Supplement: Neural representations of ambiguous affective stimuli and resilience to anxiety in emerging adults

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Contents

Sample information.

Supplemental Table 1a: Sample demographics and summary statistics for questionnaire data.

Variable	N	
Age	101	
18		65 (64%)
19		36 (36%)
Sex	101	
Female		80 (79%)
Male		21 (21%)
Race	101	
American Indian/Alaska Native		2 (2.0%)
Asian		37 (37%)
Black/African American		10 (9.9%)
Caucasian/White		29 (29%)
Multiracial		11 (11%)
Not Reported		4 (4.0%)
Other		8 (7.9%)
Ethnicity	101	
Hispanic		24 (24%)
Not Hispanic		77 (76%)
First generation college student	101	38 (38%)
Baseline anxiety	101	30 (21, 42)
Negative valence bias	41	0.69 (0.54, 0.77)
Self-reported ambiguity tolerance	101	38 (35, 43)

Statistics presented: n (%); Median (IQR)

Supplemental Table 1b: Number of complete observations (participants) at each timepoint.

Number of anxiety observations at each timepoint

T1	T2	T3	T4	T5
101	96	96	82	81

Supplemental Table 1c: Number of completed timepoints by demographics.

Results from chi square tests of independence testing association between number of completed timepoints to demographic variables

Variable	Chi.squared	df	p.value
Sex	3.3	5	0.66
Race	38.2	30	0.14
Ethnicity	6.5	5	0.26
First generation (yes/no)	2.5	5	0.78

Longitudinal anxiety scores.

Supplemental Table 2: Growth curve model of anxiety scores over time.

Fixed effects from multilevel model
Dependent variable: Anxiety score

variable	estimate	SE	CI	t	df	p
Intercept	32.50	1.63	[29.3, 35.7]	19.90	100	<0.001
Time (months)	-0.01	0.23	[-0.46, 0.45]	-0.03	81	0.973

Supplemental Table 3: Growth curve model of anxiety scores over time, controlling for quarantine onset.

Fixed effects from multilevel model
Dependent variable: Anxiety score

variable	estimate	SE	CI	t	df	p
Intercept	42.4	5.79	[31.04, 53.72]	7.33	100	<0.001
Time (months)	0.0	0.23	[-0.45, 0.46]	0.01	81	0.995
Quarantine onset between T1 and T2	-8.8	7.05	[-22.68, 4.98]	-1.25	98	0.213
Quarantine onset between T2 and T3	-12.2	6.20	[-24.4, -0.08]	-1.97	99	0.051
Quarantine onset between T3 and T4	-9.3	6.69	[-22.47, 3.77]	-1.40	99	0.166
Quarantine onset between T4 and T5	-1.9	12.80	[-26.98, 23.2]	-0.15	96	0.883

Self-reported ambiguity tolerance and anxiety.

Supplemental Table 4: Self-reported ambiguity tolerance and baseline anxiety.

Dependent variable: Baseline anxiety score (z)

variable	estimate	SE	CI	t(99)	p
Intercept	0.00	0.09	[-0.19, 0.19]	0.0	>0.999
MSTAT score (z)	-0.32	0.10	[-0.51, -0.13]	-3.4	0.001

Supplemental Table 5: Self-reported ambiguity tolerance and longitudinal anxiety.

Fixed effects from multilevel model
Dependent variable: Anxiety score

variable	estimate	SE	CI	t	df	p
Intercept	32.50	1.55	[29.47, 35.53]	21.02	101	<0.001
Time (months)	-0.01	0.23	[-0.46, 0.44]	-0.04	81	0.971
MSTAT score (z)	-5.05	1.55	[-8.09, -2.01]	-3.25	100	0.002
Time x MSTAT score (z)	0.20	0.22	[-0.24, 0.64]	0.90	79	0.369

Behavior in post-scan task.

Supplemental Table 6a: Accuracy for non-ambiguous (threatening and nonthreatening) images in post-scan task.

One-tailed t-test: Is average accuracy for threatening (angry) images greater than 50% (chance accuracy)?

Test statistic	df	P value	Alternative hypothesis	mean of x
30.6	40	1.137e-29 * * *	greater	0.9315

One-tailed t-test: Is average accuracy for nonthreatening (happy) images greater than 50% (chance accuracy)?

Test statistic	df	P value	Alternative hypothesis	mean of x
71.5	40	3.971e-44 * * *	greater	0.9604

Supplemental Table 6b: Reaction time by image type in post-scan task.

```
##
##  Paired t-test
##
## data:  data$angry_rt_average and data$surprised_rt_average
```

```
## t = -8, df = 40, p-value = 4e-10
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
##  -0.086 -0.052
## sample estimates:
## mean of the differences
##                  -0.069
```

```
##
##  Paired t-test
##
## data:  data$happy_rt_average and data$surprised_rt_average
## t = -10, df = 40, p-value = 3e-12
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
##  -0.116 -0.077
## sample estimates:
## mean of the differences
##                  -0.097
```

Dependent variable: Average reaction time (surprised trials are reference level)

