

$$E(y_i)$$

$$y_i \sim \text{Beta}(\mu_i, \phi_i)$$

$$\text{logit}(\mu_i) = \alpha_\mu + \beta_\mu x_i$$

$$\log(\phi_i) = \alpha_\phi + \beta_\phi x_i$$

posterior_epred() gives the draws from the expected value of the posterior predictive distribution, or the average of each draw from `posterior_predict()`.

In beta regression, this is **μ on the proportion or probability scale** (or inverse logit).

posterior_epred(dpar = "phi") gives the posterior draws of **ϕ on the unlogged scale**.

posterior_linpred() gives the posterior draws of **μ on the logit or log odds scale**.

posterior_linpred(dpar = "phi") gives the posterior draws of **ϕ on the log scale**.

posterior_predict() gives the draws from a random beta distribution with draws from the posterior distribution of π .

These are proportions or probabilities between 0–1.