Panel Data Model

$$y_{it} = \alpha_i + \beta_1 x1it + ...\beta_k x_{kit} + (\mu_i + \epsilon_{it}) \tag{1}$$

Fixed effect: $alpha_{it}$
Random effect: mu_{it}
24 pt
Hierarchical Linear Model

$y_{it} = \alpha_i + \beta_1 x1it + ...\beta_k x_{kit} + \epsilon_{it}$

Where:

$$\alpha_i = \gamma_0 + \gamma_1 + \mu_i \tag{2}$$