variable	estimate	SE	CI	t(120)	p
Intercept	0.57	0.02	[0.54, 0.61]	34.8	<0.001
Angry trials	-0.07	0.02	[-0.12, -0.02]	-3.0	0.004
Happy trials	-0.10	0.02	[-0.14, -0.05]	-4.1	<0.001

```
## Analysis of Variance Table
##
## Response: reactiontime_average
##                                          Df Sum Sq Mean Sq F value Pr(>F)
## relevel(trial_type, ref = "surprised")   2  0.203  0.1016    9.13 0.0002 ***
## Residuals                               120  1.336  0.0111
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Self-reported ambiguity tolerance and behavior in post-scan task.

Supplemental Table 7a: Self-reported ambiguity tolerance and negative valence biases in post-scan task.

Dependent variable: Negative valence bias (z)

variable	estimate	SE	CI	t(39)	p
Intercept	0.00	0.16	[-0.32, 0.32]	0.00	>0.999
MSTAT score (z)	0.14	0.16	[-0.18, 0.46]	0.91	0.369

Supplemental Table 7b: Same model with low accuracy participant removed.

Dependent variable: Negative valence bias (z)

variable	estimate	SE	CI	t(38)	p
Intercept	0.08	0.14	[-0.2, 0.36]	0.56	0.582
MSTAT score (z)	0.11	0.14	[-0.17, 0.39]	0.81	0.423

Anxiety and behavior in post-scan task.

Supplemental Table 8a: Negative valence biases and baseline anxiety scores.

Dependent variable: Negative valence bias (z)

variable	estimate	SE	CI	t(39)	p
Intercept	0.00	0.16	[-0.32, 0.32]	0.00	>0.999
Baseline anxiety (z)	-0.06	0.16	[-0.39, 0.26]	-0.39	0.699

Supplemental Table 8b: Same model with low accuracy participant removed.

Dependent variable: Negative valence bias (z)

variable	estimate	SE	CI	t(38)	p
Intercept	0.08	0.14	[-0.2, 0.36]	0.56	0.575
Baseline anxiety (z)	0.13	0.14	[-0.16, 0.41]	0.90	0.374

Supplemental Table 9a: Negative valence biases and longitudinal anxiety scores.

Fixed effects from multilevel model
Dependent variable: Anxiety score

variable	estimate	SE	CI	t	df	p
Intercept	33.56	2.74	[28.2, 38.93]	12.27	39	<0.001
Time (months)	-0.29	0.38	[-1.04, 0.46]	-0.76	38	0.453
Negative valence bias (z)	-1.89	2.77	[-7.32, 3.53]	-0.68	39	0.498
Time x Negative valence bias	0.72	0.38	[-0.02, 1.46]	1.91	37	0.064

Supplemental Table 9b: Same model with low accuracy participant removed.

Fixed effects from multilevel model
Dependent variable: Anxiety score

variable	estimate	SE	CI	t	df	p
Intercept	32.27	2.56	[27.25, 37.29]	12.60	38	<0.001
Time (months)	-0.34	0.39	[-1.11, 0.43]	-0.87	37	0.392
Negative valence bias (z)	2.30	2.95	[-3.48, 8.08]	0.78	38	0.439
Time x Negative valence bias	0.83	0.44	[-0.04, 1.7]	1.87	36	0.069

