## Supplemental Methods and Results for

## Mapping neural circuit biotypes to symptoms and behavioral dimensions of depression and anxiety

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Table S3A. Circuit definitions, regions, z values, and coordinates for task-free circuits

			Default Mode Circuit				
Circuit T	уре		Condition		Task Contrast	Neurosynth Search criteria	
Intrins	ic		Task-free			Term="default mode"; "resting state"	
						Number of studies=516; 825 Search Date=6.4.17	
Defines hypothesized dysfunction?	Region label	Region anatomy: Full name	Region anatomy: Abbreviation	Left, Right, or Medial	Z Value	Template coordinates and definitions	
Yes	D1	anterior medial PreFrontal Cortex	amPFC (BA 10)	M	22.0	-2, 50, -6	
Yes	D2	Angular Gyrus	AG (BA 39)	L	26.1	-46, -70, 32	
Yes	D3	Angular Gyrus	AG (BA 39)	R	20.6	50, -62, 26	
Yes	D4	Posterior Cingulate	PCC	M	29.8	0, -50, 28	
		Č				r r	
No	D5	dorsal Anterior Cingulate	dACC (BA 32)	M	12.1	2, 16, 44	
No	D6	dorsomedial Prefrontal	dmPFC (BA 9)	M	12.8	-2, 54, 28	
3.7	P.=	Cortex	MEG (D : 21)	*	150	(0. 11. 17	
No	D7	Mid-Temporal Gyrus	MTG (BA 21)	L	15.0	-60, -14, -16	
No	D8	Anterior Insula	AI	L	12.4	-34, 22, 2	
No	D9	Anterior Insula	AI	R	12.8	34, 22, -2	
No	D10	Hippocampus	HC	L	11.3	AAL	
No	D11	Hippocampus	HC	R	10.6	AAL	
No	D12	Thalamus	Thal	R	9.8	AAL	
No	D13	Caudate nucleus	CdN	R	6.9	AAL	
Ciit T	?		Condition	S	alience Circu		
Circuit T	ype		Condition		Task Contrast	Neurosynth Search criteria	
Intrins	ic		Task-free			Terms="salience network"; "salience" Number of studies=60; 269	
						Search Date=6.4.17	
· ·	Region label	Region anatomy: Full name	Region anatomy: Abbreviation	Left, Right, or Medial	Z Value	Search Date=6.4.17  Template coordinates and definitions	
hypothesized				Right, or	Z Value	Template coordinates and	
hypothesized dysfunction?	label	Full name	Abbreviation	Right, or Medial		Template coordinates and definitions	
hypothesized dysfunction? Yes	label S1	Full name  Anterior Insula Anterior Insula	Abbreviation AI	Right, or Medial L	11.9	Template coordinates and definitions -38, 14, -6	
hypothesized dysfunction? Yes Yes	S1 S2	Full name  Anterior Insula Anterior Insula Amygdala	Abbreviation  AI  AI  AI  Amy	Right, or Medial L R	11.9 14.8	Template coordinates and definitions  -38, 14, -6 38, 18, 2	
hypothesized dysfunction? Yes Yes Yes Yes	S1   S2   S3   S4	Full name  Anterior Insula Anterior Insula Amygdala Amygdala	Abbreviation  AI  AI  Amy  Amy	Right, or Medial L R L R	11.9 14.8 6.9 14.7	Template coordinates and definitions  -38, 14, -6 38, 18, 2 AAL AAL	
hypothesized dysfunction? Yes Yes Yes Yes Yes No	S1 S2 S3 S4 S5	Full name  Anterior Insula Anterior Insula Amygdala Amygdala dorsal Anterior Cingulate	Al AI Amy Amy dACC (BA 24)	Right, or Medial L R L R M	11.9 14.8 6.9 14.7 10.9	Template coordinates and definitions  -38, 14, -6 38, 18, 2 AAL AAL 6, 26, 28	
hypothesized dysfunction? Yes Yes Yes Yes	S1   S2   S3   S4	Full name  Anterior Insula Anterior Insula Amygdala Amygdala	Abbreviation  AI  AI  Amy  Amy	Right, or Medial L R L R	11.9 14.8 6.9 14.7	Template coordinates and definitions  -38, 14, -6 38, 18, 2 AAL AAL	
