Measures of Central Tendency and Variabilit

Alex Shpenev

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Measures of Central Tendency

- Measures of Central Tendency describe what is "typical" of the distribution.
- They show where the "middle" of the distribution is. Not necessarily average!

Mode

- What category is the most frequent?

Most common languages in the U.S. other than English, 2015.

Language	Number of Speakers, mln
Spanish	40
Chinese	3.3
French	2.2
Tagalog	1.7
Vietnamese	1.5
Hindustani	1.3
Arabic	1.2
Korean	1.1
German	1.1
Russian	0.91

Source: ACS, https:

Mode for different Levels of Measurement

- Easy to determine for nominal and ordinal variables.
- Can be determined for interval-ratio variables.
- If you are given an interval, the mode can be estimated using some assumptions.

We will not learn the formula for mode for intervals, but expect software to produce a mode for you.

The Median

- The median is the category that splits the distribution into two equal parts.
- Half cases are above the median and half are below the median.
- Can be calculated using several methods ()