SIMULATION RESULTS

Simulations of ten conditioning models on twenty discrimination experiments and comparison with empirical results from *Macroglossum stellatarum*.

List of Tables

TABLE 1. Result for the Categorization model

Exp	Phase	T	Stimuli	S1	S2	Model (%)	Moth (%)	p	sig.
1	1	1	B/Y	93921	6079	94/6	88/12	1.000000	
2	1	1	YH/YL	65088	34912	65/35	63/37	1.000000	
3	1	1	BH/BL	54490	45510	54/46	52/48	1.000000	
4	1	1	BL/YH	89111	10889	89/11	96/4	0.609205	
5	1	1	BH/YL	94798	5202	95/5	90/10	1.000000	
6	1	50	B+/Y	4992425	7575	100/0			
	2	1	B/Y	100000	0	100/0	95/5	1.000000	
7	1	50	B/Y+	2422470	2577530	48/52			
	2	1	B/Y	9238	90762	9/91	20/80	0.661420	
8	1	50	BH+/BL	2783408	2216592	56/44			
	2	1	BH/BL	55825	44175	56/44	50/50	1.000000	
9	1	50	BH/BL+	2419959	2580041	48/52			
	2	1	BH/BL	47945	52055	48/52	58/42	0.772482	
10	1	50	YH+/YL	3712089	1287911	74/26			
	2	1	YH/YL	74710	25290	75/25	81/19	0.602768	
11	1	50	YH/YL+	1570468	3429532	31/69			
	2	1	YH/YL	28733	71267	29/71	29/71	1.000000	
12	1	50	YH+/BL	3801183	1198817	76/24			
	2	1	YL/BH	65123	34877	65/35	62/38	0.835156	
13	1	50	YH+/BL	3800072	1199928	76/24			
	2	1	Y/B	99436	564	99/1	100/0	1.000000	
14	1	50	BL+/YH	4986890	13110	100/0			
	2	1	YL/BH	146	99854	0/100	0/100	1.000000	
15	1	50	BL+/YH	4986737	13263	100/0			
	2	1	Y/B	0	100000	0/100	0/100	1.000000	
16	1	50	YL+/BH	2813723	2186277	56/44			
	2	1	YH/BL	67934	32066	68/32	72/28	1.000000	
17	1	50	B/Y+	2431581	2568419	49/51			
	2	50	BH/BL+	1225520	3774480	25/75			
	3	1	BH/BL	23454	76546	23/77	21/79	1.000000	
18	1	50	B/Y+	2428408	2571592	49/51			
	2	50	BH+/BL	3783020	1216980	76/24			
	3	1	BH/BL	76926	23074	77/23	79/21	1.000000	
19	1	50	Y+	4990516	9484	100/0			
	2	50	YH/YL+	2499958	2500042	50/50			
	3	1	YH/YL	49894	50106	50/50	58/42	0.781251	
20	1	50	Y+	4990740	9260	100/0			
	2	50	YH+/YL	2500332	2499668	50/50			
	3	1	YH/YL	50118	49882	50/50	50/50	1.000000	