Supplemental Table 10a: Baseline anxiety and average reaction time to ambiguous stimuli.

Dependent variable: Average RT to surprised images in post-scan task

variable	estimate	SE	CI	t(39)	p
Intercept	0.00	0.16	[-0.32, 0.32]	0.00	>0.999
Baseline anxiety (z)	-0.03	0.16	[-0.35, 0.3]	-0.17	0.869

Supplemental Table 10b: Same model with low accuracy participant removed.

Dependent variable: Average RT to surprised images in post-scan task

variable	estimate	SE	CI	t(38)	p
Intercept	0.02	0.16	[-0.31, 0.35]	0.12	0.908
Baseline anxiety (z)	0.02	0.17	[-0.33, 0.37]	0.10	0.924

Condition-level analyses: Representational similarity (RS) and baseline anxiety.

Supplemental Table 11: Ambiguous/threatening RS and baseline anxiety.

Right amygdala.

Dependent variable: Baseline anxiety score (z)

variable	estimate	SE	CI	t(39)	p
Intercept	-0.22	0.62	[-1.48, 1.04]	-0.35	0.726
Ambiguous/threatening RS (Fisher z score)	0.56	1.55	[-2.57, 3.7]	0.36	0.718

Left amygdala.

Dependent variable: Baseline anxiety score (z)

variable	estimate	SE	CI	t(39)	p
Intercept	-0.08	0.59	[-1.26, 1.11]	-0.13	0.894
Ambiguous/threatening RS (Fisher z score)	0.21	1.50	[-2.82, 3.24]	0.14	0.890

Supplemental Table 12: Ambiguous/nonthreatening RS and baseline anxiety.

Right amygdala.

Dependent variable: Baseline anxiety score (z)

variable	estimate	SE	CI	t(39)	p
Intercept	0.71	0.76	[-0.82, 2.23]	0.93	0.356
Ambiguous/nonthreatening RS (Fisher z score)	-1.78	1.86	[-5.54, 1.98]	-0.96	0.345

Left amygdala.

Dependent variable: Baseline anxiety score (z)

variable	estimate	SE	CI	t(39)	p
Intercept	1.6	0.75	[0.09, 3.12]	2.1	0.039
Ambiguous/nonthreatening RS (Fisher z score)	-4.0	1.84	[-7.76, -0.3]	-2.2	0.035

Left amygdala: Sensitivity analysis (Control voxels).

Dependent variable: Baseline anxiety score (z)

variable	estimate	SE	CI	t(38)	p
Intercept	1.2	1.3	[-1.38, 3.71]	0.93	0.359
Ambiguous/nonthreatening RS (Fisher z score)	-4.0	1.9	[-7.79, -0.24]	-2.16	0.038
Left amygdala size	0.0	0.0	[-0.01, 0.01]	0.44	0.665

Supplemental Table 13: Threatening/nonthreatening RS and baseline anxiety.

Right amygdala.

Dependent variable: Baseline anxiety score (z)

variable	estimate	SE	CI	t(39)	p
Intercept	-0.12	0.66	[-1.47, 1.22]	-0.18	0.856
Threatening/nonthreatening RS (Fisher z score)	0.34	1.79	[-3.28, 3.96]	0.19	0.852

Left amygdala.

Dependent variable: Baseline anxiety score (z)

variable	estimate	SE	CI	t(39)	p
Intercept	0.41	0.57	[-0.74, 1.56]	0.72	0.476
Threatening/nonthreatening RS (Fisher z score)	-1.17	1.56	[-4.32, 1.99]	-0.75	0.459