hypothesized dysfunction? Yes Yes Yes Yes No No	\$1 \$2 \$3 \$4 \$5 \$6 \$7	Full name  Anterior Insula Anterior Insula Amygdala Amygdala dorsal Anterior Cingulate Angular Gyrus	Abbreviation  AI  AI  Amy  Amy  dACC (BA 24)  AG (BA 39)  Thal	Right, or Medial L R L R M L L	11.9 14.8 6.9 14.7 10.9 6.9	Template coordinates and definitions  -38, 14, -6 38, 18, 2 AAL AAL 6, 26, 28 -48, -64, 32 AAL	
hypothesized dysfunction? Yes Yes Yes Yes Yes No No	\$1 \$2 \$3 \$4 \$5 \$6 \$7	Full name  Anterior Insula Anterior Insula Amygdala Amygdala dorsal Anterior Cingulate Angular Gyrus	Abbreviation  AI  AI  Amy  Amy  dACC (BA 24)  AG (BA 39)  Thal  Condition	Right, or Medial L R L R M L L	11.9 14.8 6.9 14.7 10.9 10.9 6.9	Template coordinates and definitions  -38, 14, -6 38, 18, 2 AAL AAL 6, 26, 28 -48, -64, 32 AAL  Neurosynth Search criteria	
hypothesized dysfunction? Yes Yes Yes Yes No No No	S1   S2   S3   S4   S5   S6   S7	Full name  Anterior Insula Anterior Insula Amygdala Amygdala dorsal Anterior Cingulate Angular Gyrus	Abbreviation  AI  AI  Amy  Amy  dACC (BA 24)  AG (BA 39)  Thal	Right, or Medial L R L R M L L	11.9 14.8 6.9 14.7 10.9 10.9 6.9	Template coordinates and definitions  -38, 14, -6 38, 18, 2 AAL AAL 6, 26, 28 -48, -64, 32 AAL  Neurosynth Search criteria  Terms="frontoparietal network "attention" Number of studies=1447; 79	
hypothesized dysfunction? Yes Yes Yes Yes No No No	S1   S2   S3   S4   S5   S6   S7	Full name  Anterior Insula Anterior Insula Amygdala Amygdala dorsal Anterior Cingulate Angular Gyrus	Abbreviation  AI  AI  Amy  Amy  dACC (BA 24)  AG (BA 39)  Thal  Condition	Right, or Medial L R L R M L L	11.9 14.8 6.9 14.7 10.9 10.9 6.9 Exertion Circu Task Contrast	Template coordinates and definitions  -38, 14, -6 38, 18, 2 AAL AAL 6, 26, 28 -48, -64, 32 AAL  Neurosynth Search criteria  Terms="frontoparietal network "attention"	
hypothesized dysfunction? Yes Yes Yes Yes No No No Circuit 1 Intrins  Defines hypothesized dysfunction? Yes	S1   S2   S3   S4   S5   S6   S7   S7   S7   S9   S6   S7   S9   S9   S9   S9   S9   S9   S9	Full name  Anterior Insula Anterior Insula Amygdala Amygdala dorsal Anterior Cingulate Angular Gyrus Thalamus  Region anatomy:	Abbreviation  AI AI AI Amy Amy dACC (BA 24) AG (BA 39) Thal  Condition  Task-free  Region anatomy:	Right, or Medial L R L R M L L L At	11.9 14.8 6.9 14.7 10.9 10.9 6.9 tention Circu Task Contrast	Template coordinates and definitions  -38, 14, -6 38, 18, 2 AAL AAL 6, 26, 28 -48, -64, 32 AAL  ait  Neurosynth Search criteria  Terms="frontoparietal network "attention" Number of studies=1447; 79 Search Dat=6.4.17  Template coordinates and	
hypothesized dysfunction? Yes Yes Yes Yes No No No Circuit T  Intrins  Defines hypothesized dysfunction?	s1 S2 S3 S4 S5 S6 S7  Sype ic  Region label	Full name  Anterior Insula Anterior Insula Amygdala Amygdala dorsal Anterior Cingulate Angular Gyrus Thalamus  Region anatomy: Full name medial superior	Abbreviation  AI AI AI Amy Amy dACC (BA 24) AG (BA 39) Thal  Condition  Task-free  Region anatomy: Abbreviation	Right, or Medial  L  R  L  R  M  L  L  At	11.9 14.8 6.9 14.7 10.9 10.9 6.9 Extention Circuitation C	Template coordinates and definitions  -38, 14, -6 38, 18, 2 AAL AAL 6, 26, 28 -48, -64, 32 AAL  Neurosynth Search criteria  Terms="frontoparietal network "attention" Number of studies=1447; 79 Search Dat=6.4.17  Template coordinates and definitions	
hypothesized dysfunction? Yes Yes Yes Yes No No No Circuit 1 Intrins  Defines hypothesized dysfunction? Yes	s1 S2 S3 S4 S5 S6 S7  Type  ic  Region label  A1	Full name  Anterior Insula Anterior Insula Amygdala Amygdala dorsal Anterior Cingulate Angular Gyrus Thalamus  Region anatomy: Full name  medial superior PreFrontal Cortex	Abbreviation  AI AI AI Amy Amy dACC (BA 24) AG (BA 39) Thal  Condition  Task-free  Region anatomy: Abbreviation  msPFC (BA 6)	Right, or Medial L R L R M L L L At	11.9 14.8 6.9 14.7 10.9 10.9 6.9 tention Circu Task Contrast Z Value	Template coordinates and definitions  -38, 14, -6 38, 18, 2 AAL AAL 6, 26, 28 -48, -64, 32 AAL  Neurosynth Search criteria  Terms="frontoparietal network "attention" Number of studies=1447; 79 Search Dat=6.4.17  Template coordinates and definitions  -2, 14, 52	
hypothesized dysfunction? Yes Yes Yes Yes No No No Circuit 1 Intrins  Defines hypothesized dysfunction? Yes Yes	s1 S2 S3 S4 S5 S6 S7  Sype ic  Region label A1 A2	Full name  Anterior Insula Anterior Insula Amygdala Amygdala dorsal Anterior Cingulate Angular Gyrus Thalamus  Region anatomy: Full name  medial superior PreFrontal Cortex Lateral PreFrontal Cortex Lateral PreFrontal Cortex anterior Inferior Parietal	Abbreviation  AI AI AI Amy Amy dACC (BA 24) AG (BA 39) Thal  Condition  Task-free  Region anatomy: Abbreviation  msPFC (BA 6) LPFC (BA 9)	Right, or Medial  L  R  L  R  M  L  L  At	11.9 14.8 6.9 14.7 10.9 10.9 6.9 tention Circu Task Contrast Z Value	Template coordinates and definitions  -38, 14, -6 38, 18, 2 AAL AAL 6, 26, 28 -48, -64, 32 AAL  Neurosynth Search criteria  Terms="frontoparietal network "attention" Number of studies=1447; 79 Search Dat=6.4.17  Template coordinates and definitions  -2, 14, 52 -44, 6, 32	
hypothesized dysfunction? Yes Yes Yes Yes No No No Circuit 1 Intrins  Defines hypothesized dysfunction? Yes Yes Yes Yes Yes Yes Yes Yes	S1   S2   S3   S4   S5   S6   S7   S7   S7   S7   S7   S7   S7	Full name  Anterior Insula Anterior Insula Amygdala Amygdala dorsal Anterior Cingulate Angular Gyrus Thalamus  Region anatomy: Full name  medial superior PreFrontal Cortex Lateral PreFrontal Cortex Lateral PreFrontal Cortex anterior Inferior Parietal Lobule anterior Inferior Parietal	Abbreviation  AI AI AI Amy Amy dACC (BA 24) AG (BA 39) Thal  Condition  Task-free  Region anatomy: Abbreviation  msPFC (BA 6) LPFC (BA 9) LPFC (BA 9)	Right, or Medial  L R L R M L L L At	11.9 14.8 6.9 14.7 10.9 10.9 6.9 tention Circu Task Contrast  Z Value  10.4 13.9 11.3	Template coordinates and definitions  -38, 14, -6 38, 18, 2 AAL AAL 6, 26, 28 -48, -64, 32 AAL  Neurosynth Search criteria  Terms="frontoparietal network "attention" Number of studies=1447; 79 Search Dat=6.4.17  Template coordinates and definitions  -2, 14, 52 -44, 6, 32 50, 10, 28	
