$$f_a \sim \mathcal{U}\left(\varepsilon, 2\bar{f} - \varepsilon\right), \quad a = 1, 2, \ldots, 7$$

For $a = 1, 2, \ldots, 7$
    For each $i \in \mathcal{I}$
$$X_{ia}^{\text{int}} \sim B^{-1}\left(Y_{ia}^{\text{unif}}; n = 2, p = f_a\right)$$