n = 100000, e = 2, average error = 4.05%, max error = 10.76%
model p = 0.122416

TABLE 2. Result for the Rescorla-Wagner model

Exp	Phase	T	Stimuli	S1	S2	Model (%)	Moth (%)	p	sig.
1	1	1	B/Y	91848	8152	92/8	88/12	1.000000	
2	1	1	YH/YL	63785	36215	64/36	63/37	1.000000	
3	1	1	BH/BL	50129	49871	50/50	52/48	1.000000	
4	1	1	BL/YH	82740	17260	83/17	96/4	0.348676	
5	1	1	BH/YL	89313	10687	89/11	90/10	1.000000	
6	1	50	B+/Y	4614763	385237	92/8			
	2	1	B/Y	92667	7333	93/7	95/5	1.000000	
7	1	50	B/Y+	3229448	1770552	65/35			
	2	1	B/Y	32901	67099	33/67	20/80	0.480115	
8	1	50	BH+/BL	3220232	1779768	64/36			
	2	1	BH/BL	74699	25301	75/25	50/50	0.440071	
9	1	50	BH/BL+	1922354	3077646	38/62			
	2	1	BH/BL	27115	72885	27/73	58/42	0.079770	
10	1	50	YH+/YL	3609116	1390884	72/28			
	2	1	YH/YL	77836	22164	78/22	81/19	1.000000	
11	1	50	YH/YL+	1774971	3225029	35/65			
	2	1	YH/YL	24715	75285	25/75	29/71	1.000000	
12	1	50	YH+/BL	2992845	2007155	60/40			
	2	1	YL/BH	6009	93991	6/94	62/38	0.000000	***
13	1	50	YH+/BL	2993407	2006593	60/40			
	2	1	Y/B	43732	56268	44/56	100/0	0.000344	***
14	1	50	BL+/YH	4318742	681258	86/14			
	2	1	YL/BH	5722	94278	6/94	0/100	1.000000	
15	1	50	BL+/YH	4317823	682177	86/14			
	2	1	Y/B	4301	95699	4/96	0/100	1.000000	
16	1	50	YL+/BH	2795254	2204746	56/44			
	2	1	YH/BL	12480	87520	12/88	72/28	0.000491	***
17	1	50	B/Y+	3229819	1770181	65/35			
	2	50	BH/BL+	1796929	3203071	36/64			
	3	1	BH/BL	25033	74967	25/75	21/79	0.775684	
18	1	50	B/Y+	3230173	1769827	65/35			
	2	50	BH+/BL	3476190	1523810	70/30			
	3	1	BH/BL	77092	22908	77/23	79/21	1.000000	
19	1	50	Y+	4999416	584	100/0			
	2	50	YH/YL+	1908438	3091562	38/62			
	3	1	YH/YL	26799	73201	27/73	58/42	0.048318	
20	1	50	Y+	4999379	621	100/0			
	2	50	YH+/YL	3252041	1747959	65/35			
	3	1	YH/YL	75209	24791	75/25	50/50	0.236461	

n = 100000, e = 1, average error = 17.14%, max error = 59.52%
model p = 0.000000 ***

TABLE 3. Result for the Rescorla-Wagner model (no extinction)

Exp	Phase	T	Stimuli	S1	S2	Model (%)	Moth (%)	p	sig.
1	1	1	B/Y	91612	8388	92/8	88/12	1.000000	
2	1	1	YH/YL	63925	36075	64/36	63/37	1.000000	
3	1	1	BH/BL	50075	49925	50/50	52/48	1.000000	
4	1	1	BL/YH	82604	17396	83/17	96/4	0.348676	
5	1	1	BH/YL	89193	10807	89/11	90/10	1.000000	
6	1	50	B+/Y	4586556	413444	92/8			
	2	1	B/Y	91809	8191	92/8	95/5	1.000000	
7	1	50	B/Y+	3419174	1580826	68/32			
	2	1	B/Y	53067	46933	53/47	20/80	0.048372	
8	1	50	BH+/BL	2532346	2467654	51/49			
	2	1	BH/BL	50400	49600	50/50	50/50	1.000000	
9	1	50	BH/BL+	2500388	2499612	50/50			
	2	1	BH/BL	50164	49836	50/50	58/42	0.772482	
10	1	50	YH+/YL	3295371	1704629	66/34			
	2	1	YH/YL	66014	33986	66/34	81/19	0.214234	
11	1	50	YH/YL+	2065980	2934020	41/59			
	2	1	YH/YL	39445	60555	39/61	29/71	0.573113	
12	1	50	YH+/BL	2193156	2806844	44/56			
	2	1	YL/BH	33773	66227	34/66	62/38	0.008927	**
13	1	50	YH+/BL	2196838	2803162	44/56			
	2	1	Y/B	32753	67247	33/67	100/0	0.000030	***
14	1	50	BL+/YH	4133021	866979	83/17			
	2	1	YL/BH	9396	90604	9/91	0/100	0.487805	
15	1	50	BL+/YH	4133005	866995	83/17			
	2	1	Y/B	8303	91697	8/92	0/100	1.000000	
16	1	50	YL+/BH	1994692	3005308	40/60			
	2	1	YH/BL	39501	60499	40/60	72/28	0.092215	
17	1	50	B/Y+	3421474	1578526	68/32			
	2	50	BH/BL+	2500828	2499172	50/50			
	3	1	BH/BL	49758	50242	50/50	21/79	0.021421	*
18	1	50	B/Y+	3421409	1578591	68/32			
	2	50	BH+/BL	2531970	2468030	51/49			
	3	1	BH/BL	50844	49156	51/49	79/21	0.170447	
19	1	50	Y+	4999485	515	100/0			
	2	50	YH/YL+	2501502	2498498	50/50			
	3	1	YH/YL	49994	50006	50/50	58/42	0.781251	
20	1	50	Y+	4999553	447	100/0			
	2	50	YH+/YL	2532270	2467730	51/49			
	3	1	YH/YL	50805	49195	51/49	50/50	1.000000	

n = 100000, e = 1, average error = 15.10%, max error = 67.25%
model p = 0.000000 ***