hypothesized dysfunction? Yes Yes Yes Yes No No No Circuit T  Intrins  Defines hypothesized dysfunction? Yes	S1   S2   S3   S4   S5   S6   S7   S7   S7   S7   S7   S7   S7	Full name  Anterior Insula Anterior Insula Amygdala Amygdala dorsal Anterior Cingulate Angular Gyrus Thalamus  Region anatomy: Full name  medial superior PreFrontal Cortex Lateral PreFrontal Cortex Lateral PreFrontal Cortex anterior Inferior Parietal Lobule anterior Inferior Parietal Lobule	Abbreviation  AI AI AI Amy Amy dACC (BA 24) AG (BA 39) Thal  Condition  Task-free  Region anatomy: Abbreviation  msPFC (BA 6)  LPFC (BA 9) LPFC (BA 9) aIPL (BA 40) aIPL (BA 40)	Right, or Medial L R L R M L L L At	11.9 14.8 6.9 14.7 10.9 10.9 6.9 Extention Circumate Task Contrast  Z Value  10.4 13.9 11.3 10.4 10.4	Template coordinates and definitions  -38, 14, -6 38, 18, 2 AAL AAL 6, 26, 28 -48, -64, 32 AAL  Terms="frontoparietal network "attention" Number of studies=1447; 79 Search Dat=6.4.17  Template coordinates and definitions  -2, 14, 52 -44, 6, 32 50, 10, 28 -30, -54, 40 38, -56, 48	
hypothesized dysfunction? Yes Yes Yes Yes No No No Circuit T Intrins  Defines hypothesized dysfunction? Yes	S1   S2   S3   S4   S5   S6   S7   S7   S7   S7   S7   S7   S7	Full name  Anterior Insula Anterior Insula Amygdala Amygdala Amygdala dorsal Anterior Cingulate Angular Gyrus Thalamus  Region anatomy: Full name  medial superior PreFrontal Cortex Lateral PreFrontal Cortex Lateral PreFrontal Cortex anterior Inferior Parietal Lobule anterior Inferior Parietal Lobule Precuneus	Abbreviation  AI AI AI Amy Amy dACC (BA 24) AG (BA 39) Thal  Condition  Task-free  Region anatomy: Abbreviation  msPFC (BA 6) LPFC (BA 9) LPFC (BA 9) aIPL (BA 40) aIPL (BA 40) PCUN (BA 7)	Right, or Medial  L R L R M L L L At	11.9 14.8 6.9 14.7 10.9 10.9 6.9 Exertion Circuitask Contrast  Z Value  10.4 13.9 11.3 10.4 10.4 13.0	Template coordinates and definitions  -38, 14, -6 38, 18, 2 AAL AAL 6, 26, 28 -48, -64, 32 AAL  Neurosynth Search criteria  Terms="frontoparietal network "attention" Number of studies=1447; 79 Search Dat=6.4.17  Template coordinates and definitions  -2, 14, 52 -44, 6, 32 50, 10, 28 -30, -54, 40 38, -56, 48 -14, -66, 52	
hypothesized dysfunction? Yes Yes Yes Yes No No No Circuit T  Intrins  Defines hypothesized dysfunction? Yes	S1   S2   S3   S4   S5   S6   S7   S7   S7   S7   S7   S7   S7	Full name  Anterior Insula Anterior Insula Amygdala Amygdala dorsal Anterior Cingulate Angular Gyrus Thalamus  Region anatomy: Full name  medial superior PreFrontal Cortex Lateral PreFrontal Cortex Lateral PreFrontal Cortex anterior Inferior Parietal Lobule anterior Inferior Parietal Lobule	Abbreviation  AI AI AI Amy Amy dACC (BA 24) AG (BA 39) Thal  Condition  Task-free  Region anatomy: Abbreviation  msPFC (BA 6)  LPFC (BA 9) LPFC (BA 9) aIPL (BA 40) aIPL (BA 40)	Right, or Medial  L R L R M L L L At	11.9 14.8 6.9 14.7 10.9 10.9 6.9 Extention Circumate Task Contrast  Z Value  10.4 13.9 11.3 10.4 10.4	Template coordinates and definitions  -38, 14, -6 38, 18, 2 AAL AAL 6, 26, 28 -48, -64, 32 AAL  Neurosynth Search criteria  Terms="frontoparietal network "attention" Number of studies=1447; 79 Search Dat=6.4.17  Template coordinates and definitions  -2, 14, 52 -44, 6, 32 50, 10, 28 -30, -54, 40 38, -56, 48	

**Notes:** Z-scores and coordinates refer to peaks of meta-analytic Z values. Coordinates are in MNI atlas space and subcortical regions are defined by overlap with the AAL or FSL atlas.

