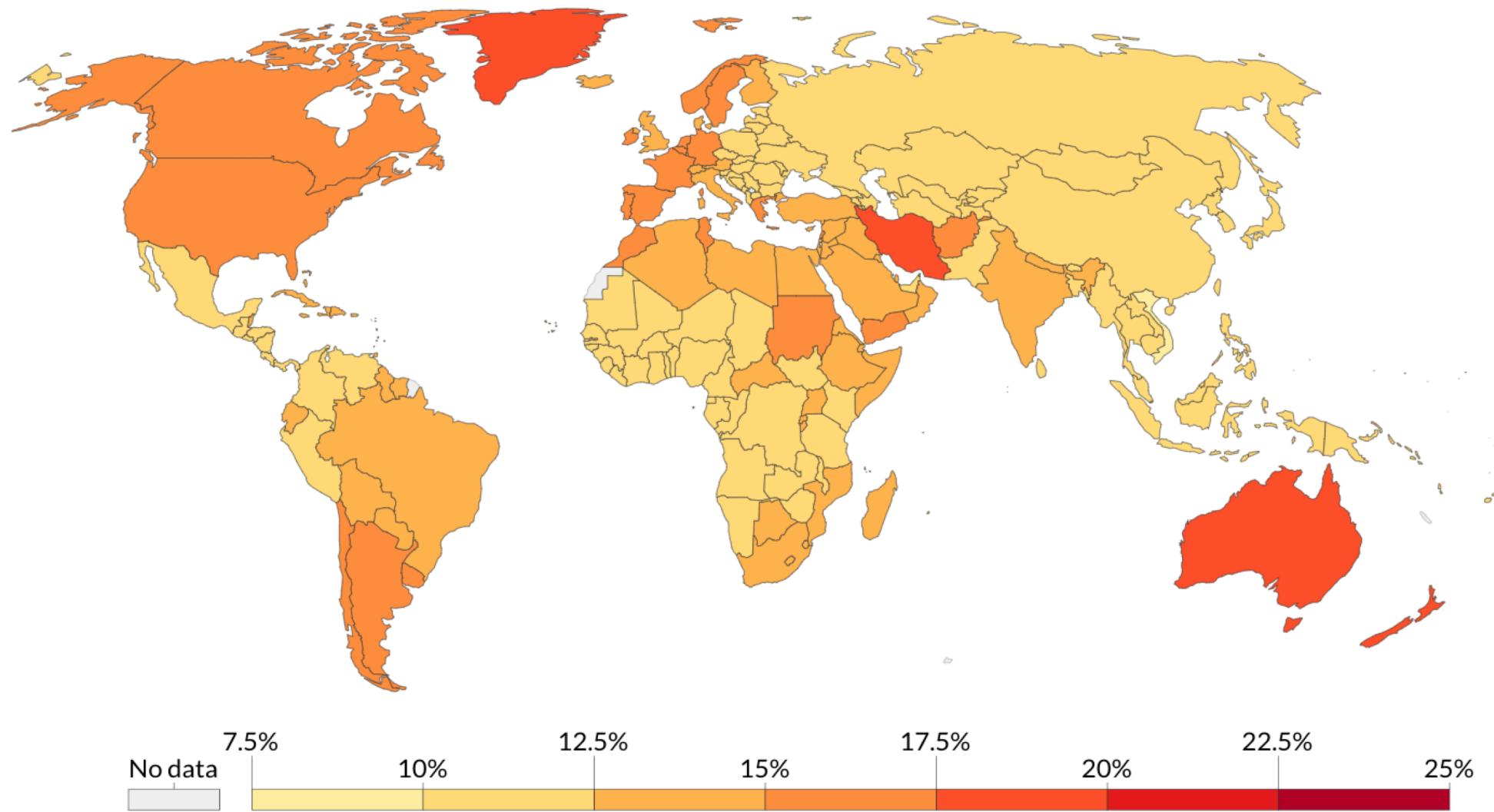


# **A STATISTICAL ANALYSIS OF MENTAL HEALTH RESOURCES AND GLOBAL SUICIDE RATES**

**Pablo Salcedo, MD  
Kelly Epley, PhD**

# Share of population with mental health and substance use disorders, 2017

Share of population with any mental health or substance use disorder; this includes depression, anxiety, bipolar, eating disorders, alcohol or drug use disorders, and schizophrenia. Due to the widespread under-diagnosis, these estimates use a combination of sources, including medical and national records, epidemiological data, survey data, and meta-regression models.