TABLE 4. Result for the Independence model 1 (not used)

Exp	Phase	T	Stimuli	S1	S2	Model (%)	Moth (%)	p	sig.
1	1	1	B/Y	91613	8387	92/8	88/12	1.000000	
2	1	1	YH/YL	63609	36391	64/36	63/37	1.000000	
3	1	1	BH/BL	50006	49994	50/50	52/48	1.000000	
4	1	1	BL/YH	82435	17565	82/18	96/4	0.348676	
5	1	1	BH/YL	89311	10689	89/11	90/10	1.000000	
6	1	50	B+/Y	4901170	98830	98/2			
	2	1	B/Y	99889	111	100/0	95/5	1.000000	
7	1	50	B/Y+	200405	4799595	4/96			
	2	1	B/Y	0	100000	0/100	20/80	0.106029	
8	1	50	BH+/BL	3336414	1663586	67/33			
	2	1	BH/BL	61560	38440	62/38	50/50	0.703567	
9	1	50	BH/BL+	1671742	3328258	33/67			
	2	1	BH/BL	38966	61034	39/61	58/42	0.247648	
10	1	50	YH+/YL	3385947	1614053	68/32			
	2	1	YH/YL	66188	33812	66/34	81/19	0.214234	
11	1	50	YH/YL+	1624191	3375809	32/68			
	2	1	YH/YL	30475	69525	30/70	29/71	1.000000	
12	1	50	YH+/BL	4821604	178396	96/4			
	2	1	YL/BH	49860	50140	50/50	62/38	0.313826	
13	1	50	YH+/BL	4821376	178624	96/4			
	2	1	Y/B	92761	7239	93/7	100/0	1.000000	
14	1	50	BL+/YH	4900004	99996	98/2			
	2	1	YL/BH	49695	50305	50/50	0/100	0.000479	***
15	1	50	BL+/YH	4900004	99996	98/2			
	2	1	Y/B	0	100000	0/100	0/100	1.000000	
16	1	50	YL+/BH	4800141	199859	96/4			
	2	1	YH/BL	49971	50029	50/50	72/28	0.305267	
17	1	50	B/Y+	200423	4799577	4/96			
	2	50	BH/BL+	1618829	3381171	32/68			
	3	1	BH/BL	33360	66640	33/67	21/79	0.410132	
18	1	50	B/Y+	200362	4799638	4/96			
	2	50	BH+/BL	3395629	1604371	68/32			
	3	1	BH/BL	63140	36860	63/37	79/21	0.475634	
19	1	50	Y+	4999472	528	100/0			
	2	50	YH/YL+	2498057	2501943	50/50			
	3	1	YH/YL	49850	50150	50/50	58/42	0.781251	
20	1	50	Y+	4999477	523	100/0			
	2	50	YH+/YL	2501773	2498227	50/50			
	3	1	YH/YL	50179	49821	50/50	50/50	1.000000	

n = 100000, e = 1, average error = 10.99%, max error = 49.69%
model p = 0.000000 ***

TABLE 5. Result for the Independence model 2 (no extinction)

