

Supplemental Tables and Figures

Anonymized

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Sample information.

Demographics and questionnaire data.

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

Variable	N = 41 [†]
Age	
18	27 (66%)
19	14 (34%)
Sex	
Female	29 (71%)
Male	12 (29%)
Race	
Asian	20 (49%)
Black/African American	4 (9.8%)
Caucasian/White	12 (29%)
Multiracial	3 (7.3%)
Not Reported	1 (2.4%)
Other	1 (2.4%)
Hispanic	
Hispanic	8 (20%)
Not Hispanic	33 (80%)
Negativity bias (proportion ambiguous trials categorized negatively)	0.69 (0.54, 0.77)
CTQ Score	38 (32, 45)
(Missing)	1
HoNOS Score	14 (8, 19)
(Missing)	3

[†] Statistics presented: n (%); Median (IQR)

ELA, global functioning, and task behavior.

Reaction times and negativity biases.

Supplemental Table 2: Does average reaction time to ambiguous images relate to negativity biases (the number of ambiguous faces interpreted negatively)?

<i>Predictors</i>	Negativity bias (percent of ambiguous faces interpreted negatively; z-scored)					
	<i>Estimates</i>	<i>95% CI</i>	<i>t</i>	<i>DF</i>	<i>standard error</i>	<i>p</i>
Intercept	-0.00	-0.32 – 0.32	-0.00	39.00	0.16	1.000
Average reaction time: ambiguous images (z-scored)	-0.10	-0.42 – 0.22	-0.63	39.00	0.16	0.529
Observations	41					
R ² / R ² adjusted	0.010 / -0.015					

ELA and negativity biases.

Supplemental Table 3: Does ELA relate to negativity biases (the number of ambiguous faces interpreted negatively)?

<i>Predictors</i>	Negativity bias (percent of ambiguous faces interpreted negatively; z-scored)					
	<i>Estimates</i>	<i>95% CI</i>	<i>t</i>	<i>DF</i>	<i>standard error</i>	<i>p</i>
Intercept	-0.03	-0.35 – 0.28	-0.21	38.00	0.16	0.834
ELA (log CTQ score, z-scored)	0.20	-0.12 – 0.52	1.25	38.00	0.16	0.220
Observations	40					
R ² / R ² adjusted	0.039 / 0.014					

Global functioning and negativity biases.

Supplemental Table 4: Does global functioning relate to negativity biases (the number of ambiguous faces interpreted negatively)?

<i>Predictors</i>	Negativity bias (percent of ambiguous faces interpreted negatively; z-scored)					
	<i>Estimates</i>	<i>95% CI</i>	<i>t</i>	<i>DF</i>	<i>standard error</i>	<i>p</i>
Intercept	-0.042	-0.381 – 0.297	-0.249	36.000	0.167	0.805
Global functioning impairment (HoNOS z-score)	-0.117	-0.460 – 0.227	-0.688	36.000	0.169	0.496
Observations	38					
R ² / R ² adjusted	0.013 / -0.014					

<i>Predictors</i>	Negativity bias (percent of ambiguous faces interpreted negatively; z-scored)					
	<i>Estimates</i>	<i>95% CI</i>	<i>t</i>	<i>DF</i>	<i>standard error</i>	<i>p</i>
Intercept	-0.0999	-0.4216 – 0.2219	-0.6307	34.0000	0.1583	0.532
Global functioning impairment (HoNOS z-score)	-0.3506	-0.7162 – 0.0150	-1.9491	34.0000	0.1799	0.060
ELA (log CTQ score, z-scored)	0.3431	0.0017 – 0.6845	2.0427	34.0000	0.1680	0.049
Observations	37					
R ² / R ² adjusted	0.148 / 0.098					

Interaction: ELA, global functioning, and task behavior.

Supplemental Table 5: Do ELA and negativity biases interact to predict global functioning?

Predictors	Global functioning impairment (HoNOS z-score)						
	Estimates	95% CI	t	DF	standard error	p	
Intercept	-0.10	-0.40 – 0.20	-0.68	33.00	0.15	0.501	
ELA (log CTQ score, z-scored)	0.39	0.09 – 0.69	2.64	33.00	0.15	0.013	
Negativity bias (percent of ambiguous faces interpreted negatively; z-scored)	-0.23	-0.58 – 0.12	-1.32	33.00	0.17	0.196	
ELA x negativity bias	0.10	-0.20 – 0.41	0.69	33.00	0.15	0.496	
Observations	37						
R ² / R ² adjusted	0.220 / 0.150						

ELA and representational overlap.

Descriptive statistics.

