PAI 705

Lecture 12

Reading and writing social research.

The production of social research is tied to the process of communication.

Producing social research generally starts with reading social research that has been produced by others.

- Literature review.
- Library database, read the bibliographies, spread out to cover what is known in the literature.
  Syracuse University Catalog https://library.syracuse.edu/
  Scopus https://www.scopus.com/search/form.uri?display=basic#basic
  Jstor https://www.jstor.org/action/showBasicSearch
  Web of Science https://www.webofscience.com/wos/woscc/basic-search

Journal articles are often what we produce in social science. About 20 pages, 10,000 words.

- Selection of where to submit is part of the process.
- Often you are looking to submit to a journal that published the studies you reviewed in your literature search.
- There is a ranking that factors in to different journals.

  https://jcr.clarivate.com/jcr/browse-journals
- The rule is you can only send it to one journal at a time for review.

Books. This is a different kind of discourse than a journal article. More detailed and elaborate. Getting into the 100,000 word or more territory.

Edited volume

Single authored monograph.

Coauthored monograph.

You can send to more than one publisher at a time for a book.

- Prospectus describes the proposed book.
- Identifying Publishers. Pecking order in academics.
- Contract.
- Submitting.
- Review.
- Revision.
- Page proofs.
- Publication.

In between are things like the research reports we have looked at in this course. There are longer than a journal article but not long enough to be a book.

Evaluating a piece of research:

Theoretical orientation

- What is the theoretical orientation if you can identify it? Is there a theory or hypothesis being tested?
- What is the purpose of the study?
- Who funded it? Why did they fund it? Put that in context.

Research Design

- What is the unit of observation and what is the unit of analysis?
- Is the data cross section or longitudinal? Pay attention to the use of cross section data to tell a longitudinal story.
- What was the non-response rate? What was the attrition rate?
- Did the authors gather the data or are they using data generated by someone else?
- When was the data set gathered?
- What was the fieldwork methodology?

Measurement.

- What are the key concepts and how are the operationally being measured?
- How do the measures chosen line up with different dimensions of the concepts that are central to the analysis?

- What is the nature of the variables: nominal, ordinal, interval, ratio and are they treated as such in the analysis?
- What composites such as index or scale measures have been constructed?

Sampling.

- What was the population? How was the sample drawn from this population?
- What population are we trying to draw conclusions about?
- If it was a probabilistic sample, how did they go about drawing it?
- Was there clustering? Why; by what logic was this structured?
- How large was the sample, and what does that allow us to infer about the larger population? Was any kind of weighting scheme introduced? Are there patterns in response or attrition that we might want to consider?
- Is there any external information about the population that we can use to compare the characteristics of our sample to other measures to verify it is representative? For example, is there a census or other studies from the area?
- If not probabilistic, how were respondents selected?

Experiments

- If there was an experiment, what is the outcome of interest and what are the independent variables that operate on that dependent variable?
- Among the independent variables, what is the 'treatment'?
- How are each of these variables operationalized and measured?
- What is the nature of the control group, and how well does it match up against the treatment group?
- What is the before and after strategy? What is the with and without strategy?
- What consideration has been given to the Hawthorne effect?
- What threats to internal validity have been identified?
- What threats to external validity have been identified? That is, does the constructed experimental setting contain lessons that can apply to the real world as experienced by people?

Survey Research

- What questions were actually asked of respondents? How good was the wording and how understandable were the questions?
- What was open ended and what was closed ended?
- Was the closed ended question spectrum exhaustive?

- Was the open-ended question post response sorting into categories credible?
- Was the open-ended question phrasing in any way leading the respondents to particular kinds of responses?
- Were people in a position to really answer the questions posed to them?
- Any double barreled or worse questions?
- Did the survey questions not include any negative statements so the people are not sure what they are not responding to negatively? Y or N.
- Is there a chance responses were strategic, or socially conditioned?
- Was the wording more or less neutral?
- Was the data gathered expressly for this study or is it used from a study that was done for another purpose? How well does it fit this new research setting?

Field Research.

- Are the variables chosen logically related to the concepts under investigation? Are the indicators valid? Are they reliable?
- Are the classifications of categories of responses to these variables plausible and defensible?
- Are the findings generalizable, and if so to what population?
- How were people selected?

- Did the producer of the research participate in the data collection? If so to what extent? If not, who did the original research and why?
- What is the background of the researcher and how might that have shaped interactions?

Content analysis.

- What are the variables and what is the data set from which they are being drawn?
- What is the time frame of the data?
- What is the unit of analysis?
- Are we using qualitative or quantitative analysis? In either case, is it done well?

Using existing data.

- Is the original source credible and reasonably well done?
- Why was it originally gathered, by whom, for what reason?
- When was it gathered and in what way?
- What definitions were used?
- Is there a codebook?

Comparative Research.

- What is the logic of the comparison?
- How far back should we look at the historical record?
- What is the unit of analysis that is being compared?
- Who produced the information we are using and what possible bias might that introduce?

Evaluation research.

- What is the intervention?
- Who has been impacted by the intervention, and in what way? Who has not been impacted, and why not?
- What was the intervention trying to do so we can define 'success' and 'failure'?
- Is the evaluation independent of the people with an interest in the interventions success or failure?

Data analysis.

- How were variables coded and categorized?
- Is the analysis thorough?
- Is the researcher in interpretation going beyond what the evidence supports?
- Is the logical flow supported or are there gaps in the logic?

- Are the conclusions and interpretations of the empirical results plausible and supported by the evidence?
- Are the statistical tools used correctly?
- Are the tests of significance interpreted correctly?

Reporting.