Condition-level analyses: Representational similarity (RS) and longitudinal anxiety.

Supplemental Table 14: Ambiguous/threatening RS and longitudinal anxiety.

Right amygdala.

Fixed effects from multilevel model
Dependent variable: Anxiety score

variable	estimate	SE	CI	t	df	p
Intercept	30.0	10.8	[8.78, 51.16]	2.77	39	0.009
Ambiguous/threatening RS (fisher z)	9.3	27.0	[-43.59, 62.14]	0.34	39	0.733
Time (months)	1.1	1.5	[-1.9, 4.04]	0.71	36	0.485
Time x Ambiguous/threatening RS	-3.5	3.8	[-10.9, 3.88]	-0.93	36	0.358

Left amygdala.

Fixed effects from multilevel model
Dependent variable: Anxiety score

variable	estimate	SE	CI	t	df	p
Intercept	33.15	10.2	[13.16, 53.14]	3.25	39	0.002
Ambiguous/threatening RS (fisher z)	1.11	26.1	[-50.04, 52.25]	0.04	39	0.966
Time (months)	-0.27	1.4	[-3.1, 2.55]	-0.19	36	0.850
Time x Ambiguous/threatening RS	-0.06	3.7	[-7.29, 7.17]	-0.02	36	0.987

Supplemental Table 15: Ambiguous/nonthreatening RS and longitudinal anxiety.

Right amygdala.

Fixed effects from multilevel model
Dependent variable: Anxiety score

variable	estimate	SE	CI	t	df	p
Intercept	42.15	13.2	[16.21, 68.09]	3.19	39	0.003
Ambiguous/nonthreatening RS (fisher z)	-21.60	32.6	[-85.41, 42.22]	-0.66	39	0.511
Time (months)	-0.19	2.0	[-4.06, 3.67]	-0.10	38	0.923
Time x Ambiguous/nonthreatening RS	-0.26	4.8	[-9.66, 9.15]	-0.05	38	0.958

Left amygdala.

Fixed effects from multilevel model
Dependent variable: Anxiety score

variable	estimate	SE	CI	t	df	p
Intercept	56.02	13	[29.94, 82.09]	4.21	39	<0.001
Ambiguous/nonthreatening RS (fisher z)	-56.50	33	[-120.77, 7.77]	-1.72	39	0.093
Time (months)	0.58	2	[-3.41, 4.56]	0.28	39	0.777
Time x Ambiguous/nonthreatening RS	-2.17	5	[-11.89, 7.54]	-0.44	38	0.664

Supplemental Table 16: Threatening/nonthreatening RS and longitudinal anxiety.

Right amygdala.

Fixed effects from multilevel model
Dependent variable: Anxiety score

variable	estimate	SE	CI	t	df	p
Intercept	31.34	11.6	[8.66, 54.02]	2.71	39	0.010
Threatening/nonthreatening RS (fisher z)	6.16	31.1	[-54.86, 67.19]	0.20	39	0.844
Time (months)	-0.87	1.6	[-4.08, 2.33]	-0.53	37	0.596
Time x Threatening/nonthreatening RS	1.61	4.4	[-7.03, 10.24]	0.36	37	0.718

Left amygdala.

Fixed effects from multilevel model
Dependent variable: Anxiety score

variable	estimate	SE	CI	t	df	p
Intercept	39.13	9.9	[19.63, 58.63]	3.93	39	<0.001
Threatening/nonthreatening RS (fisher z)	-15.81	27.2	[-69.11, 37.49]	-0.58	39	0.564
Time (months)	-0.46	1.4	[-3.27, 2.34]	-0.32	38	0.748
