

linear predictor

intercept

$$\eta_i = \alpha + \sum_{k=1}^{\eta_\beta} \beta_k z_{ki} + \sum_{j=1}^{\eta_f} f^j(u_{ju})$$

linear effects of covariates: $\{\beta_k\}$

set of random effects on n_f covariates

The diagram illustrates a mixed-effects model equation. At the top, the text 'linear predictor' has a horizontal line underneath it, with a vertical arrow pointing down to the left side of the equation. Below this, the word 'intercept' has a horizontal line underneath it, with a vertical arrow pointing down to the α term. The equation itself is $\eta_i = \alpha + \sum_{k=1}^{\eta_\beta} \beta_k z_{ki} + \sum_{j=1}^{\eta_f} f^j(u_{ju})$. Below the equation, there are two horizontal lines. The first line is labeled 'linear effects of covariates: $\{\beta_k\}$ ' and has a vertical arrow pointing up to the summation term $\sum_{k=1}^{\eta_\beta} \beta_k z_{ki}$. The second line is labeled 'set of random effects on n_f covariates' and has a vertical arrow pointing up to the summation term $\sum_{j=1}^{\eta_f} f^j(u_{ju})$.