Supplemental Table 6: Average RSA values within each region.

	angry_happy (N = 41)	angry_surprised (N = 41)	happy_surprised (N = 41)
Right Amygdala			
min	0.19	0.13	0.24
max	0.65	0.59	0.61
mean (sd)	0.36 ± 0.09	0.39 ± 0.10	0.40 ± 0.09
Left Amygdala			
min	0.15	0.12	0.23
max	0.63	0.6	0.53
mean (sd)	0.35 ± 0.10	0.38 ± 0.11	0.40 ± 0.08
Right Accumbens			
min	0.18	0.15	0.22
max	0.55	0.54	0.55
mean (sd)	0.35 ± 0.08	0.36 ± 0.09	0.36 ± 0.08
Left Accumbens			
min	0.22	0.22	0.27
max	0.5	0.57	0.54
mean (sd)	0.35 ± 0.07	0.36 ± 0.09	0.37 ± 0.07
Right Anterior Insula			
min	0.14	0.19	0.17
max	0.57	0.68	0.56
mean (sd)	0.36 ± 0.09	0.38 ± 0.11	0.38 ± 0.10
Left Anterior Insula			
min	0.11	0.15	0.15
max	0.61	0.73	0.61
mean (sd)	0.36 ± 0.10	0.37 ± 0.12	0.39 ± 0.10

(Supplemental Table 6 continued)

	angry_happy (N = 41)	angry_surprised (N = 41)	happy_surprised (N = 41)
Right vmPFC			
min	0.2	0.12	0.16
max	0.54	0.69	0.61
mean (sd)	0.36 ± 0.09	0.37 ± 0.11	0.36 ± 0.10
Left vmPFC			
min	0.18	0.15	0.2
max	0.56	0.6	0.61
mean (sd)	0.37 ± 0.08	0.36 ± 0.10	0.35 ± 0.09
Right V1			
min	0.33	0.34	0.36
max	1.01	1.02	1.07
mean (sd)	0.63 ± 0.20	0.63 ± 0.19	0.64 ± 0.19
Left V1			
min	0.19	0.23	0.31
max	1.02	1.03	1.07
mean (sd)	0.64 ± 0.21	0.64 ± 0.19	0.65 ± 0.19

Ambiguous/nonthreatening overlap.

Supplemental Table 7: ELA and ambiguous/nonthreatening overlap.

Ambiguous/nonthreatening overlap (Fisher z score): Right amygdala						
<i>Predictors</i>	<i>Estimates</i>	<i>95% CI</i>	<i>t</i>	<i>DF</i>	<i>standard error</i>	<i>p</i>
Intercept	0.40	0.37 – 0.42	31.29	38.00	0.01	<0.001
ELA (log CTQ score, z-scored)	0.03	0.01 – 0.06	2.56	38.00	0.01	0.014
Observations	40					
R ² / R ² adjusted	0.148 / 0.125					

Ambiguous/nonthreatening overlap (Fisher z score): Left amygdala						
<i>Predictors</i>	<i>Estimates</i>	<i>95% CI</i>	<i>t</i>	<i>DF</i>	<i>standard error</i>	<i>p</i>
Intercept	0.40	0.37 – 0.42	30.12	38.00	0.01	<0.001
ELA (log CTQ score, z-scored)	0.01	-0.02 – 0.03	0.59	38.00	0.01	0.559
Observations	40					
R ² / R ² adjusted	0.009 / -0.017					

Ambiguous/nonthreatening overlap (Fisher z score): Right nucleus accumbens						
<i>Predictors</i>	<i>Estimates</i>	<i>95% CI</i>	<i>t</i>	<i>DF</i>	<i>standard error</i>	<i>p</i>
Intercept	0.36	0.33 – 0.38	30.84	38.00	0.01	<0.001
ELA (log CTQ score, z-scored)	0.01	-0.02 – 0.03	0.44	38.00	0.01	0.662
Observations	40					
R ² / R ² adjusted	0.005 / -0.021					

Ambiguous/nonthreatening overlap (Fisher z score): Left nucleus accumbens						
<i>Predictors</i>	<i>Estimates</i>	<i>95% CI</i>	<i>t</i>	<i>DF</i>	<i>standard error</i>	<i>p</i>
Intercept	0.37	0.34 – 0.39	32.98	38.00	0.01	<0.001
ELA (log CTQ score, z-scored)	-0.01	-0.03 – 0.01	-0.96	38.00	0.01	0.342
Observations	40					
R ² / R ² adjusted	0.024 / -0.002					

Ambiguous/nonthreatening overlap (Fisher z score): Right anterior insula						
<i>Predictors</i>	<i>Estimates</i>	<i>95% CI</i>	<i>t</i>	<i>DF</i>	<i>standard error</i>	<i>p</i>
Intercept	0.38	0.35 – 0.41	25.69	38.00	0.01	<0.001
ELA (log CTQ score, z-scored)	0.03	-0.00 – 0.06	1.96	38.00	0.01	0.057
Observations	40					
R ² / R ² adjusted	0.092 / 0.068					

Ambiguous/nonthreatening overlap (Fisher z score): Left anterior insula						
<i>Predictors</i>	<i>Estimates</i>	<i>95% CI</i>	<i>t</i>	<i>DF</i>	<i>standard error</i>	<i>p</i>
Intercept	0.38	0.35 – 0.41	25.46	38.00	0.02	<0.001
ELA (log CTQ score, z-scored)	0.02	-0.01 – 0.05	1.16	38.00	0.02	0.253
Observations	40					
R ² / R ² adjusted	0.034 / 0.009					

