Finding data
(w/comments on crafting research questions)
( ver. 3.5)

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http://dss.princeton.edu/training/
Question…

Do you have a specific dataset in mind?

Yes

No

I think I am lost… I need more help…
Now…

What kind of data do you need?

**Micro**
(individual data, i.e. people, companies)

**Macro**
(aggregate data, i.e. countries, states, counties)
Topic/subject/geography…

Do you know the topic/subject or geographic area for your work?

Yes

No
Planning your research…

If your advisor/professor gave you a research topic or a research question it is highly recommended to do a literature review focusing primarily on journal articles (obviously mostly quantitative).

For an extensive literature research you can use the “Subject List of Databases” (available in “Articles & Databases” at the library website) and check the abstracts for the subject area of interest (i.e. economics, politics, sociology, history, etc.).

Here is the full link:

http://library.princeton.edu/catalogs/articles.php?f=subjects
Using your literature research...

This is important because it can give you a sense of what others have done so you can either:

1. Try to replicate their work (to make sure they did it right) or
2. Use it as basis for your own research by defining topics, geographic coverage, and your research question.

A very important reason is to **find out the sources of their data**. Once you know the source or even the name of the data set you can go to the DSS page (http://dss.princeton.edu for micro data) or to “Articles & Databases” (http://library.princeton.edu/catalogs/articles.php) for macro data.

Bear in mind that there are lots of data sources so you may have to be creative with your keyword search to find the right source. This is why using the data sources suggested in journal papers or a book can save you lots of headaches.

By the way, it is OK to request data from the authors (just make sure you are not breaking any license agreement).
The research question...

If you have to come up with your own research question here are some steps that may help along the way.

1. It is important for you to pick a topic that you really, really, really like. You will be spending a lot of time doing research so you better enjoy it.

2. Once you pick your topic, it is time to brainstorm to convert the research topic into a research question. Remember that a research question is a statement of what you want to study.

3. Interesting research questions do not make papers, feasible research questions make papers. The research question has to be doable.
The research question…

To see whether your research question is feasible try the following “suggested feasibility test”:

1. Can you answer the question with a simple descriptive statistic (like an average, median, count, percentage, etc)? If so, then it is just too narrow, not much to research. Not a good research question.

2. Does the answer to your question have too many angles like for example: what best practices have solved poverty? Here you need to be more specific: what do you mean by ‘best practices’? Where? The US, the world? The question assumes that poverty has been solved somehow somewhere, does this make sense? Trying to find an answer here may take you everywhere. The question is not focused enough. Too broad.
The research question...

3. A feasible research question is answerable on time. You need to consider deadlines, whether the data is available immediately or not (and in the format you need), whether you need Institutional Review Panel (IRP) permission to do the research (i.e. would you be interviewing people) which takes at least a month. In sum, do you have enough time and the necessary resources to answer the question?

4. There is no magic procedure to craft a research question. It is a back-and-forth process between you, your advisor and your subject specialist at the library. In many cases it is a frustrating process in which you are expected to bear most of the responsibility. Just remember that your advisor and your subject specialist are there to support your learning process. The earlier you start the better.
The research question…

In a general sense, I can say that a good research question is feasible if…

…it is focused enough, not to narrow not to broad, clearly define the terms, may include the pros and cons of the issue and is answerable on time.

Example: Why some countries are rich while others are poor?

Answers to this question have gone from germs, geography, climate, religion, institutions, evil doers, etc.

Here are some links that may help you:

http://www.esc.edu/ESConline/Across_ESC/WritersComplex.nsf/wholeshortlinks2/Research+Room+Menu
http://globetrotter.berkeley.edu/DissPropWorkshop/nuts&bolts/question.pdf
http://www.socialresearchmethods.net/kb/strucres.php
Some things to consider…

Once you have your research question, when looking for data, you need to ask yourself:

What is my unit of analysis?