Exp	Phase	T	Stimuli	S1	S2	Model (%)	Moth (%)	p	sig.
1	1	1	B/Y	91787	8213	92/8	88/12	1.000000	
2	1	1	YH/YL	63459	36541	63/37	63/37	1.000000	
3	1	1	BH/BL	49906	50094	50/50	52/48	1.000000	
4	1	1	BL/YH	82560	17440	83/17	96/4	0.348676	
5	1	1	BH/YL	89359	10641	89/11	90/10	1.000000	
6	1	50	B+/Y	4588039	411961	92/8			
	2	1	B/Y	91651	8349	92/8	95/5	1.000000	
7	1	50	B/Y+	3213813	1786187	64/36			
	2	1	B/Y	51085	48915	51/49	20/80	0.095846	
8	1	50	BH+/BL	2501291	2498709	50/50			
	2	1	BH/BL	50124	49876	50/50	50/50	1.000000	
9	1	50	BH/BL+	2499099	2500901	50/50			
	2	1	BH/BL	49947	50053	50/50	58/42	0.772482	
10	1	50	YH+/YL	2616077	2383923	52/48			
	2	1	YH/YL	50061	49939	50/50	81/19	0.005424	**
11	1	50	YH/YL+	2481146	2518854	50/50			
	2	1	YH/YL	50162	49838	50/50	29/71	0.170713	
12	1	50	YH+/BL	2292984	2707016	46/54			
	2	1	YL/BH	50006	49994	50/50	62/38	0.313826	
13	1	50	YH+/BL	2293603	2706397	46/54			
	2	1	Y/B	49904	50096	50/50	100/0	0.001033	**
14	1	50	BL+/YH	4132143	867857	83/17			
	2	1	YL/BH	49826	50174	50/50	0/100	0.000479	***
15	1	50	BL+/YH	4132189	867811	83/17			
	2	1	Y/B	8269	91731	8/92	0/100	1.000000	
16	1	50	YL+/BH	2110693	2889307	42/58			
	2	1	YH/BL	49509	50491	50/50	72/28	0.305267	
17	1	50	B/Y+	3212985	1787015	64/36			
	2	50	BH/BL+	2500331	2499669	50/50			
	3	1	BH/BL	49989	50011	50/50	21/79	0.021421	*
18	1	50	B/Y+	3214318	1785682	64/36			
	2	50	BH+/BL	2498404	2501596	50/50			
	3	1	BH/BL	49721	50279	50/50	79/21	0.091098	
19	1	50	Y+	4999483	517	100/0			
	2	50	YH/YL+	2501515	2498485	50/50			
	3	1	YH/YL	49870	50130	50/50	58/42	0.781251	
20	1	50	Y+	4999478	522	100/0			
	2	50	YH+/YL	2500195	2499805	50/50			
	3	1	YH/YL	49994	50006	50/50	50/50	1.000000	

n = 100000, e = 1, average error = 16.21%, max error = 50.10%
model p = 0.000000 ***

TABLE 6. Result for the Independence model 2

Exp	Phase	T	Stimuli	S1	S2	Model (%)	Moth (%)	p	sig.
1	1	1	B/Y	91794	8206	92/8	88/12	1.000000	
2	1	1	YH/YL	63644	36356	64/36	63/37	1.000000	
3	1	1	BH/BL	50197	49803	50/50	52/48	1.000000	
4	1	1	BL/YH	82606	17394	83/17	96/4	0.348676	
5	1	1	BH/YL	89297	10703	89/11	90/10	1.000000	
6	1	50	B+/Y	4720890	279110	94/6			
	2	1	B/Y	96146	3854	96/4	95/5	1.000000	
7	1	50	B/Y+	943309	4056691	19/81			
	2	1	B/Y	5306	94694	5/95	20/80	0.341649	
8	1	50	BH+/BL	3068466	1931534	61/39			
	2	1	BH/BL	62029	37971	62/38	50/50	0.703567	
9	1	50	BH/BL+	1954071	3045929	39/61			
	2	1	BH/BL	37848	62152	38/62	58/42	0.247648	
10	1	50	YH+/YL	3136489	1863511	63/37			
	2	1	YH/YL	62664	37336	63/37	81/19	0.089798	
11	1	50	YH/YL+	1945339	3054661	39/61			
	2	1	YH/YL	37598	62402	38/62	29/71	0.573113	
12	1	50	YH+/BL	4104389	895611	82/18			
	2	1	YL/BH	50058	49942	50/50	62/38	0.313826	
13	1	50	YH+/BL	4103732	896268	82/18			
	2	1	Y/B	94070	5930	94/6	100/0	1.000000	
14	1	50	BL+/YH	4543189	456811	91/9			
	2	1	YL/BH	49838	50162	50/50	0/100	0.000479	***
15	1	50	BL+/YH	4542797	457203	91/9			
	2	1	Y/B	2184	97816	2/98	0/100	1.000000	
16	1	50	YL+/BH	4061273	938727	81/19			
	2	1	YH/BL	50282	49718	50/50	72/28	0.305267	
17	1	50	B/Y+	943560	4056440	19/81			
	2	50	BH/BL+	1954071	3045929	39/61			
	3	1	BH/BL	37900	62100	38/62	21/79	0.182625	
18	1	50	B/Y+	942760	4057240	19/81			
	2	50	BH+/BL	3142321	1857679	63/37			
	3	1	BH/BL	62479	37521	62/38	79/21	0.475634	
19	1	50	Y+	4999456	544	100/0			
	2	50	YH/YL+	1955396	3044604	39/61			
	3	1	YH/YL	37871	62129	38/62	58/42	0.266831	
20	1	50	Y+	4999497	503	100/0			
	2	50	YH+/YL	3068245	1931755	61/39			
	3	1	YH/YL	62419	37581	62/38	50/50	0.703567	

