

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

In logistic regression, this is  **$\pi$  on the probability scale** (or inverse logit).

$$\text{logit}(\pi_i) = \alpha + \beta x_i$$

**posterior\_linpred()** gives the posterior draws of  **$\pi$  on the logit or log odds scale**.

$$E(y_i)$$

$$y_i \sim \text{Binomial}(1, \pi_i)$$

**posterior\_predict()** gives the draws from a random binomial distribution with draws from the posterior distribution of  $\pi$ .

**These are 0s and 1s.**