



$$(a+b)^2 = a^2 + b^2 + 2ab$$

HOW DO I EVALUATE DATA AND STATISTICS?

Ask 3 key questions



Who?



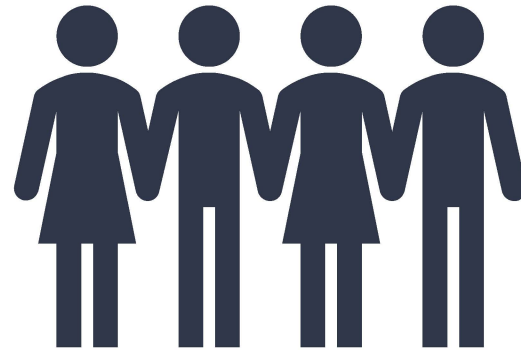
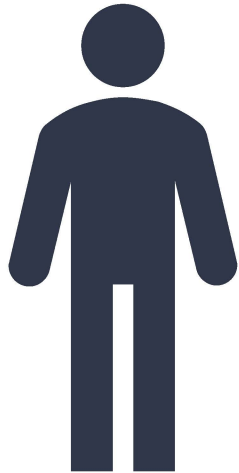
Why?



How?

To address the issues of credibility and authority, ask yourself three key questions: Who? Why? and How?

Who collected the information?



Who collected the information you'll use in your research?

Is the collector impartial or non-partisan?

Has the information been gathered by an individual or organization with a particular viewpoint or agenda?

ABOUT US

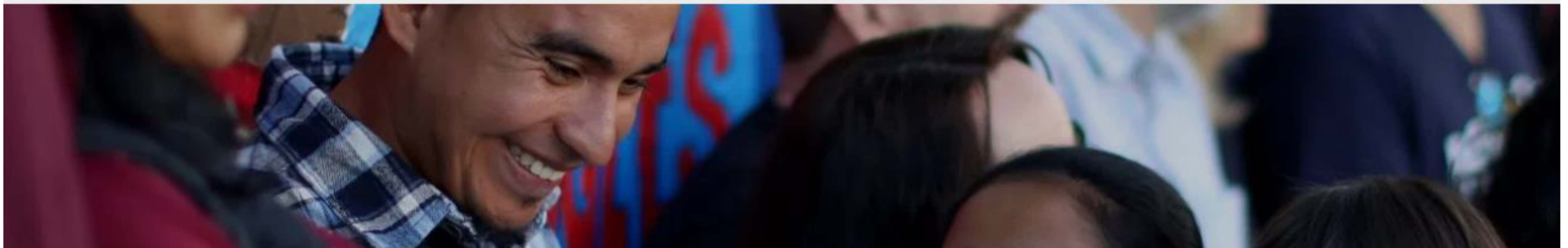
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EVENTS

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CITIES & REGIONS GLOBAL DEVELOPMENT



Visit the organization or advocacy group's web page. Read its mission statement and find out who serves on the group's board of directors or other governing body.

What affiliations do these members have? Are they associated with known entities like universities or government agencies?









Who?



