## Equations

Andrew Shao

2024-12-02

Let Y be an ordinal variable with categories j=1,...,J where  $P(Y \leq J)=1$ . For k different predictors  $X_1,...,X_k$ :

$$\log \frac{P(Y \le j)}{P(Y > j)} = \beta_0^{(j)} + \beta_1 X_1 + \dots + \beta_i X_i$$