

Journal 9/21/18

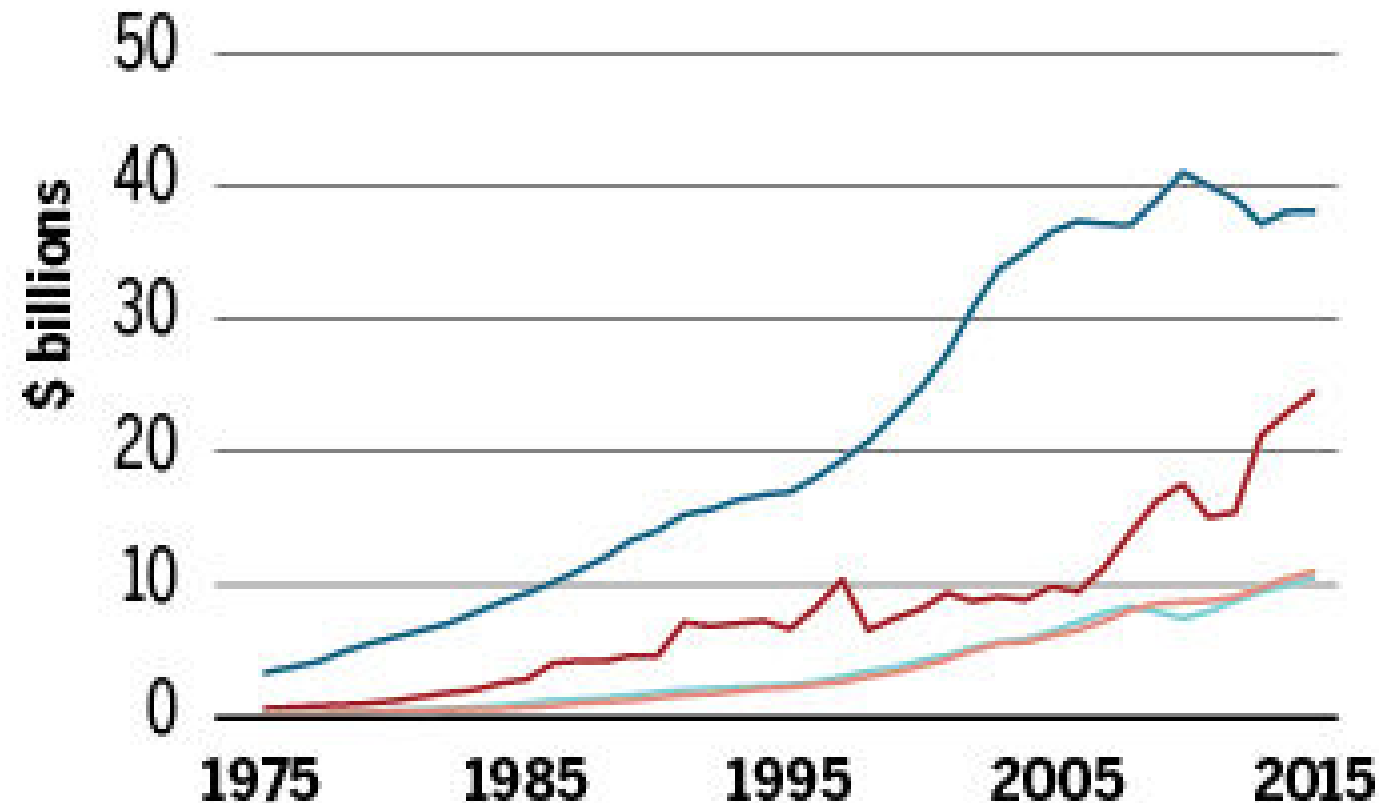
In your opinion, what makes something worth researching?

Explain and provide reasoning for why it matters

A basic shift

Federal agencies provided less than half of U.S. basic science funding in 2015, a result of stagnant budgets and rising investment by industry, universities, and philanthropies.