# METHODOLOGY

Test 1

Test 2

Test 3

Countries with  
Higher  
Resources  
Group

Countries with  
Lower  
Resources  
Group

Males of High  
Resource  
Countries  
Group

Males of Low  
Resource  
Countries  
Group

Females of  
High Resource  
Countries  
Group

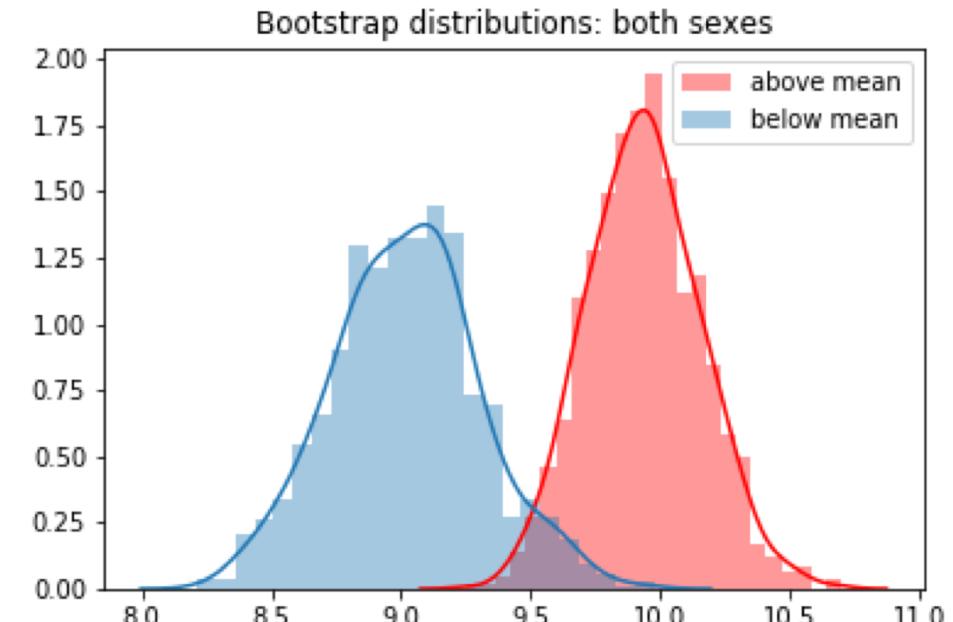
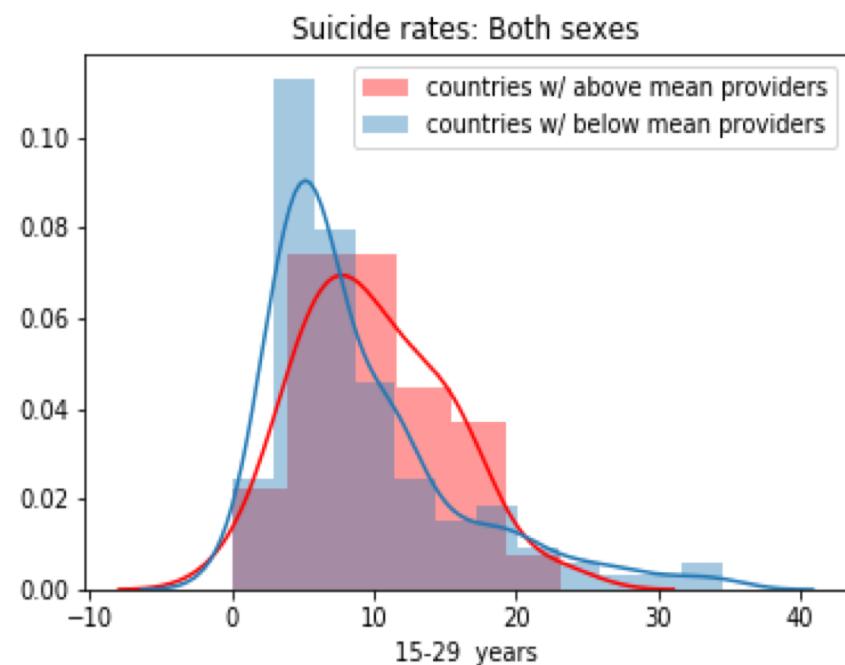
Females of  
Low Resource  
Countries  
Group

