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Supplementary Materials

Emotion Expression Salience and Racially Biased Weapon Identification:
A Diffusion Modeling Approach

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Public repository of data, materials, and analysis code: <https://osf.io/hxywn/>

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Weapon Identification Task

Results (Incorrect Response Times)

In the main text, we reported analyses of response times (RTs) only on trials with correct responses, as is common in research using the Weapon Identification Task (see Rivers, 2017). For completeness, we report RT analyses on trials with incorrect responses. Because error rates were low overall, these results should be interpreted cautiously.

Experiment 1

The Race Prime $\times$ Target Object interaction indicative of racial bias was not significant, $\beta = 7.79$, $F(1, 489.6) = 1.40$, $p = .237$, $R^2 < .01$. Nor was this interaction moderated by Salience, $\beta = -2.48$, $F(1, 7489.8) = 0.04$, $p = .845$, $R^2 < .01$.

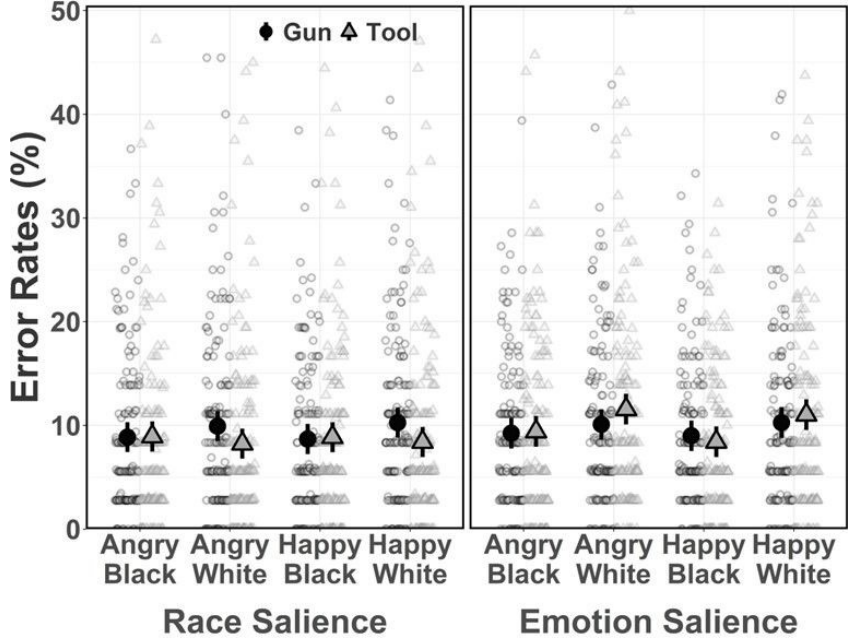
Experiment 2

The model had to be re-fit after removing the by-stimulus random intercept from the model, as boundary fit emerged. The Race Prime $\times$ Target Object interaction was significant, $\beta = 23.49$, $F(1, 7354.2) = 11.56$, $p = .001$, $R^2 = .01$, but it was not moderated by Salience, $\beta = -26.45$, $F(1, 7354.2) = 3.66$, $p = .056$, $R^2 = .01$.

Behavioral Data Plots

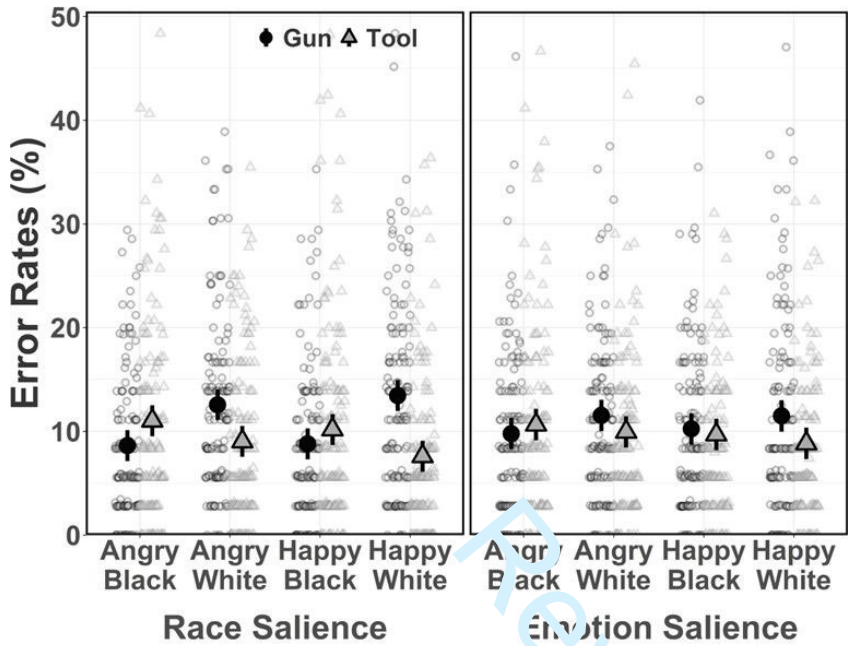
Figure S1

Error Rates by Race Prime, Emotion Prime, and Salience Conditions (Experiment 1)



Notes. Empty markers reflect individual-level error rates and filled markers and their error bars reflect estimated marginal means and confidence intervals, respectively, from the LMEM modeled to error rates in Experiment 1.

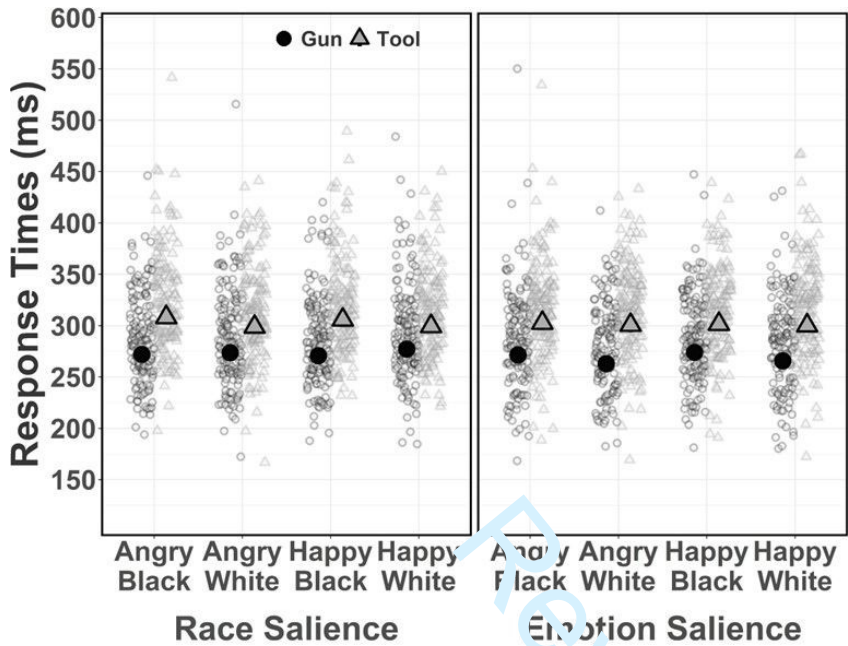
Figure S2
Error Rates by Race Prime, Emotion Prime, and Salience Conditions (Experiment 2)



Notes. Empty markers reflect individual-level error rates and filled markers and their error bars reflect estimated marginal means and confidence intervals, respectively, from the LMEM modeled to error rates in Experiment 2.

Figure S3

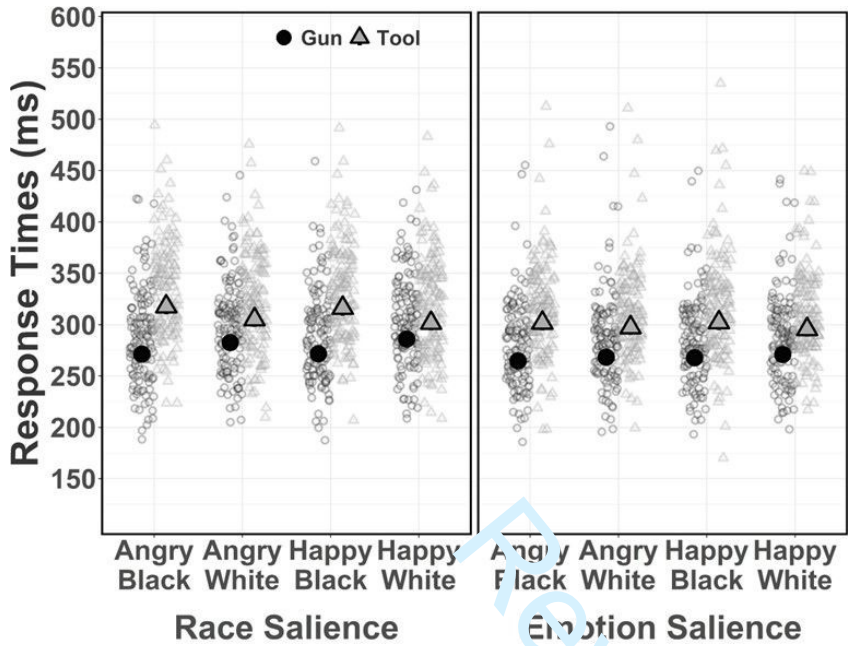
Correct RTs by Race Prime, Emotion Prime, and Salience Conditions (Experiment 1)



Notes. RTs = response times. Empty markers reflect individual-level correct RTs and filled markers and their error bars reflect estimated marginal means and confidence intervals, respectively, from the LMEM modeled to correct RTs in Experiment 1.

Figure S4

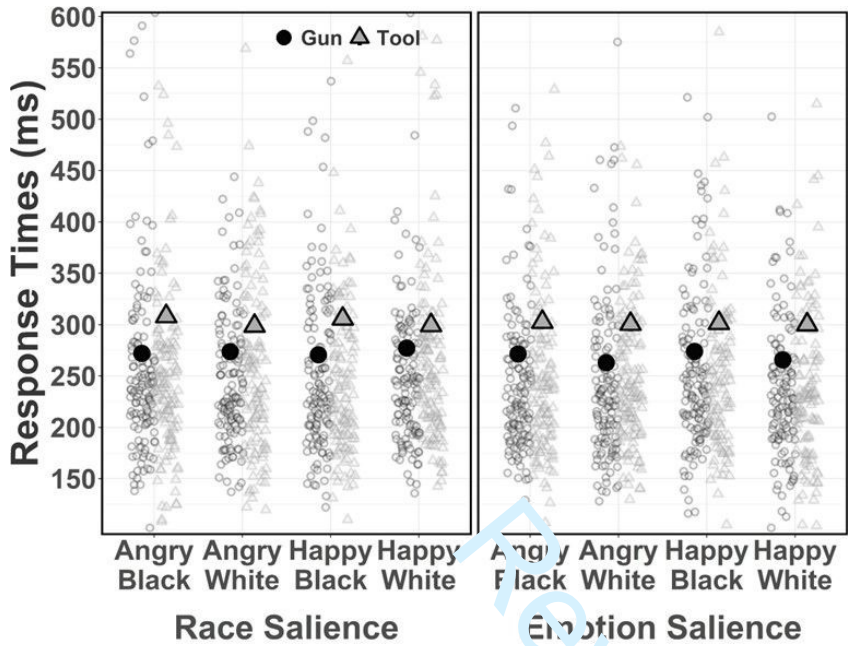
Correct RTs by Race Prime, Emotion Prime, and Salience Conditions (Experiment 2)



Notes. RTs = response times. Empty markers reflect individual-level correct RTs and filled markers and their error bars reflect estimated marginal means and confidence intervals, respectively, from the LMEM modeled to correct RTs in Experiment 2.

Figure S5

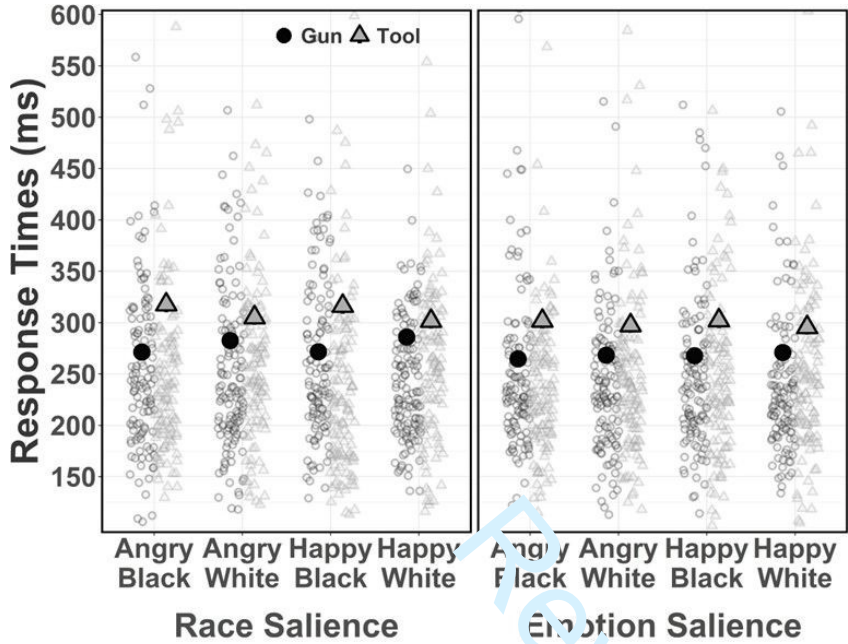
Incorrect RTs by Race Prime, Emotion Prime, and Salience Conditions (Experiment 1)



Notes. RTs = response times. Empty markers reflect individual-level incorrect RTs and filled markers and their error bars reflect estimated marginal means and confidence intervals, respectively, from the LMEM modeled to incorrect RTs in Experiment 1.

Figure S6

Incorrect RTs by Race Prime, Emotion Prime, and Salience Conditions (Experiment 2)



Notes. RTs = response times. Empty markers reflect individual-level incorrect RTs and filled markers and their error bars reflect estimated marginal means and confidence intervals, respectively, from the LMEM modeled to incorrect RTs in Experiment 2.

Behavioral Data Tables

Table S1

LMEM of Error Rates and Correct Response Times (Experiment 1)

Effect	β	<i>SE</i>	<i>df</i>	<i>t</i>	<i>p</i>
<i>Error rates</i>					
(Intercept)	.09	< .01	343.49	23.11	< .001
Race Prime	.01	< .01	563.22	3.36	.001
Target Object	< .01	< .01	563.08	-0.6	.551
Salience	.01	.01	289.97	1.1	.274
Emotion Prime	< .01	< .01	563.27	-0.54	.587
Race Prime × Target Object	< .01	.01	563.08	-0.46	.645
Race Prime × Salience	.01	< .01	82169.63	3.45	.001
Target Object × Salience	.01	< .01	82167.17	3.28	.001
Race Prime × Emotion Prime	< .01	.01	563.08	0.66	.512
Target Object × Emotion Prime	< .01	.01	563.08	-0.62	.537
Salience × Emotion Prime	< .01	< .01	82172.11	-1.18	.236
Race Prime × Target Object × Salience	.03	.01	82166.56	4.11	< .001
Race Prime × Target Object × Emotion Prime	< .01	.01	563.09	-0.11	.915
Race Prime × Salience × Emotion Prime	< .01	.01	82166.54	0.09	.932
Target Object × Salience × Emotion Prime	-.01	.01	82166.63	-0.89	.373
Race Prime × Target Object × Salience × Emotion Prime	< .01	.02	82166.72	0.22	.826
<i>Correct response times</i>					
(Intercept)	5.66	.01	311.86	742.22	< .001
Race Prime	-0.01	< .01	553.93	-3.48	.001
Target Object	0.11	< .01	554.02	31.7	< .001
Salience	-0.01	.01	292.36	-0.8	.424
Emotion Prime	< 0.01	< .01	553.98	0.6	.552
Race Prime × Target Object	-0.01	.01	553.66	-1.1	.271
Race Prime × Salience	-0.01	< .01	74529.95	-3.13	.002
Target Object × Salience	0.01	< .01	74533.29	2.9	.004
Race Prime × Emotion Prime	0.01	.01	553.56	1.14	.256
Target Object × Emotion Prime	-0.01	.01	553.62	-1.38	.167
Salience × Emotion Prime	< 0.01	< .01	74533.57	0.76	.444
Race Prime × Target Object × Salience	0.07	.01	74529.96	7.99	< .001
Race Prime × Target Object × Emotion Prime	< 0.01	.01	553.6	-0.25	.807
Race Prime × Salience × Emotion Prime	-0.01	.01	74528.38	-1.42	.156
Target Object × Salience × Emotion Prime	-0.01	.01	74528.64	-0.68	.499
Race Prime × Target Object × Salience × Emotion Prime	0.01	.02	74529.22	0.46	.644