■ Federal ■ Corporate ■ University ■ Philanthropy



Graphic: D. Malakoff/Science

Data: National Science Foundation

Unit 2: Research Methods

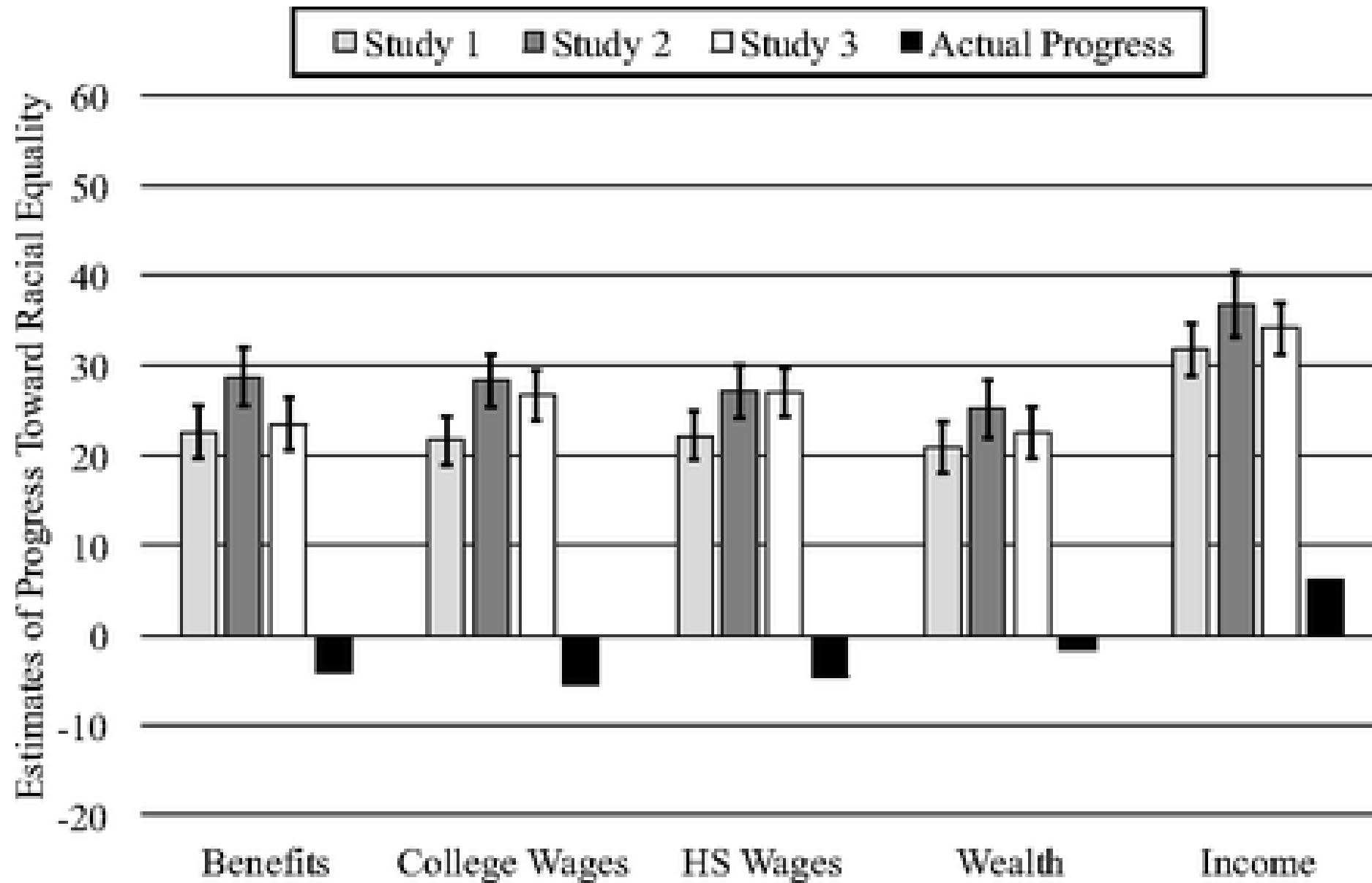
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Unit 2: Research Methods

