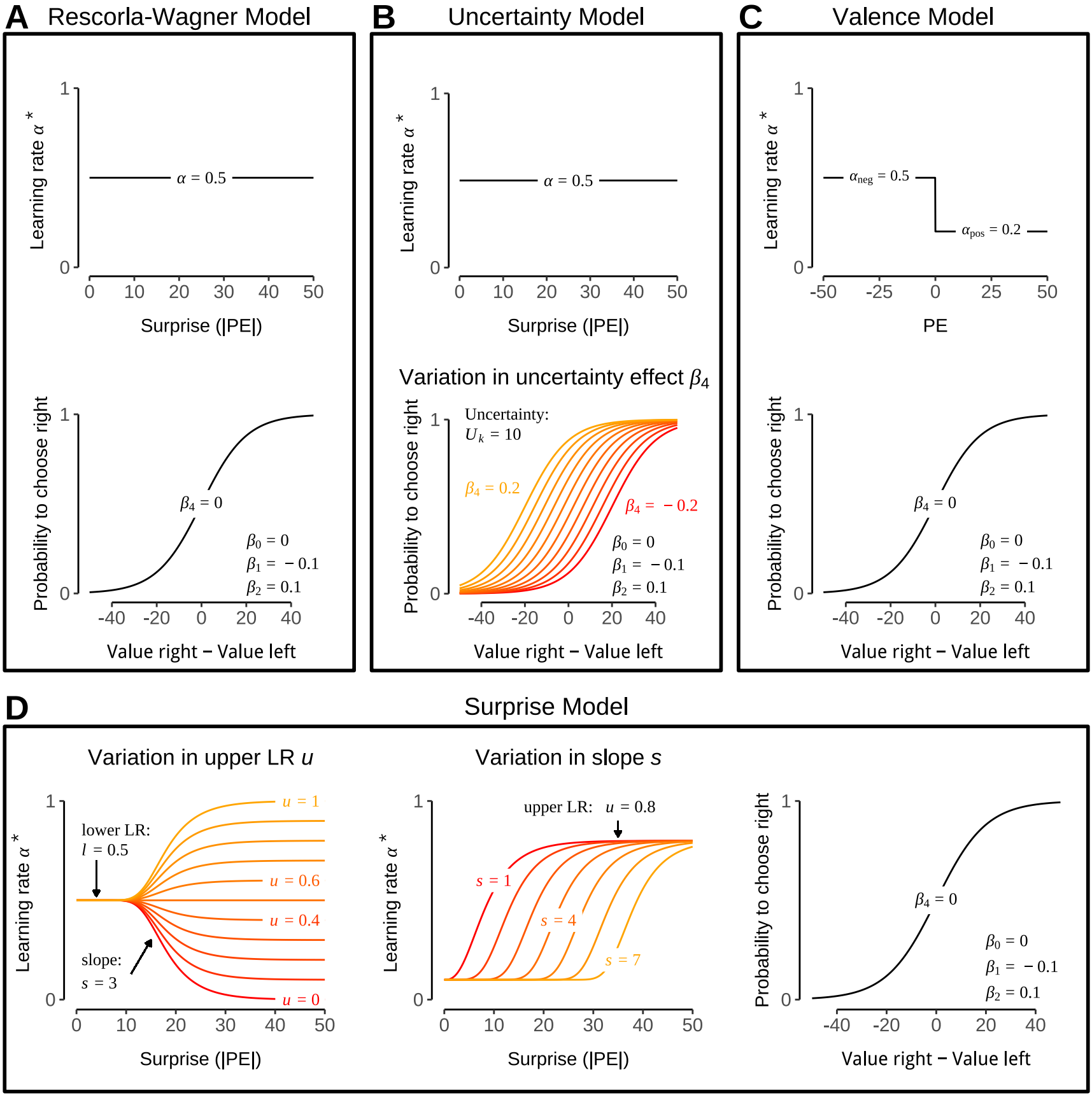
A
Rescorla-Wagner Model
Learning rate α*
α = 0.5
Surprise (|PE|)
Probability to choose right
β4 = 0
β0 = 0
β1 = − 0.1
β2 = 0.1
Value right − Value left
B
Uncertainty Model
Learning rate α*
α = 0.5
Surprise (|PE|)
Variation in uncertainty effect β4
Uncertainty:
Uk = 10
β4 = 0.2
β4 = − 0.2
β0 = 0
β1 = − 0.1
β2 = 0.1
Value right − Value left
C
Valence Model
Learning rate α*
αneg = 0.5
αpos = 0.2
PE
Probability to choose right
β4 = 0
β0 = 0
β1 = − 0.1
β2 = 0.1
Value right − Value left
D
Surprise Model
Variation in upper LR u
Learning rate α*
lower LR:
l = 0.5
u = 1
u = 0.6
u = 0.4
u = 0
slope:
s = 3
Surprise (|PE|)
Variation in slope s
upper LR: u = 0.8
s = 1
s = 4
s = 7
Surprise (|PE|)
Probability to choose right
β4 = 0
β0 = 0
β1 = − 0.1
β2 = 0.1
Value right − Value left