n = 100000, e = 1, average error = 12.64%, max error = 49.84%
model p = 0.000000 ***

TABLE 7. Result for the Pearce-Hall model (not used)

Exp	Phase	T	Stimuli	S1	S2	Model (%)	Moth (%)	p	sig.
1	1	1	B/Y	83239	16761	83/17	88/12	1.000000	
2	1	1	YH/YL	62469	37531	62/38	63/37	1.000000	
3	1	1	BH/BL	54332	45668	54/46	52/48	1.000000	
4	1	1	BL/YH	68586	31414	69/31	96/4	0.023215	*
5	1	1	BH/YL	81169	18831	81/19	90/10	1.000000	
6	1	50	B+/Y	4557482	442518	91/9			
	2	1	B/Y	92114	7886	92/8	95/5	1.000000	
7	1	50	B/Y+	1437170	3562830	29/71			
	2	1	B/Y	16880	83120	17/83	20/80	1.000000	
8	1	50	BH+/BL	3597126	1402874	72/28			
	2	1	BH/BL	84617	15383	85/15	50/50	0.103188	
9	1	50	BH/BL+	1483291	3516709	30/70			
	2	1	BH/BL	16123	83877	16/84	58/42	0.006484	**
10	1	50	YH+/YL	3666373	1333627	73/27			
	2	1	YH/YL	85074	14926	85/15	81/19	0.770671	
11	1	50	YH/YL+	1527540	3472460	31/69			
	2	1	YH/YL	16896	83104	17/83	29/71	0.527941	
12	1	50	YH+/BL	4071166	928834	81/19			
	2	1	YL/BH	44164	55836	44/56	62/38	0.108508	
13	1	50	YH+/BL	4033659	966341	81/19			
	2	1	Y/B	78351	21649	78/22	100/0	0.103896	
14	1	50	BL+/YH	4378675	621325	88/12			
	2	1	YL/BH	43782	56218	44/56	0/100	0.001318	**
15	1	50	BL+/YH	4403456	596544	88/12			
	2	1	Y/B	786	99214	1/99	0/100	1.000000	
16	1	50	YL+/BH	3989998	1010002	80/20			
	2	1	YH/BL	47131	52869	47/53	72/28	0.175583	
17	1	50	B/Y+	1390228	3609772	28/72			
	2	50	BH/BL+	1621553	3378447	32/68			
	3	1	BH/BL	18233	81767	18/82	21/79	1.000000	
18	1	50	B/Y+	1388384	3611616	28/72			
	2	50	BH+/BL	3510843	1489157	70/30			
	3	1	BH/BL	82481	17519	82/18	79/21	1.000000	
19	1	50	Y+	4999683	317	100/0			
	2	50	YH/YL+	1549375	3450625	31/69			
	3	1	YH/YL	15720	84280	16/84	58/42	0.003415	**
20	1	50	Y+	4999702	298	100/0			
	2	50	YH+/YL	3502977	1497023	70/30			
	3	1	YH/YL	85032	14968	85/15	50/50	0.103188	

n = 100000, e = 1, average error = 16.75%, max error = 43.78%
model p = 0.000000 ***

