

Today: 1-D Categorical
Bar, Spine, Rose, Pie
Statistical Tests for Categorical Data
Wednesday: 2-D Categorical

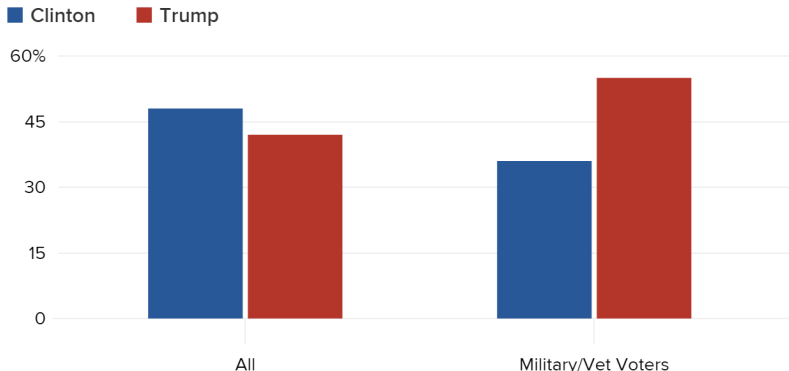
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Friday's Oral Evaluation Graphic

If the 2016 presidential election were being held today...



NBC News/SurveyMonkey Weekly Election Tracking Poll among registered voters

What Does a Bar Chart Show?

Marginal Distribution:

Empirical Distribution:

Bar Charts: Counts vs. Proportions

Counts/Frequencies of each category:

Proportions:

Chi-Square Test for Independence

Chi-squared test: Statistical test used to determine whether there is a significant difference between the expected frequencies and the observed frequencies in one or more categories (of a categorical variable).

2-D Categorical: Used to test differences in the conditional distributions (more on this Wednesday)

1-D Categorical:

Computing and Interpreting the Chi-Square Test

Test Statistic:

Interpretation: