

The LISREL Structural Equation Model

$$\underset{(mx1)}{\eta} = \underset{(mxm)}{\beta} \underset{(mx1)}{\eta} + \underset{(mxn)}{\Gamma} \underset{(nx1)}{\xi} + \underset{(mx1)}{\zeta}$$

$$\underset{(px1)}{y} = \underset{(pxm)}{\Lambda_y} \underset{(mx1)}{\eta} + \underset{(px1)}{\varepsilon}$$

$$\underset{(qx1)}{X} = \underset{(qxn)}{\Lambda_x} \underset{(nx1)}{\xi} + \underset{(qx1)}{\delta}$$

$\xi \sim N(0, \Phi)$, $\zeta \sim N(0, \Psi)$, $\varepsilon \sim N(0, \Theta_\varepsilon)$, $\delta \sim N(0, \Theta_\delta)$
 β , Γ , Λ_y and Λ_x constants with diagonal of β zero

η : Vector of latent endogenous variables

ξ : Vector of latent exogenous variables

y : Vector of manifest indicators for η

x : Vector of manifest indicators for ξ

ζ , ε and δ : Error terms