Time x Threatening/nonthreatening RS	0.48	3.9	[-7.2, 8.15]	0.12	38	0.904

Condition-level analyses: Representational similarity (RS) and negative valence biases.

Supplemental Table 17a: Ambiguous/threatening RS and negative valence biases.

Right amygdala.

Dependent variable: Negative valence bias (z score)

variable	estimate	SE	CI	t(39)	p
Intercept	0.22	0.62	[-1.03, 1.48]	0.36	0.723
Ambiguous/threatening RS (fisher z)	-0.57	1.55	[-3.71, 2.56]	-0.37	0.714

Left amygdala.

Dependent variable: Negative valence bias (z score)

variable	estimate	SE	CI	t(39)	p
Intercept	0.09	0.59	[-1.1, 1.27]	0.15	0.880
Ambiguous/threatening RS (fisher z)	-0.24	1.50	[-3.27, 2.8]	-0.16	0.875

Supplemental Table 17b: Same model with low accuracy participant removed.

Right amygdala.

Dependent variable: Negative valence bias (z score)

variable	estimate	SE	CI	t(38)	p
Intercept	0.44	0.55	[-0.67, 1.54]	0.80	0.428
Ambiguous/threatening RS (fisher z)	-0.92	1.36	[-3.67, 1.82]	-0.68	0.501

Left amygdala.

Dependent variable: Negative valence bias (z score)

variable	estimate	SE	CI	t(38)	p
Intercept	0.21	0.51	[-0.83, 1.25]	0.41	0.686
Ambiguous/threatening RS (fisher z)	-0.35	1.31	[-3.01, 2.31]	-0.26	0.793

Supplemental Table 18a: Ambiguous/nonthreatening RS and negative valence biases.

Right amygdala.

Dependent variable: Negative valence bias (z score)

variable	estimate	SE	CI	t(39)	p
Intercept	-0.64	0.76	[-2.17, 0.9]	-0.84	0.406
Ambiguous/nonthreatening RS (fisher z)	1.60	1.86	[-2.17, 5.37]	0.86	0.396

Left amygdala.

Dependent variable: Negative valence bias (z score)

variable	estimate	SE	CI	t(39)	p
Intercept	0.10	0.79	[-1.51, 1.7]	0.12	0.905
Ambiguous/nonthreatening RS (fisher z)	-0.24	1.95	[-4.19, 3.71]	-0.12	0.903

Supplemental Table 18b: Same model with low accuracy participant removed.

Right amygdala.

Dependent variable: Negative valence bias (z score)

variable	estimate	SE	CI	t(38)	p
Intercept	-0.06	0.69	[-1.46, 1.33]	-0.09	0.926
Ambiguous/nonthreatening RS (fisher z)	0.36	1.69	[-3.06, 3.77]	0.21	0.834

Left amygdala.

Dependent variable: Negative valence bias (z score)

variable	estimate	SE	CI	t(38)	p
Intercept	0.99	0.72	[-0.46, 2.44]	1.4	0.177
Ambiguous/nonthreatening RS (fisher z)	-2.27	1.76	[-5.82, 1.29]	-1.3	0.204

Supplemental Table 19a: Threatening/nonthreatening RS and negative valence biases.

Right amygdala.

Dependent variable: Negative valence bias (z score)

variable	estimate	SE	CI	t(39)	p
Intercept	0.52	0.66	[-0.81, 1.85]	0.79	0.435
Threatening/nonthreatening RS (fisher z)	-1.44	1.78	[-5.03, 2.15]	-0.81	0.422

