

Supplement Material

Overview of the statistical tests

Tables S1-S4 provide an overview of the (marginal) significant main effects and interactions for each individual experiment, as well as for the across-experiment analysis. Significant post-hoc contrasts are provided for significant interactions of interest (Valence x Action and Valence x Action x Block type). Generic table legend: rANOVA = repeated-measures analyses of variance, RTs = response times, ERs = error rates, p_{corr} = Bonferroni corrected p-values. Example of how to interpret the contrast names: win - loss | cue-valence: post-hoc contrast to examine the performance differences between win and loss trials of the cue-valence blocks. Although the cue manipulation differs between experiments, we here refer to the different block types as cue-valence blocks and target-valence blocks for simplicity. The Bonferroni corrections for post-hoc contrasts were based on the amount of possible comparisons within the specifically described context. For instance, the contrast of win and loss trials within the approach condition of cue-valence blocks has been corrected for 3 possible comparisons (i.e., win - loss, win - no-incentive, loss - no-incentive). Please note that Cohen's d does not correct for multiple comparisons.

Table S1

Experiment 1						
		Factor(s)	df	<i>F</i>	<i>p</i>	η^2_p
<i>RTs</i>	main rANOVA	Valence	2, 92	41.33	< .001	.473
		Action	1, 46	19.53	< .001	.298
		Block type	1, 46	14.44	< .001	.239
		Valence x Action	2, 92	13.60	< .001	.228
		Valence x Block type	2, 92	18.60	< .001	.291
		Action x Block type	1, 46	8.56	.005	.157
		Valence x Action x Block type	2, 92	4.34	.016	.086
				Contrast	df	<i>t</i>
		win - loss cue-valence approach	46	-3.32	.005	-0.484
		win - no-incentive cue-valence approach	46	-8.41	<.001	-1.226
		loss - no-incentive cue-valence approach	46	-5.71	<.001	-0.832
		win - no-incentive cue-valence avoid	46	-7.60	<.001	-1.108
		loss - no-incentive cue-valence avoid	46	-5.72	<.001	-0.834
		win - loss target-valence approach	46	-2.88	.018	-0.421
		win - no-incentive target-valence approach	46	-5.71	<.001	-0.833
		loss - no-incentive target-valence approach	46	-2.60	.038	-0.379
		win - loss target-valence avoid	46	2.95	.015	0.431
		loss - no-incentive target-valence avoid	46	-2.81	.022	-0.410
		Factor(s)	df	<i>F</i>	<i>p</i>	η^2_p
<i>ERs</i>	main rANOVA	Action	1, 46	10.44	.002	.185
		Block type	1, 46	10.26	.002	.182
		Valence x Action	2, 92	18.98	< .001	.292
		Valence x Block type	2, 92	3.95	.023	.079
		Contrast	df	<i>t</i>	<i>pcorr</i>	<i>d</i>
	post-hoc t-tests	win - loss approach	46	-3.74	.002	-0.546
		win - no-incentive approach	46	-5.38	<.001	-0.784
		win - loss avoid	46	3.63	.002	0.529
		win - no-incentive avoid	46	3.39	.004	0.495

Table S2

Experiment 2						
		Factor(s)	df	F	p	η^2_p
RTs	main rANOVA	Valence	2, 92	19.51	<.001	.298
		Action	1, 46	3.17	.081	.065
		Block type	1, 46	15.46	<.001	.252
		Valence x Action	1.76, 81.09	13.45	<.001	.226
		Valence x Block type	2, 92	17.68	<.001	.278
		Contrast	df	t	pcorr	d
		win - loss approach	46	-3.43	.004	-0.501
		win - no-incentive approach	46	-7.30	<.001	-1.065
		loss - no-incentive approach	46	-3.64	.002	-0.531
		loss - no-incentive avoid	46	-3.56	.003	-0.520
		win - no-incentive cue-valence	46	-5.80	<.001	-0.846
		loss - no-incentive cue-valence	46	-6.51	<.001	-0.950
		Factor(s)	df	F	p	η^2_p
ERs	main rANOVA	Block type	1, 46	6.57	.014	.125
		Valence x Action	2, 92	6.89	.002	.130
		Valence x Block type	2, 92	4.20	.018	.084
		Action x Block type	2, 92	3.09	.085	.063
		Valence x Action x Block type	1.41, 65.06	8.61	.002	.158
		Contrast	df	t	pcorr	d
		win - no-incentive target-valence	46	2.59	.039	0.377
		win - loss target-valence	46	2.73	.027	0.398
		win - loss target-valence avoid	46	4.15	<.001	0.605
		win - no-incentive target-valence avoid	46	3.83	.001	0.559

