

VARIABLES: ANSWERS AND DISCUSSION

Note: These are sample answers; other names for some variables may be equally appropriate. In some cases, different variables pertaining to different units of analysis may also be appropriate.

<u>VARIABLE 1</u> (range of values)	<u>VARIABLE 2</u> (range of values)	<u>units [pop.]</u>
1. LEVEL OF SENIORITY (LO-HI, or years/terms)	DEGREE OF PRAGMATISM (LO-HI, or index score)	individuals [members of Congress]
2. LEVEL OF EDUCATION (LO-HI, or years)	DEGREE OF RELIGIOSITY (LO-HI, indicator or index score)	individuals
3. WHETHER [or RATE AT WHICH] CAPITAL PUNISHMENT IMPOSED (YES/NO [LO-HI, or numerical rate])	MURDER RATE (LO-HI, or numerical rate)	legal jurisdictions [e.g., states]
4. DEGREE OF COMPETITIVENESS (LO-HI, or index score)	DEGREE OF RESPONSIVENESS (LO-HI, or index score)	Congressmen and their districts*
* Since (at any given time) there is a one-to-one correspondence between House members and House districts, either can be considered the unit of analysis.		
5. LEVEL OF PRESIDENT'S APPROVAL RATING (LO-HI, or %)	LEVEL OF PRESIDENT'S RE-ELECTION VOTE (LO-HI, or %)	elections [Pres. elections with incumbent running]
6. AMOUNT OF STUDY EFFORT (LO-HI, or hours/week)	LEVEL OF GRADES/GPA (LO-HI, F-A, or numerical GPA)	individuals [students]
7. DEGREE OF CLOSENESS (LO-HI or % dif)	LEVEL OF VOTING TURNOUT (LO-HI or %) (longitudinal)	elections
DEGREE OF CLOSENESS (LO-HI or % dif)	<i>or</i>	Cong.(etc.) districts (cross-sectional)

- | | | | |
|-----|---|--|----------------------------------|
| 8. | DEGREE OF GOODNESS OF TIMES
(LO-HI, or index score) | PER CENT OF INCUMBENT
CANDIDATES REELECTED
(0%-100%) | elections |
| | <i>or</i> | | |
| | DEGREE OF GOODNESS OF TIMES
(LO-HI, or index score) | INCUMBENT RE-ELECTION
PERFORMANCE (FOR
PARTICULAR OFFICE
(Vote %) | elections |
| 9. | GOODNESS OF SLEEP HABITS
(LO-HI) | LEVEL OF WELL-BEING
(LO-HI, or INCOME as indicator) | individuals |
| 10. | WHETHER OR NOT EAT AN
APPLE A DAY (YES/NO) | NUMBER OF DOCTOR VISITS
(LO-HI, count per year) | individuals |
| | <i>or (less literally)</i> | | |
| | GOODNESS OF EATING HABITS
(LO, HI) | LEVEL OF HEALTH
(LO, HI) | individuals |
| 11. | AMOUNT OF EDUCATION
(LO-HI, or number of years) | LEVEL OF SUCCESS
(LO-HI, or INCOME)
[<i>Note: <u>not</u> LEVEL OF DESIRE TO SUCCEED</i>] | individuals |
| 12. | IDEOLOGY OF GOVERNMENT
(LEFT-RIGHT) | LEVEL OF INFLATION
(LO-HI or %/year) | nations |
| 13. | LEVEL OF POLITICAL INTEREST
(LO-HI) | WHETHER OR NOT VOTES
(YES, NO) | individuals
[eligible voters] |
| 14. | DEGREE OF LIBERALISM
(LO, HI) [or IDEOLOGICAL
PLACEMENT (LIB-CONS)] | DIRECTION OF VOTING
(DEM, IND, REP) | individuals
[U.S. voters] |

- | | | |
|--|-------------------------------------|----------------------|
| 15. LEVEL OF SATISFACTION WITH ECONOMY (LO-HI) | VOTE CHOICE (INCUMBENT, CHALLENGER) | individuals [voters] |
| | <i>or perhaps</i> | |
| PERCENT SATISFIED WITH ECONOMY (LO-HI) | LEVEL OF INCUMBENT VOTE (LO-HI) | elections |

- | | | |
|---|------------------------------------|-------------------------------|
| 16. TYPE OF ELECTORAL SYSTEM (MAJORITARIAN, PROPORTIONAL) | NUMBER OF PARTIES (2, more than 2) | nations [with free elections] |
|---|------------------------------------|-------------------------------|

Note: Statement #16 is “Duverger's Law,” perhaps the most famous law-like generalization in political science.

- | | | |
|--|-----------------------------------|---------------------------------------|
| 17. AVERAGE STRENGTH OF PARTY IDENTIFICATION (LO-HI, or numerical average) | TIME EARLIER, LATER [1972 – 2004] | electorates (in successive elections) |
|--|-----------------------------------|---------------------------------------|

Note: Statement #17 makes a *longitudinal* statement (claiming a pattern over time), so the second variable is TIME. The range of values might be from 1972 through 2004 (e.g., as in the SETUPS data).

- | | | |
|---|---|--------------|
| 18. SIZE (LO-HI or number of members) | LEVEL OF EFFECTIVENESS (LO-HI or index score) | legislatures |
| 19. WHETHER OR NOT TERM-LIMITED (YES, NO) | LEVEL OF EFFECTIVENESS (LO-HI or index score) | legislatures |

See over for additional notes

Note 1. In general, students seem to have an easier time identifying the variables than the unit of analysis, especially when the latter is anything other than individuals. Remember that the variables refers to characteristics of the “things” that constitute the unit of analysis. For example, it does not make sense to say that individuals (voters) constitute the unit of analysis in #7 and also that DEGREE OF CLOSENESS is one of the variables, since voters do not vary in “closeness” (rather, elections do). More generally, imagine that you set out to collect data that bears on the empirical proposition implicit in each sentence. This means that you “observe” or “measure” the value of each variable for each case you study. Thus for each sentence, you would have two columns of data when you enter the data into a spreadsheet similar the Student Survey data that was returned to you. Each pair of entries in each column would records the value of the two variables in a particular case and each row of the data sheet corresponds to a case. Think about what kind of thing each case/row represents. Are they individuals, nations, elections, legislatures, or what? Whatever they are, they define the unit of analysis.

Note 2. The range of possible values needs to be specified separately for each variable (since they may be different). (Many people failed to do this consistently).

Note 3. The range of possible values for a variable is best summarized as “low to high” (or whatever), rather than either “low or high” or “low and high” (or whatever), since the latter expressions suggests the variable is intrinsically dichotomous (two-valued), which typically is not true — that is, there are typically several or many intermediate values between the two extremes. More generally, don’t “dichotomize” variables unnecessarily, e.g., DEGREE OF CLOSENESS (of elections) is preferable to WHETHER/NOT CLOSE.