

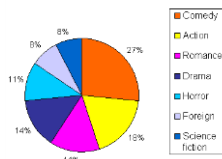
## Descriptive Statistics:

Describing your results

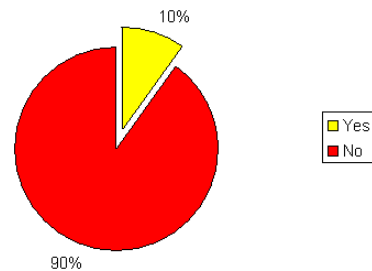
## Ways of describing your results

- Comparing group percentages
- Correlations of 2 or more variables
- Comparing group means
  - Experimental or Quasi-experimental research

“What’s your favorite movie genre?”

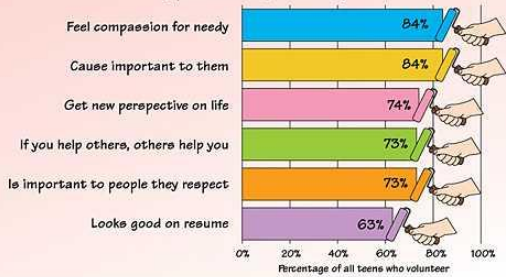


**Figure 1. Student and faculty response to the poll 'Should Avenue High School adopt student uniforms?'**



## Why Teens Lend a Helping Hand

(Top reasons teenagers volunteer)



SOURCE: Based on data from Volunteering and Giving Among American Teenagers by Independent Sector

## Correlation Coefficient

- Numerical index that reflects the relationship between 2 variables
- Ranges from  $-1$  to  $+1$
- Pearson product-moment correlation or Pearson's  $r$

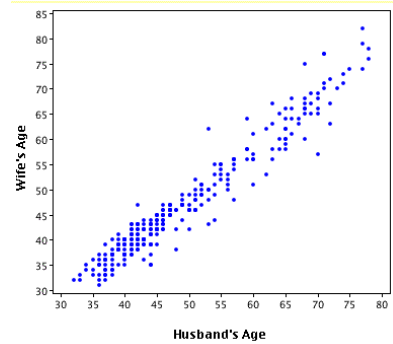
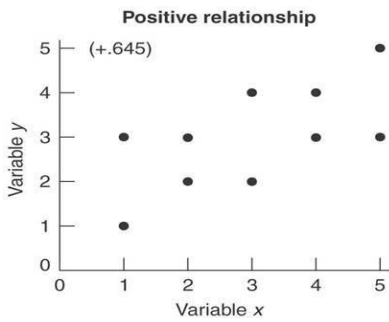
### Understanding a correlation: Eyeballing your data

.8 to 1.0	Very Strong
.6 to .8	Strong
.4 to .6	Moderate
.2 to .4	Weak
.0 to .2	Very weak

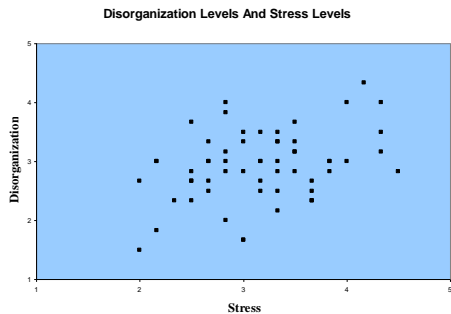
### Scatterplot

- Illustrates the relationship between variables
  - X on the horizontal axis
  - Y on the vertical axis
- Positive correlation
  - Data from lower left to upper right
- Negative correlation
  - Data from upper right to lower left