Table S3

Experiment 3						
		Factor(s)	df	F	p	η^2_p
RTs	main rANOVA	Valence	2, 78	21.73	<.001	.358
		Block type	1, 39	540.80	<.001	.933
		Valence x Action	2, 78	2.99	.056	.071
		Valence x Block type	2, 78	3.43	.037	.081
		Action x Block type	1, 39	11.22	.002	.223
		Contrast	df	t	pcorr	d
		win - loss approach	39	-4.06	<.001	-0.642
		win - no-incentive approach	39	-5.55	<.001	-0.877
		win - no-incentive avoid	39	-3.53	.003	-0.558
		loss - no-incentive avoid	39	-3.16	.009	-0.500
		win - loss cue- valence	39	-3.14	.010	-0.497
		Factor(s)	df	F	p	η^2_p
ERs	main rANOVA	Block type	1, 39	72.99	<.001	.652
		Valence x Action	2, 78	10.97	<.001	.220
		Valence x Action x Block type	2, 78	12.46	<.001	.242
		Contrast	df	t	pcorr	d
		win - loss target-valence approach	39	-3.77	.002	-0.596
		win - no-incentive target- valence approach	39	-3.00	.014	-0.474
		win - loss target- valence avoid	39	3.79	.002	0.600
		win - no-incentive target- valence avoid	39	3.65	.002	0.577

Table S4

Experiment 1-2-3						
		Factor(s)	df	F	p	η^2_p
RTs	main rANOVA	Valence	2, 262	75.85	<.001	.367
		Action	1, 131	12.28	<.001	.086
		Block type	1, 131	462.54	<.001	.779
		Experiment	2, 131	12.30	<.001	.158
		Valence x Action	1.86, 243.38	25.33	<.001	.162
		Valence x Block type	2, 262	34.55	<.001	.209
		Action x Block type	1, 131	20.51	<.001	.135
		Action x Experiment	2, 131	3.88	.023	.056
		Block type x Experiment	2, 131	240.98	<.001	.786
		Valence x Action x Block type	1.72, 225.13	4.51	.016	.033
		Valence x Block type x Experiment	4, 262	3.45	.009	.050
		Action x Block type x Experiment	2, 131	4.29	.016	.061
				Contrast	df	t
		win - loss cue-valence approach	131	-5.16	<.001	-0.446
		win - no-incentive cue-valence approach	131	-11.21	<.001	-0.968
		loss - no-incentive cue-valence approach	131	-7.68	<.001	-0.664
		win - no-incentive cue-valence avoid	131	-9.18	<.001	-0.793
		loss - no-incentive cue-valence avoid	131	-9.04	<.001	-0.781
		win - loss target-valence approach	131	-4.59	<.001	-0.396
		win - no-incentive target-valence approach	131	-8.40	<.001	-0.726
		win - loss target-valence avoid	131	2.46	.046	0.212
		Factor(s)	df	F	p	η^2_p
ERs	main rANOVA	Action	1, 131	7.57	.007	.055
		Block type	1, 131	89.63	<.001	.406
		Experiment	2, 131	6.57	.002	.091
		Valence x Action	1.89, 247.97	32.67	<.001	.200
		Valence x Block type	2, 262	8.02	<.001	.058
		Action x Experiment	2, 131	3.18	.045	.046
		Block type x Experiment	2, 131	29.91	<.001	.313
		Valence x Action x Block type	1.62, 211.66	16.83	<.001	.114
		Contrast	df	t	pcorr	d
		win - no-incentive cue-valence approach	131	-2.68	.025	-0.232
		win - loss target-valence approach	131	-4.53	<.001	-0.392
		win - no-incentive target-valence approach	131	-4.32	<.001	-0.373
		win - loss target-valence avoid	131	6.52	<.001	0.563
		win - no-incentive target-valence avoid	131	6.58	<.001	0.568