Table S2

LMEM of Incorrect Response Times (Experiment 1)

Effect	β	<i>SE</i>	<i>df</i>	<i>t</i>	<i>p</i>
(Intercept)	252.35	2.88	304.07	87.64	< .001
Race Prime	3.89	3.28	483.49	1.19	.237
Target Object	6.28	3.34	518.89	1.88	.061
Salience	-8.09	5.69	311.99	-1.42	.156
Emotion Prime	-0.97	3.3	491.74	-0.29	.770
Race Prime × Target Object	7.79	6.58	489.58	1.18	.237
Race Prime × Salience	-3.47	6.35	7482.64	-0.55	.584
Target Object × Salience	0.86	6.47	7574.77	0.13	.895
Race Prime × Emotion Prime	-0.33	6.55	478.56	-0.05	.960
Target Object × Emotion Prime	7.18	6.58	488.52	1.09	.275
Salience × Emotion Prime	-1.66	6.37	7513.26	-0.26	.795
Race Prime × Target Object × Salience	-2.48	12.72	7489.82	-0.2	.845
Race Prime × Target Object × Emotion Prime	2.30	13.13	483.35	0.18	.861
Race Prime × Salience × Emotion Prime	-24.08	12.66	7455.82	-1.9	.057
Target Object × Salience × Emotion Prime	2.36	12.71	7488.3	0.19	.853
Race Prime × Target Object × Salience × Emotion Prime	4.07	25.38	7480.25	0.16	.873

Table S3*LMEM of Error Rates and Correct Response Times (Experiment 2)*

Effect	β	SE	df	t	p
<i>Error rates</i>					
(Intercept)	0.1	< .01	294.32	24.14	< .001
Race Prime	0.01	< .01	565.36	2.27	.024
Target Object	-0.01	< .01	565.35	-3.93	< .001
Salience	< .01	0.01	259.99	0.14	.889
Emotion Prime	< .01	< .01	565.36	-1.19	.235
Race Prime $\times$ Target Object	-0.04	0.01	565.36	-7.31	< .001
Race Prime $\times$ Salience	-0.01	< .01	74213.34	-1.5	.135
Target Object $\times$ Salience	< .01	< .01	74212.81	0.99	.323
Race Prime $\times$ Emotion Prime	< .01	0.01	565.37	-0.22	.825
Target Object $\times$ Emotion Prime	-0.01	0.01	565.35	-2.4	.017
Salience $\times$ Emotion Prime	< .01	< .01	74212.87	-0.24	.808
Race Prime $\times$ Target Object $\times$ Salience	0.04	0.01	74212.84	5.03	< .001
Race Prime $\times$ Target Object $\times$ Emotion Prime	< .01	0.01	565.36	-0.4	.693
Race Prime $\times$ Salience $\times$ Emotion Prime	< .01	0.01	74213.48	-0.47	.639
Target Object $\times$ Salience $\times$ Emotion Prime	< .01	0.01	74212.81	0.5	.618
Race Prime $\times$ Target Object $\times$ Salience $\times$ Emotion Prime	0.02	0.02	74213.49	0.97	.334
<i>Correct response times</i>					
(Intercept)	5.66	.01	274.21	705.40	< .001
Race Prime	< .01	< .01	551.44	-0.32	.747
Target Object	0.11	< .01	552.09	34.99	< .001
Salience	-0.04	.02	264.14	-2.27	.024
Emotion Prime	< .01	< .01	551.42	0.52	.601
Race Prime $\times$ Target Object	-0.06	.01	551.73	-9.59	< .001
Race Prime $\times$ Salience	< .01	< .01	66766.01	-0.92	.359
Target Object $\times$ Salience	< .01	< .01	66769.88	0.15	.880
Race Prime $\times$ Emotion Prime	< .01	.01	551.47	-0.22	.829
Target Object $\times$ Emotion Prime	-0.01	.01	551.49	-2.21	.028
Salience $\times$ Emotion Prime	< .01	< .01	66767.17	1.07	.283
Race Prime $\times$ Target Object $\times$ Salience	0.06	.01	66767.76	6.52	< .001
Race Prime $\times$ Target Object $\times$ Emotion Prime	-0.01	.01	551.43	-0.96	.336
Race Prime $\times$ Salience $\times$ Emotion Prime	-0.01	.01	66766.64	-0.73	.465
Target Object $\times$ Salience $\times$ Emotion Prime	< .01	.01	66767.15	0.17	.865
Race Prime $\times$ Target Object $\times$ Salience $\times$ Emotion Prime	0.01	.02	66767.39	0.73	.468

Table S4

LMEM of Incorrect Response Times (Experiment 2)

Effect	β	<i>SE</i>	<i>df</i>	<i>t</i>	<i>p</i>
(Intercept)	256.42	3.29	257.01	78.00	< .001
Race Prime	-2.41	3.43	7305.24	-0.70	.482
Target Object	8.22	3.50	7417.28	2.35	.019
Salience	-10.13	6.57	257.01	-1.54	.125
Emotion Prime	-0.92	3.42	7291.95	-0.27	.788
Race Prime × Target Object	23.49	6.91	7354.22	3.40	.001
Race Prime × Salience	-10.12	6.86	7305.24	-1.48	.140
Target Object × Salience	5.93	7.01	7417.28	0.85	.398
Race Prime × Emotion Prime	-0.91	6.87	7314.43	-0.13	.894
Target Object × Emotion Prime	0.34	6.87	7321.63	0.05	.961
Salience × Emotion Prime	12.72	6.85	7291.95	1.86	.063
Race Prime × Target Object × Salience	-26.45	13.82	7354.22	-1.91	.056
Race Prime × Target Object × Emotion Prime	14.41	13.72	7304.46	1.05	.293
Race Prime × Salience × Emotion Prime	0.60	13.73	7314.43	0.04	.965
Target Object × Salience × Emotion Prime	24.32	13.74	7321.63	1.77	.077
Race Prime × Target Object × Salience × Emotion Prime	4.41	27.43	7304.46	0.16	.872

Table S5*Race Prime Contrasts (Black – White) Across Conditions of Target Object and Salience*

Effect	<i>b</i>	<i>SE</i>	<i>z</i>	<i>p</i>
Experiment 1				
<i>Error Rates</i>				
Gun Trial, Race Salience	-0.01	.01	-2.55	.053
Tool Trial, Race Salience	0.01	.01	1.13	.674
Gun Trial, Emotion Salience	-0.01	.01	-2.02	.179
Tool Trial, Emotion Salience	-0.02	.01	-4.55	< .001
<i>Correct Response Times</i>				
Gun Trial, Race Salience	-0.01	.01	-2.65	.041
Tool Trial, Race Salience	0.03	.01	4.59	< .001
Gun Trial, Emotion Salience	0.03	.01	5.47	< .001
Tool Trial, Emotion Salience	0.01	.01	0.99	.757
Experiment 2				
<i>Error Rates</i>				
Gun Trial, Race Salience	-0.04	.01	-8.25	< .001
Tool Trial, Race Salience	0.02	.01	4.39	< .001
Tool Trial, Emotion Salience	0.01	.01	0.52	.453
<i>Correct Response Times</i>				
Gun Trial, Race Salience	< .01	.01	0.15	< .001
Tool Trial, Race Salience	< .01	.01	-0.22	< .001
Gun Trial, Emotion Salience	-0.01	.01	-2.21	.109
Tool Trial, Emotion Salience	0.01	.01	0.73	.004

Note. Contrasts were computed to compare the estimated marginal mean error rates or correct response times following Black primes minus the estimated marginal mean error rates or correct response times following White primes.

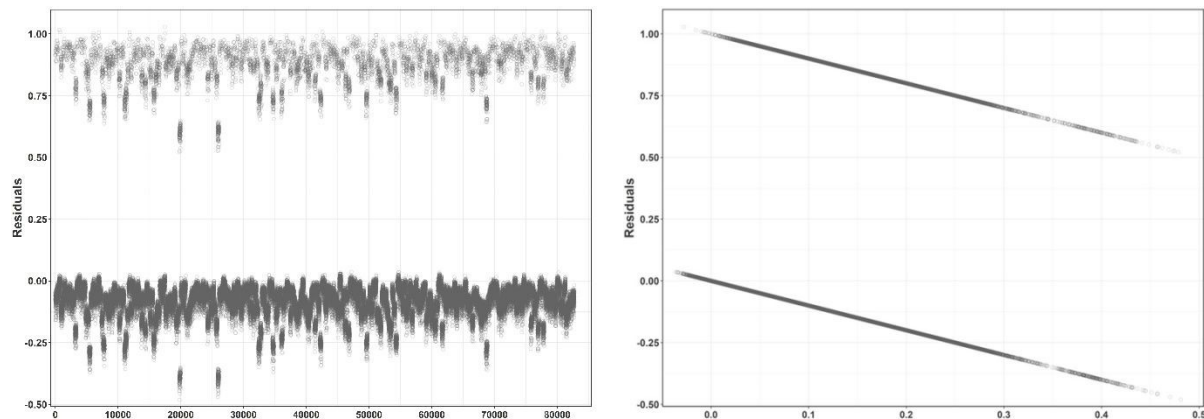
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Table S6

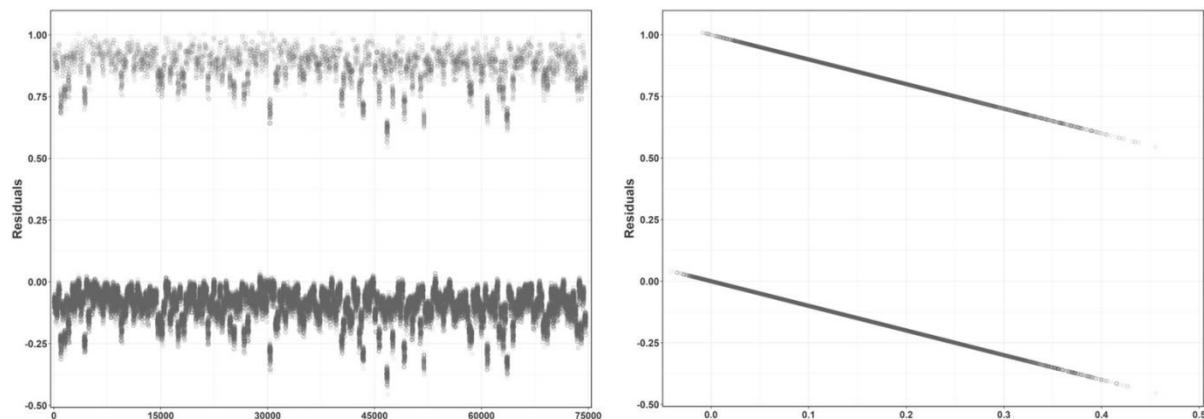
Descriptive Statistics by Race Prime, Emotion Prime, and Salience Conditions (Experiments 1 &2).

Variable	Emotion prime, race prime, and target object							
	Angry prime				Happy prime			
	Black prime		White prime		Black prime		White prime	
	Gun	Tool	Gun	Tool	Gun	Tools	Gun	Tool
Experiment 1								
Error rate (%)								
Race-salient	8.6 (28.1)	8.7 (28.2)	9.7 (29.6)	8.0 (27.2)	8.3 (27.6)	8.6 (28.0)	10.0 (30.0)	8.2 (27.4)
Emotion-salient	9.1 (28.7)	9.3 (29.0)	9.8 (29.8)	11.4 (31.7)	8.8 (28.4)	8.2 (27.4)	10.0 (30.0)	10.8 (31.0)
Correct RT (ms)								
Race-salient	288 (103)	323 (108)	289 (102)	314 (102)	286 (99)	320 (104)	293 (105)	314 (103)
Emotion-salient	288 (106)	318 (105)	279 (104)	317 (110)	290 (103)	316 (101)	283 (107)	317 (110)
Incorrect RT (ms)								
Race-salient	254 (140)	253 (145)	251 (137)	260 (156)	244 (123)	250 (138)	251 (152)	265 (145)
Emotion-salient	240 (128)	246 (152)	249 (151)	255 (160)	243 (123)	255 (130)	236 (117)	252 (159)
Experiment 2								
Error rate (%)								
Race-salient	8.5 (27.9)	10.8 (31.0)	12.4 (33.0)	8.9 (28.4)	8.6 (28.1)	10.0 (30.1)	13.3 (33.9)	7.4 (26.3)
Emotion-salient	9.4 (29.3)	10.4 (30.5)	11.2 (31.6)	9.6 (29.5)	9.9 (29.9)	9.3 (29.1)	11.2 (31.5)	8.5 (27.9)
Correct RT (ms)								
Race-salient	288 (108)	333 (114)	299 (106)	321 (110)	288 (106)	332 (112)	304 (114)	319 (116)
Emotion-salient	282 (106)	317 (106)	286 (113)	313 (103)	285 (107)	318 (110)	289 (113)	310 (103)
Incorrect RT (ms)								
Race-salient	269 (146)	258 (159)	251 (150)	282 (182)	270 (148)	242 (147)	244 (112)	271 (167)
Emotion-salient	249 (145)	257 (172)	243 (128)	251 (160)	253 (155)	265 (160)	239 (127)	266 (176)

Note. Values in parentheses are standard deviations. RT = response time.

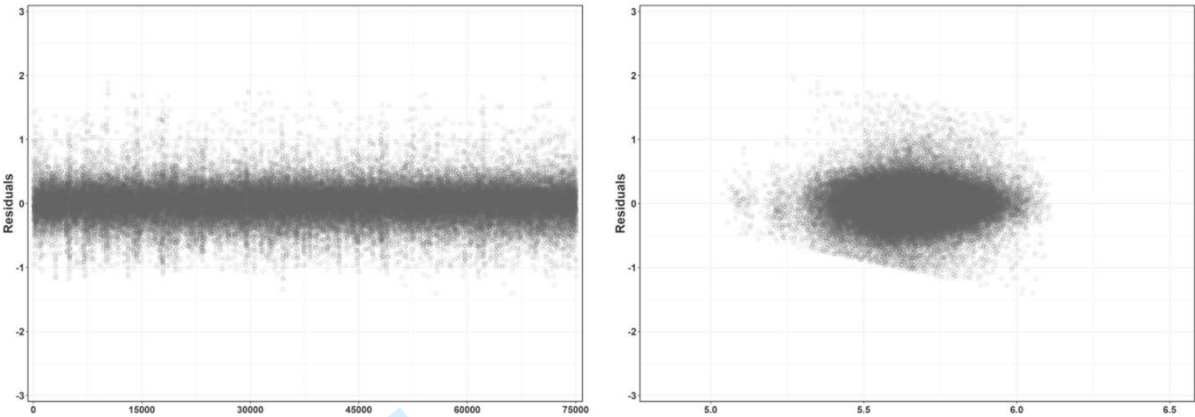
Figure S7

Notes. Plotted residuals from the LMEM on error rates in Experiment 1. For the plot on the left, x-axis values reflect the index of individual-level responses. For the plot on the right, x-axis values reflect model-predicted error rates.

Figure S8

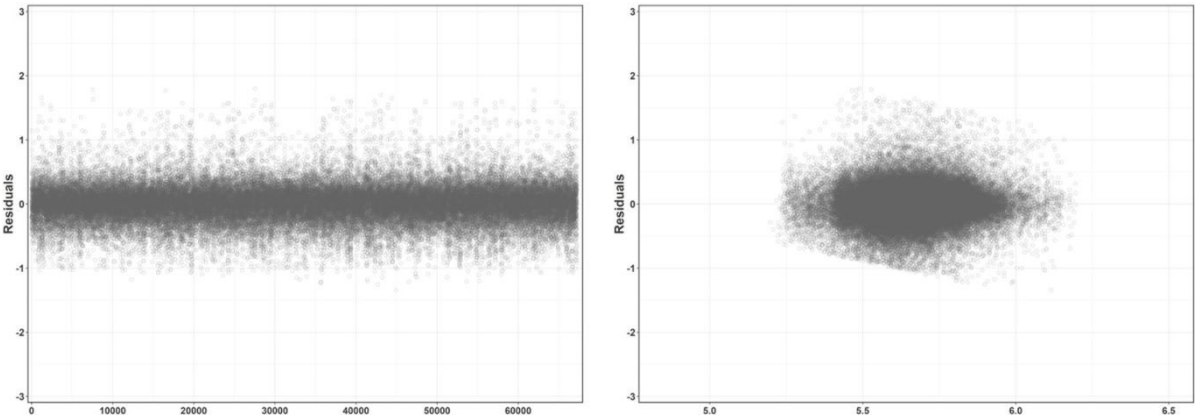
Notes. Plotted residuals from the LMEM on error rates in Experiment 2. For the plot on the left, x-axis values reflect the index of individual-level responses. For the plot on the right, x-axis values reflect model-predicted error rates.