# RESULTS

## Test 1

Countries with  
Higher  
Resources  
Group

Countries with  
Lower  
Resources  
Group

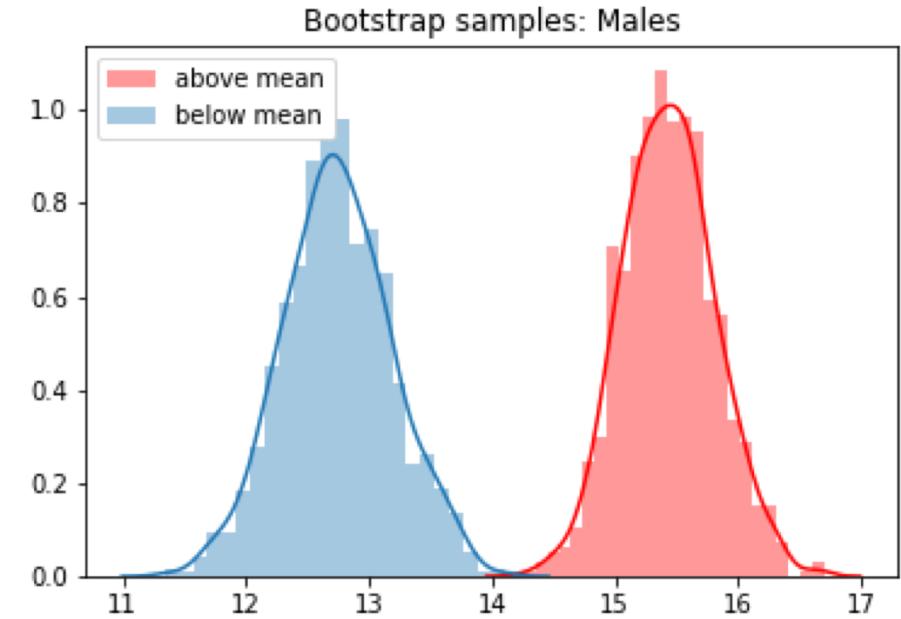
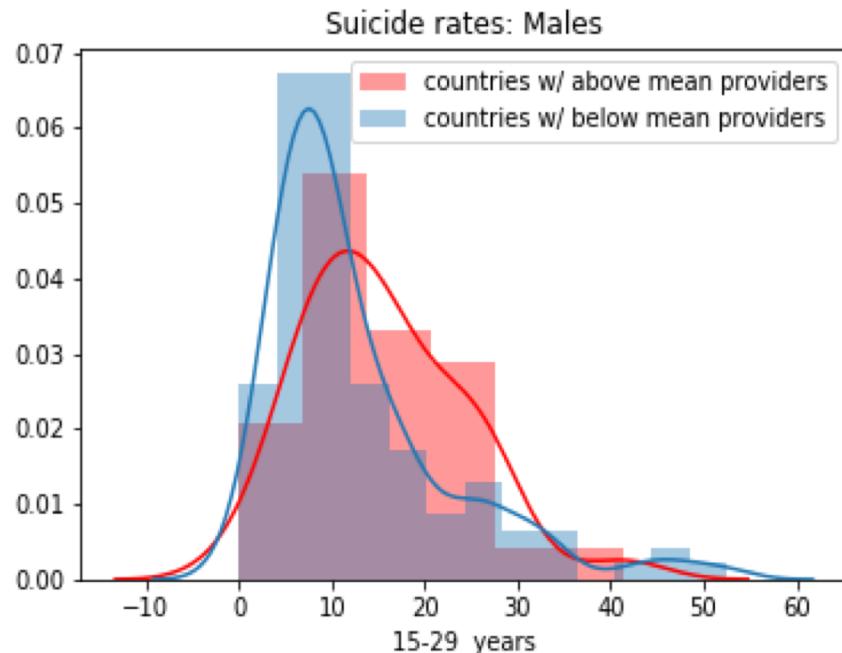


