Source:

1 | multivariate analysis

1.1 | terms

1.1.1 | null hypothesis

1.1.2 | dependence - if one set of variables can predict another

1.1.3 | interdependent analysis - intercorrelations for underlying understanding

1.1.4 | metric vs non metric - a metric variable is numeric

1.2 | then a bunch of methods for dependence analysis

1.2.1 | pick by matching which ones match your input/output variable types and numbers

1.3 | interdependent multivariate analysis

1.3.1 | factor analysis

1. understand which variables highly correlate to others
    (a) common factor analysis - extracts factors that correlate
    (b) principal component analysis - extract factors that have the largest impact
2. clustereananlysis
3. multidimensional scaling
    (a) obtain tabluar data from a weighted graph structure?
4. corresponding analysis
    (a) like factor analysis or something?

1.4 | important matrices

1.4.1 | data matrix

1.4.2 | USSCP

1. data matrix multiplied by the transpose

1.4.3 | some other thing CSSCP

1.4.4 | covariance matrix (C)

1.4.5 | correlation matrix (R)

1. variables normalized for mean 0 and stddev 1

1.5 | **applications**

1.5.1 | **lots of fields**