

Suicide in the US

Vasiliy Usenko &

Eduard Ponarin

Higher School of Economics

Laboratory for Comparative Social Research

November 14, 2014

Rationale

The United States is

- more religious than Europe

Rationale

The United States is

- more religious than Europe
- religiously diverse

Rationale

The United States is

- more religious than Europe
- religiously diverse
- abundant with good-quality data

Previous Research

- mostly, Catholic and Protestants

Previous Research

- mostly, Catholic and Protestants
- suicide in Dniepropetrovsk

Relatively small subpopulations can affect general statistics.

Data

county-level aggregate data, 2000-2006

- Suicide Death Rates per 100,000 Population
- All Races and Ethnicities, Both Sexes, All Ages, All Injuries
- Annualized, Age-adjusted, Geospatially smoothed

Data

county-level aggregate data, 2000-2006

- Suicide Death Rates per 100,000 Population
- All Races and Ethnicities, Both Sexes, All Ages, All Injuries
- Annualized, Age-adjusted, Geospatially smoothed
- dependent: age-adjusted suicide rate in the county

Data

county-level aggregate data, 2000-2006

- Suicide Death Rates per 100,000 Population
- All Races and Ethnicities, Both Sexes, All Ages, All Injuries
- Annualized, Age-adjusted, Geospatially smoothed
- dependent: age-adjusted suicide rate in the county
- independent: percentage of major religions in the county

Denominations

There are too many, there is a need to collapse them into a limited number of meaningful categories.

- A variety of classifications is available

Denominations

There are too many, there is a need to collapse them into a limited number of meaningful categories.

- A variety of classifications is available
- Glenmary Research Center

Denominations

There are too many, there is a need to collapse them into a limited number of meaningful categories.

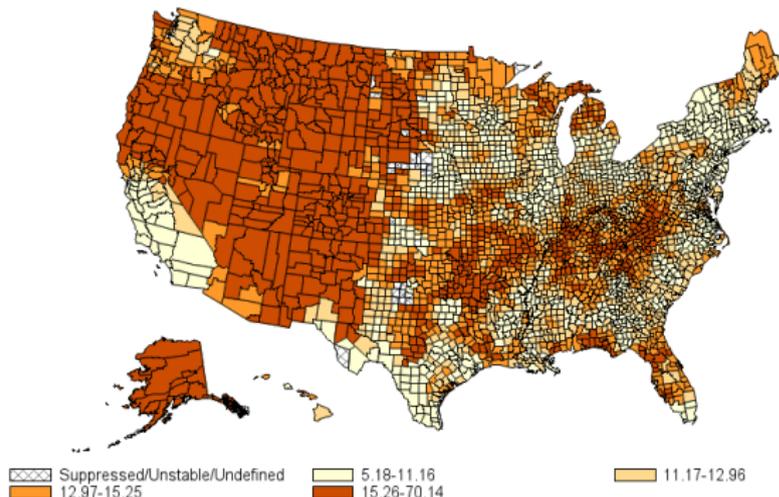
- A variety of classifications is available
- Glenmary Research Center
- Own classification

Data sources

- Office of Statistics & Programming, National Center for Injury Prevention & Control, CDC
- Religious Congregations and Membership in the United States 2000. Glenmary Research Center Nashville, Tennessee.
- Demographic controls: US Census 2000 Summary Files.

A glimpse at the dependent variable

2004-2010, United States
Smoothed Age-adjusted Death Rates per 100,000 Population
All Injury, Suicide, All Races, All Ethnicities, Both Sexes, All Ages
Annualized Age-adjusted Rate for United States: 11.38

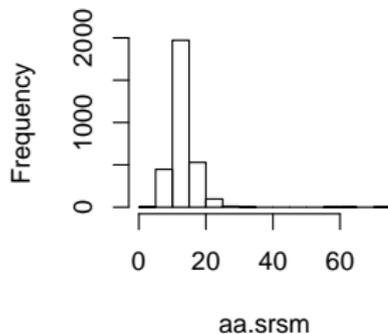


Reports for All Ages include those of unknown age.

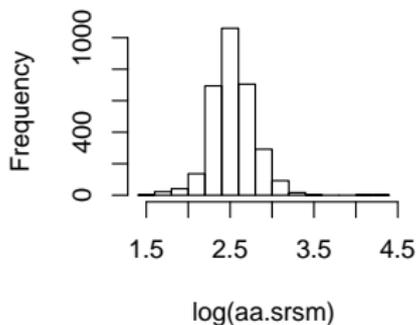
* Rates based on 20 or fewer deaths may be unstable. These rates are suppressed for counties (see legend above); such rates in the title have an asterisk.
The standard population for age-adjustment represents the year 2000, all races, both sexes.
Rates appearing in this map have been geospatially smoothed.

Another look at the DP

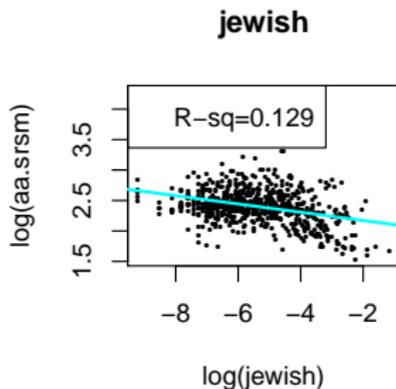
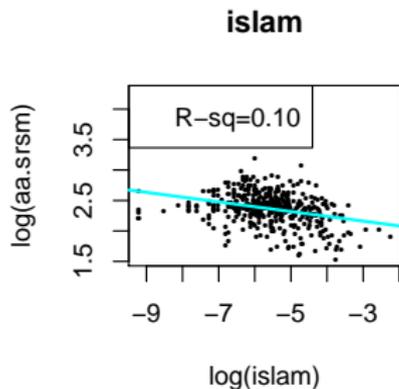
Histogram of aa.srsm



