

Poli 30D Political Inquiry

Theory & Hypothesis

Shane Xinyang Xuan
ShaneXuan.com

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Contact Information

Shane Xinyang Xuan
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We have someone to help you every day!

Professor Desposato	M	1330-1500 (Latin American Center)
Shane Xuan	Tu	1600-1800 (SSB332)
Cameron Sells	W	1000-1200 (SSB352)
Kelly Matush	Th	1500-1700 (SSB343)
Julia Clark	F	1200-1400 (SSB326)

Supplemental Materials

Our class oriented

ShaneXuan.com

UCLA SPSS starter kit

www.ats.ucla.edu/stat/spss/sk/modules_sk.htm

Princeton data analysis

<http://dss.princeton.edu/training/>

Next section (10/5–10/7) will be held in Eleanor Roosevelt College (ERC) #117. This is a one-time temporary change.

Please be there on time, we will have our first lab session there!

If you want to use your own laptop, please install SPSS beforehand.

For details, consult with the staff at UCSD Campus Software.

https://software-web.ucsd.edu/contact_us.php

Housekeeping Notes (1)

- Section attendance is **mandatory**. We take attendance for every single section meeting.
- I have **zero discretion** on: late assignments, exam rescheduling, re-grading, section absence, ... Professor Desposito is going to make the final call.

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- This is a difficult class, and it is **completely acceptable** to get lost at some point during the quarter. If that happens, please let me know.
- I post my slides and other resources on my website (ShaneXuan.com). In case you miss a section, check the "Teaching" page first. If you do not find the things you are looking for, please email me to let me know.
- Please give me **24-48 hours** to get back to you. If your question is urgent, post it on the TritonEd course website. Someone will check it daily.

Housekeeping Notes (2)

One last thing, and you would appreciate knowing this:
Syllabus is your best friend.

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- Office hours & locations
- Grading rubric
- Required readings for lectures (and exams)
- Late homework policy
- Academic integrity
- ⋮

Discussion (10% of your final grade)

Some of my colleagues suggest that we should do a quiz every day, so that TAs can help reinforce what the students have just learned, and get to know who is struggling. I like this idea.

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Here is the grading rubric (for a total of 10% of your final grades)

50% attendance

25% quiz

25% participation

Different TAs have different teaching philosophy.

I care more about if you have tried your best. So if you come to every single discussion section, your section grades will be **great**.

That being said, don't stress too much in my section. Just make sure you come and learn!

Today's Quiz

Is “I don't know” an appropriate answer according to my policy?

Template:

LAST NAME, FIRST NAME
EMAIL

ANSWER

Example:

Xuan, Shane
xxuan@ucsd.edu

yes

Today's Quiz

Is “I don't know” an appropriate answer according to my policy?

Template:

LAST NAME, FIRST NAME

EMAIL

ANSWER

Example:

Xuan, Shane

xxuan@ucsd.edu

yes

The answer is “yes.” I understand that you can't get everything by yourself. That's why I am here to help. Being honest and telling me that you do not know the answer in the quiz is completely acceptable.

Terminology

- **Unit of Analysis:** Entities from which measurements are taken
- **Number of cases:** Total units of analysis; notation wise, we use N (or n)
- **Law:** The *actual* relationship between properties
- **Hypothesis:** The *perceived* relationship between properties

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We now draw an analogy. (Discussion.)

Law \rightsquigarrow Hypothesis

Property \rightsquigarrow Concept

Terminology (2)

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Terminology (2)

Law \rightsquigarrow Hypothesis

Property \rightsquigarrow Concept

Differences:

- One is *true*, the other is our *guess*
- How do we test our *guess*?
- **Variable**: The measurement of concept
- The key is to **operationalize**

Hypothesis

- 1) **Falsifiability**: $Pr(\text{observation contradicts hypothesis})$
- 2) **Spurious Relationship**: Our hypothesized explanatory variable and respondent variable are **both** dependent on a third variable

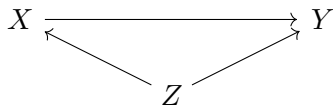


Figure: Example of **confounding** variable

$$X \rightarrow Z \rightarrow Y$$

Figure: Example of **intervening** variable

Ingredients for a good hypothesis

- Unit of analysis
- Independent variable
- Dependent variable
- Causal relationship
- Values

Hypothesis

Now, let's try some examples:

Hypothesis

- Putnam's work suggests that, when people get involved in groups and help make collective decisions for the group, they develop participatory skills. These participatory skills, in turn, cause people to participate more in politics – voting at higher rates than people who are not involved in any groups.
- The **associational** relationship between group membership and voter turnout is mediated by an intervening variable.
- Rewrite the hypothesis in which the intervening variable is the **new dependent variable**. Rewrite the hypothesis in which the intervening variable is the **new independent variable**.

Hypothesis

- Rewrite the hypothesis in which the intervening variable is the *new dependent variable*. Rewrite the hypothesis in which the intervening variable is the *new independent variable*.
- 1) membership \rightsquigarrow skills
 - 2) skills \rightsquigarrow voter turnout
- Essentially, we broke the following hypothesis into 2 pieces in the exercise above

membership \rightsquigarrow skills \rightsquigarrow vote

See you next week!

Have a good weekend and I will see you next week!

Poli 30D, to many of you, is not an easy class. It requires some mathematical background, and **a lot of** intuition. It is my goal to help you get such intuition, so that you are understanding, instead of merely memorizing, the mathematics. We want you to **try your best**. If you get lost at any time, please contact me (**xxuan@ucsd.edu**). I strongly prefer meeting with you during my office hours, but feel free to email me and set up an appointment if you absolutely cannot make it to my office hours.