Conceptualization and Measurement

With Applications to Democracy and Political Tensions

measure: a quantification of a concept of interest

concept: a word used to describe a (political) entity

conceptualization: the process of refining and specifying concepts

When we use words like "rich," "democratic," "conservative," and "Islamic," we must have precise definitions for the underlying concepts.

Evaluating Measures

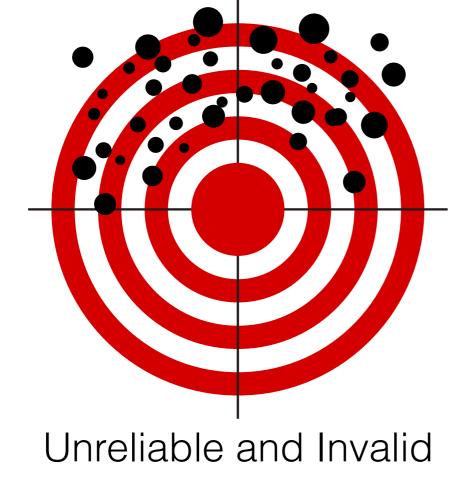
individual measurement = exact value + bias + chance error

validity: the extent to which the measure corresponds to the concept it is intended to reflect

- invalid measures have substantial bias
- assess using "face validity"—just making a judgement

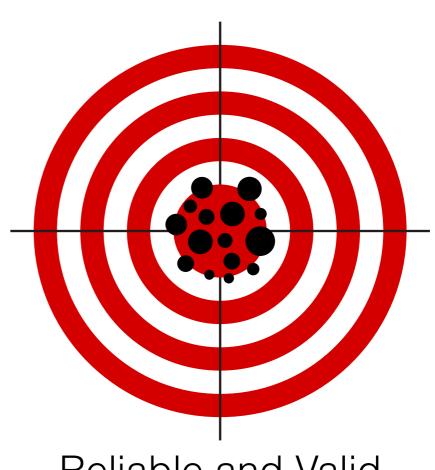
reliability: the extent to which the measurement process repeatedly and consistently produces the same score for a given case

- unreliable measures have substantial chance error
- assess using repeated measurements



