Name that analysis…

TYPES OF VARIABLES	LEVELS OF MEASUREMENT	
Independent Variable	Nominal	Nominal
Dependent Variable	Nominal	Ratio/interval
Statistical analysis?	_____?	_____?

t-tests

- *t*–test: independent variable is nominal, but dependent variable is ratio/interval.
- The *t*–test compares means
  - **Independent sample *t*-test** Comparing the means of two independently chosen samples
    - H_A: SJSU students receiving post-grad test preparation will score higher in the LCSW exam compared to those SJSU students who did not receive post-grad test preparation
  - **Dependent (or Paired) sample *t*–test** Comparing the means of two *related* samples, or more typically, the *same sample measured twice*
    - H_A: LCSW test preparation will result in reduced anxiety as measured by a ratio level anxiety scale score, comparing scores pre- and post- test preparation
  - **One sample *t*–test** Comparing a sample mean to that *already known* in the population
    - H_A: SJSU graduates will score higher in the LCSW exam than the MSW students statewide

8 steps to conducting *t*-tests: **Independent sample *t*-test**

- **H$_A$**: SJSU students receiving post-grad test preparation will score higher in the LCSW exam compared to those SJSU students who did not receive post-grad test preparation

    1. What is the independent variable, and its level of measurement? _____

    2. What is the dependent variable , and its level of measurement? _____

    3. What's the Null Hypothesis? _____

    4. Is the alternative hypothesis stated above one-tailed or two-tailed? _____

    5. Statistical test & alpha level: Independent sample *t*-test, alpha = ___

    6. Review SPSS table of results

    7. Describe results & decision to accept or reject Null

    8. Discuss results

8 steps to conducting *t*-tests: Dependent (paired) sample *t*-test

- **H$_A$**: LCSW test preparation will result in reduced anxiety as measured by a ratio level anxiety scale score, comparing scores pre- and post- test preparation

  1. What is the independent variable, and its level of measurement? _____

  2. What is the dependent variable , and its level of measurement? _____

  3. What's the Null Hypothesis? _____

  4. Is the alternative hypothesis stated above one-tailed or two-tailed? _____

  5. Statistical test & alpha level: Dependent sample *t*-test, alpha = ___

  6. Review SPSS table of results

  7. Describe results & decision to accept or reject Null

  8. Discuss results

8 steps to conducting *t*-tests:
One sample *t*–test

- **H$_A$**: SJSU graduates will score higher in the LCSW exam than the MSW students statewide
    1. What is the independent variable, and its level of measurement? Sample vs. population (nominal) Note: we're still only talking about *one sample*
    2. What is the dependent variable , and its level of measurement? _____
    3. What's the Null Hypothesis? _____
    4. Is the alternative hypothesis stated above one-tailed or two-tailed?
    5. Statistical test & alpha level: One-sample *t*-test, alpha = .05
    6. Review SPSS table of results
    7. Describe results & decision to accept or reject Null
    8. Discuss results