**Dependent t-test**

1. A researcher believes that girls, when compared to boys, will perceive their parents as more authoritarian in parenting style (recall from Intro Psych that the three parenting styles are authoritarian, permissive, and authoritative). The researcher collects data from a popular parenting style questionnaire for 9 girl/boy sibling pairs. High scores on this particular scale (values can range from 0 to 20) indicate greater levels of authoritarian parenting style. Do the data below support the researcher's hypothesis?

Brother Sister

15 20  
 5 4  
 7 5  
 6 7  
 5 8  
 12 18  
 2 2  
 5 6  
 8 9

Why are these data suitable for a dependent t-test?

Conduct a NHST on these data. Use an alpha level of .05 and work through the steps in NHST, being sure to show all of your work, including the hypotheses, critical values, effect size, and confidence interval.