Figure S9



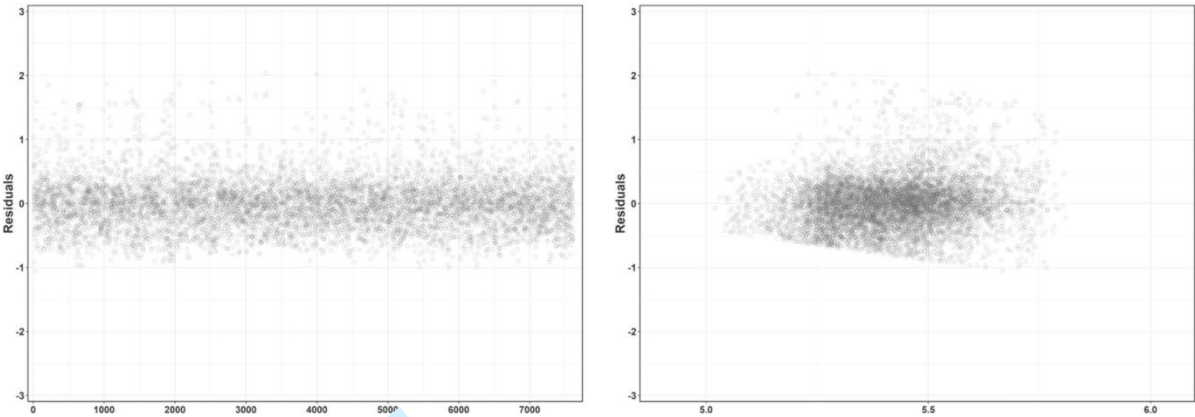
Notes. Plotted residuals from the LMEM on correct response times in Experiment 1. For the plot on the left, x-axis values reflect the index of individual-level correct responses times. For the plot on the right, x-axis values reflect model-predicted correct response times.

Figure S10



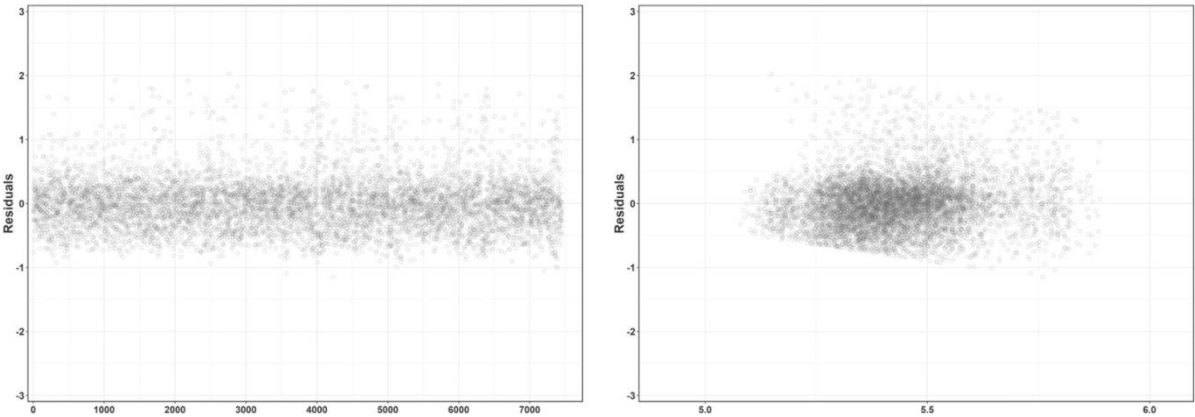
Notes. Plotted residuals from the LMEM on correct response times in Experiment 2. For the plot on the left, x-axis values reflect the index of individual-level correct responses times. For the plot on the right, x-axis values reflect model-predicted correct response times.

Figure S11



Notes. Plotted residuals from the LMEM on incorrect response times in Experiment 1. For the plot on the left, x-axis values reflect the index of individual-level incorrect responses times. For the plot on the right, x-axis values reflect model-predicted incorrect response times.

Figure S12



Notes. Plotted residuals from the LMEM on incorrect response times in Experiment 2. For the plot on the left, x-axis values reflect the index of individual-level incorrect responses times. For the plot on the right, x-axis values reflect model-predicted incorrect response times.

Face Categorization Task

Table S7

Analyses of Error Rates and Correct Response Times by Condition (Experiment 2)

Effect	<i>F</i> (1, 253)	<i>p</i>	η_p^2
<i>Error rates</i>			
Salience (Race vs. Emotion)	11.01	< .001	.042
Stimulus Set	0.16	.689	< .001
Salience × Stimulus Set	1.02	.313	.004
<i>Correct response times</i>			
Salience (Race vs. Emotion)	4.26	< .001	.239
Stimulus Set	0.19	.762	< .001
Salience × Stimulus Set	0.19	.321	.004

Note. *Stimulus Set* refers to the two randomly selected sets of 24 faces (Race: 12 Black, 12 White; emotion expression: 12 angry/scowling, 12 happy/smiling).

Table S8

Descriptive Statistics for Face Categorization Task (Experiment 2)

Effect	Stimulus Set 1		Stimulus Set 2	
	Emotion Classification	Race Classification	Emotion Classification	Race Classification
Error rate (%)	0.05 (0.22)	0.03 (0.16)	0.04 (0.20)	0.03 (0.17)
Correct RT (ms)	718.7 (481.4)	517.5 (242.2)	710.8 (497.6)	542.9 (355.5)

Note. Values in parentheses are standard deviations. RT = response time.

Hierarchical Diffusion Decision Model

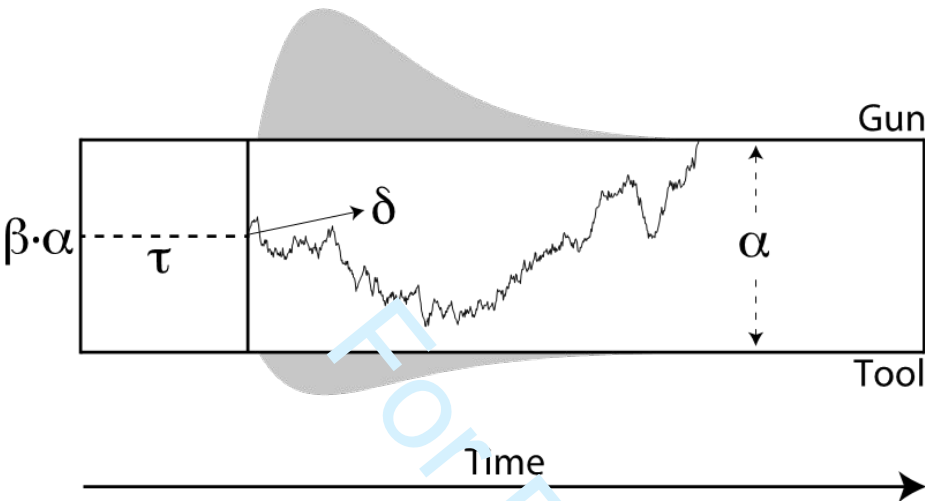
As stated in the main text, we estimated the model using an MCMC sampler in JAGS 4.3.0 (Plummer, 2003), with the Wiener distribution provided by Wabersich and Vandekerckhove (2014) and an estimation approach to make inferences in this framework (Gelman et al., 2003; Kruschke, 2014). We collected 12,000 samples using 10 chains with 1,200 samples per chain. We also included a burn-in of 500 samples and recorded only every tenth sample.

Representativeness of the posterior distribution was evaluated visually by inspecting caterpillar plots for overlap in MCMC chains, and it was evaluated numerically by checking whether the Gelman-Rubin convergence statistic (R-hat) was < 1.05 . Overall, the chains met these standards, suggesting representativeness of the posterior distributions. Accuracy was evaluated by examining autocorrelations, the effective sample size, and the Monte-Carlo standard error (MCSE). The ESS estimates the sample size of MCMC chains after accounting for autocorrelations. We sought an effective sample size $> 10,000$. Group-level distributions were $> 8,500$, with most $> 10,000$. The MCSE estimates the noise in the sampled estimates (Kruschke, 2015), and is computed by dividing the standard deviation of the chains by their effective sample size. All MSCE values were $< .001$, suggesting extremely low levels of noise in the model's parameter estimation.¹ In the following section, we present Tables S12-S23, which offer the ESS, MSCE, and R-hat values per condition, per experiment.

¹ Figures for visual assessment of representativeness and accuracy can be found in the supplementary online materials: <https://osf.io/hxywn/>

Figure S13

Illustration of the Diffusion Decision Process



Notes. The decision process starts with a bias to select gun or tool, as indicated by the relative start point, β . Evidence is then accumulated (as illustrated by the jagged line) for each decision option, with average strength δ . The distance between the thresholds, α , indicates the amount of evidence needed to decide. Finally, the length of non-decision processes is indicated by τ . The hypothetical distributions (in gray) above and below the decision space indicate that the model predicts the distribution of response times for each decision option.

Model Evaluation Tables

Table S9

Accuracy and Representativeness of Alpha (Threshold) Estimates in Experiment 1

Trial Type	ESS	MCSE	R-hat
<i>Emotion Salience</i>			
Happy, White	11066.59	< .001	1.00
Happy, Black	10134.78	< .001	1.00
Angry, White	10925.07	< .001	1.00
Angry, Black	11333.83	< .001	1.00
<i>Race Salience</i>			
Happy, White	10673.32	< .001	1.00
Happy, Black	10396.24	< .001	1.00
Angry, White	10373.25	< .001	1.00
Angry, Black	10732.35	< .001	1.00

Table S10

Accuracy and Representativeness of Beta (Starting Point) Estimates in Experiment 1

Trial Type	ESS	MCSE	R-hat
<i>Emotion Salience</i>			
Happy, White	9749.86	< .001	1.00
Happy, Black	10196.15	< .001	1.00
Angry, White	10699.88	< .001	1.00
Angry, Black	10638.97	< .001	1.00
<i>Race Salience</i>			
Happy, White	10168.12	< .001	1.00
Happy, Black	10196.52	< .001	1.00
Angry, White	10538.00	< .001	1.00
Angry, Black	10839.64	< .001	1.00

Table S11
Accuracy and Representativeness of Delta (Drift Rate) Estimates in Experiment 1

Trial Type	ESS	MCSE	R-hat
<i>Emotion Salience</i>			
Happy, White, Gun	11850.18	.001	1.00
Happy, White, Tool	11379.47	.001	1.00
Happy, Black, Gun	12440.39	.001	1.00
Happy, Black, Tool	10985.46	.001	1.00
Angry, White, Gun	10394.72	.001	1.00
Angry, White, Tool	11671.65	.001	1.00
Angry, Black, Gun	11623.67	.001	1.00
Angry, Black, Tool	11052.00	.001	1.00
<i>Race Salience</i>			
Happy, White, Gun	11375.18	.001	1.00
Happy, White, Tool	11537.20	.001	1.00
Happy, Black, Gun	11687.38	.001	1.00
Happy, Black, Tool	11505.81	.001	1.00
Angry, White, Gun	11692.57	.001	1.00
Angry, White, Tool	11153.65	.001	1.00
Angry, Black, Gun	11147.55	.001	1.00
Angry, Black, Tool	11818.54	.001	1.00

Table S12*Accuracy and Representativeness of Tau (Nondecision Time) Estimates in Experiment 1*

Trial Type	ESS	MCSE	R-hat
<i>Emotion Salience</i>			
Happy, White, Gun	12335.03	< .001	1.00
Happy, White, Tool	11783.57	< .001	1.00
Happy, Black, Gun	11999.50	< .001	1.00
Happy, Black, Tool	12309.90	< .001	1.00
Angry, White, Gun	11945.08	< .001	1.00
Angry, White, Tool	12340.74	< .001	1.00
Angry, Black, Gun	11854.01	< .001	1.00
Angry, Black, Tool	11540.42	< .001	1.00
<i>Race Salience</i>			
Happy, White, Gun	12131.00	< .001	1.00
Happy, White, Tool	12278.77	< .001	1.00
Happy, Black, Gun	11905.05	< .001	1.00
Happy, Black, Tool	11657.97	< .001	1.00
Angry, White, Gun	12148.77	< .001	1.00
Angry, White, Tool	11044.75	< .001	1.00
Angry, Black, Gun	12628.76	< .001	1.00
Angry, Black, Tool	12105.54	< .001	1.00

Table S13*Accuracy and Representativeness of Alpha (Threshold) Estimates in Experiment 2*

Trial Type	ESS	MCSE	R-hat
<i>Emotion Salience</i>			
Happy, White	11095.48	< .001	1.00
Happy, Black	11123.17	< .001	1.00
Angry, White	10953.35	< .001	1.00
Angry, Black	11467.08	< .001	1.00
<i>Race Salience</i>			
Happy, White	10867.34	< .001	1.00
Happy, Black	10945.81	< .001	1.00
Angry, White	11433.48	< .001	1.00
Angry, Black	10293.65	< .001	1.00

Table S14

Accuracy and Representativeness of Beta (Starting Point) Estimates in Experiment 2

Trial Type	ESS	MCSE	R-hat
<i>Emotion Salience</i>			
Happy, White	9409.55	< .001	1.00
Happy, Black	9494.63	< .001	1.00
Angry, White	10204.32	< .001	1.00
Angry, Black	9083.41	< .001	1.00
<i>Race Salience</i>			
Happy, White	9792.76	< .001	1.00
Happy, Black	10373.62	< .001	1.00
Angry, White	10046.29	< .001	1.00
Angry, Black	10278.78	< .001	1.00

Table S15

Accuracy and Representativeness of Delta (Drift Rate) Estimates in Experiment 2

Trial Type	ESS	MCSE	R-hat
<i>Emotion Salience</i>			
Happy, White, Gun	11218.05	.001	1.00
Happy, White, Tool	11209.69	.001	1.00
Happy, Black, Gun	10891.23	.001	1.00
Happy, Black, Tool	10675.10	.001	1.00
Angry, White, Gun	11076.95	.001	1.00
Angry, White, Tool	12122.74	.001	1.00
Angry, Black, Gun	10903.85	.001	1.00
Angry, Black, Tool	10912.63	.001	1.00
<i>Race Salience</i>			
Happy, White, Gun	11160.65	.001	1.00
Happy, White, Tool	11535.20	.001	1.00
Happy, Black, Gun	10914.66	.001	1.00
Happy, Black, Tool	11565.25	.001	1.00
Angry, White, Gun	11169.91	.001	1.00
Angry, White, Tool	11711.09	.001	1.00
Angry, Black, Gun	11136.77	.001	1.00
Angry, Black, Tool	11579.09	.001	1.00

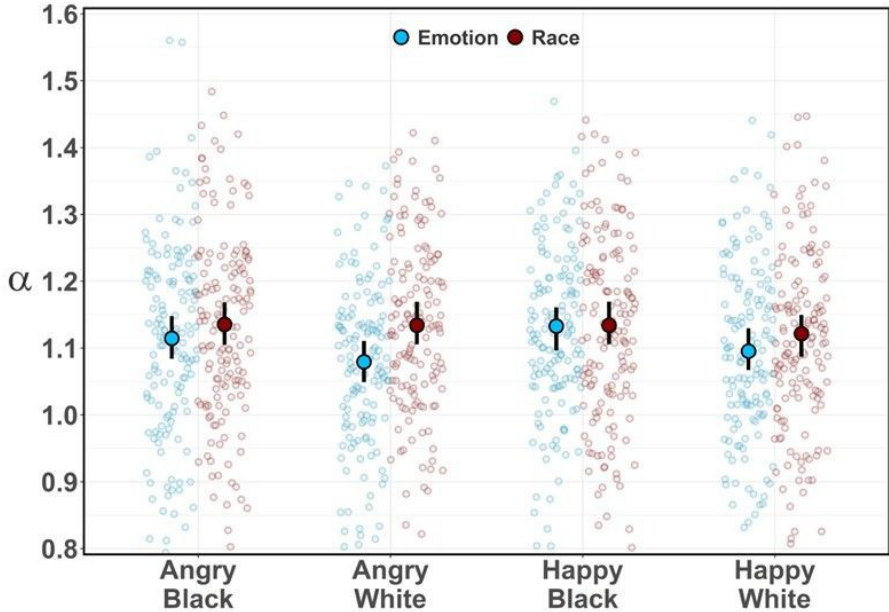
Table S16*Accuracy and Representativeness of Tau (Nondecision Time) Estimates in Experiment 2*