Abbreviations: AAL = Automated Anatomical Labeling Atlas; FSL = FMRIB Software Library; MNI = Montreal Neurological Institute; BA = Brodmann Area; L = Left; R = Right; M = Medial

Table S3B. Circuit definitions, regions, z values, and coordinates for task-evoked circuits

		Nega	tive Affect Circuit:	Sad		
Circuit Type		Condition			Task Contrast	Neurosynth Search Criteria
Task-evoked		Conscious Facial Emotion Viewing			Sad vs Neutral evoked by facial emotion stimuli	Term"threat" Number of studies=170 Search Date6.4.17
Defines hypothesized dysfunction?	Region label	Regional anatomy: full name	Region anatomy: Abbreviation	Left, Right, or Medial	Z Value	Coordinates
Yes	N1	pregenual Anterior Cingulate	pgACC	M	6.3	6, 42, 4
Yes	N2	Anterior Insula	AI	L	17.4	-36, 20, -4
Yes	N3	Anterior Insula	AI	R	16.1	38, 22, -4
Yes	N4	Amygdala	Amy	L	28.4	AAL
Yes	N5	Amygdala	Amy	R	25.2	AAL
No	N6	dorsal Anterior Cingulate	dACC (BA32)	M	8.2	6, 22, 32
No	N7	dorsal Medial PreFrontal Cortex	dMPFC (BA6)	M	8.9	2, 2, 56
No	N8	Lateral PreFrontal Cortex/Inferior Frontal	LPFC/IFG (BA44)	L	6.3	-46, 8, 28
No	N9	Gyrus Lateral PreFrontal Cortex	LPFC (BA9)	R	6.3	34, 34, 24
No	N10	Precentral Gyrus	GPrC (BA4)	R	6.3	50, 6, 42
No	N11	Supramarginal Gyrus	SMG	R	6.3	54, -44, 34
No	N12	Fusiform Gyrus	FFG	L	7.6	-44, -54, -18
No	N13	Fusiform Gyrus	FFG	R	8.2	42, -48, -16
Circuit Type		Negative Affect Circuit: Threat Condition			Task Contrast	Neurosynth Search Criteria
Task-evoked		Conscious or Nonconscious Facial Emotion Viewing			Fear/Anger vs Neutral evoked	Term"threat" Number of studies=170
					by facial emotion stimuli	Search Date 6.4.17
Defines hypothesized dysfunction?	Region label	Regional anatomy: full name	Region anatomy: Abbreviation	Left, Right, or Medial	by facial	
			~		by facial emotion stimuli	Search Date 6.4.17
hypothesized dysfunction?	label	full name  dorsal Anterior  Cingulate  Amygdala	anatomy: Abbreviation	Right, or Medial	by facial emotion stimuli Z Value	Search Date 6.4.17  Coordinates
hypothesized dysfunction? Yes Yes Yes	T1 T2 T3	dorsal Anterior Cingulate Amygdala Amygdala	anatomy: Abbreviation dACC Amy Amy	Right, or Medial M L R	by facial emotion stimuli <b>Z Value</b> 8.2  28.4  25.2	Coordinates  6, 22, 32  AAL AAL
hypothesized dysfunction? Yes	T1 T2 T3 T4	full name  dorsal Anterior  Cingulate  Amygdala	anatomy: Abbreviation dACC Amy Amy dMPFC	Right, or Medial M L R R	by facial emotion stimuli <b>Z Value</b> 8.2  28.4  25.2  8.9	Search Date6.4.17  Coordinates  6, 22, 32  AAL AAL 2, 2, 56
hypothesized dysfunction? Yes Yes Yes No	T1 T2 T3 T4 T5	dorsal Anterior Cingulate Amygdala Amygdala dorsal Medial l PreFrontal Cortex Inferior Frontal Gyrus	anatomy: Abbreviation dACC Amy Amy dMPFC	Right, or Medial M L R R	by facial emotion stimuli <b>Z Value</b> 8.2  28.4  25.2  8.9  6.3	Search Date6.4.17  Coordinates  6, 22, 32  AAL  AAL  2, 2, 56  -46, 8, 28
