UNIT 12 – FACTOR ANALYSIS

Varimax rotation should be used when:

Answer choices

A. You believe that the underlying factors will be correlated.
B. You believe that the underlying factors are non-orthogonal.
C. You believe that the underlying factors are independent.
D. Kaiser's criterion is met.

Answer: You believe that the underlying factors are independent

A Cronbach's alpha value of .85 for a questionnaire means that:

Answer choices

A. The questionnaire is valid.
B. The questionnaire has good reliability.
C. The questionnaire has too few items.
D. The questionnaire would produce different scores if used on the same people at two different points in time.

Answer: The questionnaire has good reliability

Kaiser criterion for retaining factors is:

Answer choices

A. Retain any factor with an eigenvalue greater than 1.
B. Retain any factor with an eigenvalue greater than 0.3.
C. Retain factors before the point of inflexion on a scree plot.
D. Retain factors with communalities greater than 0.7.

Answer: Retain any factor with an eigenvalue greater than 1

Which of these is a form of oblique rotation?

Answer choices

A. Equamax
B. Quartimax
C. Varimax
D. Promax

Answer: Promax

What is a latent variable?

Answer choices

A. It is a variable that cannot be measured directly.
B. It is another name for a factor.
C. Latent variables represent clusters of variables that correlate highly with each other.
D. All of these are correct.

Answer: All of these are correct

A multivariate statistical technique for studying interrelationships among variables, usually for discovering underlying constructs or data reduction is known as:

A. Multiple regression
B. Factor analysis
C. Discriminant analysis
D. Canonical correlation analysis

Answer: Factor analysis

To determine which variables relate to which factors, a researcher would use:

A. Factor loadings
B. Communalities
C. Eigen values
D. Beta coefficients

Answer: Factor loadings

If a researcher wants to determine the amount of variance in the original variables that is associated with a factor, s/he would use:

A. Factor loadings
B. Communalities
C. Eigen values
D. Beta coefficients

Answer: Eigen values

If a researcher wanted to determine which variables were associated with which factors s/he would look at:

A. Factor scores
B. Factor loadings

C. Factors

D. Factor associations

Answer: Factors