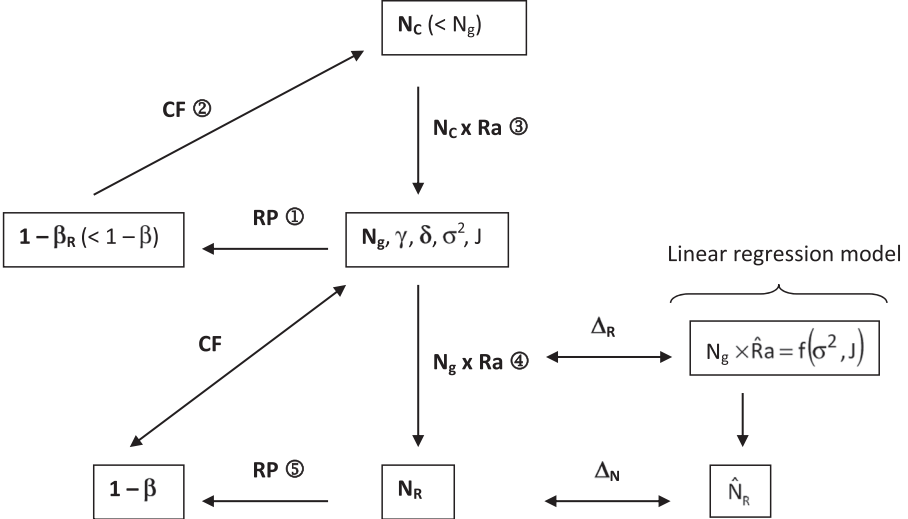




RP: Raschpower method; CF: classical formula for normally distributed variables

N_g : sample size per group associated with a power of $1 - \beta_R$ for Rasch analysis and $1 - \beta$ for CTT-based analysis; γ : difference between the mean values of the latent trait in the two groups (group effect); δ : vector of the items parameters; σ^2 : variance of the latent trait; N_c : sample size per group associated with a power of $1 - \beta_R$ for CTT-based analysis; Ra : ratio computed with the Raschpower method; $\hat{Ra}$: ratio predicted by the linear regression model; $\Delta_R = \hat{Ra} - Ra$; N_R : sample size per group computed with the Raschpower method associated with a power of $1 - \beta$ for Rasch analysis; $\hat{N}_R$: sample size per group predicted by the linear regression model; $\Delta_N = \hat{N}_R - N_R$.

J : number of items; N_R : sample size per group providing a $1 - \beta$ power for Rasch analysis