Assumptions Consistency

**One Population Proportion**

Sample can be considered a simple random sample

Large enough sample size ()

* Confidence Interval: At least 10 of each outcome ()
* Hypothesis Test: At least 10 of each outcome ()

**Two Population Proportions**

Samples can be considered two simple random samples

Samples can be considered independent of one another

Large enough sample sizes ()

* Confidence Interval: At least 10 of each outcome ()
* Hypothesis Test: At least 10 of each outcome () - Where (the common population proportion estimate)

**One Population Mean**

Sample can be considered a simple random sample

Sample comes from a normally distributed population

* This assumption is less critical with a large enough sample size (application of the C.L.T.)

**One Population Mean Difference**

Sample of differences can be considered a simple random sample

Sample of differences comes from a normally distributed population of differences

* This assumption is less critical with a large enough sample size (application of the C.L.T.)

**Two Population Means**

Samples can be considered a simple random samples

Samples can be considered independent of one another

Samples each come from normally distributed populations

* This assumption is less critical with a large enough sample size (application of the C.L.T.)

Populations have equal variances – pooled procedure used

* • If this assumption cannot be made, unpooled procedure used