Unreliable, but Valid





Reliable and Valid

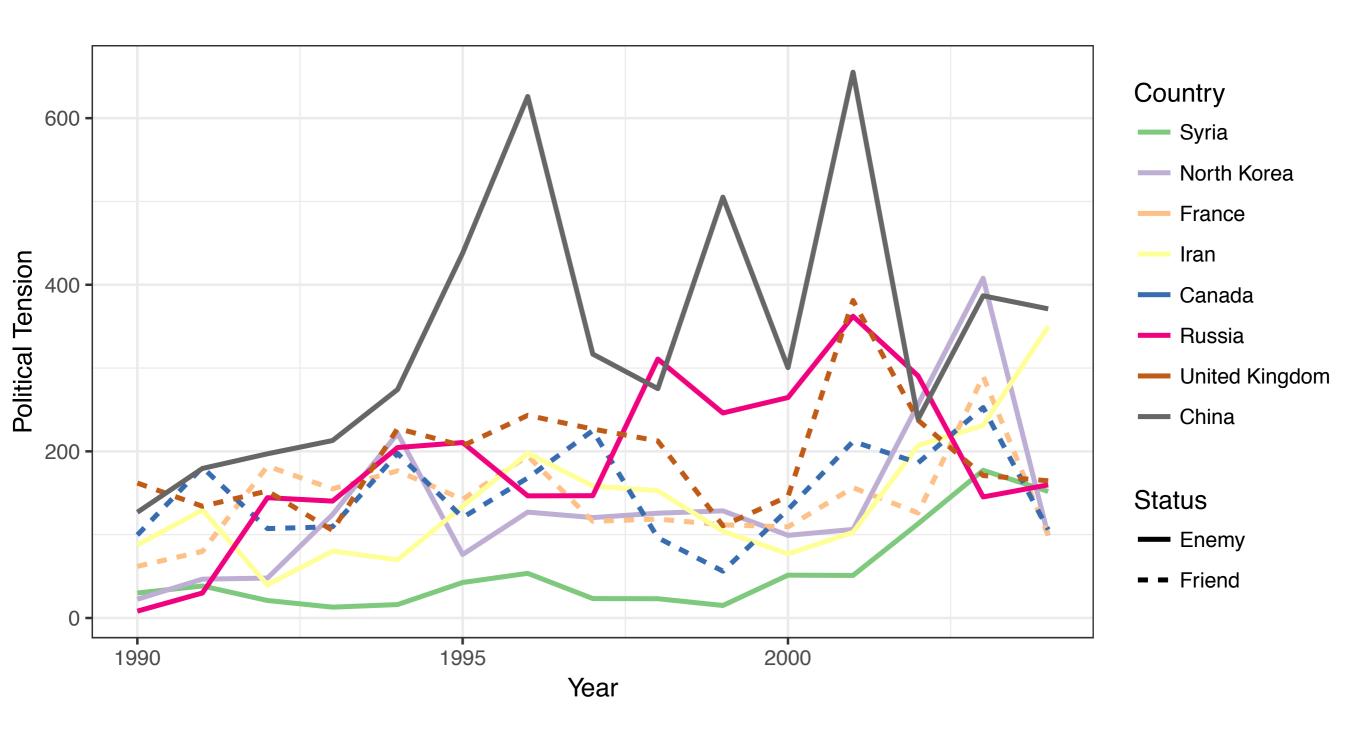
Political Tensions

"By political tensions, we mean disagreement over policy issues, hostility between leaders, and negative public sentiment."

-Davis and Meunier (2011)

Previous literature has analyzed events data to measure levels of conflict and cooperation in dyadic relations among states, and we use this as our starting point. The Conflict and Peace Data Bank (COPDAB) was used by Pollins in his classic article showing the effect of political relations on bilateral trade relations (Polachek 1980; Pollins 1989b). This data series coded diplomatic events reported in newspapers and has been modified to weight events according to significance (Goldstein 1992). King and Lowe (2003) provide the most recent and comprehensive events dataset, which extends on the approach of these earlier surveys using computer coding of media reports. The coding program (Virtual Research Associates Reader) reads daily Reuters news reports to extract a list of events that identify the actors, date, and type of event according to cue words (i.e., complain, demonstrate, seize). The program filters out routine updates such as stock reports and has been shown to be as accurate as human coders. The King-Lowe events data are available for 1990 to 2004, in contrast to the earlier events datasets that end in 1985.

We add to the standard specification an independent variable for *political tensions*, which measures negative events with either government- or citizen-level origin between two countries.⁵ Each event has been coded with a "Goldstein score" weighting its significance, i.e., a military attack would receive the score -10, cutting off aid would receive -5.6, and issuing a formal complaint or protest would receive -2.4. Our political tension variable sums negative Goldstein scores for the dyad in each quarter (reported as positive values in log form). We also



Democracy

Dahl's Concept of Democracy

contestation: citizens are free to organize themselves into competing blocs in order to press for the policies and outcomes they desire

inclusion: many people are allowed to participate in the democratic process

polyarchy: a political regime with high levels of inclusion and contestation

Contestation

Polyarchies (Ideal type)

Apartheid South Africa, U.S. before 1830 U.S. today

China

Soviet Union

Inclusion

Exercise

- · Get into a group with two other classmates you haven't talked to before.
- Using polyarchy as your starting concept of democracy, come up with a valid and reliable measure of democracy.
 - Imagine you are going to ask undergraduates RAs to code countries as either a Democracy or an Autocracy. You want these rules to be (1) easy to follow and (2) capture the concept of democracy.
 - Think about it as a series of conditions. For example, you might have three conditions. If a country meets all three in a given year, then it gets coded as a democracy for that year and an autocracy otherwise. (Or maybe if it meets 3 of 5 conditions. Or maybe it must meet 2 particular conditions and then at least 1 of 3 others. You get the idea)
 - Use conditions that we can check using Wikipedia.
- Use your measure to code the following country-years:
 - US in 1868
 - US in 2000
 - Russia in 2012
 - Switzerland in 2015
 - Iran in 2013
 - China in 2013

According to the DD measure of democracy (Cheibub, Gandhi, and Vreeland 2009), a regime is a democracy if and only if it meets the following criteria:

- The chief executive must be chosen by popular election or by a body that was itself popularly elected.
- 2. The legislature must be popularly elected.
- 3. There must be **more than one party** competing in the elections.
- 4. An **alternation in power** under electoral rules identical to the ones that brought the incumbent to office must have taken place.

Concept

Measure

polyarchy: a political regime with high levels of inclusion and contestation

inclusion: many people are allowed to participate in the democratic process

contestation: citizens are free to organize themselves into competing blocs in order to press for the policies and outcomes they

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Do you think this measure is valid? Reliable?

Review Exercises

- Describe Dahl's concept of democracy (or polyarchy) and the two components.
- 2. Explain how we evaluate measures.
- 3. Describe the DD measure of democracy.
- 4. Evaluate the DD measure of democracy.
- 5. How do Davis and Muenier measure political tensions (roughly)? What is their concept of "political tension"? Does their measure seem valid and reliable? What is problematic?