hypothesized dysfunction? Yes Yes Yes No No	T1 T2 T3 T4 T5 T6	dorsal Anterior Cingulate Amygdala Amygdala dorsal Medial I PreFrontal Cortex Inferior Frontal Gyrus Lateral PreFrontal Cortex	anatomy: Abbreviation dACC  Amy Amy dMPFC  IFG LPFC	Right, or Medial M L R R L	by facial emotion stimuli <b>Z Value</b> 8.2  28.4  25.2  8.9  6.3  6.3	Search Date6.4.17  Coordinates  6, 22, 32  AAL  AAL  2, 2, 56  -46, 8, 28  34, 34, 24
hypothesized dysfunction? Yes Yes Yes No No	T1 T2 T3 T4 T5 T6 T7	dorsal Anterior Cingulate Amygdala Amygdala dorsal Medial I PreFrontal Cortex Inferior Frontal Gyrus Lateral PreFrontal Cortex Precentral Gyrus	anatomy: Abbreviation dACC  Amy Amy dMPFC  IFG LPFC  GPrC (BA6)	Right, or Medial M L R R L R	by facial emotion stimuli <b>Z Value</b> 8.2  28.4  25.2  8.9  6.3  6.3	Search Date6.4.17  Coordinates  6, 22, 32  AAL AAL 2, 2, 56  -46, 8, 28 34, 34, 24  50, 6, 42
hypothesized dysfunction? Yes Yes Yes No No No No No	T1 T2 T3 T4 T5 T6 T7 T8	dorsal Anterior Cingulate Amygdala Amygdala dorsal Medial I PreFrontal Cortex Inferior Frontal Gyrus Lateral PreFrontal Cortex Precentral Gyrus Supramarginal Gyrus	anatomy: Abbreviation dACC  Amy Amy dMPFC  IFG LPFC  GPrC (BA6) SMG	Right, or Medial M L R R L R	by facial emotion stimuli <b>Z Value</b> 8.2  28.4  25.2  8.9  6.3  6.3  6.3  6.3	Search Date6.4.17  Coordinates  6, 22, 32  AAL AAL 2, 2, 56  -46, 8, 28 34, 34, 24  50, 6, 42 54, -44, 34
hypothesized dysfunction? Yes Yes Yes No No No No No No	T1 T2 T3 T4 T5 T6 T7 T8 T9	dorsal Anterior Cingulate Amygdala Amygdala dorsal Medial 1 PreFrontal Cortex Inferior Frontal Gyrus Lateral PreFrontal Cortex Precentral Gyrus Supramarginal Gyrus Anterior Insula	anatomy: Abbreviation dACC  Amy Amy dMPFC  IFG LPFC  GPrC (BA6) SMG AI	Right, or Medial M L R R L R	by facial emotion stimuli <b>Z Value</b> 8.2  28.4  25.2  8.9  6.3  6.3  6.3  17.4	Search Date6.4.17  Coordinates  6, 22, 32  AAL AAL 2, 2, 56  -46, 8, 28 34, 34, 24  50, 6, 42 54, -44, 34 -36, 20, -4
hypothesized dysfunction? Yes Yes Yes No No No No No No No No No	T1 T2 T3 T4 T5 T6 T7 T8 T9 T10	dorsal Anterior Cingulate Amygdala Amygdala dorsal Medial I PreFrontal Cortex Inferior Frontal Gyrus Lateral PreFrontal Cortex Precentral Gyrus Supramarginal Gyrus Anterior Insula Anterior Insula	anatomy: Abbreviation dACC  Amy Amy dMPFC  IFG LPFC  GPrC (BA6) SMG AI AI	Right, or Medial M L R R R L R	by facial emotion stimuli <b>Z Value</b> 8.2  28.4  25.2  8.9  6.3  6.3  6.3  17.4  16.1	Search Date 6.4.17  Coordinates  6, 22, 32  AAL AAL 2, 2, 56  -46, 8, 28 34, 34, 24  50, 6, 42 54, -44, 34 -36, 20, -4 38, 22, -4
hypothesized dysfunction? Yes Yes Yes No No No No No No	T1 T2 T3 T4 T5 T6 T7 T8 T9	dorsal Anterior Cingulate Amygdala Amygdala dorsal Medial I PreFrontal Cortex Inferior Frontal Gyrus Lateral PreFrontal Cortex Precentral Gyrus Supramarginal Gyrus Anterior Insula Anterior Insula Fusiform Gyrus	anatomy: Abbreviation dACC  Amy Amy dMPFC  IFG LPFC  GPrC (BA6) SMG AI	Right, or Medial M L R R L R	by facial emotion stimuli <b>Z Value</b> 8.2  28.4  25.2  8.9  6.3  6.3  6.3  17.4  16.1  7.6	Search Date6.4.17  Coordinates  6, 22, 32  AAL AAL 2, 2, 56  -46, 8, 28 34, 34, 24  50, 6, 42 54, -44, 34 -36, 20, -4 38, 22, -4 -44, -54, -18
