

Technical Paper 22

T-test (paired samples)

- A. Test to compare differences between paired samples.
- B. T-test is applicable to interval and ratio scale data.
- C. Assumptions
 - 1. Random sample
 - 2. The differences in the means are normally distributed.
- D. Violation of assumptions and minimization
 - 1. The t-test is fairly robust to violations of assumptions
 - 2. Larger sample sizes reduce the problems associated with violations

$$t = \frac{\bar{d}}{s_{\bar{d}}}$$

$$s_{\bar{d}} = \frac{s}{\sqrt{n}}$$