TABLE 8. Result for the Categorization model with extinction

Exp	Phase	T	Stimuli	S1	S2	Model (%)	Moth (%)	p	sig.
1	1	1	B/Y	93686	6314	94/6	88/12	1.000000	
2	1	1	YH/YL	64914	35086	65/35	63/37	1.000000	
3	1	1	BH/BL	54453	45547	54/46	52/48	1.000000	
4	1	1	BL/YH	88946	11054	89/11	96/4	0.609205	
5	1	1	BH/YL	94827	5173	95/5	90/10	1.000000	
6	1	50	B+/Y	4992643	7357	100/0			
	2	1	B/Y	100000	0	100/0	95/5	1.000000	
7	1	50	B/Y+	2422761	2577239	48/52			
	2	1	B/Y	9319	90681	9/91	20/80	0.661420	
8	1	50	BH+/BL	2783664	2216336	56/44			
	2	1	BH/BL	55822	44178	56/44	50/50	1.000000	
9	1	50	BH/BL+	2419757	2580243	48/52			
	2	1	BH/BL	48064	51936	48/52	58/42	0.772482	
10	1	50	YH+/YL	3711109	1288891	74/26			
	2	1	YH/YL	75075	24925	75/25	81/19	0.790931	
11	1	50	YH/YL+	1570362	3429638	31/69			
	2	1	YH/YL	28983	71017	29/71	29/71	1.000000	
12	1	50	YH+/BL	3794614	1205386	76/24			
	2	1	YL/BH	65496	34504	65/35	62/38	0.835156	
13	1	50	YH+/BL	3800054	1199946	76/24			
	2	1	Y/B	99429	571	99/1	100/0	1.000000	
14	1	50	BL+/YH	4986982	13018	100/0			
	2	1	YL/BH	155	99845	0/100	0/100	1.000000	
15	1	50	BL+/YH	4986939	13061	100/0			
	2	1	Y/B	0	100000	0/100	0/100	1.000000	
16	1	50	YL+/BH	2814960	2185040	56/44			
	2	1	YH/BL	68226	31774	68/32	72/28	1.000000	
17	1	50	B/Y+	2420397	2579603	48/52			
	2	50	BH/BL+	1217367	3782633	24/76			
	3	1	BH/BL	23159	76841	23/77	21/79	1.000000	
18	1	50	B/Y+	2423908	2576092	48/52			
	2	50	BH+/BL	3790258	1209742	76/24			
	3	1	BH/BL	76978	23022	77/23	79/21	1.000000	
19	1	50	Y+	5000000	0	100/0			
	2	50	YH/YL+	2498092	2501908	50/50			
	3	1	YH/YL	49688	50312	50/50	58/42	0.781251	
20	1	50	Y+	5000000	0	100/0			
	2	50	YH+/YL	2499687	2500313	50/50			
	3	1	YH/YL	50012	49988	50/50	50/50	1.000000	

n = 100000, e = 2, average error = 3.99%, max error = 10.68%
model p = 0.160630

TABLE 9. Result for Pearce's configural model (original)

Exp	Phase	T	Stimuli	S1	S2	Model (%)	Moth (%)	p	sig.
1	1	1	B/Y	49941	50059	50/50	88/12	0.005436	**
2	1	1	YH/YL	49912	50088	50/50	63/37	0.354732	
3	1	1	BH/BL	50134	49866	50/50	52/48	1.000000	
4	1	1	BL/YH	49832	50168	50/50	96/4	0.000287	***
5	1	1	BH/YL	49699	50301	50/50	90/10	0.140867	
6	1	50	B+/Y	4900530	99470	98/2			
	2	1	B/Y	100000	0	100/0	95/5	1.000000	
7	1	50	B/Y+	100120	4899880	2/98			
	2	1	B/Y	0	100000	0/100	20/80	0.106029	
8	1	50	BH+/BL	3229298	1770702	65/35			
	2	1	BH/BL	71201	28799	71/29	50/50	0.440071	
9	1	50	BH/BL+	1774438	3225562	35/65			
	2	1	BH/BL	28809	71191	29/71	58/42	0.079770	
10	1	50	YH+/YL	3227660	1772340	65/35			
	2	1	YH/YL	71312	28688	71/29	81/19	0.442765	
11	1	50	YH/YL+	1773678	3226322	35/65			
	2	1	YH/YL	28683	71317	29/71	29/71	1.000000	
12	1	50	YH+/BL	4899355	100645	98/2			
	2	1	YL/BH	49723	50277	50/50	62/38	0.313826	
13	1	50	YH+/BL	4898938	101062	98/2			
	2	1	Y/B	100000	0	100/0	100/0	1.000000	
14	1	50	BL+/YH	4901009	98991	98/2			
	2	1	YL/BH	49849	50151	50/50	0/100	0.000479	***
15	1	50	BL+/YH	4899091	100909	98/2			
	2	1	Y/B	0	100000	0/100	0/100	1.000000	
16	1	50	YL+/BH	4898406	101594	98/2			
	2	1	YH/BL	49663	50337	50/50	72/28	0.305267	
17	1	50	B/Y+	100578	4899422	2/98			
	2	50	BH/BL+	1801234	3198766	36/64			
	3	1	BH/BL	29065	70935	29/71	21/79	0.576292	
18	1	50	B/Y+	100477	4899523	2/98			
	2	50	BH+/BL	3201013	1798987	64/36			
	3	1	BH/BL	71200	28800	71/29	79/21	1.000000	
19	1	50	Y+	3727175	1272825	75/25			
	2	50	YH/YL+	2190826	2809174	44/56			
	3	1	YH/YL	39737	60263	40/60	58/42	0.266831	
20	1	50	Y+	3721617	1278383	74/26			
	2	50	YH+/YL	2810387	2189613	56/44			
	3	1	YH/YL	60195	39805	60/40	50/50	1.000000	