(Supplemental Table 7 continued)

Ambiguous/nonthreatening overlap (Fisher z score): Right vmPFC						
<i>Predictors</i>	<i>Estimates</i>	<i>95% CI</i>	<i>t</i>	<i>DF</i>	<i>standard error</i>	<i>p</i>
Intercept	0.36	0.33 – 0.39	22.71	38.00	0.02	<0.001
ELA (log CTQ score, z-scored)	0.01	-0.02 – 0.04	0.49	38.00	0.02	0.628
Observations	40					
R ² / R ² adjusted	0.006 / -0.020					

Ambiguous/nonthreatening overlap (Fisher z score): Left vmPFC						
<i>Predictors</i>	<i>Estimates</i>	<i>95% CI</i>	<i>t</i>	<i>DF</i>	<i>standard error</i>	<i>p</i>
Intercept	0.35	0.32 – 0.38	23.57	38.00	0.01	<0.001
ELA (log CTQ score, z-scored)	0.01	-0.02 – 0.05	0.96	38.00	0.02	0.343
Observations	40					
R ² / R ² adjusted	0.024 / -0.002					

Ambiguous/nonthreatening overlap (Fisher z score): Right V1						
<i>Predictors</i>	<i>Estimates</i>	<i>95% CI</i>	<i>t</i>	<i>DF</i>	<i>standard error</i>	<i>p</i>
Intercept	0.63	0.57 – 0.69	21.18	38.00	0.03	<0.001
ELA (log CTQ score, z-scored)	-0.03	-0.09 – 0.03	-0.99	38.00	0.03	0.327
Observations	40					
R ² / R ² adjusted	0.025 / -0.000					

Ambiguous/nonthreatening overlap (Fisher z score) Left V1						
<i>Predictors</i>	<i>Estimates</i>	<i>95% CI</i>	<i>t</i>	<i>DF</i>	<i>standard error</i>	<i>p</i>
Intercept	0.636	0.576 – 0.696	21.503	38.000	0.030	<0.001
ELA (log CTQ score, z-scored)	-0.033	-0.094 – 0.028	-1.103	38.000	0.030	0.277
Observations	40					
R ² / R ² adjusted	0.031 / 0.006					

False discovery rate corrected q-values

Region	Standardized beta estimate	t value	uncorrected p value	FDR corrected q value
right amygdala	0.033	2.56	0.014	0.14
left amygdala	0.008	0.59	0.559	0.66
right nucleus accumbens	0.005	0.44	0.662	0.66
left nucleus accumbens	-0.011	-0.96	0.342	0.49
right anterior insula	0.029	1.96	0.057	0.29
left anterior insula	0.018	1.16	0.253	0.49
right vmPFC	0.008	0.49	0.628	0.66
left vmPFC	0.015	0.96	0.343	0.49
right V1	-0.030	-0.99	0.327	0.49
left V1	-0.033	-1.10	0.277	0.49

Supplemental Table 8: Does observed association with ambiguous/nonthreatening overlap hold when we control for participant-specific ROI size?

Ambiguous/nonthreatening overlap (Fisher z score): Right amygdala						
<i>Predictors</i>	<i>Estimates</i>	<i>95% CI</i>	<i>t</i>	<i>DF</i>	<i>standard error</i>	<i>p</i>
Intercept	0.41	0.24 – 0.58	4.93	37.00	0.08	<0.001
ELA (log CTQ score, z-scored)	0.03	0.01 – 0.06	2.51	37.00	0.01	0.017
Right amygdala size	-0.00	-0.00 – 0.00	-0.22	37.00	0.00	0.830
Observations	40					
R ² / R ² adjusted	0.149 / 0.103					

Threatening/nonthreatening overlap.

Supplemental Table 9: ELA and threatening/nonthreatening overlap.

Threatening/nonthreatening overlap (Fisher z score): Right amygdala						
Predictors	Estimates	95% CI	t	DF	standard error	p
Intercept	0.36	0.33 – 0.39	26.12	38.00	0.01	<0.001
ELA (log CTQ score, z-scored)	0.03	-0.00 – 0.06	1.97	38.00	0.01	0.056
Observations	40					
R ² / R ² adjusted	0.093 / 0.069					
Threatening/nonthreatening overlap (Fisher z score): Left amygdala						
Predictors	Estimates	95% CI	t	DF	standard error	p
Intercept	0.35	0.32 – 0.38	21.63	38.00	0.02	<0.001
ELA (log CTQ score, z-scored)	0.02	-0.01 – 0.05	1.19	38.00	0.02	0.243
Observations	40					
R ² / R ² adjusted	0.036 / 0.010					
Threatening/nonthreatening overlap (Fisher z score): Right nucleus accumbens						
Predictors	Estimates	95% CI	t	DF	standard error	p
Intercept	0.35	0.32 – 0.38	26.40	38.00	0.01	<0.001
ELA (log CTQ score, z-scored)	0.00	-0.02 – 0.03	0.17	38.00	0.01	0.866
Observations	40					
R ² / R ² adjusted	0.001 / -0.026					
Threatening/nonthreatening overlap (Fisher z score): Left nucleus accumbens						
Predictors	Estimates	95% CI	t	DF	standard error	p
Intercept	0.35	0.33 – 0.37	31.55	38.00	0.01	<0.001
ELA (log CTQ score, z-scored)	0.00	-0.02 – 0.03	0.42	38.00	0.01	0.674
Observations	40					
R ² / R ² adjusted	0.005 / -0.021					
Threatening/nonthreatening overlap (Fisher z score): Right anterior insula						
Predictors	Estimates	95% CI	t	DF	standard error	p
Intercept	0.360	0.332 – 0.387	26.332	38.000	0.014	<0.001
ELA (log CTQ score, z-scored)	0.031	0.003 – 0.059	2.229	38.000	0.014	0.032
Observations	40					
R ² / R ² adjusted	0.116 / 0.092					
Threatening/nonthreatening overlap (Fisher z score): Left anterior insula						
Predictors	Estimates	95% CI	t	DF	standard error	p
Intercept	0.36	0.33 – 0.39	24.14	38.00	0.01	<0.001
ELA (log CTQ score, z-scored)	0.03	-0.00 – 0.06	1.89	38.00	0.02	0.066
Observations	40					
R ² / R ² adjusted	0.086 / 0.062					

(Supplemental Table 9 continued)

Threatening/nonthreatening overlap (Fisher z score): Right vmPFC						
<i>Predictors</i>	<i>Estimates</i>	<i>95% CI</i>	<i>t</i>	<i>DF</i>	<i>standard error</i>	<i>p</i>
Intercept	0.36	0.34 – 0.39	25.69	38.00	0.01	<0.001
ELA (log CTQ score, z-scored)	0.00	-0.03 – 0.03	0.23	38.00	0.01	0.820
Observations	40					
R ² / R ² adjusted	0.001 / -0.025					

Threatening/nonthreatening overlap (Fisher z score): Left vmPFC						
<i>Predictors</i>	<i>Estimates</i>	<i>95% CI</i>	<i>t</i>	<i>DF</i>	<i>standard error</i>	<i>p</i>
Intercept	0.37	0.34 – 0.40	27.42	38.00	0.01	<0.001
ELA (log CTQ score, z-scored)	0.01	-0.02 – 0.03	0.40	38.00	0.01	0.688
Observations	40					
R ² / R ² adjusted	0.004 / -0.022					

Threatening/nonthreatening overlap (Fisher z score): Right V1						
<i>Predictors</i>	<i>Estimates</i>	<i>95% CI</i>	<i>t</i>	<i>DF</i>	<i>standard error</i>	<i>p</i>
Intercept	0.62	0.56 – 0.69	19.54	38.00	0.03	<0.001
ELA (log CTQ score, z-scored)	-0.01	-0.08 – 0.05	-0.39	38.00	0.03	0.700
Observations	40					
R ² / R ² adjusted	0.004 / -0.022					

Threatening/nonthreatening overlap (Fisher z score): Left V1						
<i>Predictors</i>	<i>Estimates</i>	<i>95% CI</i>	<i>t</i>	<i>DF</i>	<i>standard error</i>	<i>p</i>
Intercept	0.631	0.565 – 0.697	19.329	38.000	0.033	<0.001
ELA (log CTQ score, z-scored)	-0.017	-0.084 – 0.050	-0.503	38.000	0.033	0.618
Observations	40					
R ² / R ² adjusted	0.007 / -0.020					

False discovery rate corrected q-values

Region	Standardized beta estimate	t value	uncorrected p value	FDR corrected q value
right amygdala	0.027	1.97	0.056	0.22
left amygdala	0.020	1.19	0.243	0.61
right nucleus accumbens	0.002	0.17	0.866	0.87
left nucleus accumbens	0.005	0.42	0.674	0.87
right anterior insula	0.031	2.23	0.032	0.22
left anterior insula	0.028	1.89	0.066	0.22
right vmPFC	0.003	0.23	0.820	0.87
left vmPFC	0.006	0.41	0.688	0.87
right V1	-0.013	-0.39	0.700	0.87
left V1	-0.017	-0.50	0.618	0.87

Supplemental Table 10: Does observed association with threatening/nonthreatening overlap hold when we control for participant-specific ROI size?

<i>Predictors</i>	Threatening/nonthreatening overlap (Fisher z score): Right anterior insula					
	<i>Estimates</i>	<i>95% CI</i>	<i>t</i>	<i>DF</i>	<i>standard error</i>	<i>p</i>
Intercept	0.22	-0.01 – 0.44	1.96	37.00	0.11	0.057
ELA (log CTQ score, z-scored)	0.04	0.01 – 0.06	2.51	37.00	0.01	0.017
Right anterior insula size	0.00	-0.00 – 0.00	1.29	37.00	0.00	0.205
Observations	40					
R ² / R ² adjusted	0.154 / 0.108					

Global functioning and representational overlap.

Supplemental Table 11: Does ambiguous/threatening overlap relate to global functioning?