Here is a definition:

“…The unit of analysis is the major entity that you are analyzing in your study. For instance, any of the following could be a unit of analysis in a study:

– individuals
– groups
– artefacts (books, photos, newspapers)
– geographical units (town, census tract, state)
– social interactions (dyadic relations, divorces, arrests)

Why is it called the 'unit of analysis' and not something else (like, the unit of sampling)? Because it is the analysis you do in your study that determines what the unit is. For instance, if you are comparing the children in two classrooms on achievement test scores, the unit is the individual child because you have a score for each child. On the other hand, if you are comparing the two classes on classroom climate, your unit of analysis is the group, in this case the classroom, because you only have a classroom climate score for the class as a whole and not for each individual student. For different analyses in the same study you may have different units of analysis. If you decide to base an analysis on student scores, the individual is the unit. But you might decide to compare average classroom performance. In this case, since the data that goes into the analysis is the average itself (and not the individuals' scores) the unit of analysis is actually the group.” [Source: http://www.socialresearchmethods.net/kb/unitanal.php]
The unit of analysis define the type of data you need. If you are studying individuals, households, companies, etc. then you are dealing with micro level data. (go to http://dss.princeton.edu)

If your unit of analysis are countries, states or some other form of aggregate data then you have macro level data. (go to http://library.princeton.edu/catalogs/articles.php).

The sources of data are different from one type to the other. At DSS we offer mostly micro level but we also provide links to some macro level data.
Final considerations…

If you are still not sure what to do, here are some tips:

1. Talk to your advisor/professor as many times as possible. Remember, he will grade your work.

2. Talk to your subject librarian (go to http://library.princeton.edu/help/sub.php)

3. Once you fine tuned your research but have not been able to find what you need, contact DSS at data@princeton.edu

4. If you have what you need but need assistance downloading, reading or analyzing it, contact DSS at data@princeton.edu

5. Keep a log of your research, record all the steps, sources and procedures you followed. This will come in handy when writing the final version of your paper (in particular, the methodological part)

6. For your analysis make sure you have a sound theory behind and a clear research question. This will make easy for you to define your outcome ($y$) and predictor ($x$) variable(s) and your model.
Use [http://dss.princeton.edu/](http://dss.princeton.edu/) as a gateway to find micro level data. Find data by searching, by subject, by geographic coverage or by source (data providers).

Use these if you know your subject area or geographic coverage.

You can also use some other major data providers.

**Back to front**

I think I need to work more on my research project.
Use [http://library.princeton.edu/catalogs/articles.php](http://library.princeton.edu/catalogs/articles.php) as a gateway to find macro level data. Find data by searching, or by subject.

**NOTE:** This link gives you also access to articles, journals and some other text databases.

I think I need to work more on my research project.
You can use this search page to access public opinion data at the Roper Center ([http://www.ropercenter.uconn.edu/Catalog40/StartQuery.html](http://www.ropercenter.uconn.edu/Catalog40/StartQuery.html)).

The Roper Center for Public Opinion Research is one of the world's leading archives of social science data, specializing in data from surveys of public opinion. The data held by the Roper Center range from the 1930s, when survey research was in its infancy.
Search Results

Title: Time Magazine/Abt SRBI Poll # 2008-4567: America by the Numbers
[Study # USSRBI2008-4567]

Survey Firm: Abt SRBI, Inc. (Schulman, Ronca, & Bucuvac, Inc.)
Survey Sponsor: Time Magazine
Field Dates: October 3-6, 2008
Sample: Registered likely voters
Sample Size: 1,053
Sample Notes: Respondents were interviewed via landlines and cellular telephones.
Variables: 136

Major Topics Covered:
- Voter history/intent (3)
- 2008 presidential election (1)
- Obama/Biden vs. McCain/Palin (4)
- Rating political leaders/people (10)
- Sarah Palin vs. Joe Biden (5)
- Barack Obama vs. John McCain (3)
- Source of news (13)
- George W. Bush job performance (1)
- Direction of country (1)
- Economy (2)
- Social contract (2)
- Comparing now and then (1)
- Mortgage recovery plan (1)
- Opinion on certain statements (10)
- War in Iraq (1)
- People in the news (5)

NOTE: When data is not available in Stata, you can download the SPSS portable (*.por), open it using SPSS (available at the DSS lab) and save it as Stata.
You can use this search page to access data at the ICPSR (http://www.icpsr.umich.edu)

Our Mission
ICPSR provides leadership and training in data access, curation, and methods of analysis for a diverse and expanding social science research community.

