1. Carry out a principal component analysis on the engineer data as follows.

Ignore groups and use a correlation matrix based on all 40 observations.

Table. Comparison of Six Tests on Engineer Apprentices and Pilots



2. Use the engineer data. Combine the two groups into a single sample.

1. Using a scree plot, the number of eigenvalues greater than 1, and the percentages, is there a clear choice of m?
2. Extract three factors by the principal component method and carry out a varimax rotation.
3. Extract three factors by the principal factor method and carry out a varimax rotation.
4. (d) Compare the results of parts (b) and (c)