# RESULTS

## Test 2

Males of High Resource Country Group

Males of Low Resource Country Group

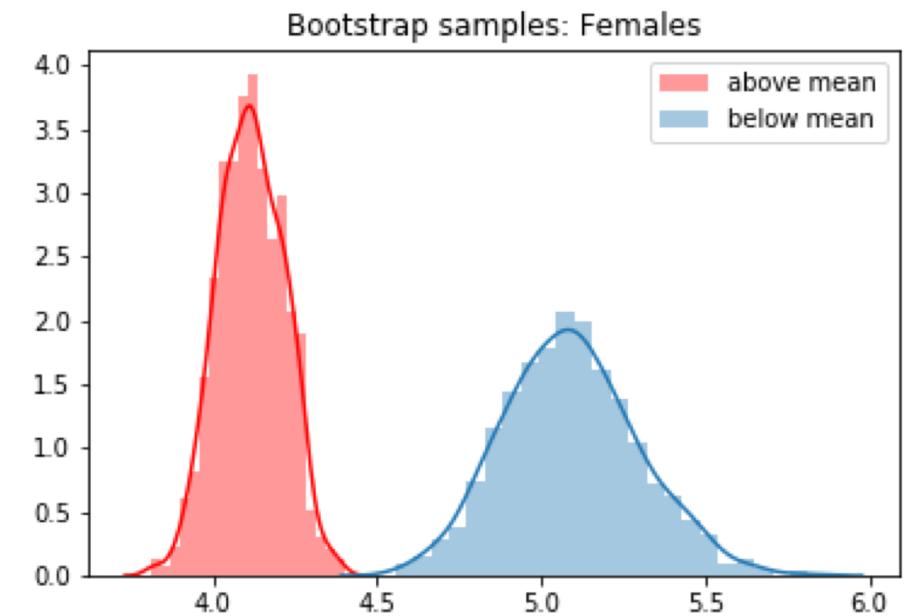
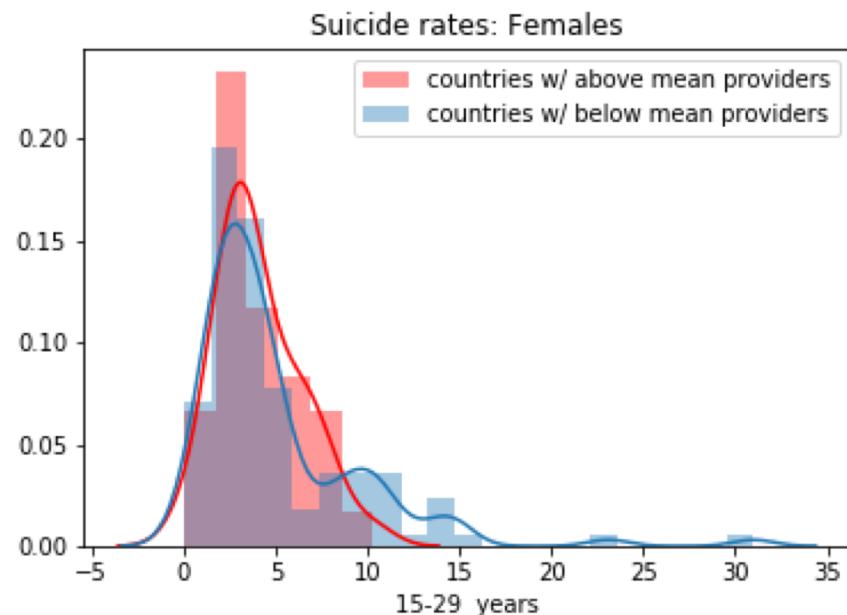


# RESULTS

## Test 3

Females of  
High Resource  
Countries  
Group

Females of Low  
Resource  
Countries  
Group



# DISCUSSION

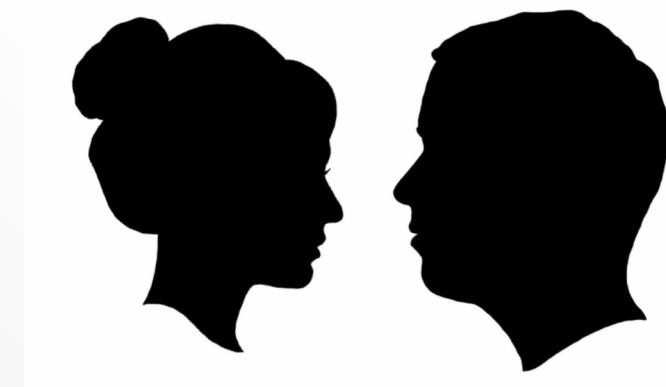
- **Test 1**

- observed a higher mean distribution of suicide rates in high resource countries and a lower mean distribution of suicide rates in low resource countries
- using suicide rate as a proxy for mental health resource effectiveness
- the broad scope of mental health illnesses encompassed by the WHO's ICD-10
- suicide reporting not being standardized across all countries
- legality and socio-demographic trends



# DISCUSSION

- **Test 2 and 3**
  - higher mean distribution of male suicide rates in high resource countries
  - lower mean distribution of female suicide rates in high resource countries
- differences between female and male suicide methods
- time allowed for intervention



# RECOMMENDATIONS AND APPLICATIONS

Research	Policy	Business
<ul style="list-style-type: none"><li>• Further comparative research analyses on the predictive factors influencing mental health in low and middle income countries</li></ul>	<ul style="list-style-type: none"><li>• Standardized and uniform data collection and classification system for mental health illness</li></ul>	<ul style="list-style-type: none"><li>• Implementing early screening modalities to make the most use of intervention methods (which are time dependent)</li></ul>

# SOURCES

- World Health Organization's "Global Health Observatory Data Repository"
- Hannah Ritchie and Max Roser (2019) - "Mental Health". Published online at OurWorldInData.org. Retrieved from: '<https://ourworldindata.org/mental-health>' [Online Resource]



**World Health Organization**

# THANK YOU FOR YOUR ATTENTION

## QUESTIONS?