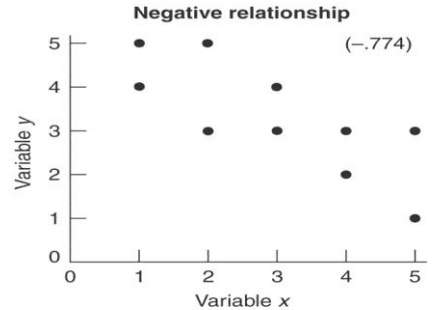
### Scatterplot for + correlation

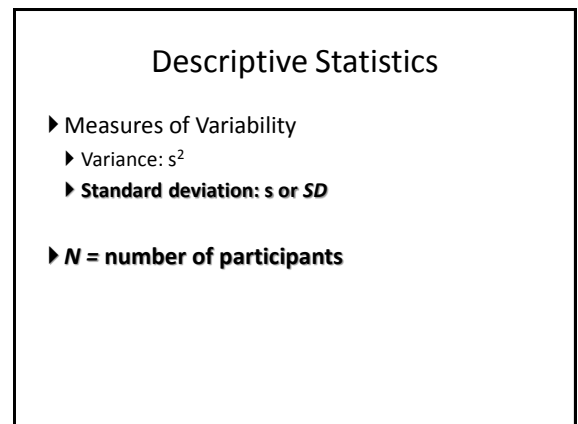
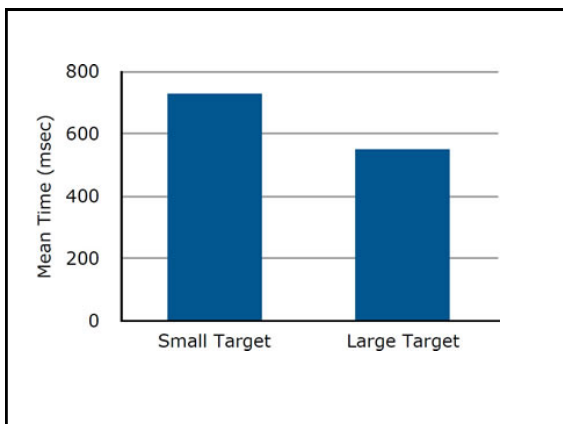
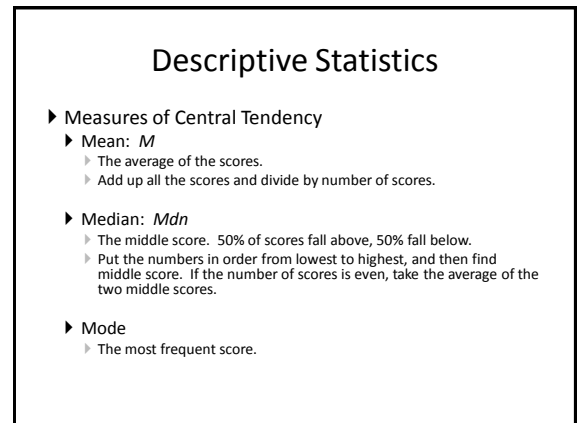
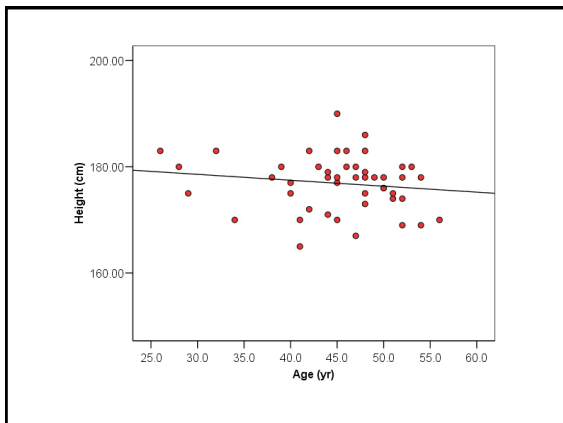
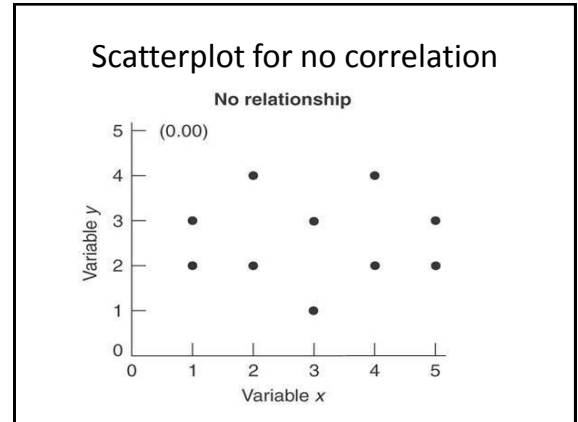
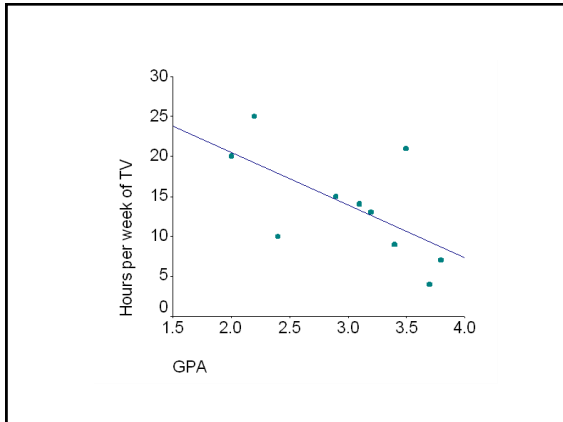


### Scatterplot

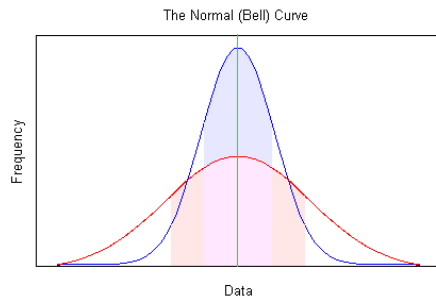


### Scatterplot for - correlation





## Why Standard Deviation Matters



## With your group:

1. How will you be describing your results?
  - Comparing %? Correlation of scores? Comparing means?
  - May have to think about how will you need to manipulate your data (find total scores) in order to examine it.
2. What kind of graph might you use to represent your data?
  - Create a 'mock' graph of what your data might look like if your predictions are fulfilled.
  - What might your data look like if you do not obtain significant results?