

### ACTIVITY 3

PART A – October 18, 2017

Week 4, Wednesday

**Due:** Tuesday, July 11

**Instructions:** A hard copy of the final version of Activity #3 is due on Monday, October 30 (Week 6). You will be given the activity in parts, but it is your responsibility to keep track of all questions on one master document for each respective activity.

- (1) What is the type of research design utilized in the study described in Dale Keiger's *The Number*?
- (2) Does this type of research design typically have higher internal or external validity? Why?
- (3) Given what the article discusses, why would the external validity be threatened in this study?

For the remaining questions, work with a partner. Develop a hypothesis around any of the questions asked in the survey.

- (4) Who is your partner?
- (5) What is your hypothesis?
- (6) Determine if this hypothesis is **directional** or **non-directional**?
- (7) What **question** would serve as your **dependent variable**?
- (8) What **question** would serve as your **independent variable**?
- (9) What is a possible **causal mechanism** for this hypothesis? *Explain your logic.*
- (10) State the **null hypothesis**.
- (11) For your independent variable:
  - (a) What is the **level of measurement** for this variable?
  - (b) Report the value(s) for the most appropriate measure of **central tendency**.
  - (c) Report the value(s) for **variability**.
  - (d) Draw the most appropriate graph for this variable.
- (12) For your dependent variable:
  - (a) What is the **level of measurement** for this variable?
  - (b) Report the value(s) for the most appropriate measure of **central tendency**.
  - (c) Report the value(s) for **variability**.
  - (d) Draw the most appropriate graph for this variable.