

Acquisition

$$\Delta V = c (V_{\max} - V)$$

$V_{\max}=1$ $c=0.5$

starting $V = 0$

$V_{\max}=1$ $c=0.3$

trial	V (before)	ΔV	V (after)
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

V (before)	ΔV	V (after)

$v_{\max}=2$ $c=0.5$

starting $V = 0$

trial	V (before)	ΔV	V (after)
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

Rescorla-Wagner Model

Extinction

$$\Delta V = c (V_{\max} - V)$$

starting $V = 1.0$

Vmax=0
c=0.5

Vmax=0
c=0.3

trial	V (before)	ΔV	V (after)
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

[illegible]

Rescorla-Wagner Model

$$\Delta V = c (V_{\max} - V_{\text{tot}})$$

Compound conditioning

starting $V(a) = 0$, $V(b) = 0$

$V_{\max} = 1.0$
 $c(a) = 0.5$

$c(b) = 0.20$

trial	V (ab)	$\Delta V(a)$	V(a) (after trial)	$\Delta V(b)$	V(b) (after trial)
1					
2					
3					
4					
5					
6					
7					
8					
9					

(Blocking)

starting $V(a) = 0.8$, $V(b) = 0$

$V_{\max} = 1.0$
 $c(a) = 0.5$

$c(b) = 0.20$

trial	V (ab)	$\Delta V(b)$	V(a) (after trial)	$\Delta V(b)$	V(b) (after trial)
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

Rescorla-Wagner Model

Conditioned Inhibition

$$\Delta V = c(V_{\max} - V_{\text{tot}})$$

Vmax=1	starting V = 0
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c(a) = 0.5

c(b) = 0.60

[illegible]

$V_{max}=1$ starting $V = 0$

$c(a) = 0.5$

$c(b) = 0.60$

$c(c) = 0.20$

trial	V (tot) (before trial)	$\Delta V(a)$	V(a) (after trial)	$\Delta V(b)$	V(b) (after trial)	$\Delta V(c)$	V(c) (after trial)
A-US							
B-							
A-US							
B-							
A-US							
B-							
A-US							
B-							
A-US							
B-							

Rules for working any R-W problem:

For each trial ask the following 2 questions:

1. What CSs are Present?

Add their Vs for V(tot)

Do formula for each

If not there, then not part of V(tot) and no ΔV

2. Is US Presented?

If yes, then use designated V(max)

If no, then V(max)=0