



***WORKSHEET 17-12a: STATISTICAL ANALYSIS***

**(Based on Selection Rates)**

This Worksheet may be used to find the statistical significance of a difference in selection rates.

At the top of the sheet, enter the SCRR page 17 problem number and, beside "Issue," enter the names of the particular groups whose selection rates you are

comparing, the type of selection decision and for what job(s); i.e., Female vs. Male Hires for Management Trainee. Then complete this page as follows:

(a) Step #1: Find the difference in selection rates by subtracting the lower rate from the higher.

(b) Step #2: For the value of one Standard Deviation (S.D.):

(1) Multiply the total selection rate by 1 minus the total selection rate.

NOTE: "1 minus the total selection rate" is just a shortcut for the total non-selection rate; i.e., if the total selection rate is .25, then  $1 - .25$  or .75 is the total non-selection rate.

(2) Then find the value of 1 divided by the number of one group in the pool (of applicants, of candidates) and add it to the value of 1 divided by the number of the other group in the pool.

Multiply the result of (a) by the result of (b) and find the square root. This is one Standard Deviation.

(c) Step #3: For the number of Standard Deviations of the difference in selection rates shown in Step #1, divide the result of Step #1 by the result of Step #2.

Generally speaking, a result of 2 or more Standard Deviations is considered statistically significant.