Trial Type	ESS	MCSE	R-hat
<i>Emotion Salience</i>			
Happy, White, Gun	12078.55	< .001	1.00
Happy, White, Tool	11820.23	< .001	1.00
Happy, Black, Gun	12398.19	< .001	1.00
Happy, Black, Tool	12948.95	< .001	1.00
Angry, White, Gun	11645.39	< .001	1.00
Angry, White, Tool	12088.76	< .001	1.00
Angry, Black, Gun	12062.08	< .001	1.00
Angry, Black, Tool	11804.40	< .001	1.00
<i>Race Salience</i>			
Happy, White, Gun	11551.62	< .001	1.00
Happy, White, Tool	11880.14	< .001	1.00
Happy, Black, Gun	11889.12	< .001	1.00
Happy, Black, Tool	12317.30	< .001	1.00
Angry, White, Gun	12073.76	< .001	1.00
Angry, White, Tool	11997.66	< .001	1.00
Angry, Black, Gun	12146.72	< .001	1.00
Angry, Black, Tool	11436.69	< .001	1.00

DDM Parameter Plots

Figure S14

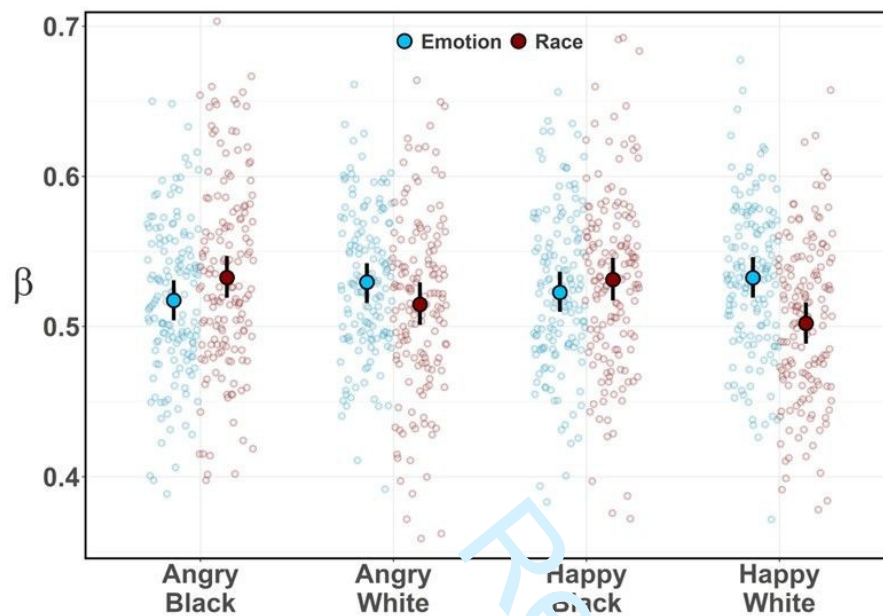
Alpha Estimates by Race Prime, Emotion Prime, and Salience Conditions (Experiments 1)



Notes. Alpha (threshold separation) estimates. Empty dots reflect individual-level estimates and filled dots and their error bars reflect the most credible values and 95% highest density intervals, respectively, from the DDM modeled to data in Experiment 1.

Figure S15

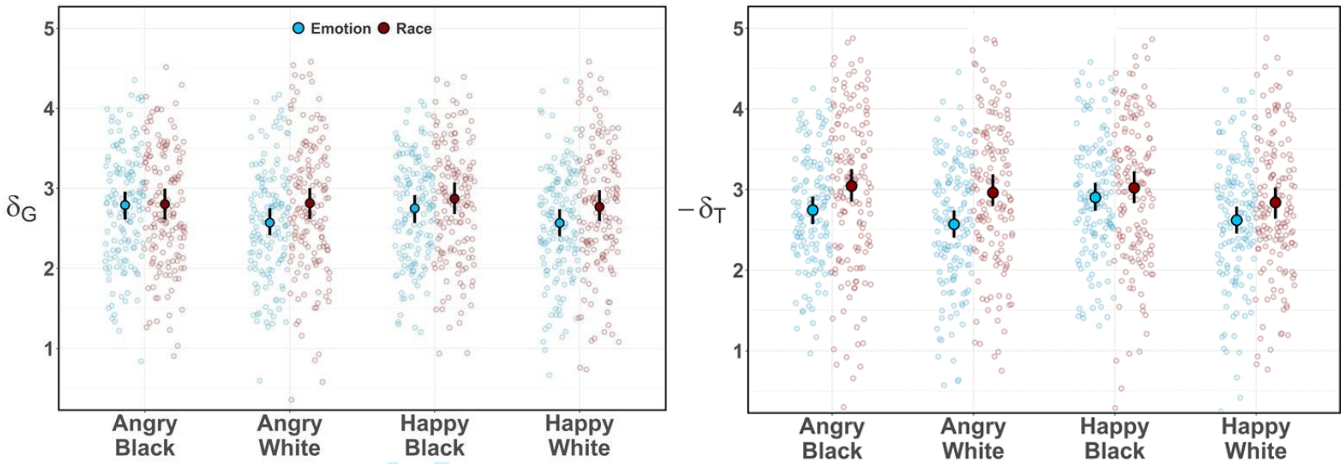
Beta Estimates by Race Prime, Emotion Prime, and Salience Conditions (Experiments 1)



Notes. Beta (starting point) estimates. Empty dots reflect individual-level estimates and filled dots and their error bars reflect the most credible values and 95% highest density intervals, respectively, from the DDM modeled to data in Experiment 1.

Figure S16

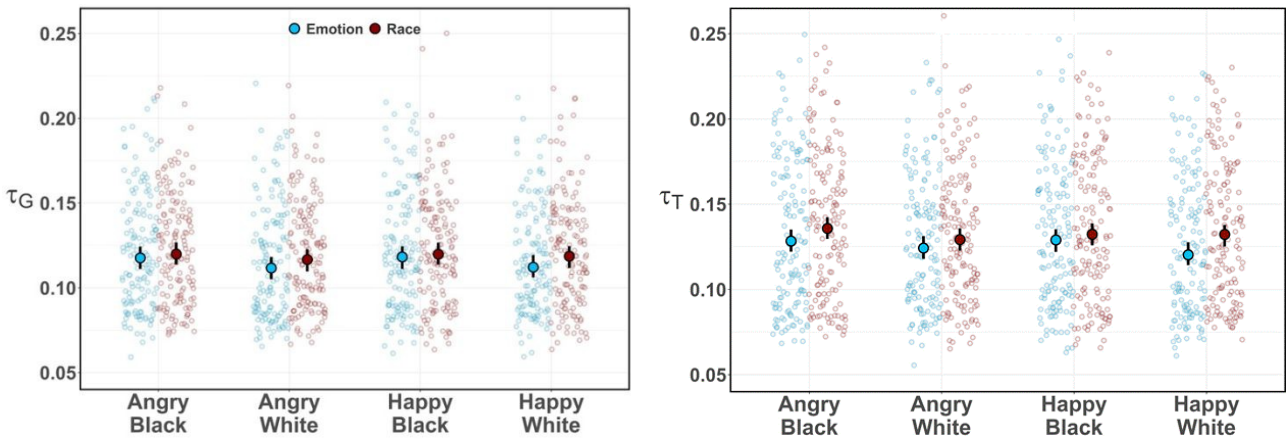
Delta Estimates by Race Prime, Emotion Prime, and Salience Conditions (Experiments 1)



Notes. Delta (drift rate) estimates. Empty dots reflect individual-level estimates and filled dots and their error bars reflect the most credible values and 95% highest density intervals, respectively, from the DDM modeled to data in Experiment 1. The plot on the left reflects delta estimates for tool trials. The plot on the right reflects delta estimates for gun trials.

Figure S17

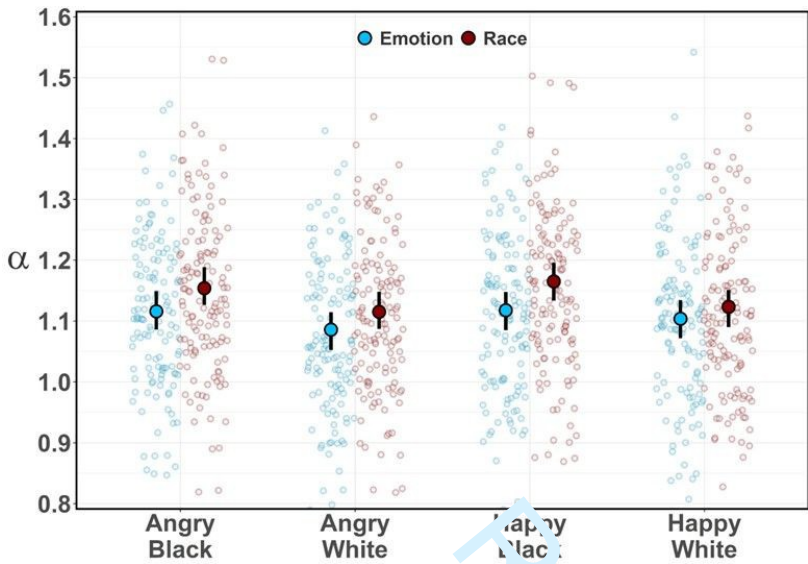
Tau Estimates by Race Prime, Emotion Prime, and Salience Conditions (Experiments 1)



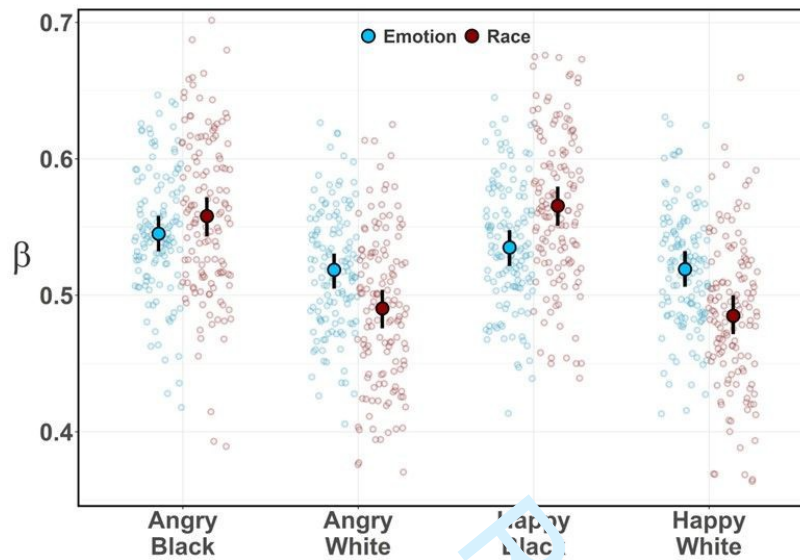
Notes. Tau (nondecision time) estimates. Empty dots reflect individual-level estimates and filled dots and their error bars reflect the most credible values and 95% highest density intervals, respectively, from the DDM modeled to data in Experiment 1. The plot on the left reflects tau estimates for tool trials. The plot on the right reflects tau estimates for gun trials.

Figure S18

Alpha Estimates by Race Prime, Emotion Prime, and Salience Conditions (Experiments 2)



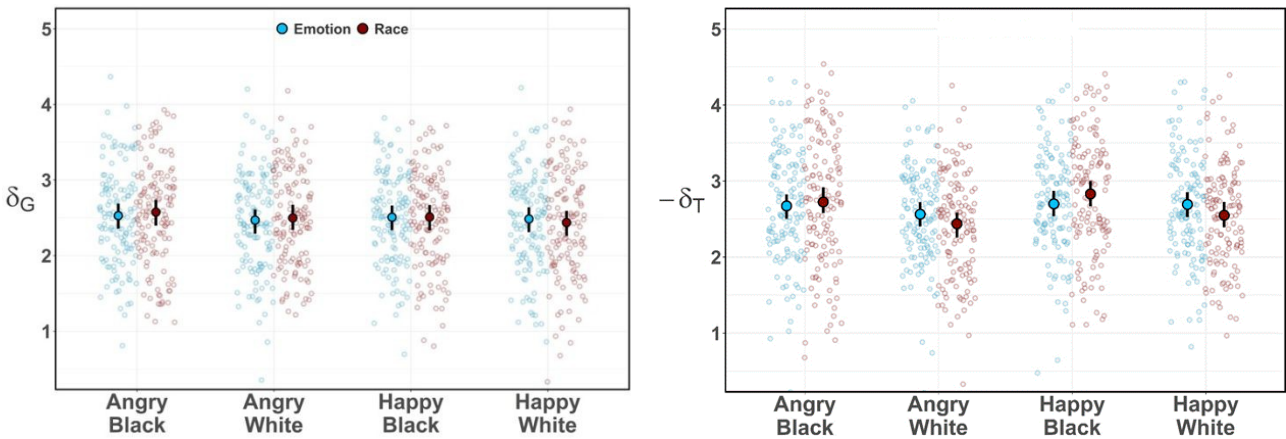
Notes. Alpha (threshold separation) estimates. Empty dots reflect individual-level estimates and filled dots and their error bars reflect the most credible values and 95% highest density intervals, respectively, from the DDM modeled to data in Experiment 2.

Figure S19*Beta Estimates by Race Prime, Emotion Prime, and Salience Conditions (Experiments 2)*

Notes. Beta (starting point) estimates. Empty dots reflect individual-level estimates and filled dots and their error bars reflect the most credible values and 95% highest density intervals, respectively, from the DDM modeled to data in Experiment 2.

Figure S20

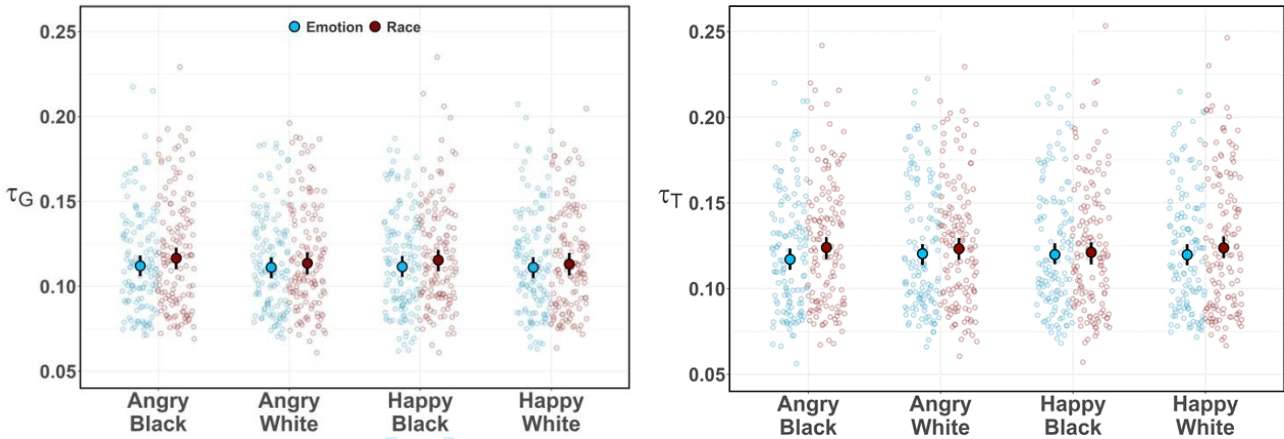
Delta Estimates by Race Prime, Emotion Prime, and Salience Conditions (Experiments 2)



Notes. Delta (drift rate) estimates. Empty dots reflect individual-level estimates and filled dots and their error bars reflect the most credible values and 95% highest density intervals, respectively, from the DDM modeled to data in Experiment 2. The plot on the left reflects delta estimates for tool trials. The plot on the right reflects delta estimates for gun trials.

Figure S21

Tau Estimates by Race Prime, Emotion Prime, and Salience Conditions (Experiments 2)



Notes. Tau (nondecision time) estimates. Empty dots reflect individual-level estimates and filled dots and their error bars reflect the most credible values and 95% highest density intervals, respectively, from the DDM modeled to data in Experiment 2. The plot on the left reflects tau estimates for tool trials. The plot on the right reflects tau estimates for gun trials.