Ambiguous/threatening overlap (Fisher z score): Right amygdala						
<i>Predictors</i>	<i>Estimates</i>	<i>95% CI</i>	<i>t</i>	<i>DF</i>	<i>standard error</i>	<i>p</i>
Intercept	0.389	0.353 – 0.424	22.237	36.000	0.017	<0.001
Global functioning impairment (HoNOS z-score)	-0.001	-0.037 – 0.035	-0.040	36.000	0.018	0.968
Observations	38					
R ² / R ² adjusted	0.000 / -0.028					
Ambiguous/threatening overlap (Fisher z score): Left amygdala						
<i>Predictors</i>	<i>Estimates</i>	<i>95% CI</i>	<i>t</i>	<i>DF</i>	<i>standard error</i>	<i>p</i>
Intercept	0.37	0.34 – 0.41	20.67	36.00	0.02	<0.001
Global functioning impairment (HoNOS z-score)	0.01	-0.03 – 0.04	0.28	36.00	0.02	0.781
Observations	38					
R ² / R ² adjusted	0.002 / -0.026					
Ambiguous/threatening overlap (Fisher z score): Right nucleus accumbens						
<i>Predictors</i>	<i>Estimates</i>	<i>95% CI</i>	<i>t</i>	<i>DF</i>	<i>standard error</i>	<i>p</i>
Intercept	0.36	0.33 – 0.39	24.17	36.00	0.01	<0.001
Global functioning impairment (HoNOS z-score)	0.01	-0.02 – 0.04	0.54	36.00	0.01	0.595
Observations	38					
R ² / R ² adjusted	0.008 / -0.020					
Ambiguous/threatening overlap (Fisher z score): Left nucleus accumbens						
<i>Predictors</i>	<i>Estimates</i>	<i>95% CI</i>	<i>t</i>	<i>DF</i>	<i>standard error</i>	<i>p</i>
Intercept	0.37	0.34 – 0.40	24.17	36.00	0.02	<0.001
Global functioning impairment (HoNOS z-score)	-0.01	-0.04 – 0.02	-0.42	36.00	0.02	0.675
Observations	38					
R ² / R ² adjusted	0.005 / -0.023					
Ambiguous/threatening overlap (Fisher z score): Right anterior insula						
<i>Predictors</i>	<i>Estimates</i>	<i>95% CI</i>	<i>t</i>	<i>DF</i>	<i>standard error</i>	<i>p</i>
Intercept	0.3776	0.3411 – 0.4140	21.0082	36.0000	0.0180	<0.001
Global functioning impairment (HoNOS z-score)	-0.0001	-0.0370 – 0.0369	-0.0031	36.0000	0.0182	0.998
Observations	38					
R ² / R ² adjusted	0.000 / -0.028					
Ambiguous/threatening overlap (Fisher z score): Left anterior insula						
<i>Predictors</i>	<i>Estimates</i>	<i>95% CI</i>	<i>t</i>	<i>DF</i>	<i>standard error</i>	<i>p</i>
Intercept	0.37	0.33 – 0.41	18.67	36.00	0.02	<0.001
Global functioning impairment (HoNOS z-score)	0.01	-0.03 – 0.05	0.36	36.00	0.02	0.722
Observations	38					
R ² / R ² adjusted	0.004 / -0.024					

(Supplemental Table 11 continued)

Ambiguous/threatening overlap (Fisher z score): Right vmPFC							
<i>Predictors</i>	<i>Estimates</i>	<i>95% CI</i>	<i>t</i>	<i>DF</i>	<i>standard error</i>	<i>p</i>	
Intercept	0.37	0.33 – 0.40	20.85	36.00	0.02	<0.001	
Global functioning impairment (HoNOS z-score)	0.03	-0.01 – 0.07	1.71	36.00	0.02	0.095	
Observations	38						
R ² / R ² adjusted	0.075 / 0.050						

Ambiguous/threatening overlap (Fisher z score): Left vmPFC							
<i>Predictors</i>	<i>Estimates</i>	<i>95% CI</i>	<i>t</i>	<i>DF</i>	<i>standard error</i>	<i>p</i>	
Intercept	0.36	0.33 – 0.40	21.29	36.00	0.02	<0.001	
Global functioning impairment (HoNOS z-score)	0.02	-0.02 – 0.05	0.89	36.00	0.02	0.382	
Observations	38						
R ² / R ² adjusted	0.021 / -0.006						

Ambiguous/threatening overlap (Fisher z score): Right V1							
<i>Predictors</i>	<i>Estimates</i>	<i>95% CI</i>	<i>t</i>	<i>DF</i>	<i>standard error</i>	<i>p</i>	
Intercept	0.63	0.57 – 0.69	20.84	36.00	0.03	<0.001	
Global functioning impairment (HoNOS z-score)	-0.01	-0.08 – 0.05	-0.48	36.00	0.03	0.631	
Observations	38						
R ² / R ² adjusted	0.006 / -0.021						

Ambiguous/threatening overlap (Fisher z score): Left V1							
<i>Predictors</i>	<i>Estimates</i>	<i>95% CI</i>	<i>t</i>	<i>DF</i>	<i>standard error</i>	<i>p</i>	
Intercept	0.64	0.58 – 0.71	19.89	36.00	0.03	<0.001	
Global functioning impairment (HoNOS z-score)	-0.03	-0.09 – 0.04	-0.82	36.00	0.03	0.417	
Observations	38						
R ² / R ² adjusted	0.018 / -0.009						

Representational overlap and task behavior.

