

GNB Models

estimates $P^{\mathcal{M}}; do[Z=\{h'\}](Y_{h'} | X)$

CNB Models

estimates $P^{\mathcal{M}}; do[Z=\{h,h'\}](Y_{h'} | Y_h)$ for $h \in \mathcal{H}$

Gumbel-Max SI-SCM $\mathcal{M}(\Psi)$

estimates

$P^{\mathcal{M}(\Psi)} | X=x, Z=\{h\}, \mathbf{Y}=y_h; do[Z=\{h\}](Y_{h'} | X)$

GNB Baseline

estimates

$P^{\mathcal{M}}; do[Z=\{h'\}](Y_{h'} | X)$

GNB + CNB Baseline

estimates

$P^{\mathcal{M}}; do[Z=\{h'\}](Y_{h'} | X) \times P^{\mathcal{M}}; do[Z=\{h,h'\}](Y_{h'} | Y_h)$