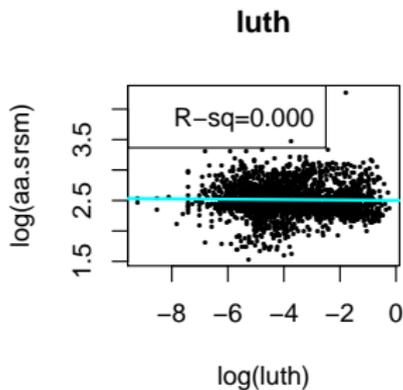
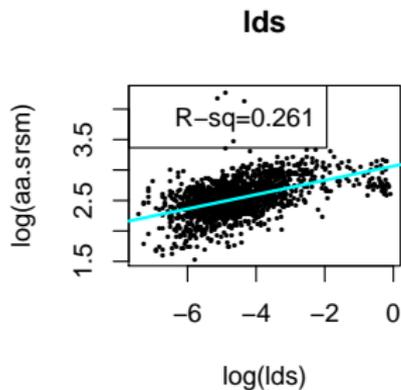
Histogram of log(aa.srsm)



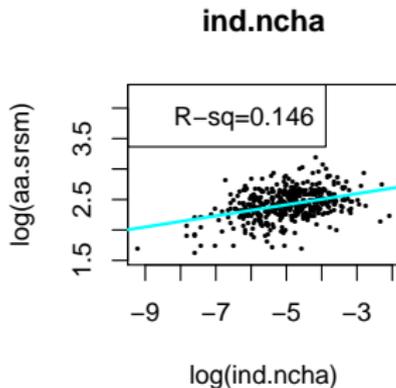
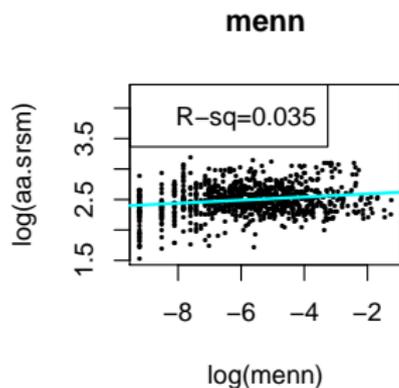
Some older religions



Some younger religions

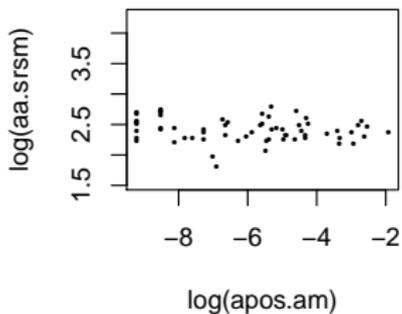


Some other religions

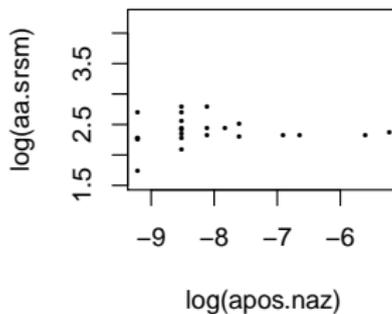


Some scarce religions

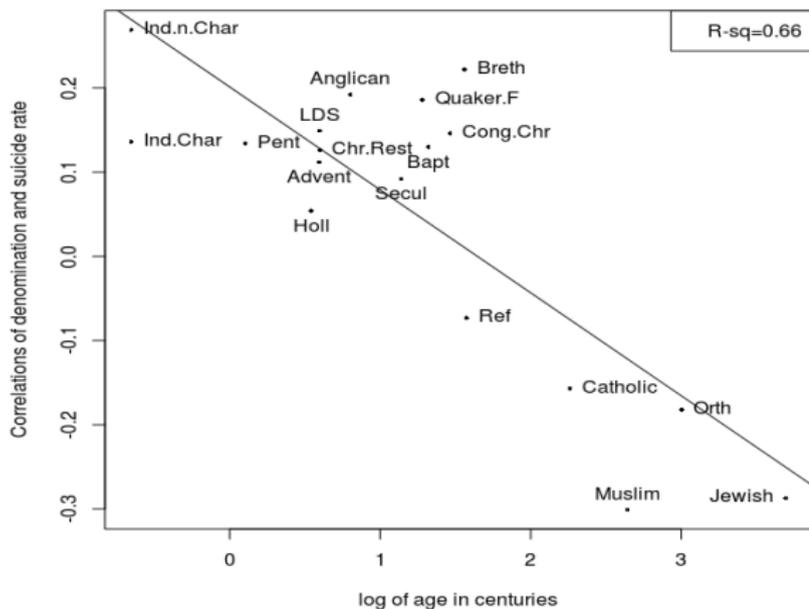
apos.am



apos.naz



18 groups, range(n)=(297, 1711)



Robustness checks I

Regress log suicide rate

- log population density
- log death rate
- logit sectP and logit sectN
- LDS and LDS-squared

All items are very significant (except sectN) and $R^2 = 0.495$

Robustness checks II

- remove SectN
- add log share minorities
- add latitude and longitude

A very large R^2 and robust effects of sects

Discussion

- cultural evolution thesis
- rationalization

Durkheim's book describes a special case of a more general phenomenon.

More data and correlations

US Religious landscape survey (Pew 2007)

- a very large sample
- a detailed list of denominations
- a large inventory of beliefs

High correlations of suicide rate and denomination on the one hand with percentage believing in life after death (0.504) and in importance of proselitism (0.652).