Supplemental Table 12: Does ambiguous/threatening overlap relate to negativity biases (number of ambiguous faces interpreted negatively)?

Negativity bias (percent of ambiguous faces interpreted negatively; z-scored)						
<i>Predictors</i>	<i>Estimates</i>	<i>95% CI</i>	<i>t</i>	<i>DF</i>	<i>standard error</i>	<i>p</i>
Intercept	0.22	-1.03 – 1.48	0.36	39.00	0.62	0.723
Ambiguous/threatening overlap (Fisher z score): Right amygdala	-0.57	-3.71 – 2.56	-0.37	39.00	1.55	0.714
Observations	41					
R ² / R ² adjusted	0.003 / -0.022					

Negativity bias (percent of ambiguous faces interpreted negatively; z-scored)						
<i>Predictors</i>	<i>Estimates</i>	<i>95% CI</i>	<i>t</i>	<i>DF</i>	<i>standard error</i>	<i>p</i>
Intercept	0.09	-1.10 – 1.27	0.15	39.00	0.59	0.880
Ambiguous/threatening overlap (Fisher z score): Left amygdala	-0.24	-3.27 – 2.80	-0.16	39.00	1.50	0.875
Observations	41					
R ² / R ² adjusted	0.001 / -0.025					

Negativity bias (percent of ambiguous faces interpreted negatively; z-scored)						
<i>Predictors</i>	<i>Estimates</i>	<i>95% CI</i>	<i>t</i>	<i>DF</i>	<i>standard error</i>	<i>p</i>
Intercept	0.31	-1.05 – 1.68	0.46	39.00	0.68	0.646
Ambiguous/threatening overlap (Fisher z score): Right nucleus accumbens	-0.87	-4.57 – 2.82	-0.48	39.00	1.83	0.636
Observations	41					
R ² / R ² adjusted	0.006 / -0.020					

Negativity bias (percent of ambiguous faces interpreted negatively; z-scored)						
<i>Predictors</i>	<i>Estimates</i>	<i>95% CI</i>	<i>t</i>	<i>DF</i>	<i>standard error</i>	<i>p</i>
Intercept	-0.72	-2.07 – 0.62	-1.09	39.00	0.67	0.284
Ambiguous/threatening overlap (Fisher z score): Left nucleus accumbens	1.98	-1.61 – 5.57	1.12	39.00	1.77	0.271
Observations	41					
R ² / R ² adjusted	0.031 / 0.006					

Negativity bias (percent of ambiguous faces interpreted negatively; z-scored)						
<i>Predictors</i>	<i>Estimates</i>	<i>95% CI</i>	<i>t</i>	<i>DF</i>	<i>standard error</i>	<i>p</i>
Intercept	-0.07	-1.27 – 1.14	-0.12	39.00	0.60	0.907
Ambiguous/threatening overlap (Fisher z score): Right anterior insula	0.18	-2.89 – 3.26	0.12	39.00	1.52	0.904
Observations	41					
R ² / R ² adjusted	0.000 / -0.025					

Negativity bias (percent of ambiguous faces interpreted negatively; z-scored)						
<i>Predictors</i>	<i>Estimates</i>	<i>95% CI</i>	<i>t</i>	<i>DF</i>	<i>standard error</i>	<i>p</i>
Intercept	0.39	-0.67 – 1.44	0.74	39.00	0.52	0.462
Ambiguous/threatening overlap (Fisher z score): Left anterior insula	-1.05	-3.76 – 1.67	-0.78	39.00	1.34	0.440
Observations	41					
R ² / R ² adjusted	0.015 / -0.010					

Negativity bias (percent of ambiguous faces interpreted negatively; z-scored)						
<i>Predictors</i>	<i>Estimates</i>	<i>95% CI</i>	<i>t</i>	<i>DF</i>	<i>standard error</i>	<i>p</i>
Intercept	0.14	-0.99 – 1.26	0.25	39.00	0.56	0.807
Ambiguous/threatening overlap (Fisher z score): Right vmPFC	-0.37	-3.31 – 2.57	-0.26	39.00	1.45	0.799
Observations	41					
R ² / R ² adjusted	0.002 / -0.024					

Negativity bias (percent of ambiguous faces interpreted negatively; z-scored)						
<i>Predictors</i>	<i>Estimates</i>	<i>95% CI</i>	<i>t</i>	<i>DF</i>	<i>standard error</i>	<i>p</i>
Intercept	-0.17	-1.38 – 1.03	-0.29	39.00	0.59	0.770
Ambiguous/threatening overlap (Fisher z score): Left vmPFC	0.48	-2.71 – 3.68	0.31	39.00	1.58	0.762
Observations	41					
R ² / R ² adjusted	0.002 / -0.023					