Sociology and Common Sense

- True or False:
- **The gap in socioeconomic inequality between African Americans and White Americans has narrowed significantly in recent years.**
- Inequality has risen in terms of benefits, wages for people with college degrees, wages for people with high school diplomas, and wealth. Overall income has made progress. (Kraus, Rucker, and Richeson 2017)



Sociology and Common Sense

- True or False:
- **On average, men have a higher tolerance for both pain and temperature extremes than women do.**
- On average, women tolerate pain, heat, and cold better than men do when physiological tests are performed. However, U.S. culture socializes men to be “tough” more than it does women—so women may often act sensitive (Bartley and Fillingim 2011)

Sociology and Common Sense

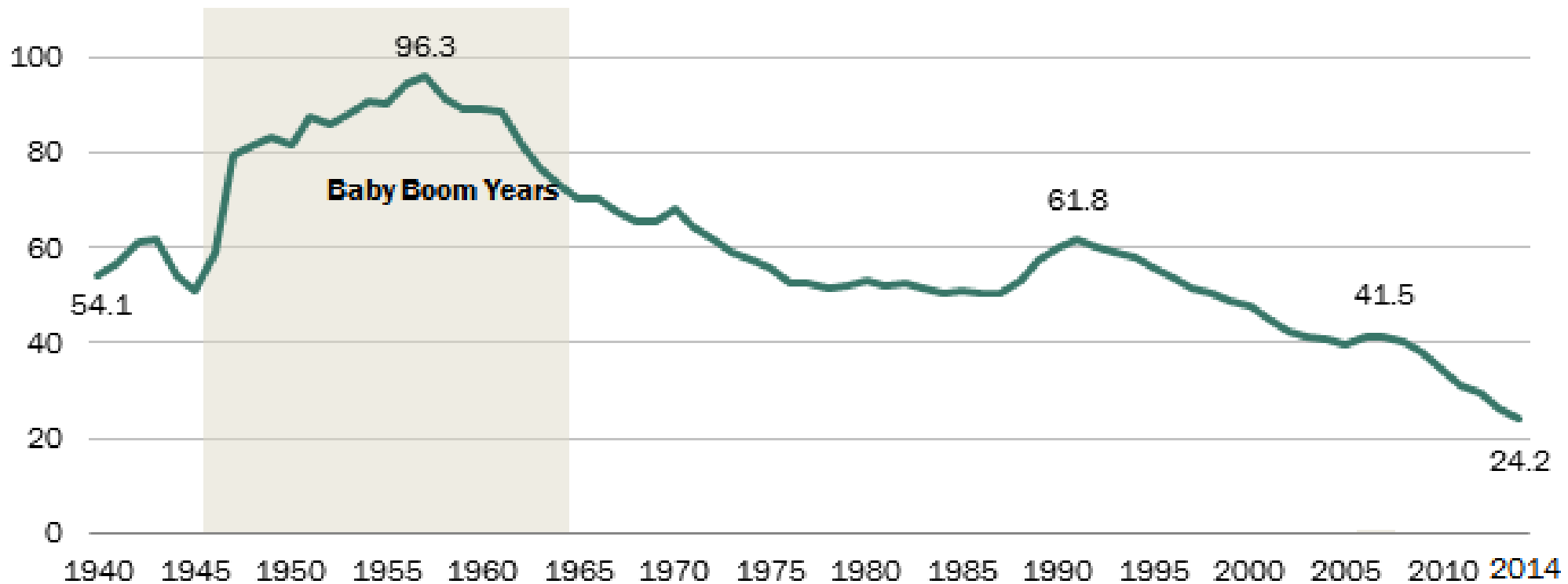
- True or False:
- **Most homeless people choose to be homeless.**
- Only ~ 6% of homeless people are that way by choice (Kendall 2000). 40+% of homeless adults are actually employed. (Population Review Bureau supplement). Over 1/4 of homeless women get that way fleeing domestic violence.
- <https://www.youtube.com/watch?v=2wCHtOTxQak>

Sociology and Common Sense

- True or False:
- **Teenage pregnancies have increased dramatically since the 1950s.**
- Actually, they decreased over past half century; teens less likely to marry/start family. Percentage of teen pregnancies involving *unmarried* teens increased dramatically (but even that has been dropping since the early 1990s). (Kendall 1996)

U.S. teen birth rate has fallen dramatically over time

Births per 1,000 females ages 15-19, 1940-2014



Note: Data labels shown are for 1940, 1957, 1991, 2007 and 2014. Teens younger than 15 not included. These data only account for live births and do not include miscarriages, stillbirths or abortions.