Posterior Predictive Checks

Response Proportions

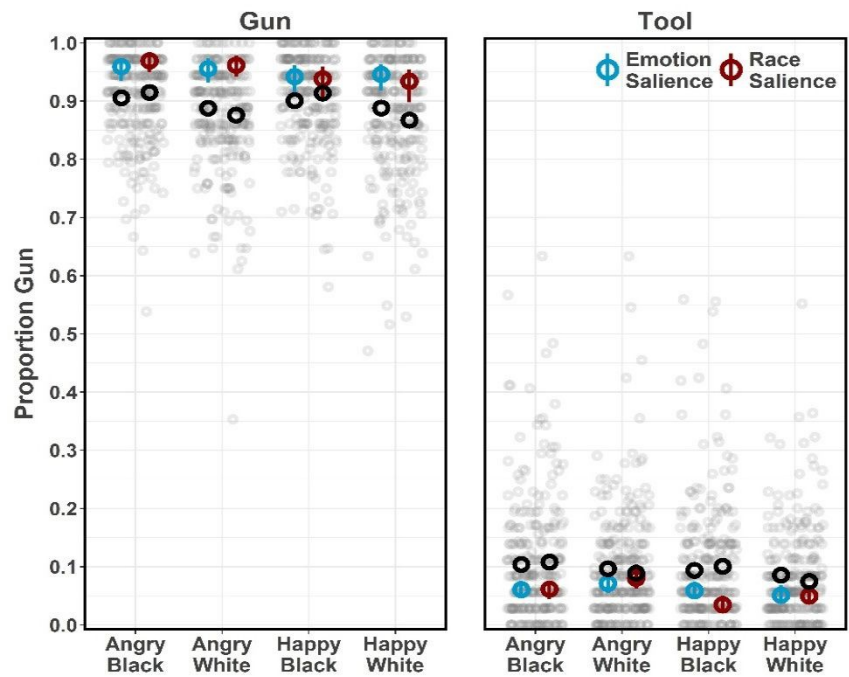
Figures S22 and S23 display the observed proportion of gun responses and the posterior predicted proportion of gun responses from the DDM. Overall, the model adequately characterized the proportion of times participants identified objects as guns. However, it should be noted that it somewhat overestimates the number of *gun* responses on trials with scowling face primes and Black face primes.

Response Times

Figures S24-S54 display the observed and posterior predicted response times (RTs). Overall, the model adequately characterized the proportion of times participants identified objects as guns. The model overestimates incorrect response times, but does so consistently across trial types and conditions, and it varies to a highly similar pattern across quantiles of response times as seen in the observed data.

Figure S22

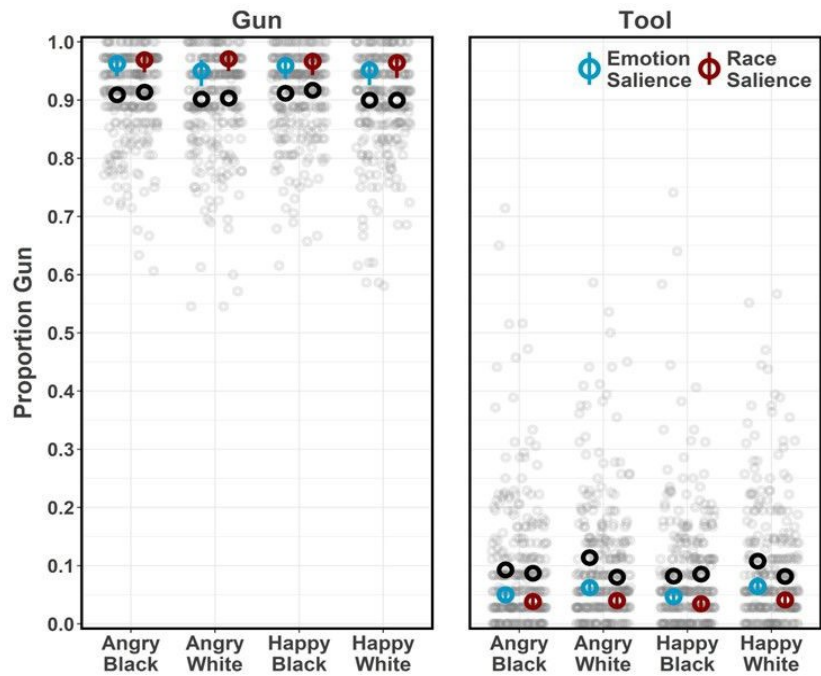
Observed and Posterior Predicted Proportions of Gun Responses (Experiment 1)



Notes. Black open circles reflect the average proportion of *gun* responses per trial type and salience condition. Light gray open circles reflect individual-level proportions of *gun* responses per trial type and salience condition. Error bars reflect HDI_{95%} for the posterior predicted distribution per trial type and salience condition.

Figure S23

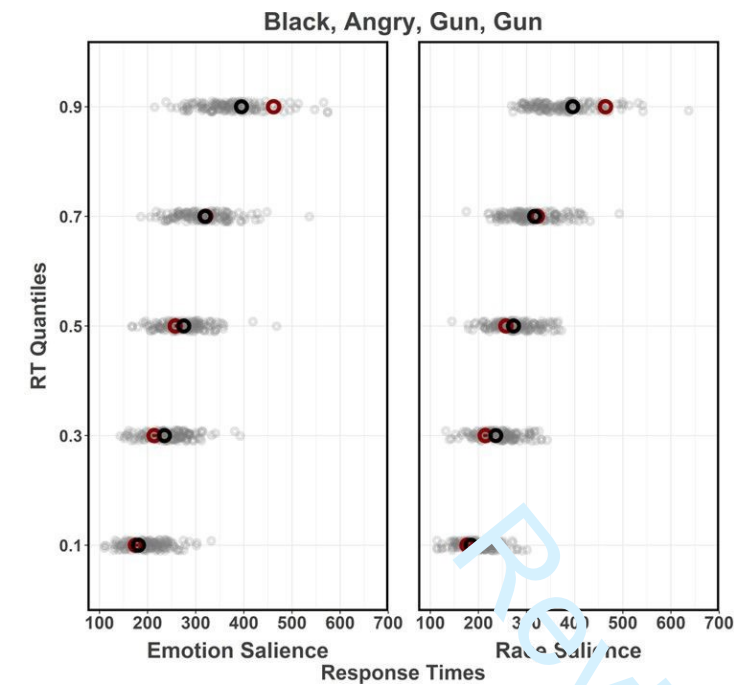
Observed and Posterior Predicted Proportions of Gun Responses (Experiment 2)



Notes. Black open circles reflect the average proportion of *gun* responses per trial type and salience condition. Light gray open circles reflect individual-level proportions of *gun* responses per trial type and salience condition. Error bars reflect HDI_{95%} for the posterior predicted distribution per trial type and salience condition.

Figure S24

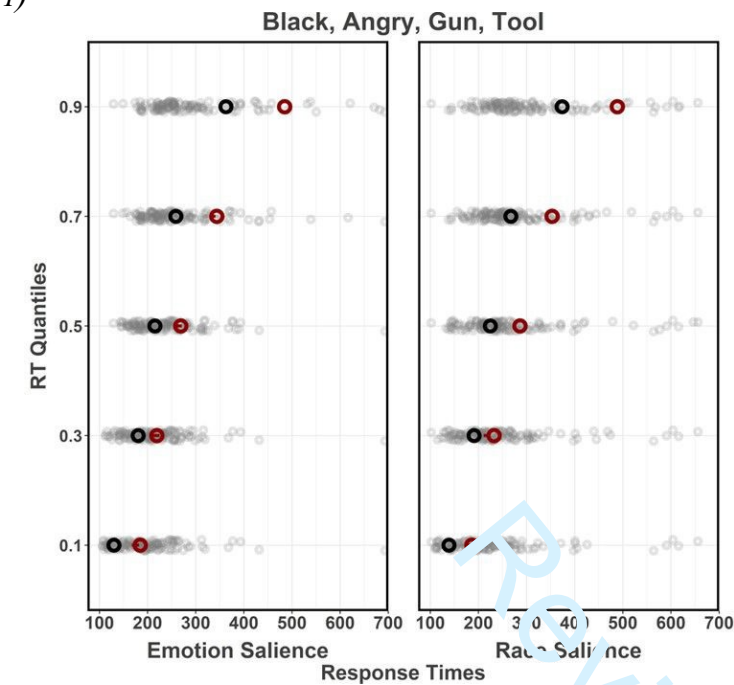
Observed & Posterior Predicted RTs: Identifying Guns After Angry Black Primes (Experiment 1)



Notes. Black open circles reflect average RTs, whereas light gray open circles reflect individual-level RTs. Posterior predicted RTs are reflected in red, including their HDI_{95%} (error bars).

Figure S25

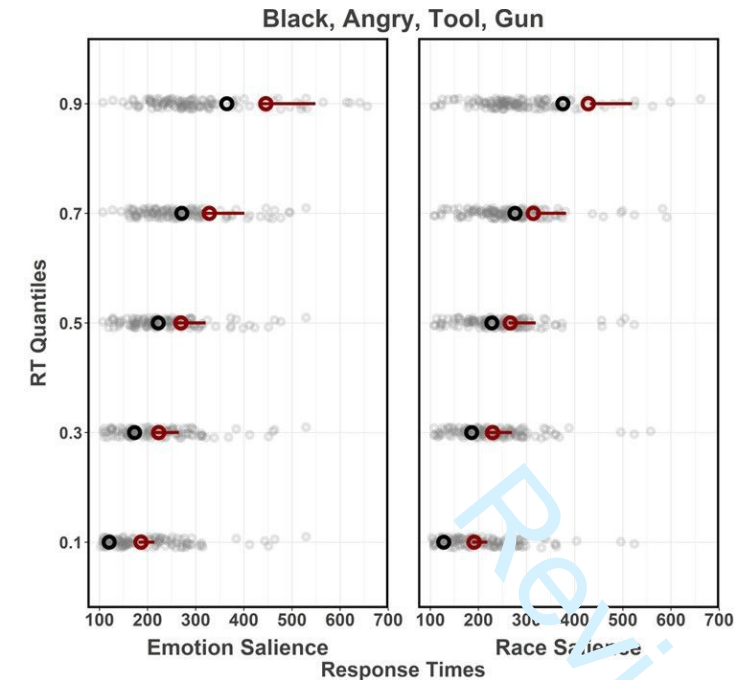
Observed & Posterior Predicted RTs: Identifying Tools After Angry Black Primes (Experiment 1)



Notes. Black open circles reflect average RTs, whereas light gray open circles reflect individual-level RTs. Posterior predicted RTs are reflected in red, including their HDI_{95%} (error bars).

Figure S26

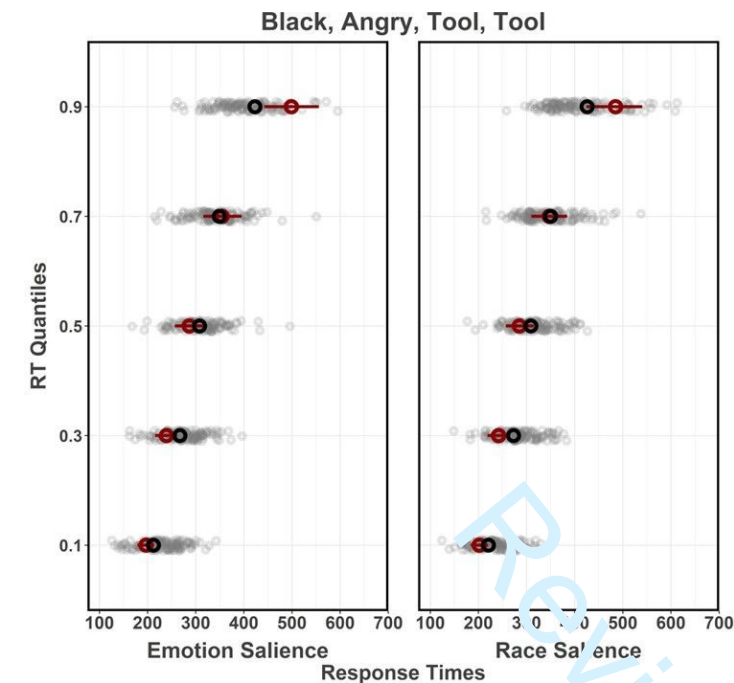
Observed & Posterior Predicted RTs: Misidentifying Tools After Angry Black Primes (Experiment 1)



Notes. Black open circles reflect average RTs, whereas light gray open circles reflect individual-level RTs. Posterior predicted RTs are reflected in red, including their HDI95% (error bars).

Figure S27

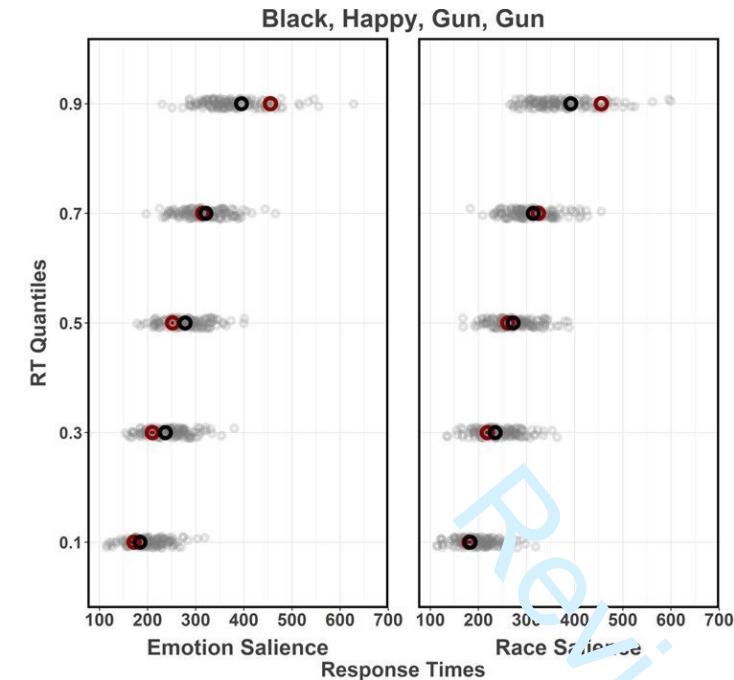
Observed & Posterior Predicted RTs: Identifying Tools After Angry Black Primes (Experiment 1)



Notes. Black open circles reflect average RTs, whereas light gray open circles reflect individual-level RTs. Posterior predicted RTs are reflected in red, including their HDI_{95%} (error bars).

Figure S28

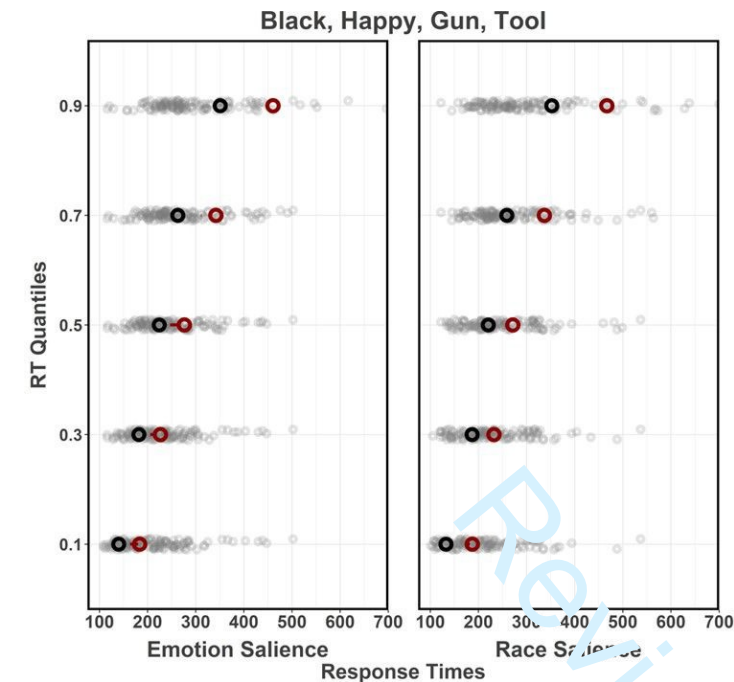
Observed & Posterior Predicted RTs: Identifying Guns After Happy Black Primes (Experiment 1)



Notes. Black open circles reflect average RTs, whereas light gray open circles reflect individual-level RTs. Posterior predicted RTs are reflected in red, including their HDI95% (error bars).