(Supplemental Table 12 continued)

Negativity bias (percent of ambiguous faces interpreted negatively; z-scored)						
<i>Predictors</i>	<i>Estimates</i>	<i>95% CI</i>	<i>t</i>	<i>DF</i>	<i>standard error</i>	<i>p</i>
Intercept	0.25	-0.88 – 1.37	0.44	39.00	0.55	0.660
Ambiguous/threatening overlap (Fisher z score): Right V1	-0.39	-2.11 – 1.32	-0.46	39.00	0.85	0.646
Observations	41					
R ² / R ² adjusted	0.005 / -0.020					

Negativity bias (percent of ambiguous faces interpreted negatively; z-scored)						
<i>Predictors</i>	<i>Estimates</i>	<i>95% CI</i>	<i>t</i>	<i>DF</i>	<i>standard error</i>	<i>p</i>
Intercept	0.18	-0.94 – 1.30	0.33	39.00	0.55	0.746
Ambiguous/threatening overlap (Fisher z score): Left V1	-0.28	-1.97 – 1.40	-0.34	39.00	0.83	0.735
Observations	41					
R ² / R ² adjusted	0.003 / -0.023					

Univariate neural responses.

Descriptive statistics.

Supplemental Table 13: Average univariate values by condition within each region.

	ambiguous (N = 41)	nonthreatening (N = 41)	threatening (N = 41)
Right Amygdala			
min	-0.4	-0.69	-0.64
max	1.78	1.68	1.31
mean (sd)	0.52 ± 0.54	0.42 ± 0.45	0.51 ± 0.47
Left Amygdala			
min	-0.73	-0.56	-0.48
max	1.31	1.39	1.21
mean (sd)	0.39 ± 0.50	0.30 ± 0.43	0.38 ± 0.43
Right Accumbens			
min	-1.95	-1.6	-1.49
max	0.87	0.9	0.84
mean (sd)	-0.08 ± 0.57	-0.13 ± 0.61	-0.13 ± 0.54
Left Accumbens			
min	-2.06	-1.79	-1.28
max	0.98	1.13	0.88
mean (sd)	-0.07 ± 0.66	-0.11 ± 0.74	-0.15 ± 0.58
Right Anterior Insula			
min	-1.39	-1.65	-0.93
max	1.05	1.21	1.2
mean (sd)	-0.01 ± 0.51	-0.07 ± 0.56	0.00 ± 0.53
Left Anterior Insula			
min	-1.08	-1.82	-1.27
max	1.01	1.7	1.5
mean (sd)	-0.00 ± 0.46	-0.10 ± 0.62	-0.06 ± 0.57

(Supplemental Table 13 continued)

	ambiguous (N = 41)	nonthreatening (N = 41)	threatening (N = 41)
Right vmPFC			
min	-1.72	-2.21	-1.74
max	1.4	1.46	1.12
mean (sd)	-0.08 ± 0.76	-0.16 ± 0.79	-0.01 ± 0.67
Left vmPFC			
min	-1.74	-1.91	-1.73
max	1.82	1.48	1.3
mean (sd)	-0.12 ± 0.80	-0.18 ± 0.78	-0.04 ± 0.70
Right V1			
min	-1.37	-0.89	-0.65
max	4.19	4.38	3.88
mean (sd)	1.66 ± 1.20	1.53 ± 1.12	1.46 ± 1.13
Left V1			
min	-2.68	-1.49	-1.42
max	4.55	4.93	4.56
mean (sd)	1.50 ± 1.39	1.38 ± 1.42	1.32 ± 1.34

Basic group-level contrasts by stimulus type within regions.

Supplemental Table 14: Group-level contrasts by stimulus type within regions.

Univariate response: Right amygdala (Reference level: ambiguous)						
<i>Predictors</i>	<i>Estimates</i>	<i>95% CI</i>	<i>t</i>	<i>DF</i>	<i>standard error</i>	<i>p</i>
Intercept	0.517	0.366 – 0.667	6.789	120.000	0.076	<0.001
Emotion: Threatening	-0.008	-0.221 – 0.205	-0.071	120.000	0.108	0.943
Emotion: Nonthreatening	-0.101	-0.314 – 0.112	-0.940	120.000	0.108	0.349
Observations	123					
R ² / R ² adjusted	0.009 / -0.007					

Univariate response: Left amygdala (Reference level: ambiguous)						
<i>Predictors</i>	<i>Estimates</i>	<i>95% CI</i>	<i>t</i>	<i>DF</i>	<i>standard error</i>	<i>p</i>
Intercept	0.387	0.245 – 0.528	5.404	120.000	0.072	<0.001
Emotion: Threatening	-0.003	-0.204 – 0.197	-0.033	120.000	0.101	0.974
Emotion: Nonthreatening	-0.089	-0.289 – 0.111	-0.880	120.000	0.101	0.381
Observations	123					
R ² / R ² adjusted	0.008 / -0.008					

