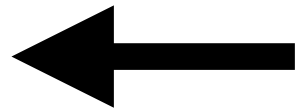
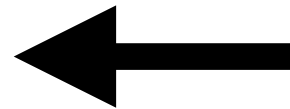


Goal-sensitive answer



Goal inference



Expected  
questioner behavior

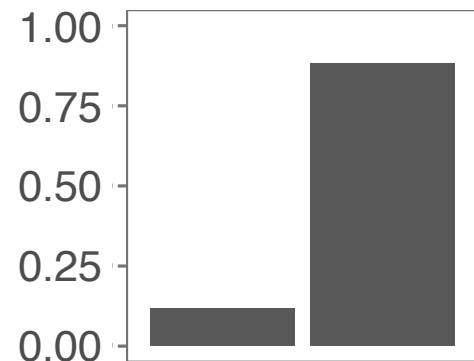
$$U_{A_2}(a; q, w) = \sum_{g \in \mathcal{G}} P(g|q) \widehat{P}_I^g(w|a)$$

$$P(g|q) \propto P_{Q_1}(q|g)P(g)$$

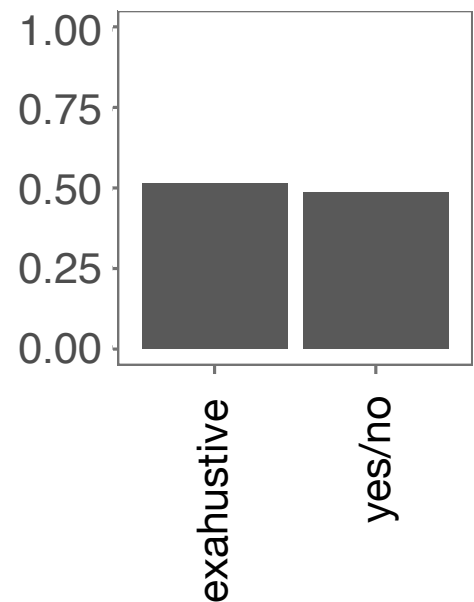
$$P_{Q_1}(q|g) \propto \exp \{ \alpha \mathbb{E}_{P(a|q)} [IG^g(a, q)] \}$$

Q: American Express?

P(answer | observed question)

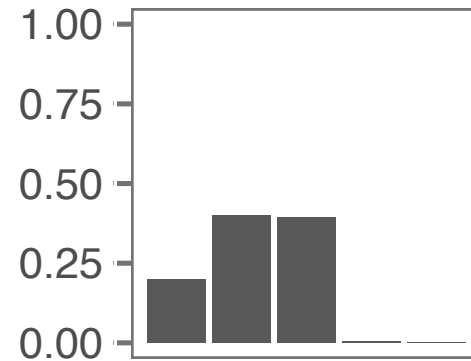


Q: credit cards?

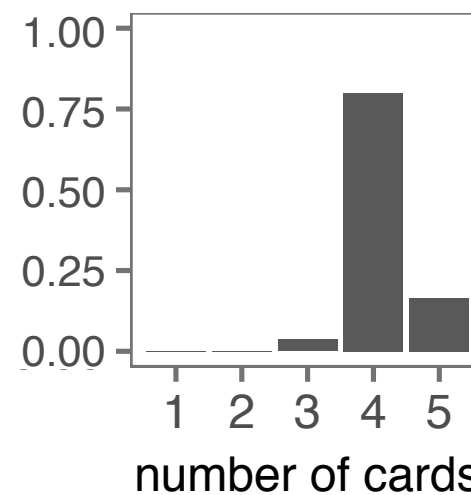


Q: American Express?

P(goal | observed question)

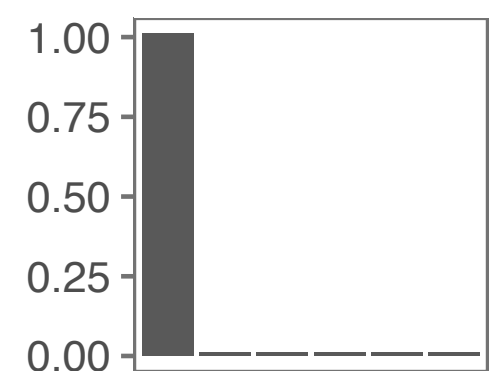


Q: credit cards?



Goal: only AmEx

P(question | true goal)



Goal: all 5 cards