Left amygdala.

Dependent variable: Negative valence bias (z score)

variable	estimate	SE	CI	t(39)	p
Intercept	0.58	0.57	[-0.56, 1.73]	1.0	0.310
Threatening/nonthreatening RS (fisher z)	-1.66	1.55	[-4.78, 1.47]	-1.1	0.291

Supplemental Table 19b: Same model with low accuracy participant removed.

Right amygdala.

Dependent variable: Negative valence bias (z score)

variable	estimate	SE	CI	t(38)	p
Intercept	0.8	0.58	[-0.37, 1.96]	1.4	0.174
Threatening/nonthreatening RS (fisher z)	-2.0	1.54	[-5.1, 1.14]	-1.3	0.206

Left amygdala.

Dependent variable: Negative valence bias (z score)

variable	estimate	SE	CI	t(38)	p
Intercept	0.9	0.49	[-0.09, 1.9]	1.8	0.074
Threatening/nonthreatening RS (fisher z)	-2.3	1.33	[-5.03, 0.37]	-1.8	0.089

Single-trial (actor-level) analyses: Single trial (actor-level) RS and subsequent appraisals of the actor's ambiguous image.

Supplemental Table 20a: Actor-level ambiguous/threatening RS and subsequent appraisals of the actor's ambiguous image.

Right amygdala.

Fixed effects from multilevel logistic model
Region: Right amygdala
Dependent variable: Likelihood positive categorization

variable	odds ratio	SE	CI	z	p
Intercept	0.55	0.09	[0.4, 0.74]	-3.9	<0.001
Ambiguous/threatening RS (fisher z)	1.78	0.66	[0.86, 3.69]	1.6	0.121

Left amygdala.

Fixed effects from multilevel logistic model
Region: Left amygdala
Dependent variable: Likelihood positive categorization

variable	odds ratio	SE	CI	z	p
Intercept	0.55	0.09	[0.4, 0.74]	-3.86	<0.001
Ambiguous/threatening RS (fisher z)	0.83	0.29	[0.41, 1.66]	-0.54	0.590

Supplemental Table 20b: Same model with low accuracy participant removed.

Right amygdala.

Fixed effects from multilevel logistic model
Region: Right amygdala
Dependent variable: Likelihood positive categorization

variable	odds ratio	SE	CI	z	p
Intercept	0.5	0.07	[0.39, 0.65]	-5.3	<0.001
Ambiguous/threatening RS (fisher z)	1.8	0.66	[0.86, 3.7]	1.6	0.118

Left amygdala.

Fixed effects from multilevel logistic model
Region: Left amygdala
Dependent variable: Likelihood positive categorization

variable	odds ratio	SE	CI	z	p
Intercept	0.50	0.07	[0.39, 0.65]	-5.27	<0.001
Ambiguous/threatening RS (fisher z)	0.82	0.29	[0.41, 1.65]	-0.55	0.584

Supplemental Table 21a: Actor-level ambiguous/nonthreatening RS and subsequent appraisals of the actor's ambiguous image.

Right amygdala.

Fixed effects from multilevel logistic model
Region: Right amygdala
Dependent variable: Likelihood positive categorization

variable	odds ratio	SE	CI	z	p