Univariate response: Right accumbens (Reference level: ambiguous)						
<i>Predictors</i>	<i>Estimates</i>	<i>95% CI</i>	<i>t</i>	<i>DF</i>	<i>standard error</i>	<i>p</i>
Intercept	-0.083	-0.260 – 0.095	-0.923	120.000	0.090	0.358
Emotion: Threatening	-0.051	-0.301 – 0.200	-0.399	120.000	0.127	0.690
Emotion: Nonthreatening	-0.051	-0.301 – 0.200	-0.400	120.000	0.127	0.690
Observations	123					
R ² / R ² adjusted	0.002 / -0.015					

Univariate response: Left accumbens (Reference level: ambiguous)						
<i>Predictors</i>	<i>Estimates</i>	<i>95% CI</i>	<i>t</i>	<i>DF</i>	<i>standard error</i>	<i>p</i>
Intercept	-0.070	-0.274 – 0.135	-0.673	120.000	0.103	0.502
Emotion: Threatening	-0.085	-0.374 – 0.205	-0.578	120.000	0.146	0.564
Emotion: Nonthreatening	-0.038	-0.327 – 0.252	-0.257	120.000	0.146	0.798
Observations	123					
R ² / R ² adjusted	0.003 / -0.014					

(Supplemental Table 14 continued)

Univariate response: Right anterior insula (Reference level: ambiguous)						
<i>Predictors</i>	<i>Estimates</i>	<i>95% CI</i>	<i>t</i>	<i>DF</i>	<i>standard error</i>	<i>p</i>
Intercept	-0.011	-0.175 – 0.153	-0.135	120.000	0.083	0.893
Emotion: Threatening	0.016	-0.216 – 0.248	0.135	120.000	0.117	0.893
Emotion: Nonthreatening	-0.054	-0.286 – 0.178	-0.460	120.000	0.117	0.646
Observations	123					
R ² / R ² adjusted	0.003 / -0.013					

Univariate response: Left anterior insula (Reference level: ambiguous)						
<i>Predictors</i>	<i>Estimates</i>	<i>95% CI</i>	<i>t</i>	<i>DF</i>	<i>standard error</i>	<i>p</i>
Intercept	-0.005	-0.176 – 0.167	-0.053	120.000	0.087	0.958
Emotion: Threatening	-0.055	-0.298 – 0.188	-0.445	120.000	0.123	0.657
Emotion: Nonthreatening	-0.096	-0.339 – 0.147	-0.783	120.000	0.123	0.435
Observations	123					
R ² / R ² adjusted	0.005 / -0.011					

Univariate response: Right vmPFC (Reference level: ambiguous)						
<i>Predictors</i>	<i>Estimates</i>	<i>95% CI</i>	<i>t</i>	<i>DF</i>	<i>standard error</i>	<i>p</i>
Intercept	-0.083	-0.313 – 0.148	-0.711	120.000	0.116	0.479
Emotion: Threatening	0.071	-0.254 – 0.396	0.432	120.000	0.164	0.667
Emotion: Nonthreatening	-0.073	-0.398 – 0.253	-0.442	120.000	0.164	0.660
Observations	123					
R ² / R ² adjusted	0.006 / -0.010					

Univariate response: Left vmPFC (Reference level: ambiguous)						
<i>Predictors</i>	<i>Estimates</i>	<i>95% CI</i>	<i>t</i>	<i>DF</i>	<i>standard error</i>	<i>p</i>
Intercept	-0.117	-0.352 – 0.118	-0.983	120.000	0.119	0.328
Emotion: Threatening	0.080	-0.253 – 0.412	0.474	120.000	0.168	0.637
Emotion: Nonthreatening	-0.065	-0.398 – 0.267	-0.388	120.000	0.168	0.699
Observations	123					
R ² / R ² adjusted	0.006 / -0.010					

Univariate response: Right V1 (Reference level: ambiguous)						
<i>Predictors</i>	<i>Estimates</i>	<i>95% CI</i>	<i>t</i>	<i>DF</i>	<i>standard error</i>	<i>p</i>
Intercept	1.663	1.307 – 2.019	9.251	120.000	0.180	<0.001
Emotion: Threatening	-0.204	-0.708 – 0.299	-0.803	120.000	0.254	0.423
Emotion: Nonthreatening	-0.131	-0.634 – 0.373	-0.514	120.000	0.254	0.608
Observations	123					
R ² / R ² adjusted	0.005 / -0.011					

Univariate response: Left V1 (Reference level: ambiguous)						
<i>Predictors</i>	<i>Estimates</i>	<i>95% CI</i>	<i>t</i>	<i>DF</i>	<i>standard error</i>	<i>p</i>
Intercept	1.502	1.074 – 1.930	6.951	120.000	0.216	<0.001
Emotion: Threatening	-0.178	-0.783 – 0.427	-0.581	120.000	0.306	0.562
Emotion: Nonthreatening	-0.123	-0.728 – 0.482	-0.402	120.000	0.306	0.689
Observations	123					
R ² / R ² adjusted	0.003 / -0.014					