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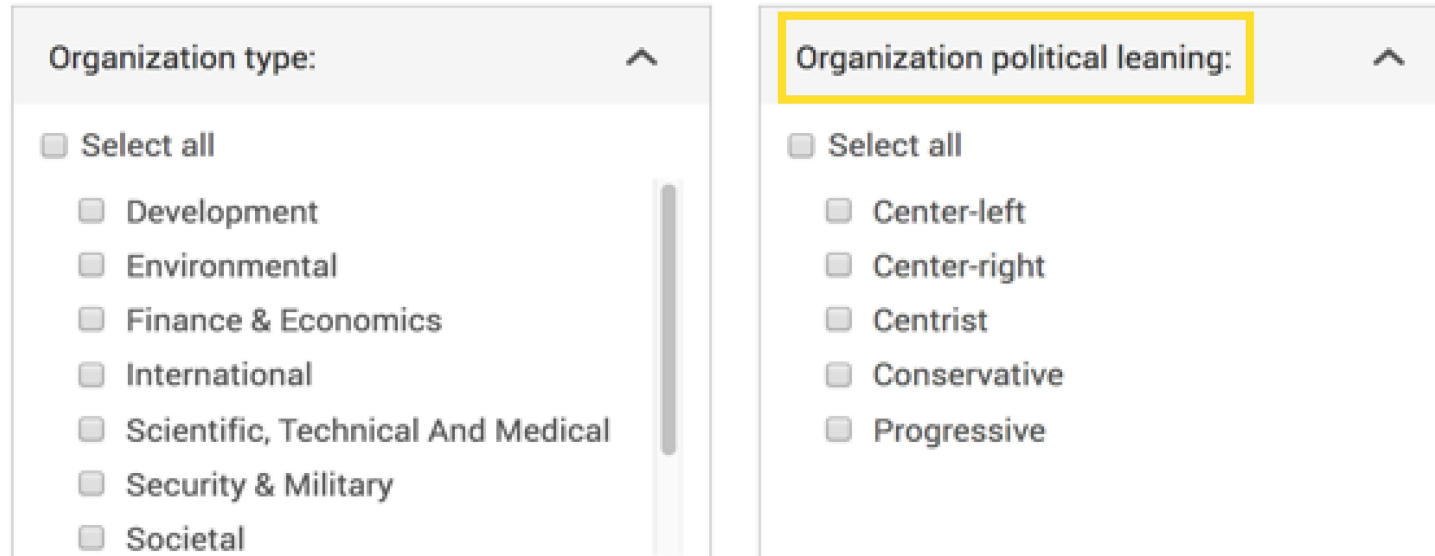
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Library resources may also help. For example, the PolicyFile database indexes studies and reports from think tanks and other policy groups.

Select PolicyFile from the Databases A to Z list on the library home page.

Who?



From PolicyFile

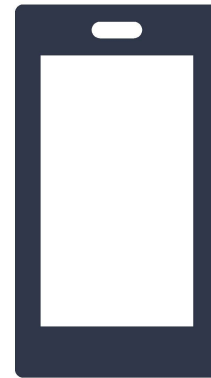
As shown in this illustration, PolicyFile allows you to filter reports by broad subject area and by organization political leaning.

How was the information collected?



It's important to know about the methods used to conduct the survey, the sample size, etc. These are details that will help you assess the project.

How was the information collected?



Can you detect any biases in the selection of research participants?

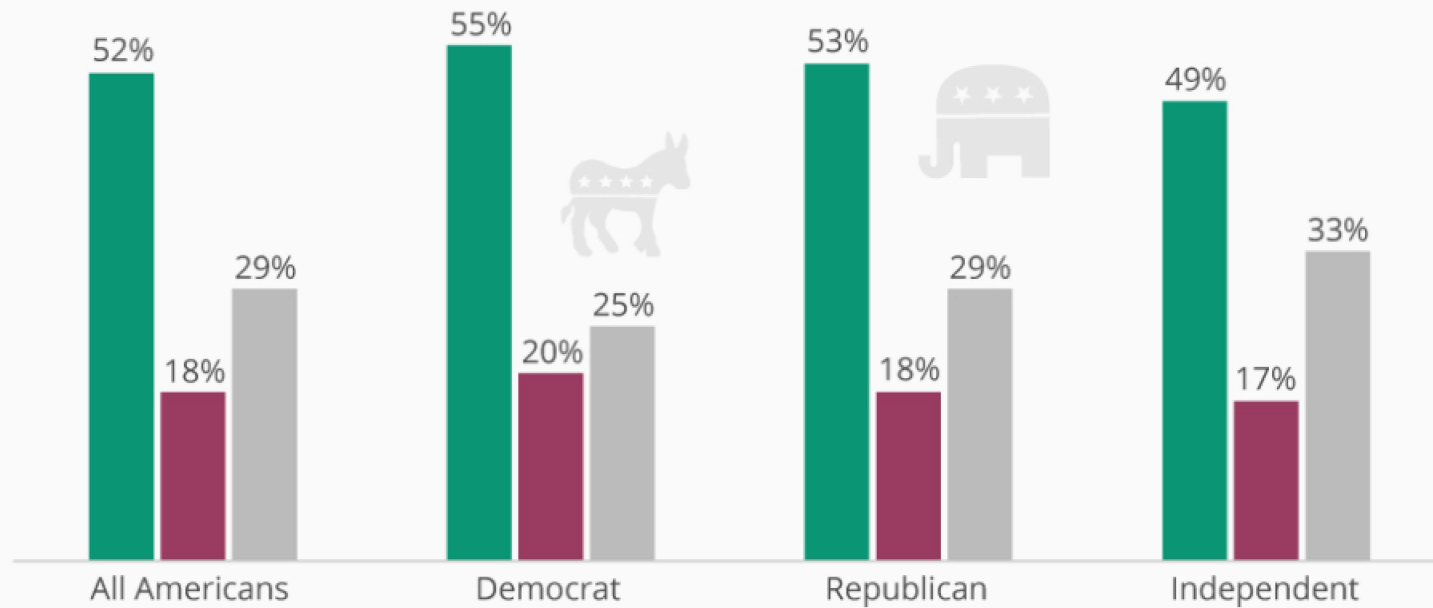
Was the survey conducted by phone?