Intercept	0.55	0.09	[0.4, 0.74]	-3.86	<0.001
Ambiguous/nonthreatening RS (fisher z)	1.21	0.44	[0.6, 2.47]	0.54	0.592

Left amygdala.

Fixed effects from multilevel logistic model
Region: Left amygdala
Dependent variable: Likelihood positive categorization

variable	odds ratio	SE	CI	z	p
Intercept	0.55	0.09	[0.4, 0.74]	-3.86	<0.001
Ambiguous/nonthreatening RS (fisher z)	1.35	0.46	[0.68, 2.65]	0.86	0.389

Supplemental Table 21b: Same model with low accuracy participant removed.

Right amygdala.

Fixed effects from multilevel logistic model
Region: Right amygdala
Dependent variable: Likelihood positive categorization

variable	odds ratio	SE	CI	z	p
Intercept	0.5	0.07	[0.39, 0.65]	-5.28	<0.001
Ambiguous/nonthreatening RS (fisher z)	1.2	0.43	[0.58, 2.41]	0.47	0.637

Left amygdala.

Fixed effects from multilevel logistic model
Region: Left amygdala
Dependent variable: Likelihood positive categorization

variable	odds ratio	SE	CI	z	p
Intercept	0.5	0.07	[0.39, 0.65]	-5.27	<0.001
Ambiguous/nonthreatening RS (fisher z)	1.4	0.46	[0.69, 2.65]	0.86	0.387

Supplemental Table 22a: Actor-level threatening/nonthreatening RS and subsequent appraisals of the actor's ambiguous image.

Right amygdala.

Fixed effects from multilevel logistic model
Region: Right amygdala
Dependent variable: Likelihood positive categorization

variable	odds ratio	SE	CI	z	p
Intercept	0.55	0.09	[0.4, 0.74]	-3.86	<0.001
Threatening/nonthreatening RS (fisher z)	1.29	0.46	[0.65, 2.58]	0.72	0.470

Left amygdala.

Fixed effects from multilevel logistic model
Region: Left amygdala
Dependent variable: Likelihood positive categorization

variable	odds ratio	SE	CI	z	p
Intercept	0.55	0.09	[0.4, 0.74]	-3.9	<0.001
Threatening/nonthreatening RS (fisher z)	2.28	0.77	[1.18, 4.41]	2.5	0.014

Left amygdala: Sensitivity analysis (Control voxels).

Fixed effects from multilevel logistic model
Region: Left amygdala
Dependent variable: Likelihood positive categorization

variable	odds ratio	SE	CI	z	p
Intercept	1.5	1.13	[0.33, 6.59]	0.52	0.604
Threatening/nonthreatening RS (fisher z)	2.3	0.77	[1.18, 4.41]	2.45	0.014
Left amygdala voxel number	1.0	0.00	[0.99, 1]	-1.34	0.180

Supplemental Table 22b: Same model with low accuracy participant removed.

Right amygdala.

Fixed effects from multilevel logistic model
Region: Right amygdala
Dependent variable: Likelihood positive categorization

variable	odds ratio	SE	CI	z	p
Intercept	0.5	0.07	[0.39, 0.65]	-5.27	<0.001
Threatening/nonthreatening RS (fisher z)	1.3	0.45	[0.64, 2.54]	0.68	0.496