Announcements
- ICPSR Business Meeting Presentation - Recording Now Available!
- ICPSR Receives New Technology Grants
- New Releases through 2009-09-20
- 2009 Undergraduate Research Paper Winners
- ICPSR Webinars in Early October - Register Today!
- 2009 ICPSR Web Site - Navigating & Using the New Site!
- Funding opportunity for secondary data analysis of PreK-3rd data

Featured Site (view all)
Data Documentation Initiative (DDI)

The Data Documentation Initiative (DDI) is an emerging standard for social science metadata that is being developed by an international group called the DDI alliance. Version 3.0 of the DDI documents the life cycle of research data from the start of a research project through data dissemination.

“Established in 1962, ICPSR is the world’s largest archive of digital social science data. We acquire, preserve, and distribute original research data and provide training in its analysis. We also offer access to publications based on our data holdings.”

NOTE: You need to open an account to download datasets (is free)
You can use this page to access data at IPUMS (http://www.ipums.org/)

The MPC is one of the world’s leading developers of demographic data resources. We provide population data to thousands of researchers, policymakers, teachers, and students. All MPC data are available free over the internet.

### Integrated Public Use Microdata Series

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<tr>
<th>Integrated Public Use Microdata Series</th>
<th>Other MPC Projects</th>
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<tr>
<td><strong>IPUMS-International</strong></td>
<td><strong>North Atlantic Population Project</strong></td>
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<tr>
<td>Harmonized data for 1960 forward, covering 279 million people in 130 censuses from around the world</td>
<td>Complete-count data from 1800s censuses of Canada, Great Britain, Norway, Sweden, and the U.S.</td>
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<tr>
<td><strong>IPUMS-USA</strong></td>
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<tr>
<td>Harmonized data on people in the U.S. census and American Community Survey, from 1850 to the present</td>
<td>Tabular U.S. census data and GIS boundary files from 1790 to 2000</td>
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<tr>
<td><strong>IPUMS-CPS</strong></td>
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<tr>
<td>Harmonized data on people in the Current Population Survey, every March from 1962 to the present</td>
<td>Annual harmonized data on people in the U.S. National Health Interview Survey from the 1960s to the present</td>
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<td><strong>American Time Use Survey-X</strong></td>
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You can use this page to access data at WRDS (http://wrds.wharton.upenn.edu/)

You need to request an account (free to PU)
World Development Indicators database (World Bank)

Once you finish selecting your data, follow these steps to download the file in a format suitable for panel data analysis. The default settings will not give you the data in the proper format.

1. Change settings to these

2. Drag to rearrange the order

3. APPLY CHANGES

4. Download Options

5. Advanced Options

6. Set NA to ‘Blank’

For more on panel data see here:

Stata
http://dss.princeton.edu/training/Panel101.pdf

R
http://dss.princeton.edu/training/Panel101R.pdf
Some useful links…

- DSS - http://dss.princeton.edu
- Articles & Databases (PU) - http://library.princeton.edu/catalogs/articles.php
- Libguides at PU - http://libguides.princeton.edu/dss
- ICPSR - http://www.icpsr.umich.edu/
- Roper Center - http://www.ropercenter.uconn.edu/
- IPUMS - http://www.ipums.org/
- WRDS - http://wrds.wharton.upenn.edu/
- NBER - http://www.nber.org/data/
- IQSS Dataverse Network - http://dvn.iq.harvard.edu/dvn/
- Vanderbilt TV news archive - http://tvnews.vanderbilt.edu/
THANK YOU!