hypothesized dysfunction? Yes Yes Yes No	T1 T2 T3 T4 T5 T6 T7 T8 T9 T10 T11	dorsal Anterior Cingulate Amygdala Amygdala dorsal Medial I PreFrontal Cortex Inferior Frontal Gyrus Lateral PreFrontal Cortex Precentral Gyrus Supramarginal Gyrus Anterior Insula Anterior Insula Fusiform Gyrus Fusiform Gyrus subgenual Anterior Cingulate	anatomy: Abbreviation dACC  Amy Amy dMPFC  IFG LPFC  GPrC (BA6) SMG AI AI FFG FFG sgACC	Right, or Medial  M  L  R  R  R  L  R  R  R  M	by facial emotion stimuli <b>Z Value</b> 8.2  28.4  25.2  8.9  6.3  6.3  6.3  17.4  16.1	Search Date 6.4.17  Coordinates  6, 22, 32  AAL AAL 2, 2, 56  -46, 8, 28 34, 34, 24  50, 6, 42 54, -44, 34 -36, 20, -4 38, 22, -4
hypothesized dysfunction? Yes Yes Yes No	T1 T2 T3 T4 T5 T6 T7 T8 T9 T10 T11 T12	dorsal Anterior Cingulate Amygdala Amygdala dorsal Medial I PreFrontal Cortex Inferior Frontal Gyrus Lateral PreFrontal Cortex Precentral Gyrus Supramarginal Gyrus Anterior Insula Anterior Insula Fusiform Gyrus Fusiform Gyrus subgenual Anterior Cingulate	anatomy: Abbreviation dACC  Amy Amy dMPFC  IFG LPFC  GPrC (BA6) SMG AI AI FFG FFG	Right, or Medial  M  L  R  R  R  L  R  R  R  M	by facial emotion stimuli <b>Z Value</b> 8.2  28.4  25.2  8.9  6.3  6.3  6.3  17.4  16.1  7.6	Search Date6.4.17  Coordinates  6, 22, 32  AAL AAL 2, 2, 56  -46, 8, 28 34, 34, 24  50, 6, 42 54, -44, 34 -36, 20, -4 38, 22, -4 -44, -54, -18 42, -48, -16
hypothesized dysfunction? Yes Yes Yes No	T1 T2 T3 T4 T5 T6 T7 T8 T9 T10 T11 T12	dorsal Anterior Cingulate Amygdala Amygdala dorsal Medial I PreFrontal Cortex Inferior Frontal Gyrus Lateral PreFrontal Cortex Precentral Gyrus Supramarginal Gyrus Anterior Insula Anterior Insula Fusiform Gyrus Fusiform Gyrus subgenual Anterior Cingulate Positiv	anatomy: Abbreviation dACC  Amy Amy dMPFC  IFG LPFC  GPrC (BA6) SMG AI AI FFG FFG sgACC	Right, or Medial  M  L  R  R  R  L  R  R  R  M	by facial emotion stimuli <b>Z Value</b> 8.2  28.4  25.2  8.9  6.3  6.3  6.3  17.4  16.1  7.6	Search Date6.4.17  Coordinates  6, 22, 32  AAL AAL 2, 2, 56  -46, 8, 28 34, 34, 24  50, 6, 42 54, -44, 34 -36, 20, -4 38, 22, -4 -44, -54, -18 42, -48, -16
hypothesized dysfunction? Yes Yes Yes Yes No To	T1 T2 T3 T4 T5 T6 T7 T8 T9 T10 T11 T12	dorsal Anterior Cingulate Amygdala Amygdala Amygdala dorsal Medial I PreFrontal Cortex Inferior Frontal Gyrus Lateral PreFrontal Cortex Precentral Gyrus Supramarginal Gyrus Anterior Insula Anterior Insula Fusiform Gyrus Fusiform Gyrus subgenual Anterior Cingulate  Positiv Cornscious Fac	anatomy: Abbreviation dACC  Amy Amy dMPFC  IFG LPFC  GPrC (BA6) SMG AI AI FFG FFG sgACC	Right, or Medial M L R R L R L R R L R R L R	by facial emotion stimuli <b>Z Value</b> 8.2  28.4 25.2 8.9  6.3 6.3 6.3 17.4 16.1 7.6 8.2	Search Date6.4.17  Coordinates  6, 22, 32  AAL AAL 2, 2, 56  -46, 8, 28 34, 34, 24  50, 6, 42 54, -44, 34 -36, 20, -4 38, 22, -4 -44, -54, -18 42, -48, -16 4, 26, -10  Neurosynth Search