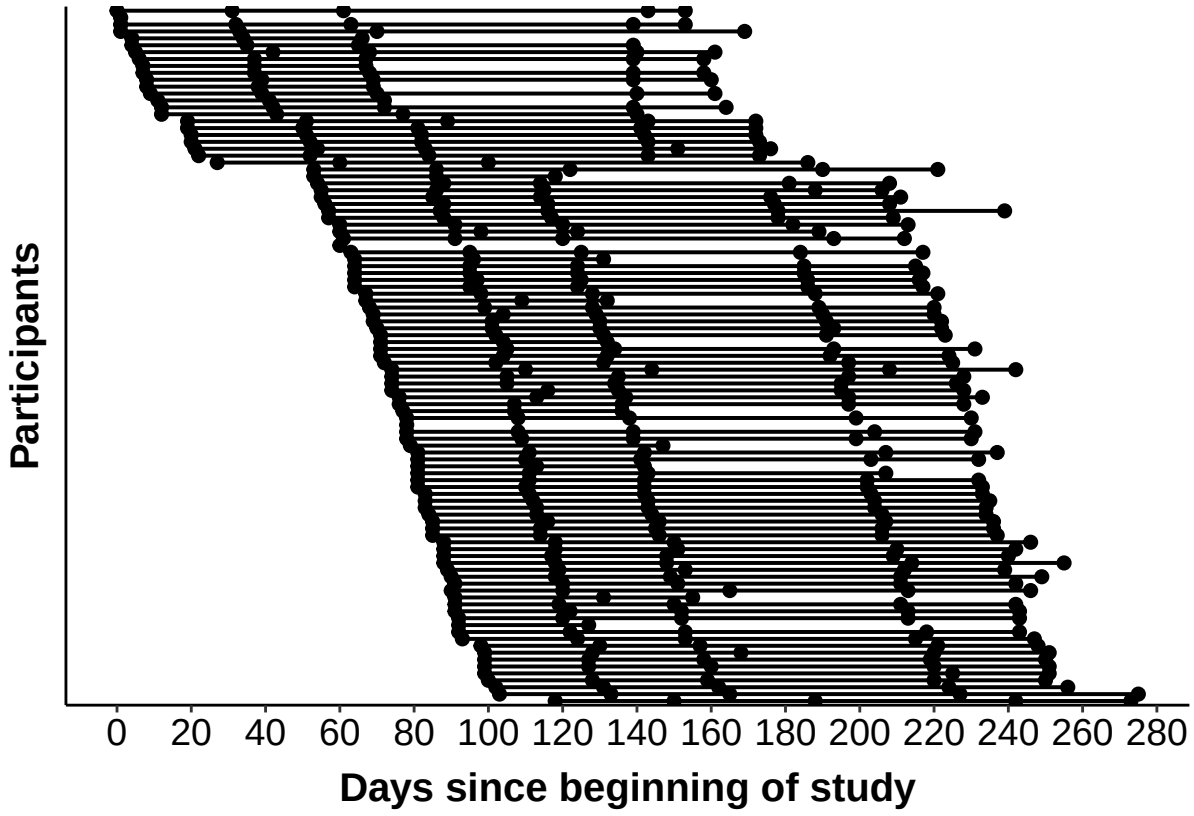
Left amygdala.

Fixed effects from multilevel logistic model
Region: Left amygdala
Dependent variable: Likelihood positive categorization

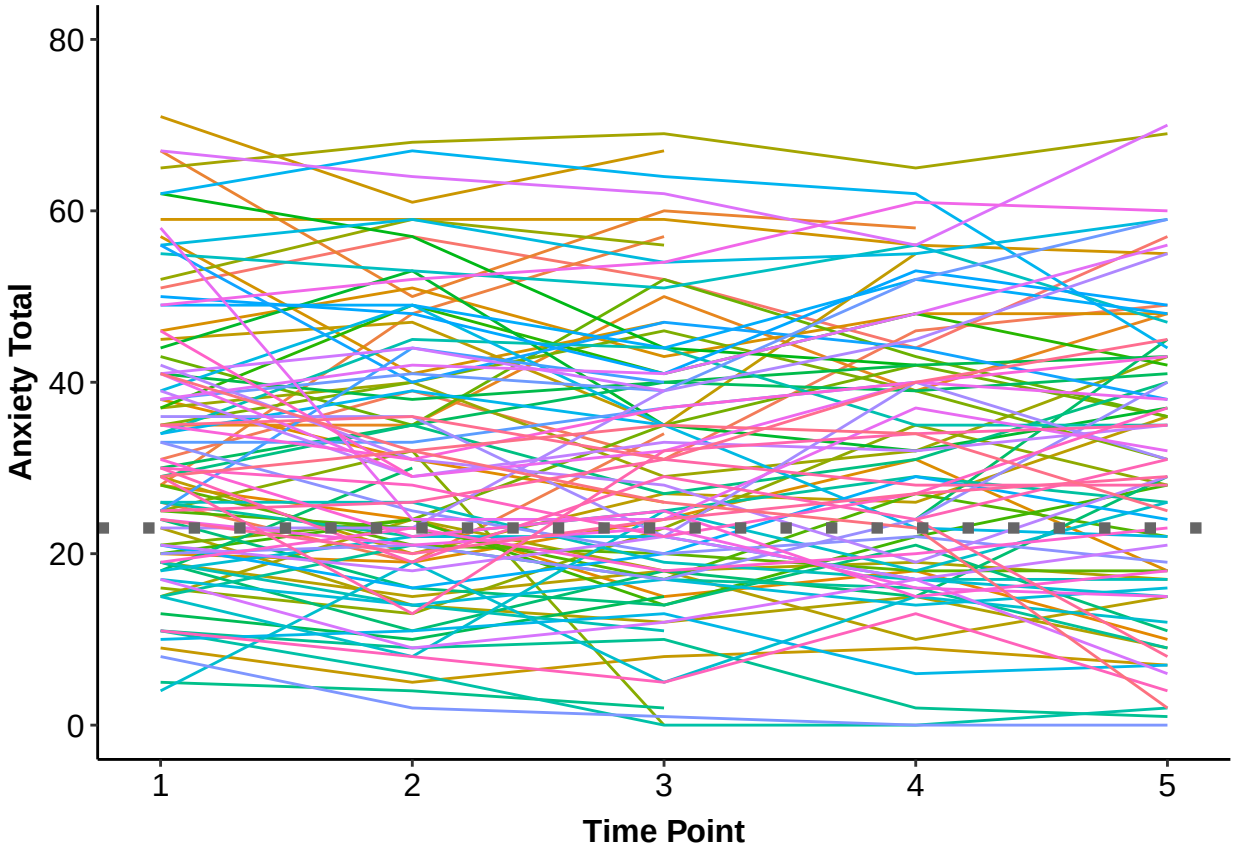
variable	odds ratio	SE	CI	z	p
Intercept	0.5	0.07	[0.39, 0.65]	-5.3	<0.001
Threatening/nonthreatening RS (fisher z)	2.3	0.76	[1.18, 4.39]	2.4	0.015

Supplemental figures.

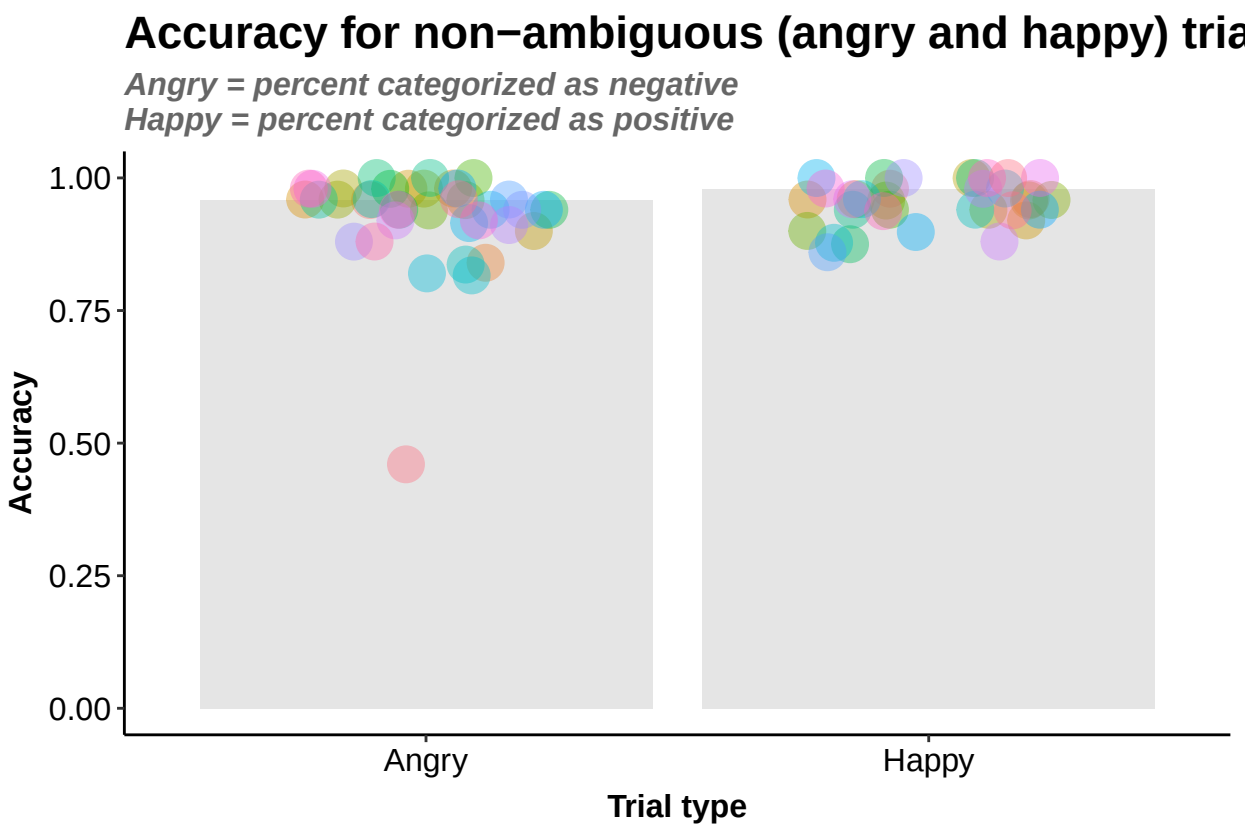
Supplemental Figure 1: Visualization of study timepoints.



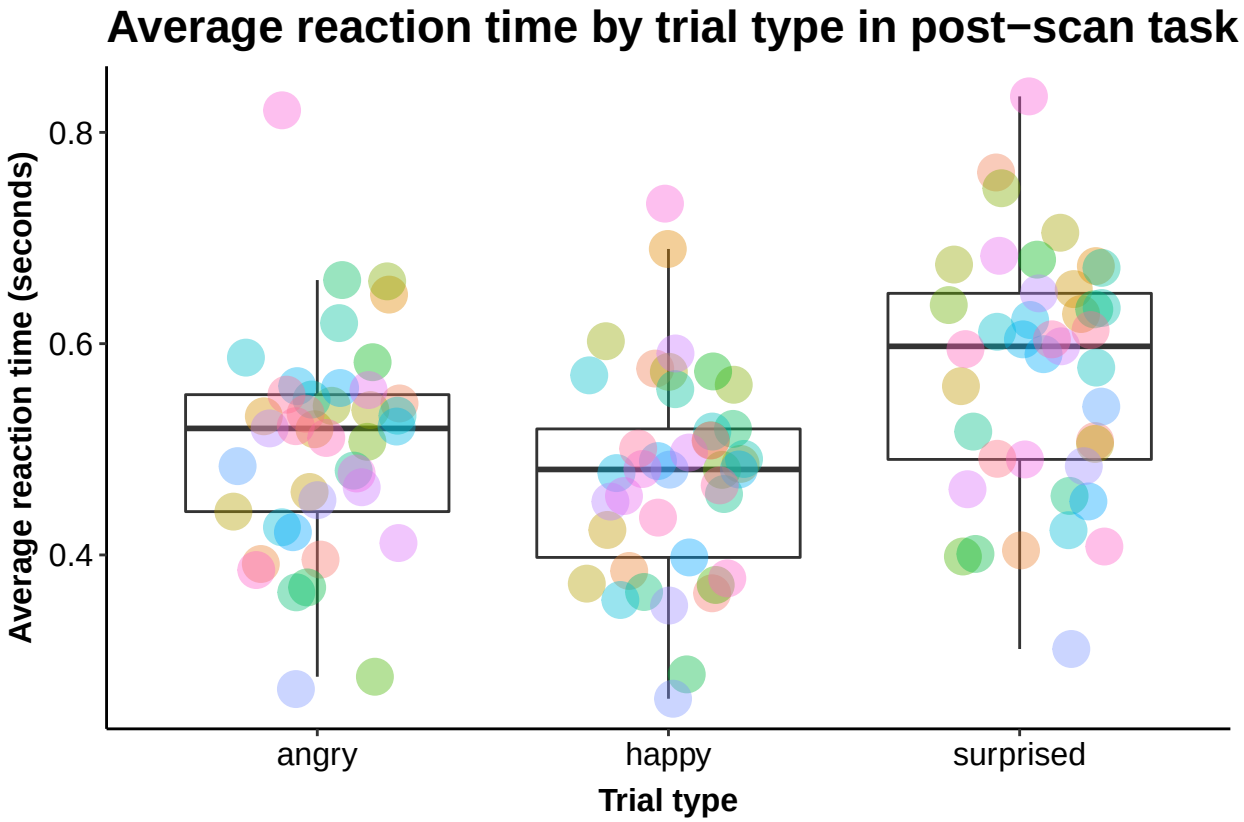
Supplemental Figure 2: Individual anxiety scores over time.



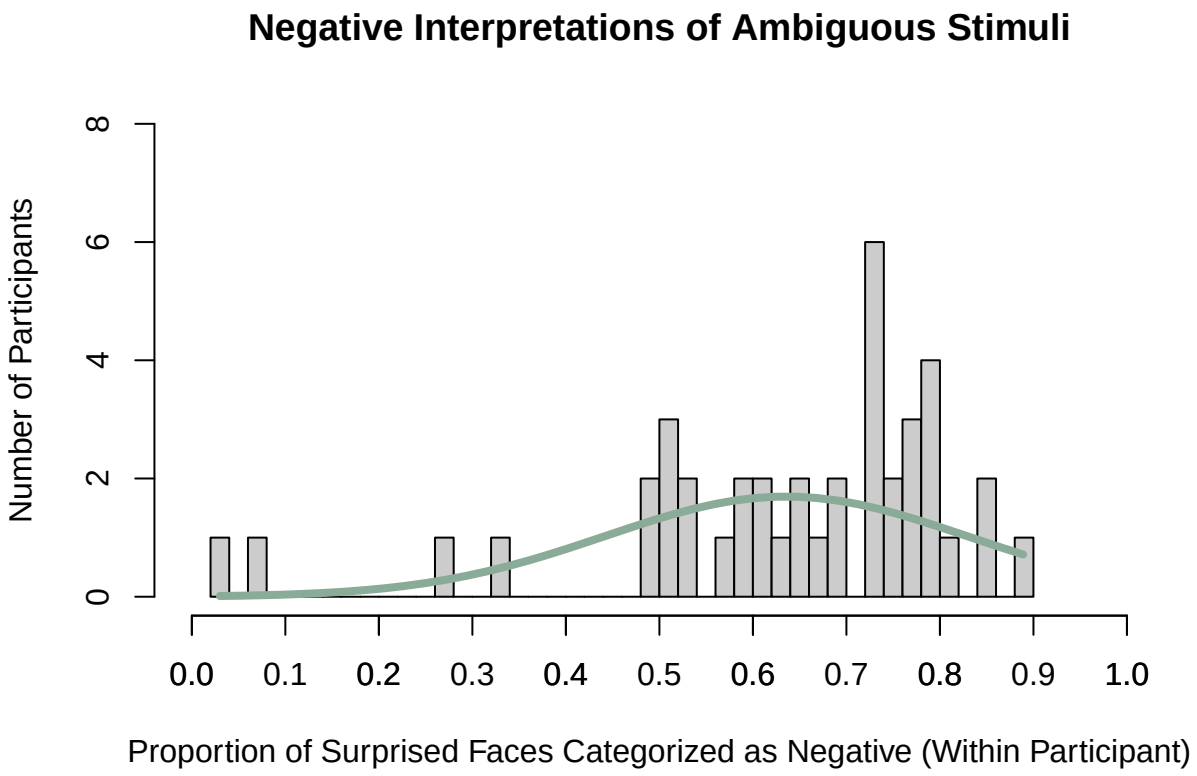
Supplemental Figure 3a: Accuracy for non-ambiguous (threatening and non-threatening) trials in post-scan task.



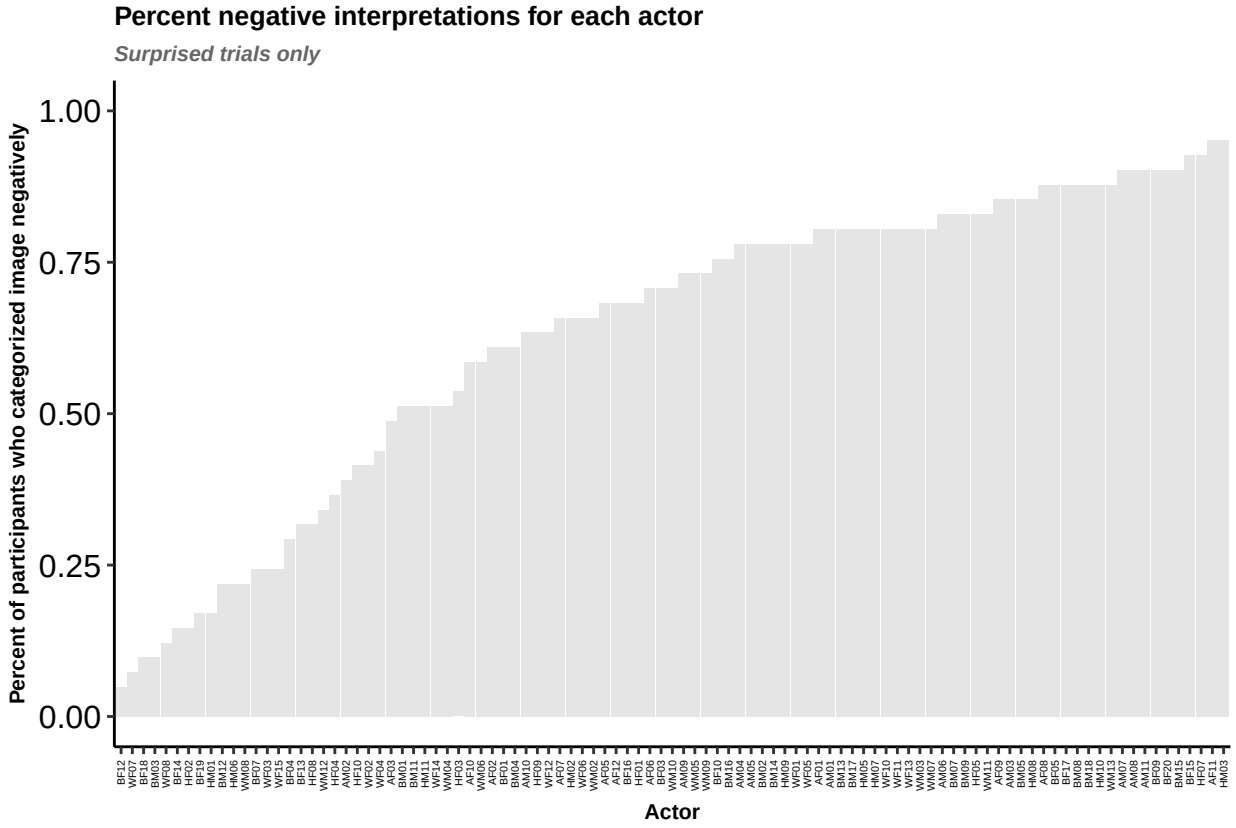
Supplemental Figure 3b: Reaction time by trial type in post-scan task.



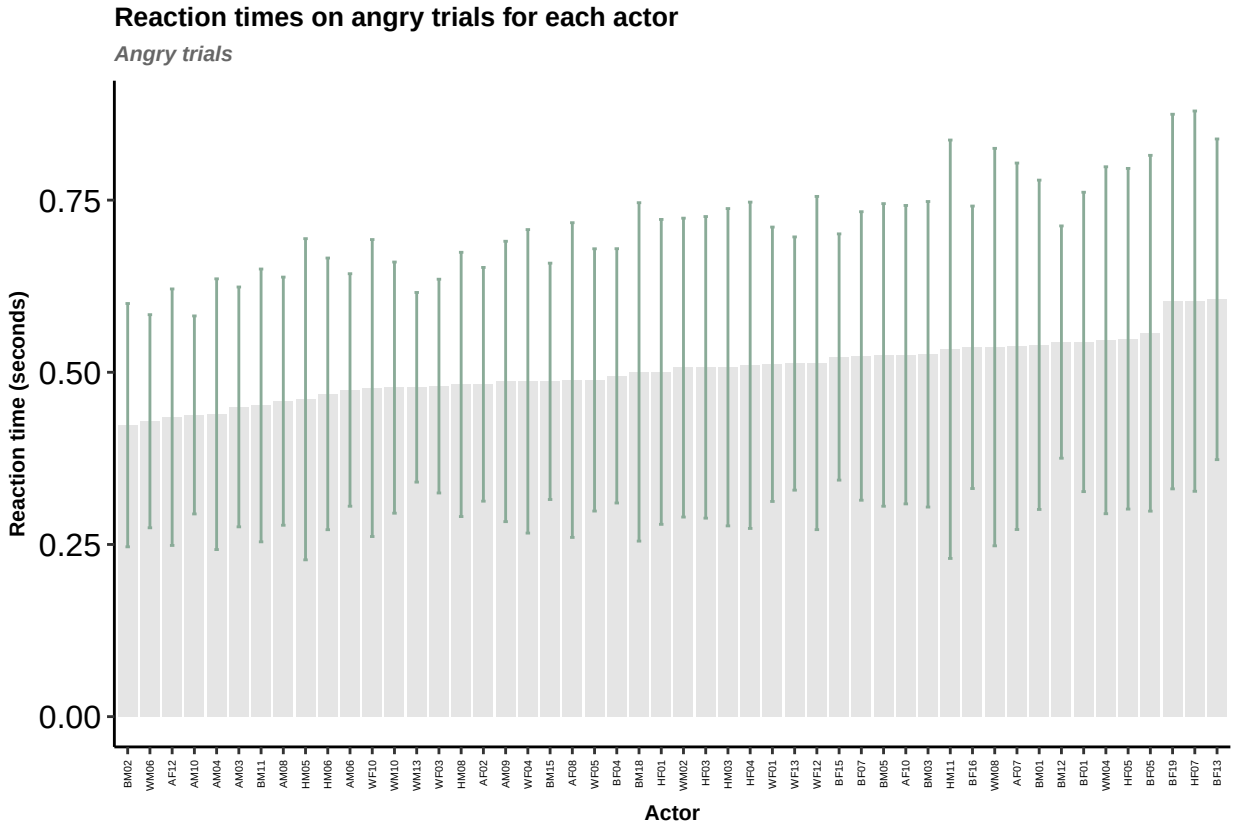
Supplemental Figure 4: Negative valence biases in sample (percent surprised faces categorized negatively in post-scan task).

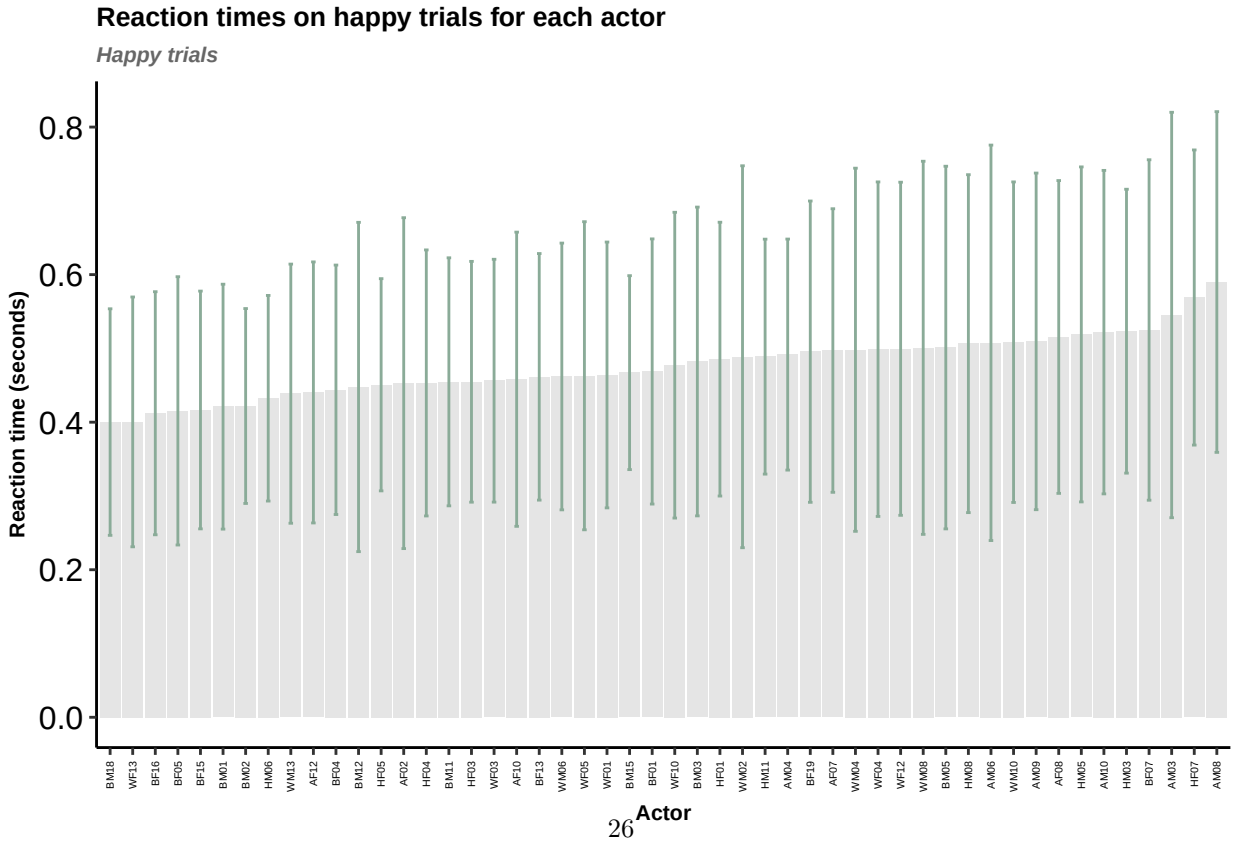


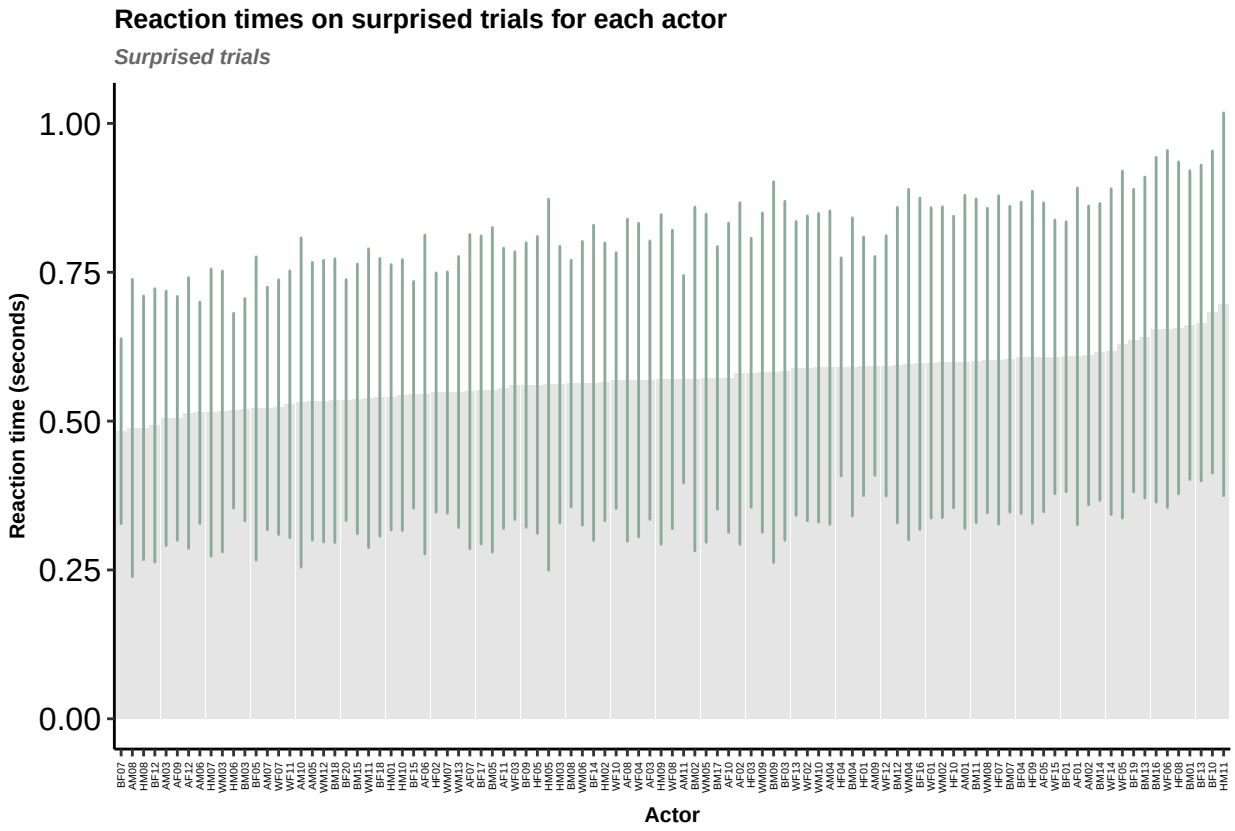
Supplemental Figure 5: Percentage of participants that categorized each actor's surprised face negatively.



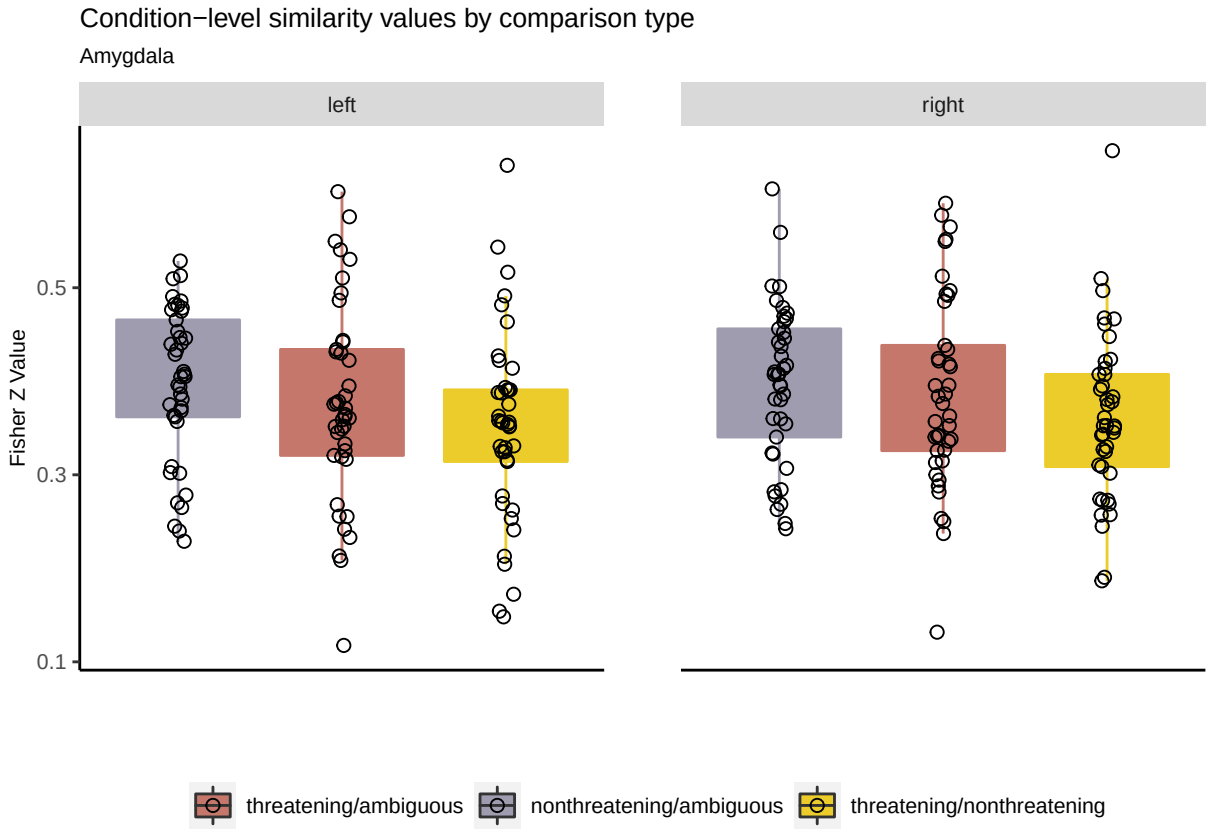
Supplemental Figure 6: Reaction times by actor and expression type in post-scan task.



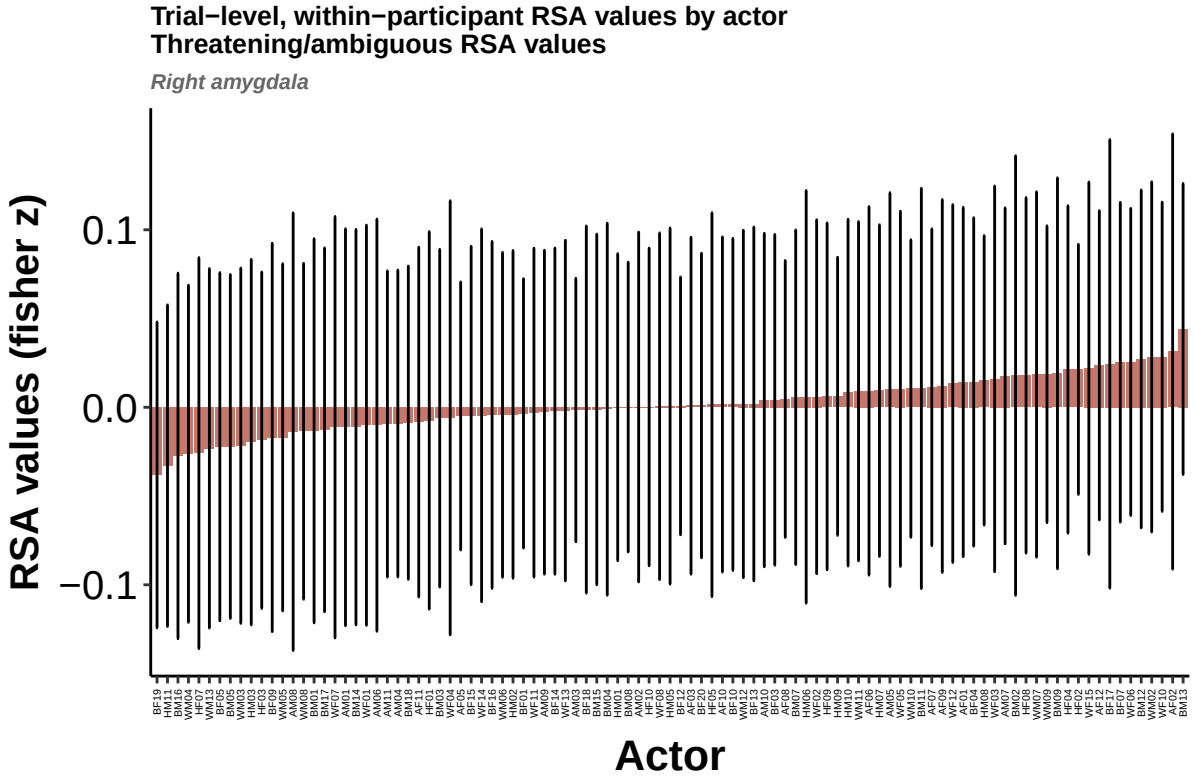


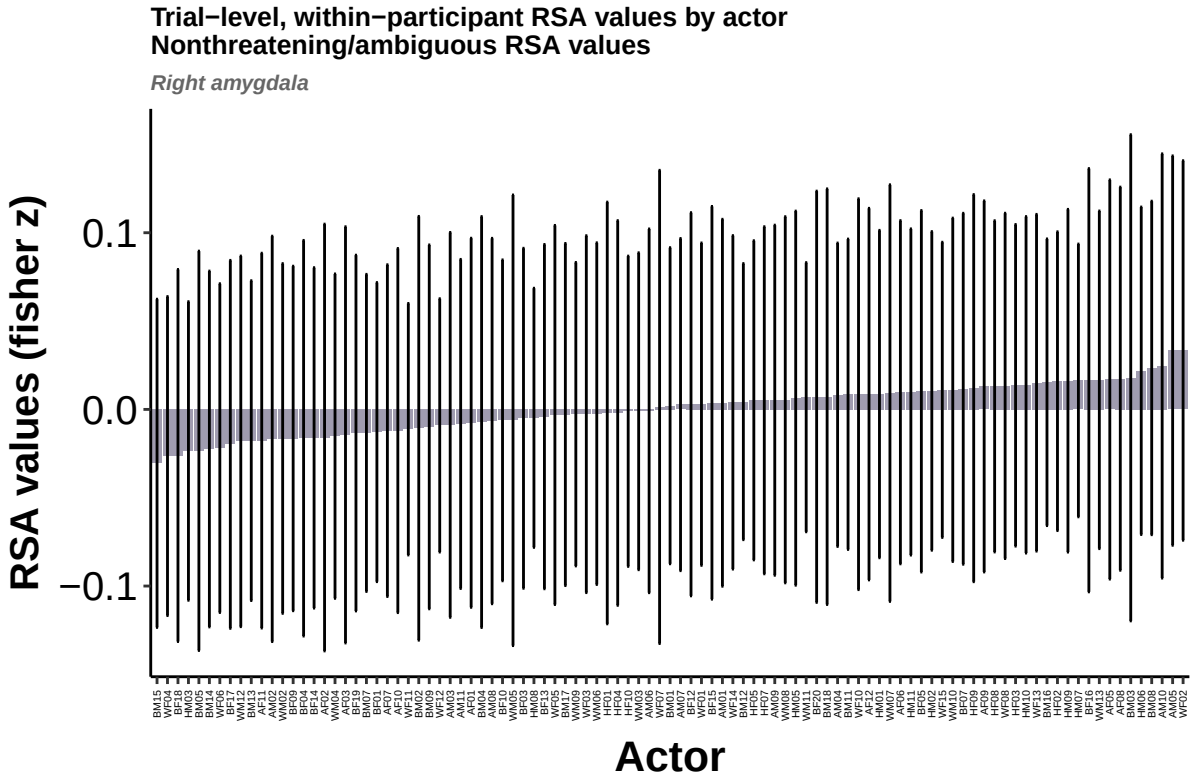

Reaction times on surprised trials for each actor
Surprised trials
Reaction time (seconds)
1.00
0.75
0.50
0.25
0.00
Actor

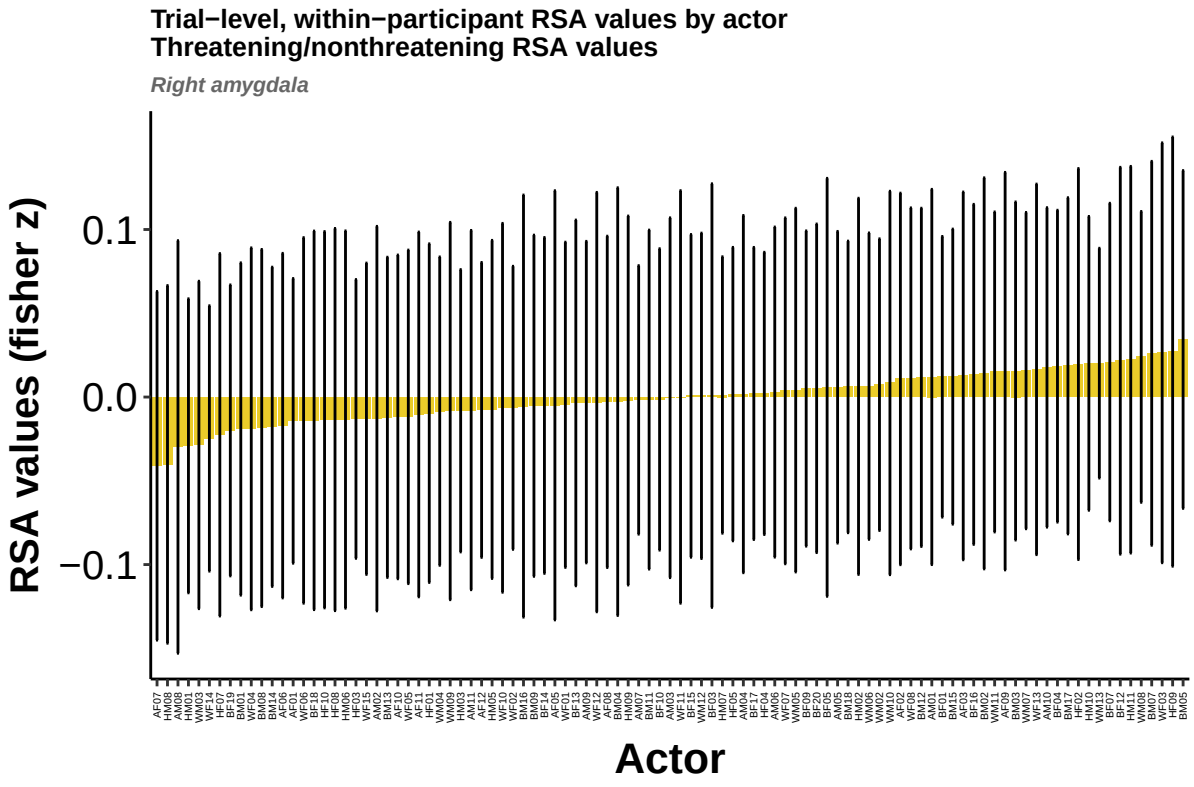
Supplemental Figure 7: Average RS values within the right and left amygdala by comparison type.

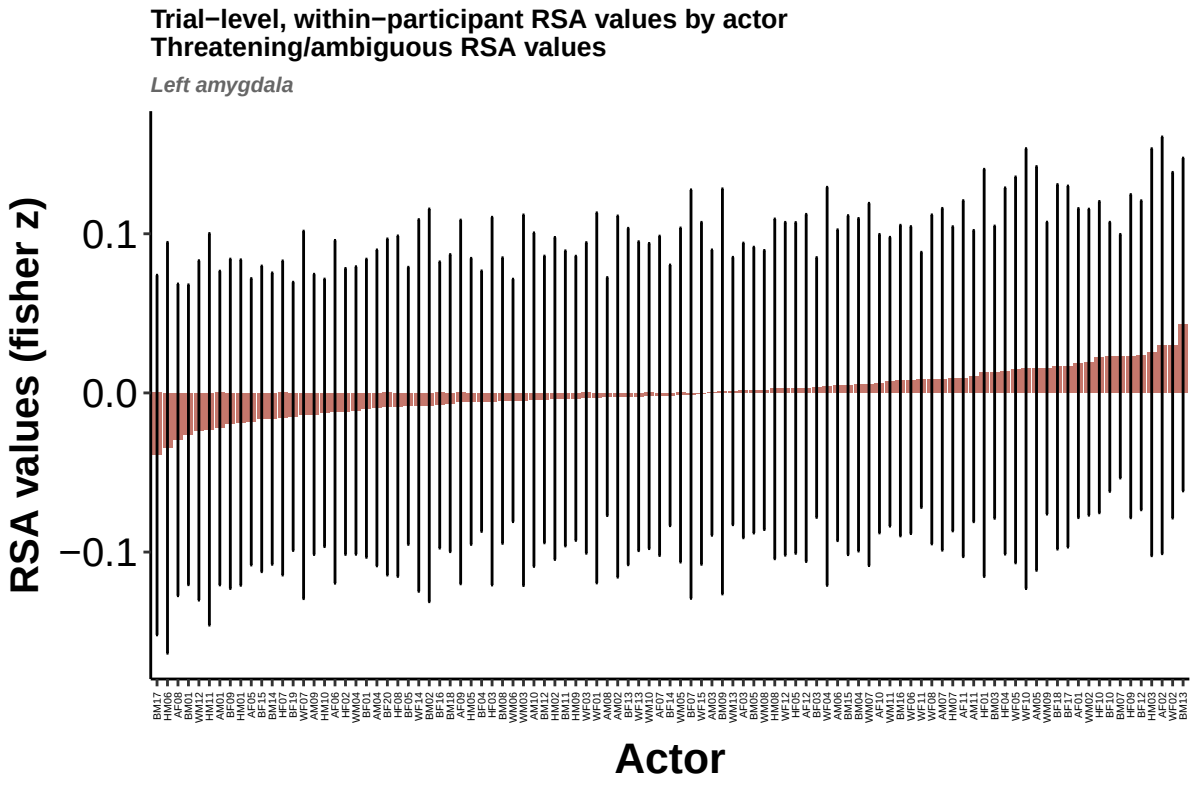


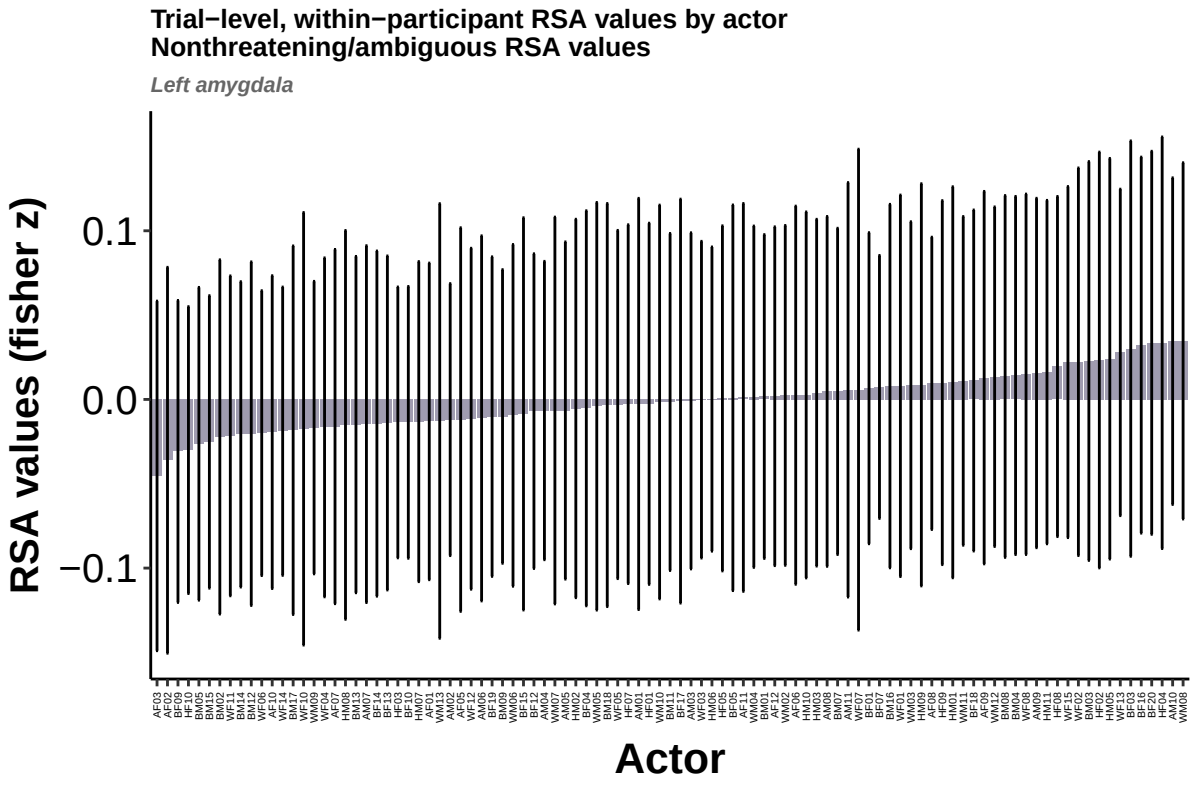
Supplemental Figure 8: Distribution of RS values by condition comparison type and by actor.

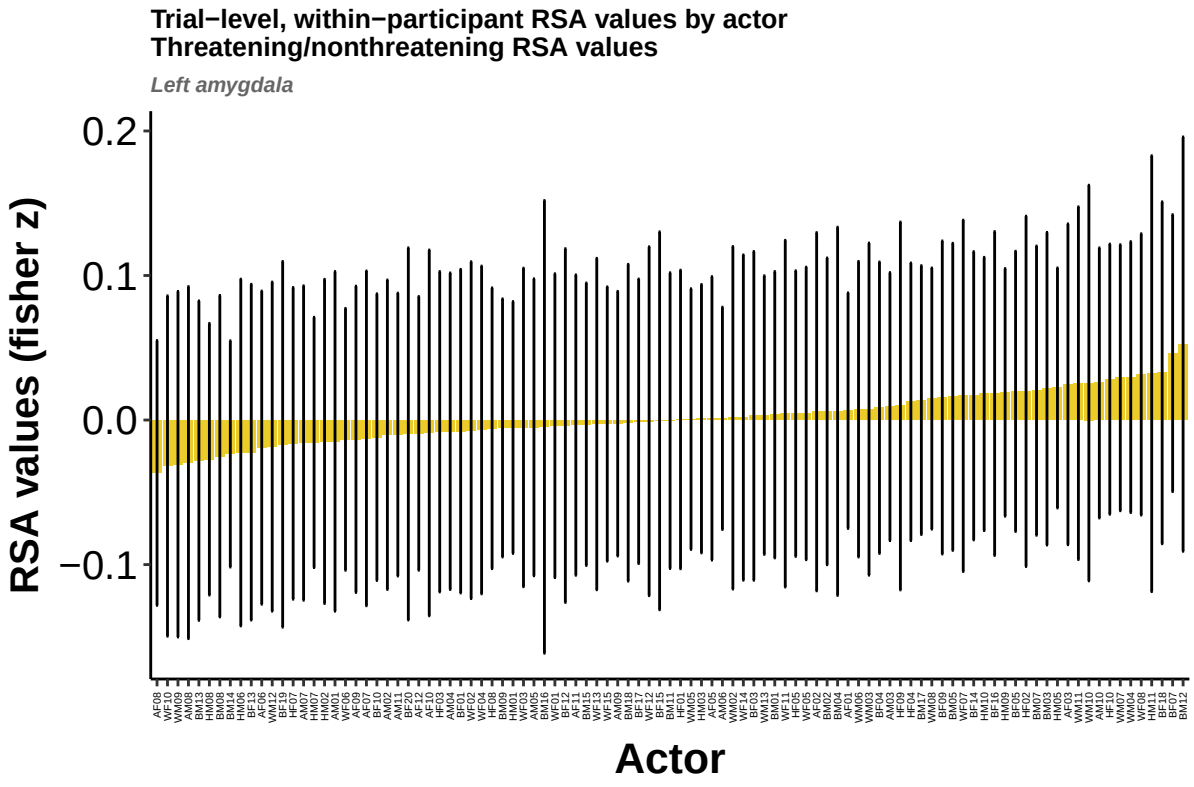





Trial−level, within−participant RSA values by actor
Threatening/nonthreatening RSA values
Right amygdala
RSA values (fisher z)
0.1
0.0
−0.1
Actor


Trial−level, within−participant RSA values by actor
Threatening/ambiguous RSA values
Left amygdala
RSA values (fisher z)
0.1
0.0
−0.1
Actor


Trial−level, within−participant RSA values by actor
Nonthreatening/ambiguous RSA values
Left amygdala
RSA values (fisher z)
0.1
0.0
−0.1
Actor


Trial−level, within−participant RSA values by actor
Threatening/nonthreatening RSA values
Left amygdala
RSA values (fisher z)
0.2
0.1
0.0
−0.1
Actor