Figure S1

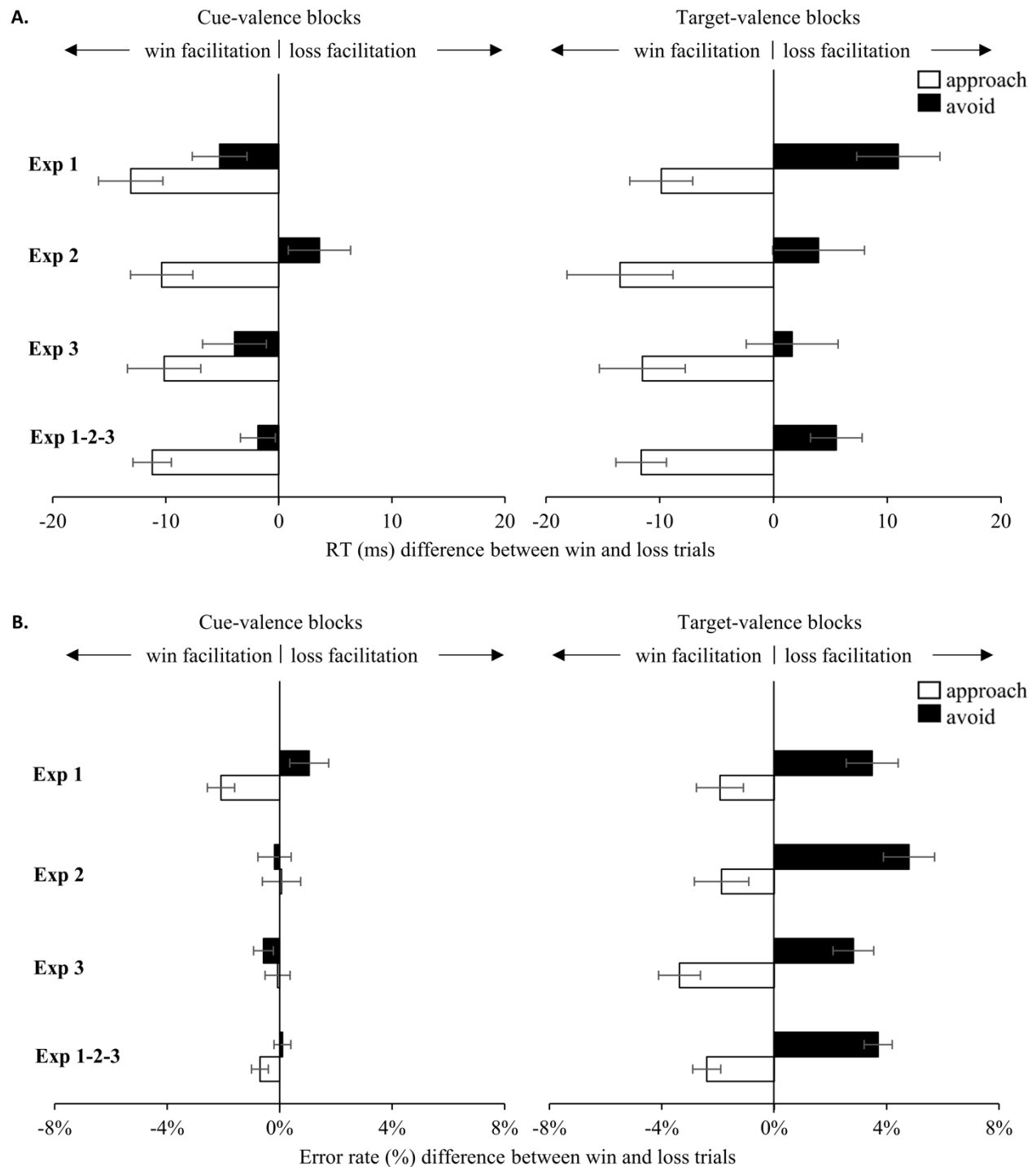


Figure S1. Differential effects of win versus loss incentives in response times (A) and error rates (B) for each individual experiment (Exp 1, 2, and 3) and across experiments (Exp 1-2-3). Incentive difference values (win minus loss) are depicted dependent on action type (approach: white bars; avoid: black bars) and block type (cue-valence: left; target-valence: right). A relative facilitation for win as compared to loss is indexed by negative values, a relative facilitation by loss as compared to win is

indexed by positive values. Although the cue manipulation differs between experiments, we here refer to the different block types as cue-valence blocks and target-valence blocks. For the plots across experiments, the means per condition represent estimated marginal means to account for differences in amount of included participants between experiments. *Error bars* indicate \pm one within-subject standard error.