- Is the policy context described adequately?
- Are all relevant details reported in the document?
- Are flaws and shortcomings dealt with in a satisfactory manner? Are there suggestions for improvement going forward?

Writing social research.

Start (more likely end) with an abstract or an executive summary.

A short summary of what is the main message of the research work.

- This is a condensation of the main points.
- There is a word limit to an abstract, in the 100 to 250 word range.
- An executive summary is in the 2-5 page range.

As a producer, take some time on this. It is often written in haste at the end, which undersells the product you have produced. Also, writing or grammar errors here are a critical flaw.

Figures and tables should be self-explanatory. Everything you need to interpret them should be in the figure or table.

- Some choice about what better conveys information, a chart / table or a graph.
- Tables should be self-explanatory.
  - o Variable names should be meaningful; avoid the temptation to cut and paste stata code!

Avoid this:

```
4 . regress Total_Act hhsize zeroherd rette champs River Lat Niger agfract popdens  marchekm cerclek
> m
```

Source	SS	df	MS
Model	327.85962	11	29.80542
Residual	729.231289	978	.745635265
Total	1057.09091	989	1.06884824

Number of obs	= 990
$F(11, 978)$	= 39.97
Prob > F	= 0.0000
R-squared	= 0.3102
Adj R-squared	= 0.3024
Root MSE	= .8635

Total_Act	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
hhsize	.0170537	.0032981	5.17	0.000	.0105814	.0235259
zeroherd	-.5363321	.0700723	-7.65	0.000	-.6738414	-.3988227
rette	.1409561	.0672579	2.10	0.036	.0089698	.2729425
champs	.0636799	.0116	5.49	0.000	.0409161	.0864437
River	.4882612	.0680713	7.17	0.000	.3546786	.6218438
Lat	-.2468056	.043267	-5.70	0.000	-.3317124	-.1618987
Niger	1.107921	.1516262	7.31	0.000	.8103712	1.405471
agfract	.3791456	.130895	2.90	0.004	.1222782	.636013
popdens	-.0072577	.0019055	-3.81	0.000	-.0109972	-.0035183
marchekm	.0020121	.0009013	2.23	0.026	.0002434	.0037808
cerclekm	-.011515	.0024055	-4.79	0.000	-.0162355	-.0067945
_cons	5.816548	.6799182	8.55	0.000	4.482281	7.150814

Use something like this:

Table 7: Poisson regression results for the number of different livelihood strategies followed by 993 household heads in 32 communities in Niger and Mali. Key household variables include demographic variables such as number of members (HH size) and an indicator for the absence of livestock wealth (No animals).   Community variable include dummies for whether the community borders the Niger river or is in the country of Niger (Niger River, Niger Country), latitude, distance in kilometers to the administrate seat from the community, the % of the community that reported being primarily cultivators (cultivation %) and the administrative district's population density (Pop. Density).

Household Size	0.0088 **
No Animals	-0.2227 **
% of community cultivating	0.2034 *
Population Density	-0.0015
Niger River	0.1910 **
Distance to Admin. Center	-0.0038 *
Latitude	-0.0855**
Niger Country Dummy	0.3442 **
Constant	2.0498 **

** is significant at 1%, * is significant at 5%

What am I trying to communicate with my findings?

How does what I am presenting in my research fit into what is already known and how have I advanced knowledge?

What topics for further inquiry have I uncovered in my research effort?

Who is my likely audience? Policy makers? Other academics? Other economists?

Sometimes we have a variety of formats for a given research effort:

Resilience and Pastoralism in Africa South of the Sahara, with a Particular Focus on the Horn of Africa and the Sahel, West Africa. (chapter)

 IFPRI 2020 Resilience Conference Paper 9. (full paper)

IFPRI 2020 Resilience Conference Brief. (brief) with Peter Little. (2014)

Research briefs are designed to convey key messages.

Another frequent output is in a working paper series. Working papers are useful for getting ideas out there. They are also helpful to get feedback.

https://ideas.repec.org/s/max/cprwps.html

Often research projects are presented as posters or presentations at professional meetings on the way to publication.

Submitting an article for peer review.

Increasingly being asked:

- to state potential conflict of interest.
- to state financial support for a piece of research.
- to state who did what part of the research

Another kind of writing related to research in social science is writing reports.

Reports have a descriptive part generally. How you did what you did to make this research product happen.

Reporting to a sponsor is often a part of social science research. From the final report of the Mali project I have discussed before:

Activity 3. Develop methods and extension activities for nutritional analyses of supplemental feed in northern Mali

NIRS Student Training and Equation Development

A new Near Infrared Reflectance Spectrometer (NIRS) was installed at the ruminant nutrition teaching laboratory at IPR-Katibougou during 2011. The NIRS instrument provides capabilities to rapidly scan feeds and fodders to determine a variety of chemical constituents including those important for assessing forage quality. This instrument was placed at the university to allow students at IPR to gain knowledge and hands-on experience using equipment (Figure 10).

In early 2011, new laboratory equipment was installed to facilitate *in vitro* and *in vivo* digestibility work to be done at both the IER Sotuba National Ruminant Nutrition Laboratory and the livestock nutrition laboratory at IPR Katibougou. This equipment will provide the laboratories with capabilities to provide pastoralists and other livestock producers with information on the quality (digestibility and energy) values for feeds and fodders which has previously been lacking in Mali. Establishment of high quality equipment in these laboratories has the potential to further the capacity of both laboratories to disseminate valuable information on forage quality to producers that will, in turn, improve risk management decision making and enhance economic opportunities for livestock fattening and herd management.

Figure 10. IPR student scanning samples with bench top Perten NIRS instrument at the IPR laboratory in Katibougou.

Final reports, trip reports, quarterly reports….

There is lots of reporting that goes with social science research.