Figure S29

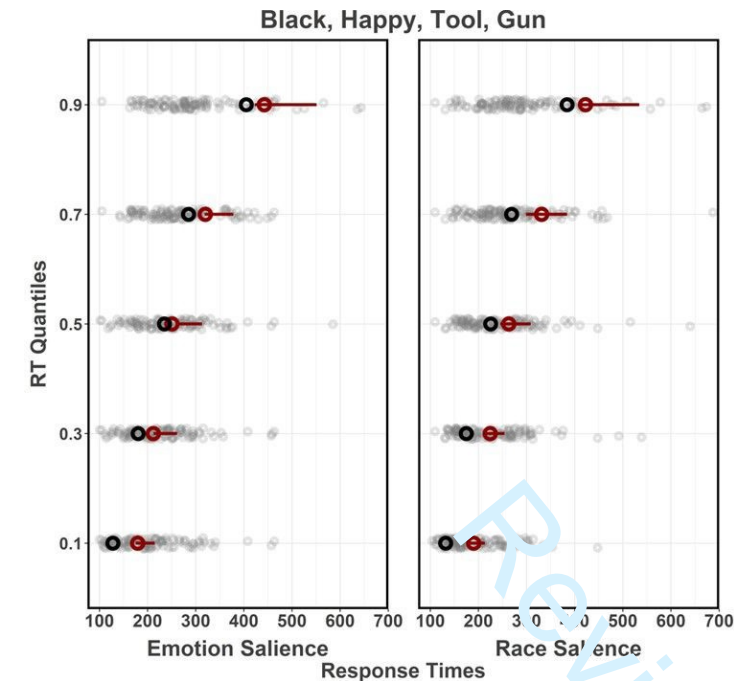
Observed & Posterior Predicted RTs: Misidentifying Guns After Happy Black Primes (Experiment 1)



Notes. Black open circles reflect average RTs, whereas light gray open circles reflect individual-level RTs. Posterior predicted RTs are reflected in red, including their HDI_{95%} (error bars).

Figure S30

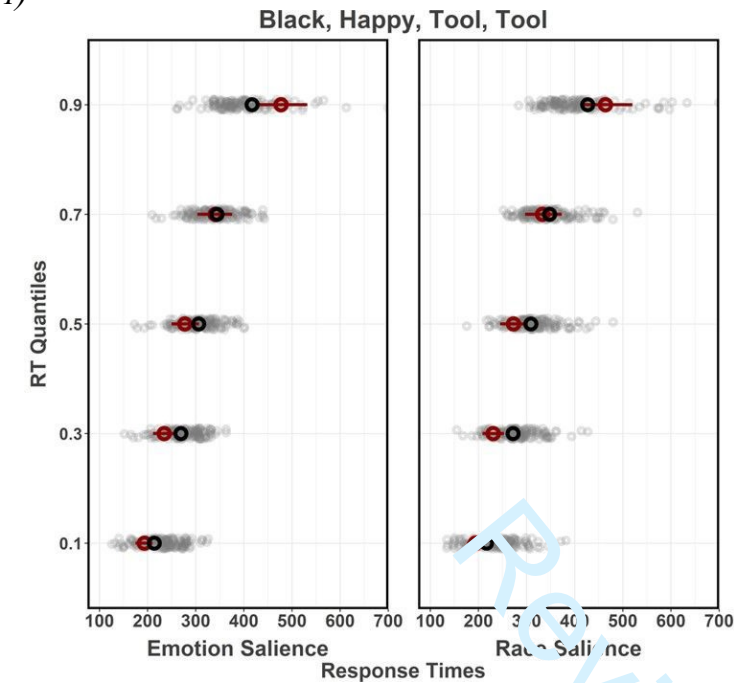
Observed & Posterior Predicted RTs: Misidentifying Tools After Happy Black Primes (Experiment 1)



Notes. Black open circles reflect average RTs, whereas light gray open circles reflect individual-level RTs. Posterior predicted RTs are reflected in red, including their HDI_{95%} (error bars).

Figure S30

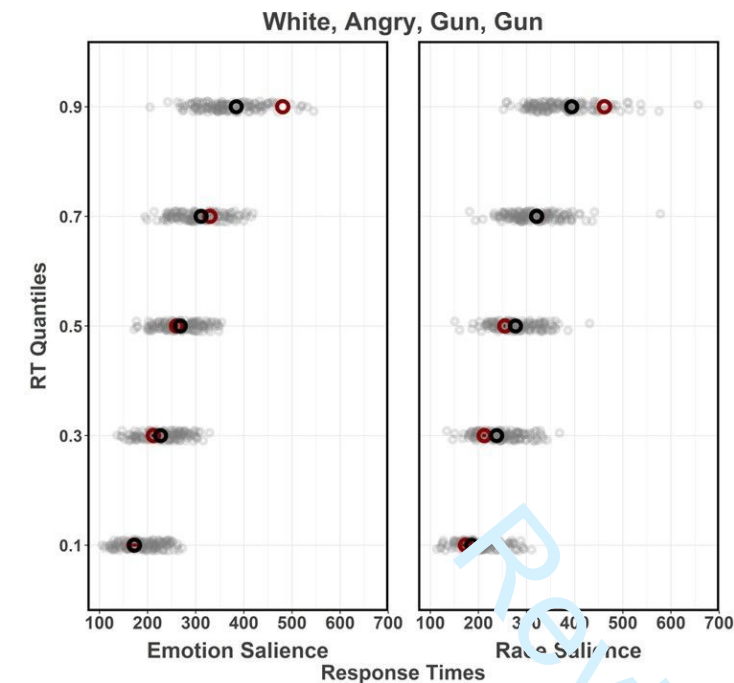
Observed & Posterior Predicted RTs: Identifying Tools After Happy Black Primes (Experiment 1)



Notes. Black open circles reflect average RTs, whereas light gray open circles reflect individual-level RTs. Posterior predicted RTs are reflected in red, including their HDI_{95%} (error bars).

Figure S31

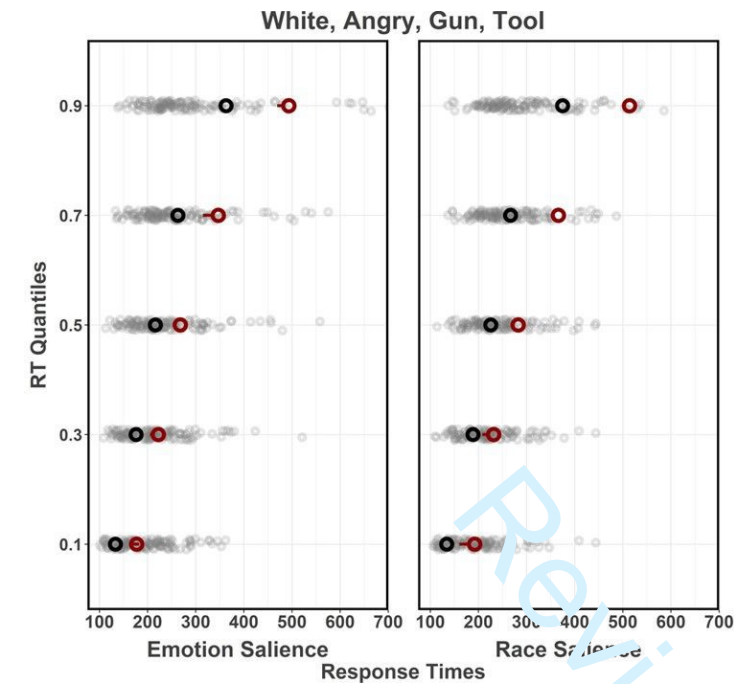
Observed & Posterior Predicted RTs: Identifying Guns After Angry White Primes (Experiment 1)



Notes. Black open circles reflect average RTs, whereas light gray open circles reflect individual-level RTs. Posterior predicted RTs are reflected in red, including their HDI_{95%} (error bars).

Figure S32

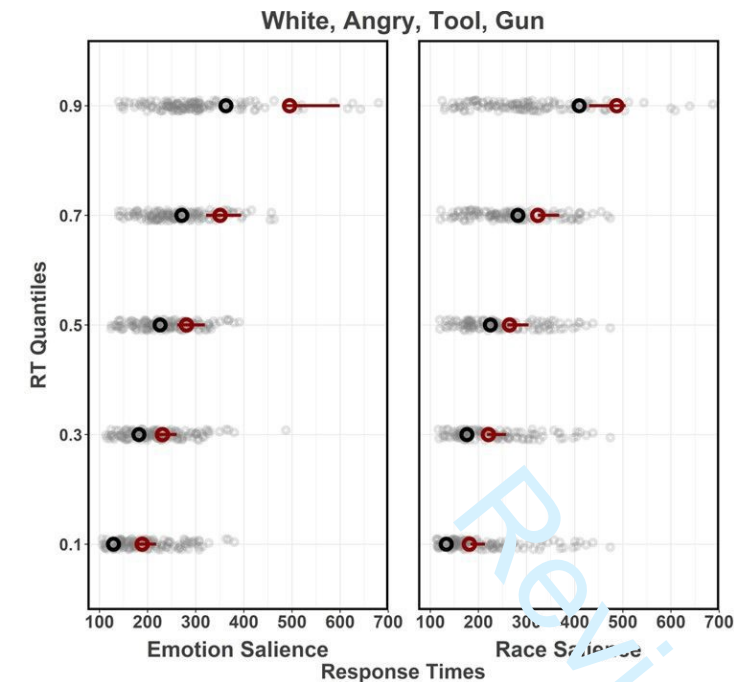
Observed & Posterior Predicted RTs: Misidentifying Guns After Angry White Primes (Experiment 1)



Notes. Black open circles reflect average RTs, whereas light gray open circles reflect individual-level RTs. Posterior predicted RTs are reflected in red, including their HDI_{95%} (error bars).

Figure S33

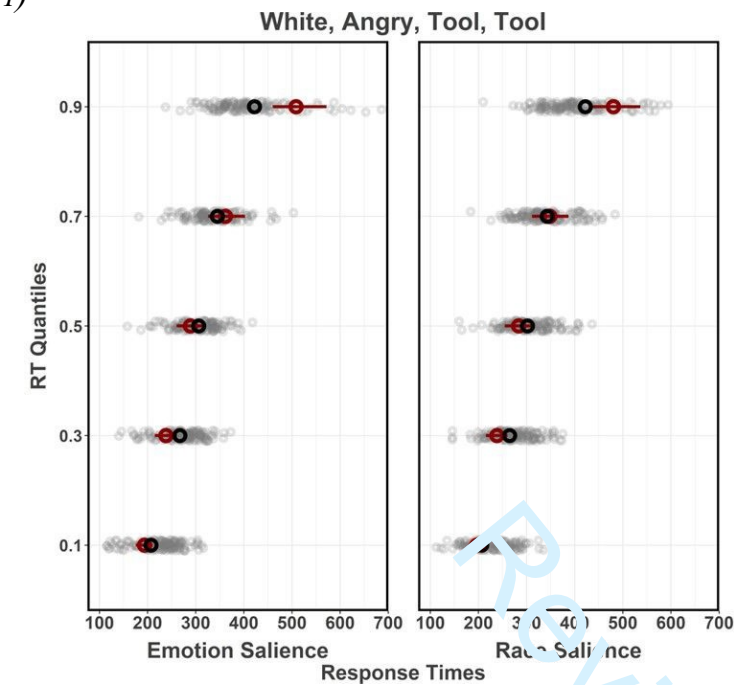
Observed & Posterior Predicted RTs: Misidentifying Tools After Angry White Primes (Experiment 1)



Notes. Black open circles reflect average RTs, whereas light gray open circles reflect individual-level RTs. Posterior predicted RTs are reflected in red, including their HDI95% (error bars).

Figure S34

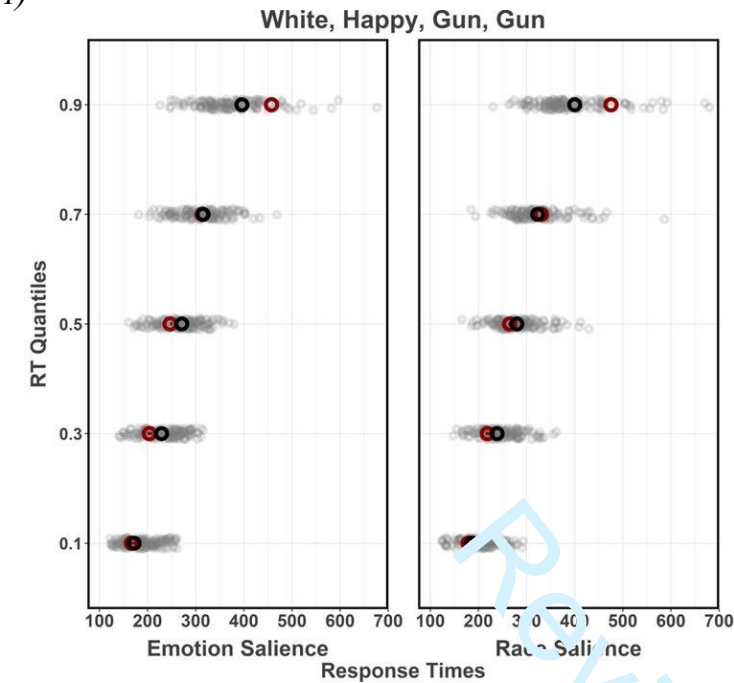
Observed & Posterior Predicted RTs: Identifying Tools After Angry White Primes (Experiment 1)



Notes. Black open circles reflect average RTs, whereas light gray open circles reflect individual-level RTs. Posterior predicted RTs are reflected in red, including their HDI_{95%} (error bars).

Figure S35

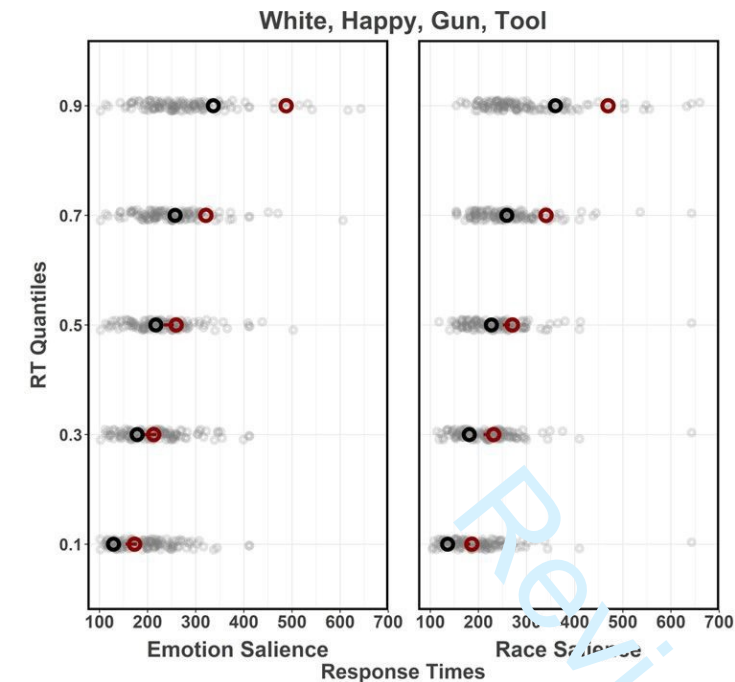
Observed & Posterior Predicted RTs: Identifying Guns After Happy White Primes (Experiment 1)



Notes. Black open circles reflect average RTs, whereas light gray open circles reflect individual-level RTs. Posterior predicted RTs are reflected in red, including their HDI_{95%} (error bars).

Figure S36

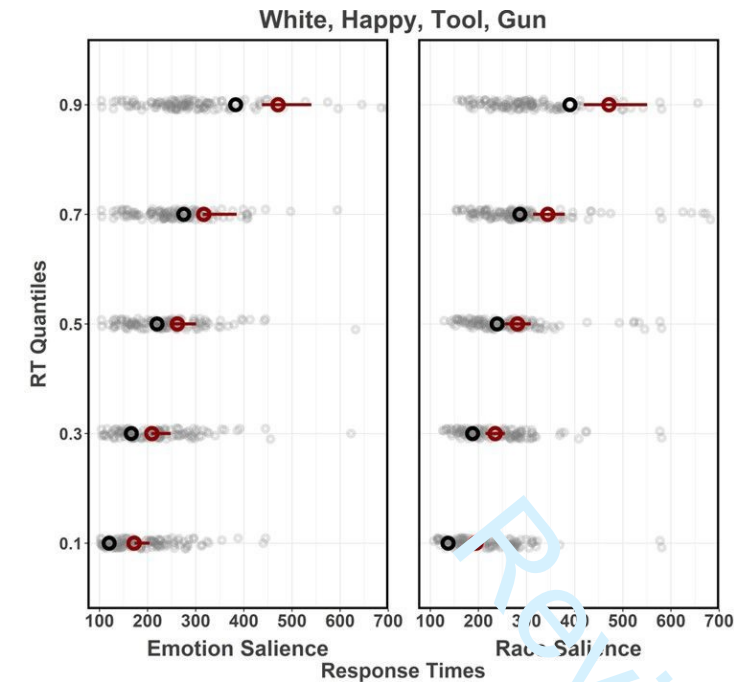
Observed & Posterior Predicted RTs: Misidentifying Guns After Happy White Primes (Experiment 1)



Notes. Black open circles reflect average RTs, whereas light gray open circles reflect individual-level RTs. Posterior predicted RTs are reflected in red, including their HDI_{95%} (error bars).

