

# Basic Concepts: Levels Of Measurement

For the following research results, identify the components listed..

Example: According to the Census Bureau, of the people 21 to 64 years old, 12.3% are not high school graduates, 27.8% have graduated high school, 30.6% have some college, 16.9% have a bachelor's degree, and 8.8% have an advanced degree.

- a) Name the Variable: EDUCATION
- b) This Variable's answer categories: NOT A HIGH SCHOOL GRADUATE, HIGH SCHOOL GRADUATE, SOME COLLEGE, BACHELOR DEGREE, AND ADVANCED DEGREE.
- c) This Variable's Level of Measurement: ORDINAL
- d) The variable's answer patterns tell us: THE TWO BIGGEST GROUPS ARE THOSE WHO GRADUATED HIGH SCHOOL AND THOSE WITH SOME COLLEGE; FEW HAVE AN ADVANCED DEGREE.

1) According to a recent poll, 54% of Americans approve of the job that the President is doing while 42% disapprove (Gallup 8/09).

- a) Name the Variable:
- b) This Variable's answer categories:
- c) This Variable's Level of Measurement:
- d) The variable's answer patterns tell us:

2) According to a recent survey, 62% of Americans say that they would support giving people the option of being covered by a government health insurance plan that would compete with private plans. 39% approve of the way Barack Obama is handling health care (Quinnipiac University Poll. July 27-Aug. 3, 2009).

- a) Name the Variable:
  - b) This Variable's answer categories:
  - c) This Variable's Level of Measurement:
  - d) The variable's answer patterns tell us:
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- e) Name the Variable:
  - f) This Variable's answer categories:
  - g) This Variable's Level of Measurement:
  - h) The variable's answer patterns tell us:

3) According to the same survey (in previous question), 40% of Republicans, 80% of Democrats, and 64% of Independents say that they would support giving people the option of being covered by a government health insurance plan that would compete with private plans (Quinnipiac University Poll. July 27-Aug. 3, 2009).

- a) Name the Variable:
  - b) This Variable's answer categories:
  - c) This Variable's Level of Measurement:
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- d) Name the Variable:
  - e) This Variable's answer categories:
  - f) This Variable's Level of Measurement:
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- g) The answer patterns for both variables tell us:

Using the data from the class survey, IDENTIFY THE LEVEL OF MEASUREMENT for each variable.

Variable	Level of Measurement	Variable	Level of Measurement
City where you live		Height	
Birth Year		Avg # Movies per month	
LA Subway (yes, no)		Hours of sleep	
# Times Eat per day		Type of Pet	

4) Using the data from the class survey, construct a frequency and percentage distribution and identify the level of measurement for each variable.

Variable	Categories	f	cf	%	c%	Level of Measurement
Familiarity-Word	very					
	somewhat					
	so-so					
	not very					
Familiar – Excel	very					
	somewhat					
	so-so					
	not very					
LA Subway	Yes					
	No					
Pet	Yes					
	No					
Gender	Woman/Female					
	Man/Male					
Birth Year						

5) Using the data from the class survey, what potential hypothesis would you like to explore? (Which two variables would you like to compare to see if there is a relationship between them?)

Variable 1:

Variable 2:

How might they be related to each other? (Hypothesis)