With the increasing prominence of mobile devices are landline surveys still representative?

Bipartisan Support for Net Neutrality

% of registered voters in the United States who support/oppose net neutrality*

Support Oppose Don't know



* net neutrality is a set of rules adopted by the FCC in 2015, preventing internet service providers from blocking, throttling or prioritizing certain content on the internet

CC BY ND
@StatistaCharts

Based on a survey of 1,994 registered voters conducted between November 21 and 25, 2017

Sources: Morning Consult, Politico

statista

Information about survey methodology is frequently included in the notes associated with charts, tables, and infographics.

**Pulling Closer and Moving
Apart: Interaction, Identity,
and Influence in the U.S.
Senate, 1973 to 2009**

Christopher C. Liu^a and Sameer B. Srivastava^b

Independent Variables

We constructed two measures that proxy for the degree of interaction between senators. The first is based on geographic proximity. A long literature—dating back to Bossard’s (1932) seminal work on marriage selection and Festinger, Schachter, and Back’s (1950) treatise on spatial configurations—suggests that geographic proximity is one of the most salient determinants of interaction. To examine the effects of geographic proximity, we

Scholarly articles and research reports provide detailed descriptions of survey or study methodology and reference datasets or statistics used in the publication. In this article, the authors describe the measures they constructed to replicate interaction among Senators.

Project Description

Project Title: The Simon Poll: Fall 2011 [Illinois Statewide]

Summary: The mission of the non-partisan Paul Simon Public Policy Institute polling is to provide citizens, policy-makers, and academic researchers with objective information about trends and issues facing society.

The 2011 Simon Poll interviewed 1,000 registered voters across Illinois. For the entire sample, the statistical margin for error of plus or minus 3 percentage points at the 95 percent confidence level.

Areas covered by the poll are: general outlook, Illinois 2012 Primary Election, the presidential race, legislative redistricting, Illinois budget, campaign finance, term limits, political reform, immigration policy, political polarization, economic situation, abortion, and gay marriage. The data also includes a series of questions on born again/evangelical Christians and companion series on biblical literalism. A series of questions investigates the acceptance of women in politics. Demographic information is also included, covering age, race, gender, income, political party affiliation, political ideology, employment, household income, and religious activities. Census division, metropolitan statistical area, and other geographic locators are included.

Funding Sources: Paul Simon Public Policy Institute

From ICPSR

Some sources may answer more than one question about your data or statistical resource. This example shows a study from the Inter-university Consortium for Political and Social Research (ICPSR). In addition to discussing methodology, the text provides information about the Paul Simon Public Policy Institute. The Institute's mission is described and we learn that the Institute is also the primary source of project funding.

Why was the information collected?



Do the data collectors have a vested interest in a particular outcome?

Are they trying to advocate for a particular policy?