Figure S37

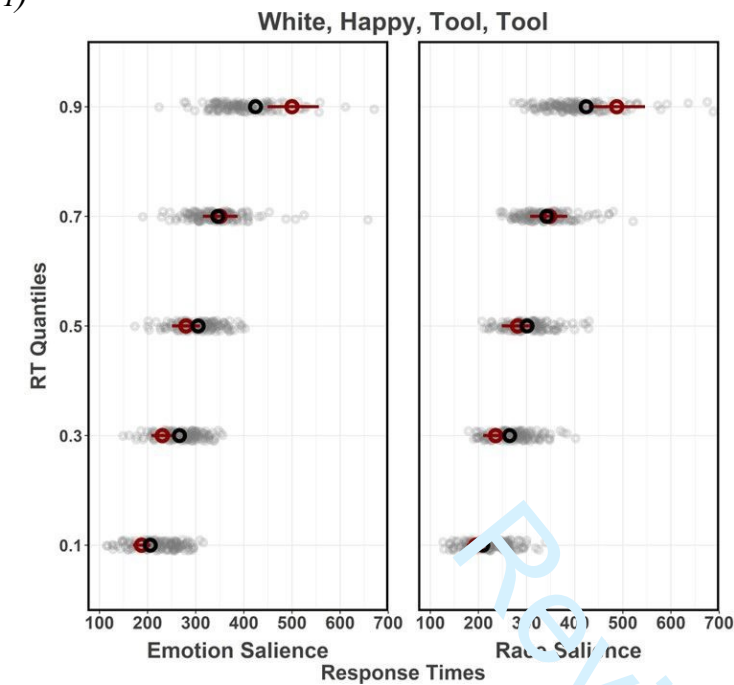
Observed & Posterior Predicted RTs: Misidentifying Tools After Happy White Primes (Experiment 1)



Notes. Black open circles reflect average RTs, whereas light gray open circles reflect individual-level RTs. Posterior predicted RTs are reflected in red, including their HDI_{95%} (error bars).

Figure S38

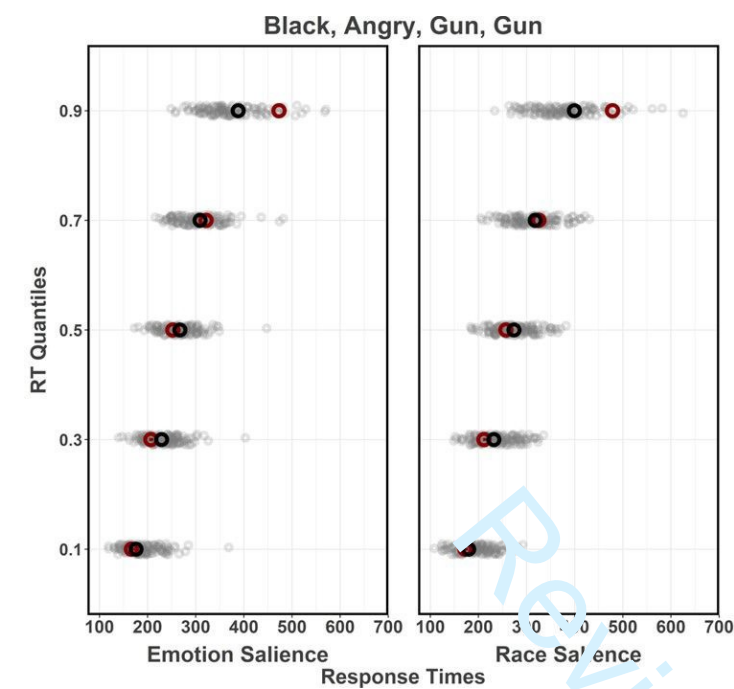
Observed & Posterior Predicted RTs: Identifying Tools After Happy White Primes (Experiment 1)



Notes. Black open circles reflect average RTs, whereas light gray open circles reflect individual-level RTs. Posterior predicted RTs are reflected in red, including their HDI_{95%} (error bars).

Figure S39

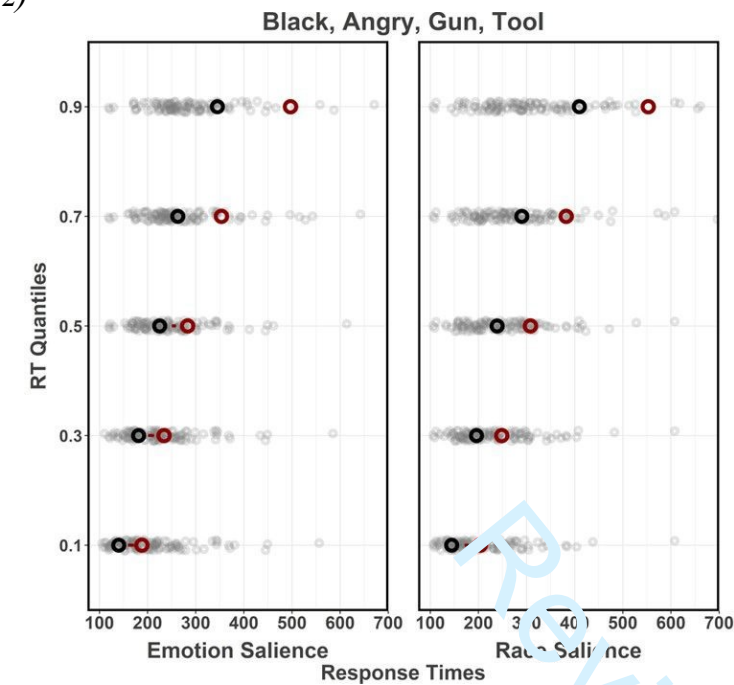
Observed & Posterior Predicted RTs: Identifying Guns After Angry Black Primes (Experiment 2)



Notes. Black open circles reflect average RTs, whereas light gray open circles reflect individual-level RTs. Posterior predicted RTs are reflected in red, including their HDI_{95%} (error bars).

Figure S40

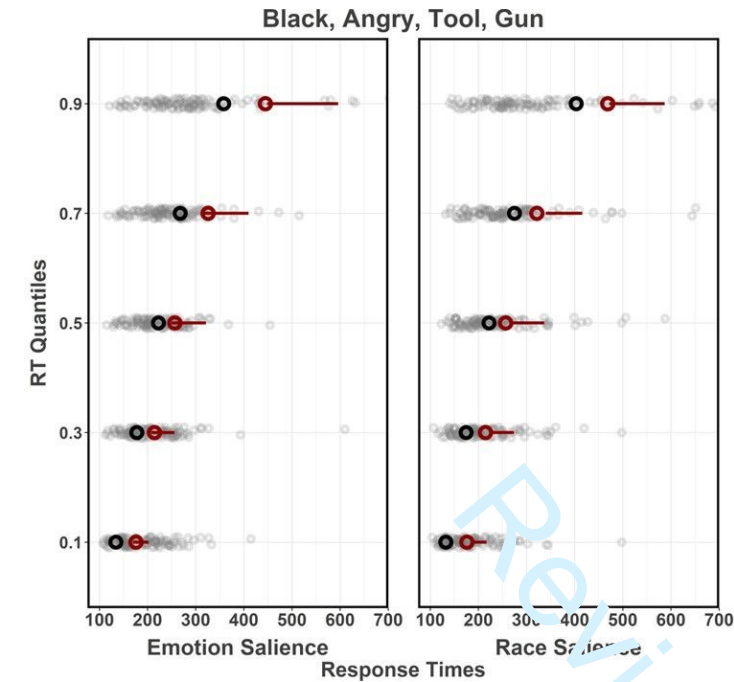
Observed & Posterior Predicted RTs: Identifying Tools After Angry Black Primes (Experiment 2)



Notes. Black open circles reflect average RTs, whereas light gray open circles reflect individual-level RTs. Posterior predicted RTs are reflected in red, including their HDI_{95%} (error bars).

Figure S41

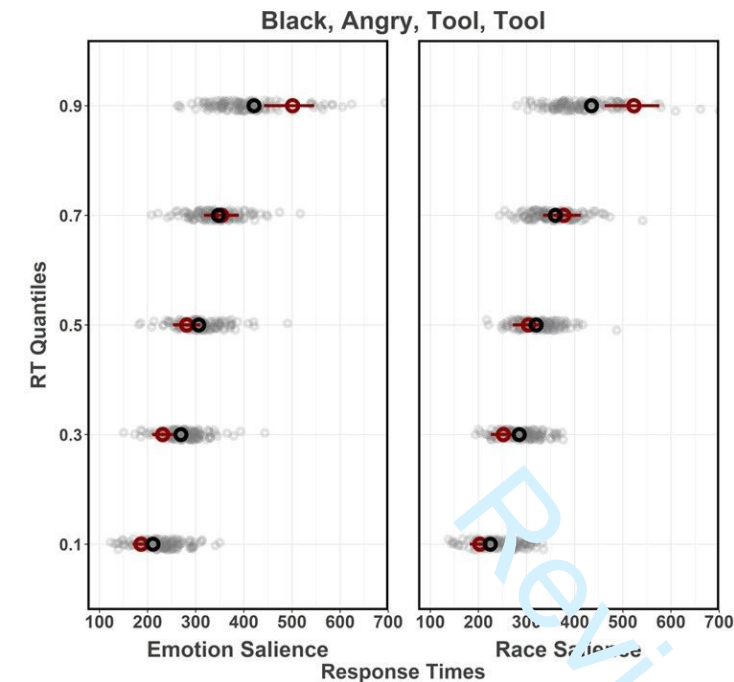
Observed & Posterior Predicted RTs: Misidentifying Tools After Angry Black Primes (Experiment 2)



Notes. Black open circles reflect average RTs, whereas light gray open circles reflect individual-level RTs. Posterior predicted RTs are reflected in red, including their HDI95% (error bars).

Figure S42

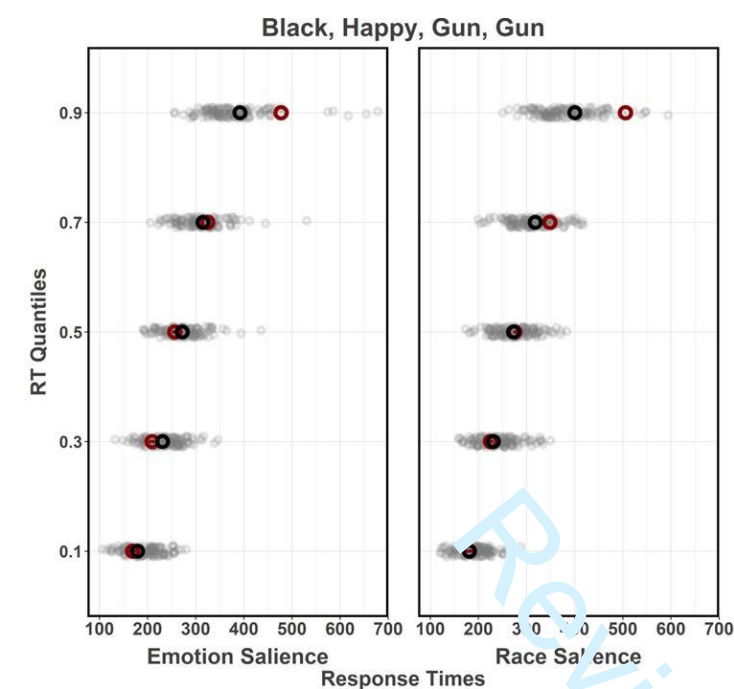
Observed & Posterior Predicted RTs: Identifying Tools After Angry Black Primes (Experiment 2)



Notes. Black open circles reflect average RTs, whereas light gray open circles reflect individual-level RTs. Posterior predicted RTs are reflected in red, including their HDI95% (error bars).

Figure S43

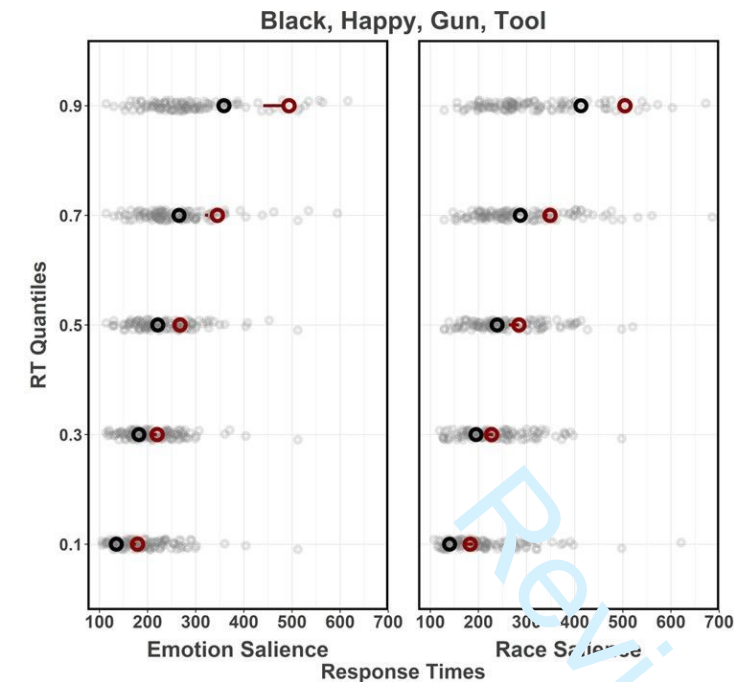
Observed & Posterior Predicted RTs: Identifying Guns After Happy Black Primes (Experiment 2)



Notes. Black open circles reflect average RTs, whereas light gray open circles reflect individual-level RTs. Posterior predicted RTs are reflected in red, including their HDI_{95%} (error bars).

Figure S44

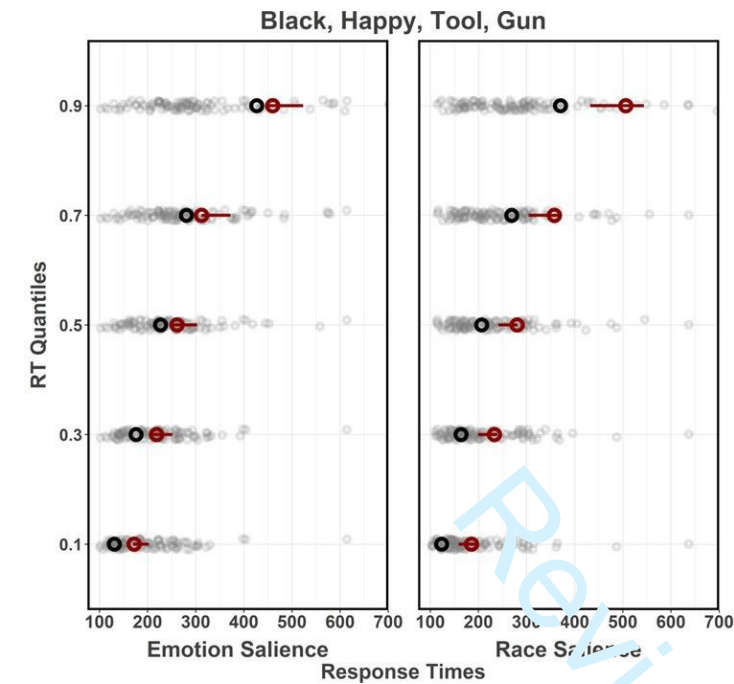
Observed & Posterior Predicted RTs: Misidentifying Guns After Happy Black Primes (Experiment 2)



Notes. Black open circles reflect average RTs, whereas light gray open circles reflect individual-level RTs. Posterior predicted RTs are reflected in red, including their HDI_{95%} (error bars).

Figure S45

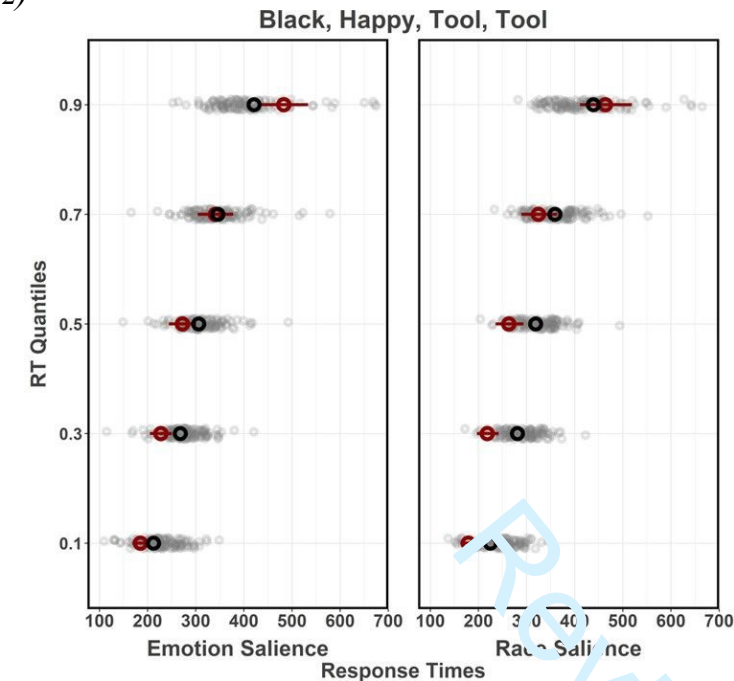
Observed & Posterior Predicted RTs: Misidentifying Tools After Happy Black Primes (Experiment 2)



Notes. Black open circles reflect average RTs, whereas light gray open circles reflect individual-level RTs. Posterior predicted RTs are reflected in red, including their HDI_{95%} (error bars).