n = 100000, e = 1, average error = 17.68%, max error = 49.85%
model p = 0.000000 ***

TABLE 10. Result for Pearce's configural model (with preferences)

Exp	Phase	T	Stimuli	S1	S2	Model (%)	Moth (%)	p	sig.
1	1	1	B/Y	91752	8248	92/8	88/12	1.000000	
2	1	1	YH/YL	63721	36279	64/36	63/37	1.000000	
3	1	1	BH/BL	50072	49928	50/50	52/48	1.000000	
4	1	1	BL/YH	82649	17351	83/17	96/4	0.348676	
5	1	1	BH/YL	89243	10757	89/11	90/10	1.000000	
6	1	50	B+/Y	4655184	344816	93/7			
	2	1	B/Y	94346	5654	94/6	95/5	1.000000	
7	1	50	B/Y+	1774793	3225207	35/65			
	2	1	B/Y	11675	88325	12/88	20/80	0.661420	
8	1	50	BH+/BL	2953525	2046475	59/41			
	2	1	BH/BL	64729	35271	65/35	50/50	0.703567	
9	1	50	BH/BL+	2250028	2749972	45/55			
	2	1	BH/BL	39045	60955	39/61	58/42	0.247648	
10	1	50	YH+/YL	3344051	1655949	67/33			
	2	1	YH/YL	71949	28051	72/28	81/19	0.442765	
11	1	50	YH/YL+	2161586	2838414	43/57			
	2	1	YH/YL	33690	66310	34/66	29/71	1.000000	
12	1	50	YH+/BL	2556317	2443683	51/49			
	2	1	YL/BH	4030	95970	4/96	62/38	0.000000	***
13	1	50	YH+/BL	2557750	2442250	51/49			
	2	1	Y/B	66113	33887	66/34	100/0	0.019062	*
14	1	50	BL+/YH	4302891	697109	86/14			
	2	1	YL/BH	6515	93485	7/93	0/100	1.000000	
15	1	50	BL+/YH	4303294	696706	86/14			
	2	1	Y/B	1152	98848	1/99	0/100	1.000000	
16	1	50	YL+/BH	2232801	2767199	45/55			
	2	1	YH/BL	10987	89013	11/89	72/28	0.000491	***
17	1	50	B/Y+	1775487	3224513	36/64			
	2	50	BH/BL+	2257344	2742656	45/55			
	3	1	BH/BL	39179	60821	39/61	21/79	0.182625	
18	1	50	B/Y+	1773571	3226429	35/65			
	2	50	BH+/BL	2988818	2011182	60/40			
	3	1	BH/BL	64613	35387	65/35	79/21	0.475634	
19	1	50	Y+	4987765	12235	100/0			
	2	50	YH/YL+	2111138	2888862	42/58			
	3	1	YH/YL	33652	66348	34/66	58/42	0.163707	
20	1	50	Y+	4987928	12072	100/0			
	2	50	YH+/YL	3218274	1781726	64/36			
	3	1	YH/YL	71294	28706	71/29	50/50	0.440071	

n = 100000, e = 1, average error = 15.78%, max error = 61.01%
model p = 0.000000 ***