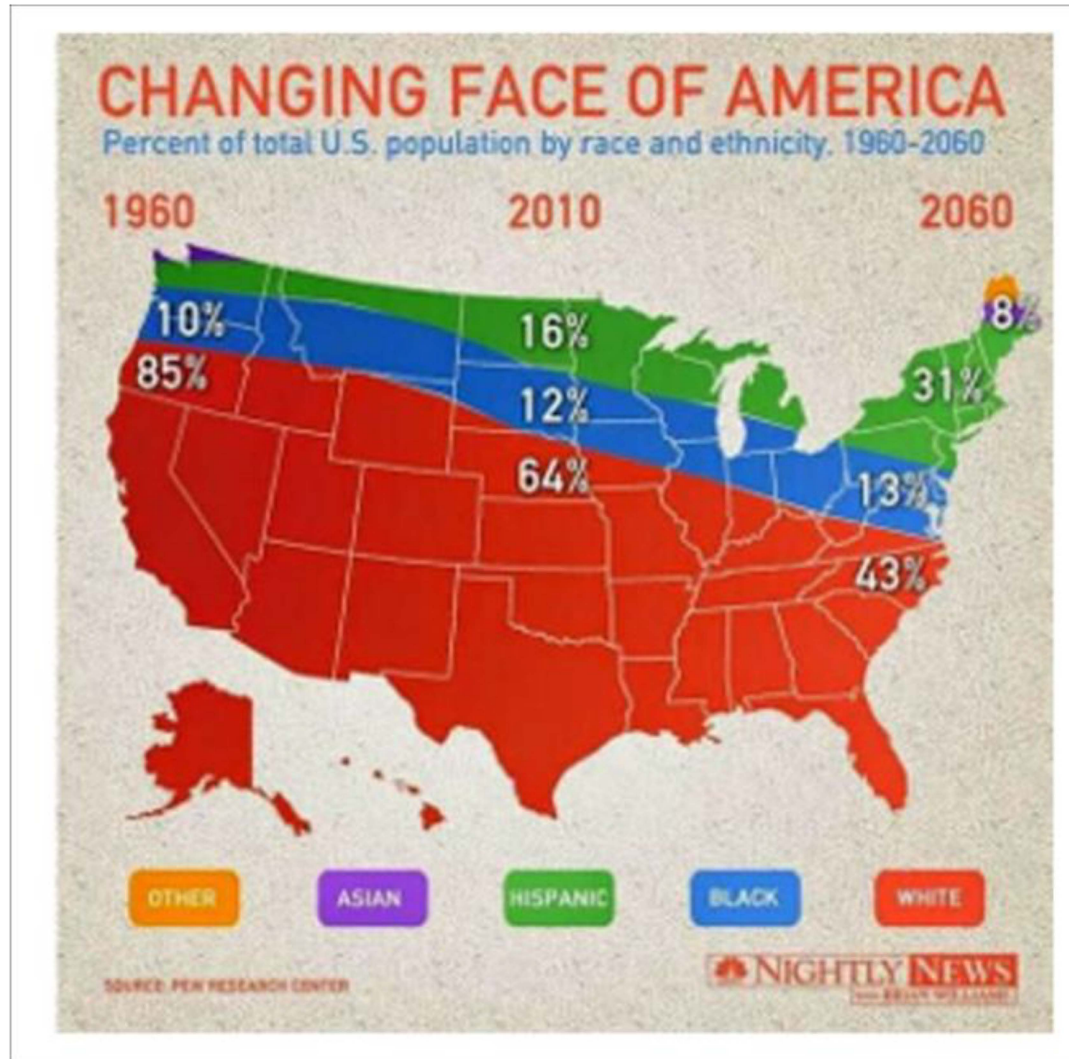
Are the data gathered as part of the process of governing, whether at the federal, state, or local level?

Why?



The data may have been gathered for administrative purposes. For example, federal government agencies collect Census data, unemployment numbers, corporate tax returns or airline on-time flight data on an ongoing basis.

Common pitfalls



When working with data or statistics, it's important to be aware of common pitfalls. Statistics and data presented out of context are confusing and subject to misinterpretation. This infographic on the changing racial and ethnic profile of the US uses a map to represent a concept that has nothing to do with geography.

Correlation \neq Causation

Another common pitfall is the relationship between correlation and causation.

For example, if a school buys tablets for all students and standardized test scores rise, it's tempting to think that tablets were the critical element. This may not be the case.



$$(a+b)^2 = a^2 + b^2 + 2ab$$

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