Figure S46

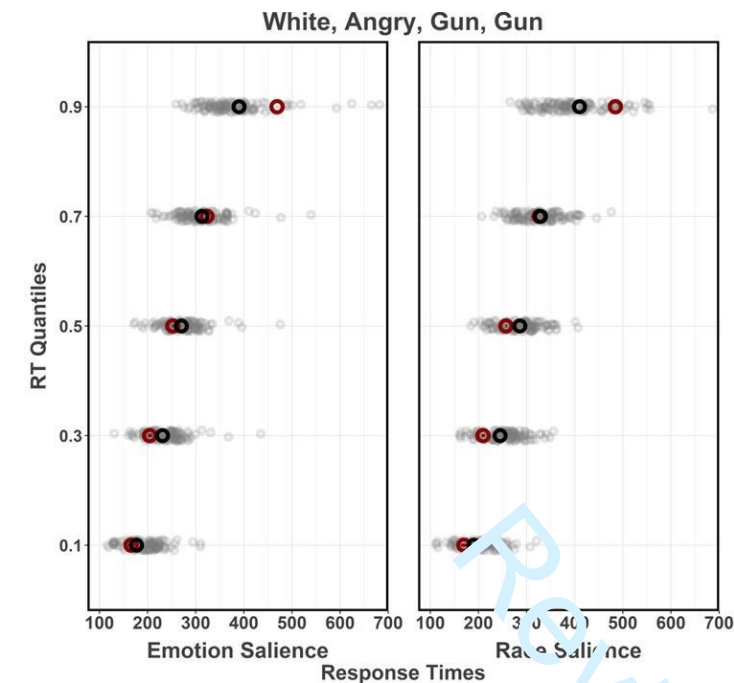
Observed & Posterior Predicted RTs: Identifying Tools After Happy Black Primes (Experiment 2)



Notes. Black open circles reflect average RTs, whereas light gray open circles reflect individual-level RTs. Posterior predicted RTs are reflected in red, including their HDI_{95%} (error bars).

Figure S47

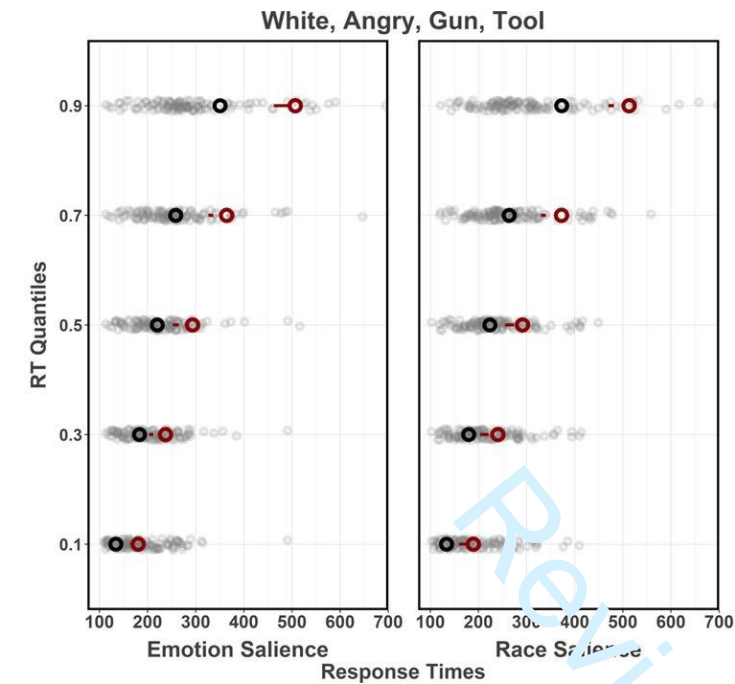
Observed & Posterior Predicted RTs: Identifying Guns After Angry White Primes (Experiment 2)



Notes. Black open circles reflect average RTs, whereas light gray open circles reflect individual-level RTs. Posterior predicted RTs are reflected in red, including their HDI_{95%} (error bars).

Figure S48

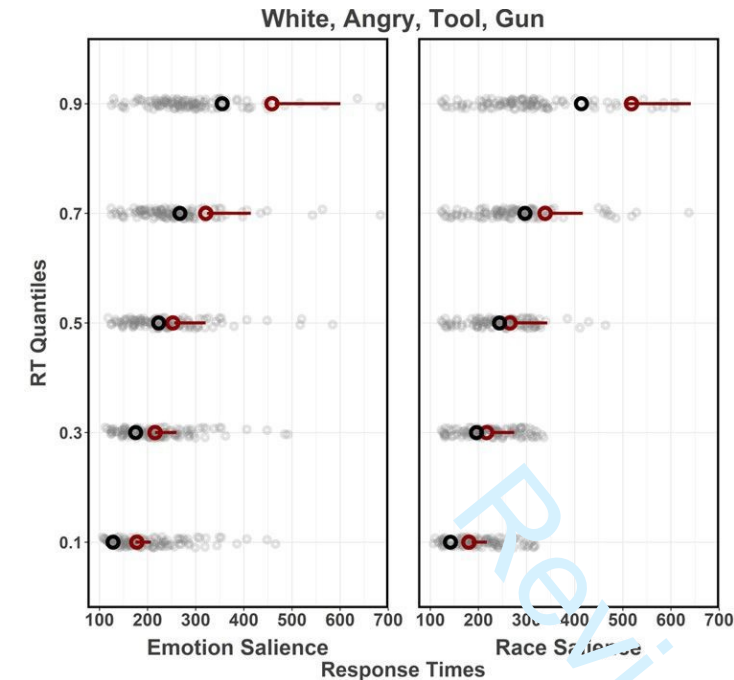
Observed & Posterior Predicted RTs: Misidentifying Guns After Angry White Primes (Experiment 2)



Notes. Black open circles reflect average RTs, whereas light gray open circles reflect individual-level RTs. Posterior predicted RTs are reflected in red, including their HDI_{95%} (error bars).

Figure S49

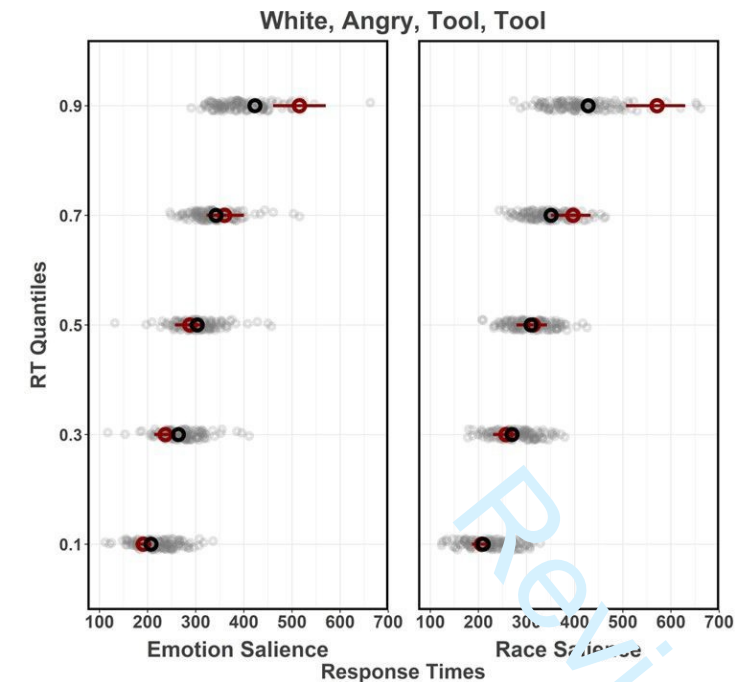
Observed & Posterior Predicted RTs: Misidentifying Tools After Angry White Primes (Experiment 2)



Notes. Black open circles reflect average RTs, whereas light gray open circles reflect individual-level RTs. Posterior predicted RTs are reflected in red, including their HDI95% (error bars).

Figure S50

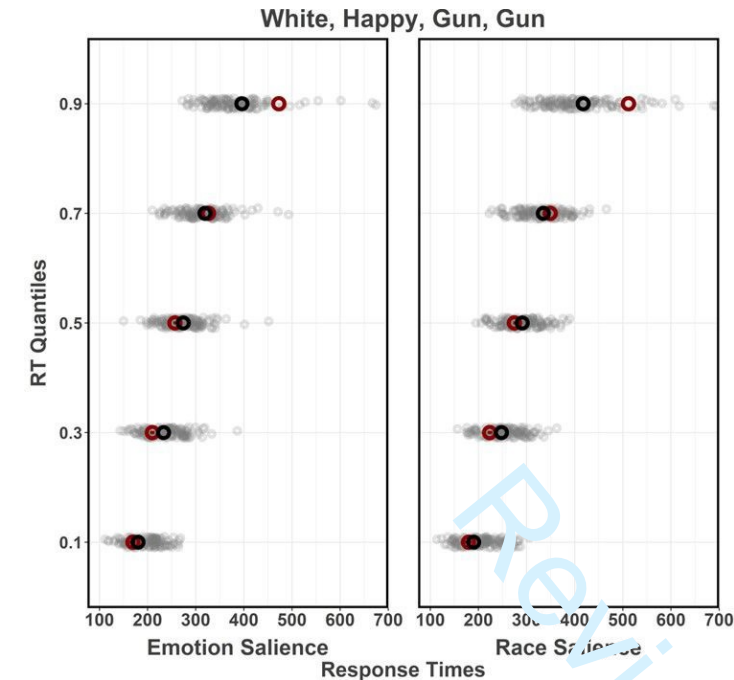
Observed & Posterior Predicted RTs: Identifying Tools After Angry White Primes (Experiment 2)



Notes. Black open circles reflect average RTs, whereas light gray open circles reflect individual-level RTs. Posterior predicted RTs are reflected in red, including their HDI95% (error bars).

Figure S51

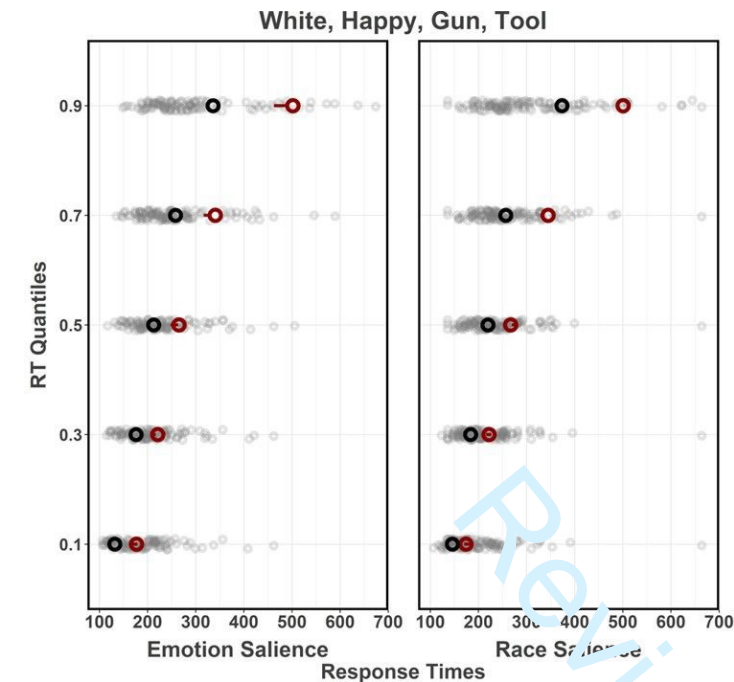
Observed & Posterior Predicted RTs: Identifying Guns After Happy White Primes (Experiment 2)



Notes. Black open circles reflect average RTs, whereas light gray open circles reflect individual-level RTs. Posterior predicted RTs are reflected in red, including their HDI95% (error bars).

Figure S52

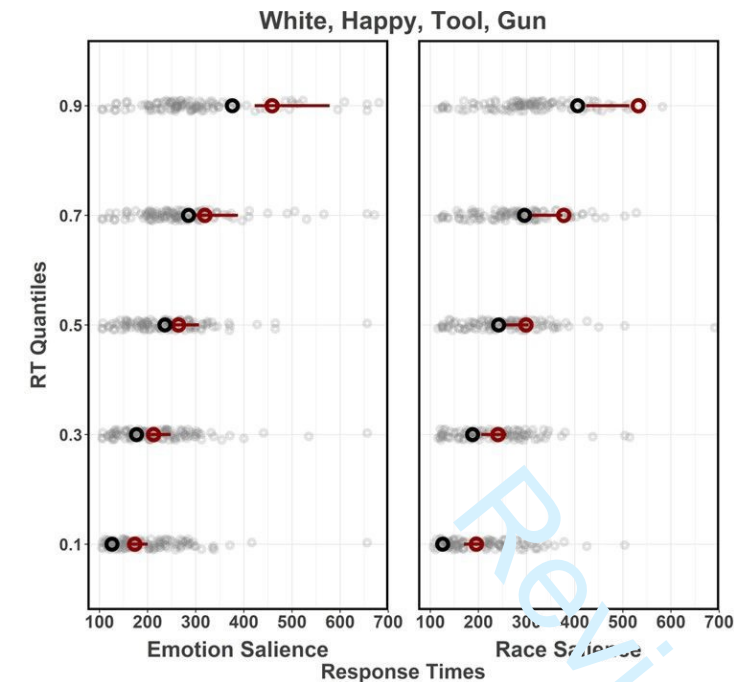
Observed & Posterior Predicted RTs: Misidentifying Guns After Happy White Primes (Experiment 2)



Notes. Black open circles reflect average RTs, whereas light gray open circles reflect individual-level RTs. Posterior predicted RTs are reflected in red, including their HDI_{95%} (error bars).

Figure S53

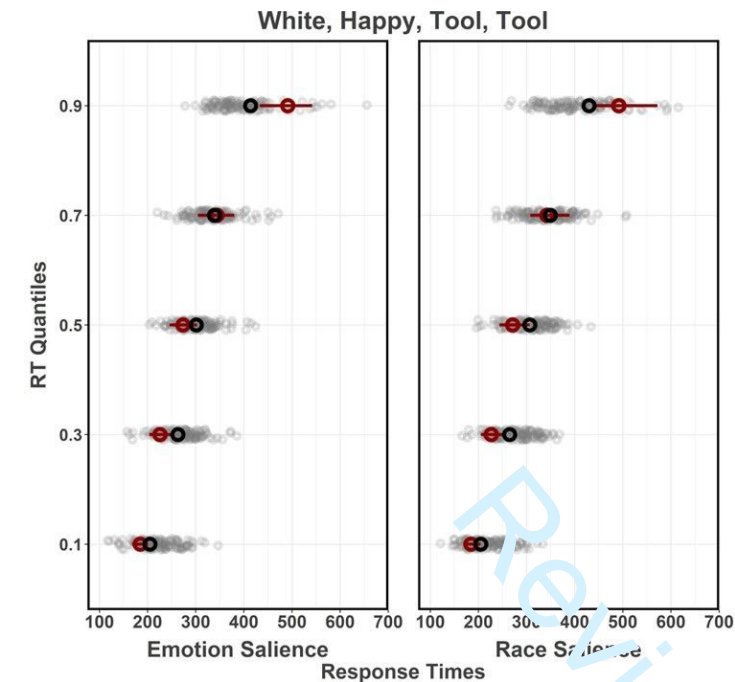
Observed & Posterior Predicted RTs: Misidentifying Tools After Happy White Primes (Experiment 2)



Notes. Black open circles reflect average RTs, whereas light gray open circles reflect individual-level RTs. Posterior predicted RTs are reflected in red, including their HDI95% (error bars).

Figure S54

Observed & Posterior Predicted RTs: Identifying Tools After Happy White Primes (Experiment 2)



Notes. Black open circles reflect average RTs, whereas light gray open circles reflect individual-level RTs. Posterior predicted RTs are reflected in red, including their HDI95% (error bars).