Source: National Center for Health Statistics published data.

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Unit 2: Research Methods

An Overview of Research Methods (cont'd)

- Most sociological research uses the ***scientific method***, which is the standard for acquiring and verifying empirical (scientific) knowledge.
- Why is the use of the scientific method so important?
 - What is the alternative?

Scientific Method

1. Question
2. Literature Review
3. Hypothesis
4. Design an experiment/test
5. Collect Data
6. Analyze Data
7. Conclusion

An Overview of Research Methods

- ***Quantitative*** research uses data that can easily be converted into numbers, such as a survey or an experiment.
- ***Qualitative*** research involves data that cannot easily be converted to numbers, such as observation or informal interviews.

An Overview of Research Methods (cont'd)

- Choose a topic/problem
- After conducting a *literature review*, a researcher forms a *hypothesis* (study time affects exam grade) stating a potential relationship between two or more *variables* (study time, exam grade).

An Overview of Research Methods (cont'd)

- These variables must be clearly defined so that they can be measured.
- Variables must be ***operationalized***, that is defined in such a way that can be measured.
- Finally, data is collected and the hypothesis can be tested.

Qualitative Methods

- One way to collect to data is through ***ethnography***, a naturalistic method based on studying people in their own environment in order to understand the meanings they attribute to their activities.
- Ethnography is often a two-part activity: active participation in and observation of a naturally occurring setting, and a written account (field notes) of what goes on there.

Qualitative Methods

- In ***participant observation*** the researcher both observes and becomes a member in a social setting.

Qualitative Methods

- **Interviews** involve direct, face-to-face contact with respondents, and often can generate large amounts of qualitative data.
- As in most research, the researcher identifies the **target population** that she wishes to study, and then selects a **sample** of people to be interviewed from that population.
- Why use a sample?

Qualitative Methods (cont)

- Interviews:
 - A ***closed-ended question*** imposes a limit on the possible responses: for example, “Are you for or against couples living together before they are married?”
 - An ***open-ended question*** allows the answer to take whatever from the respondent chooses: “What do you think about couples living together before they are married?”
- Why use one over the other?

Quantitative Methods

- ***Surveys*** are questionnaires that are administered to a sample of respondents selected from a target population.
- Survey research tends to look at large-scale social patterns and employs statistics and other mathematical means of analysis.
- *Most* commonly used research method in sociology!
 - How come?

Quantitative Methods (cont)

- ***Experiments*** are formal tests of specific variables and effects that are performed in a controlled setting where all aspects of the situation can be controlled.
- Used to demonstrate cause and effect
- *Least* commonly used method in sociology
 - How come?

Quantitative Methods (cont)

- Many experiments involve using an ***experimental group***, which is the part of the test group that receives the experimental treatment, and a ***control group***, which is the part of the test group that is allowed to continue without intervention so that it can be compared with the experimental group.

Quantitative Methods (cont)

- A researcher will investigate whether an ***independent variable (IV)*** causes changes in the ***dependent variable (DV)***.
- IV comes first (time order)
- DV is effected by the IV; comes after the IV in time

Existing Sources

- ***Existing Sources*** refer to any data that has already been collected by earlier researchers and is available for future research.
- This can include sources such as census data, newspapers, photography, and cultural artifacts.
- Using existing data is usually less involved than collecting original data and also gives researchers access to distant places and times.

Issues in Sociological Research

- The research methods described so far are often applied outside the field of sociology.
- Some examples include the US Census, political campaign offices, business, and market research.