hypothesized dysfunction? Yes Yes Yes No	T1 T2 T3 T4 T5 T6 T7 T8 T9 T10 T11 T12	dorsal Anterior Cingulate Amygdala Amygdala dorsal Medial l PreFrontal Cortex Inferior Frontal Gyrus Lateral PreFrontal Cortex Precentral Gyrus Supramarginal Gyrus Anterior Insula Anterior Insula Fusiform Gyrus Fusiform Gyrus subgenual Anterior Cingulate Positiv	anatomy: Abbreviation dACC  Amy Amy dMPFC  IFG LPFC  GPrC (BA6) SMG AI AI FFG FFG sgACC	Right, or Medial M L R R R L R R L R R H L R R A L R A A A A A A A A A A A A A A	by facial emotion stimuli <b>Z Value</b> 8.2  28.4  25.2  8.9  6.3  6.3  6.3  17.4  16.1  7.6  8.2   Task Contrast  Happy vs  Neutral evoked by facial	Search Date6.4.17  Coordinates  6, 22, 32  AAL AAL 2, 2, 56  -46, 8, 28 34, 34, 24  50, 6, 42 54, -44, 34 -36, 20, -4 38, 22, -4 -44, -54, -18 42, -48, -16 4, 26, -10  Neurosynth Search Criteria Terms="monetary reward"; "reward" Number of studies=84; 671
hypothesized dysfunction? Yes Yes Yes No To No To To To Treuit Type Task-evoked	T1 T2 T3 T4 T5 T6 T7 T8 T9 T10 T11 T12 T13 Region	dorsal Anterior Cingulate Amygdala Amygdala Amygdala dorsal Medial I PreFrontal Cortex Inferior Frontal Gyrus Lateral PreFrontal Cortex Precentral Gyrus Supramarginal Gyrus Anterior Insula Anterior Insula Fusiform Gyrus Fusiform Gyrus subgenual Anterior Cingulate Positiv Correct Conscious Face Regional anatomy:	anatomy: Abbreviation dACC  Amy Amy dMPFC  IFG LPFC  GPrC (BA6) SMG AI AI FFG FFG sgACC  AMG AI AI FFG FFG SgACC  ANG AI AI AI FFG FFG SGACC  ANG ANG AI AI AI FFG FFG SGACC  ANG ANG ANG ANG ANG ANG ANG ANG ANG AN	Right, or Medial M L R R R L R R L R R L R R L R R L R R R R L R	by facial emotion stimuli <b>Z Value</b> 8.2  28.4  25.2  8.9  6.3  6.3  6.3  17.4  16.1  7.6  8.2   Task Contrast  Happy vs Neutral evoked by facial emotion stimuli	Search Date 6.4.17  Coordinates  6, 22, 32  AAL AAL 2, 2, 56  -46, 8, 28 34, 34, 24  50, 6, 42 54, -44, 34 -36, 20, -4 38, 22, -4 -44, -54, -18 42, -48, -16 4, 26, -10  Neurosynth Search Criteria Terms="monetary reward"; "reward" Number of studies=84; 671 Search Date = 6.4.17
hypothesized dysfunction? Yes Yes Yes No To No No No No No To No No No No No No No To Task-evoked  Defines hypothesized dysfunction?	T1 T2 T3 T4 T5 T6 T7 T8 T9 T10 T11 T12 T13 Region label	dorsal Anterior Cingulate Amygdala Amygdala dorsal Medial I PreFrontal Cortex Inferior Frontal Gyrus Lateral PreFrontal Cortex Precentral Gyrus Supramarginal Gyrus Anterior Insula Anterior Insula Fusiform Gyrus Fusiform Gyrus Subgenual Anterior Cingulate  Positiv Corscious Face  Regional anatomy: full name	anatomy: Abbreviation dACC  Amy Amy dMPFC  IFG LPFC  GPrC (BA6) SMG AI AI FFG FFG sgACC  AMG AI AI FFG FFG SgACC  ANG AI AI AI FFG FFG ANG AI AI AI FFG FFG ANG AI AI AI FFG FFG ANG AI AI AI AI FFG FFG ANG ANG AI AI AI FFG FFG ANG ANG ANG ANG ANG ANG ANG ANG ANG AN	Right, or Medial  M  L  R  R  R  L  R  R  R  L  R  R  R  L  R  R	by facial emotion stimuli Z Value  8.2  28.4  25.2  8.9  6.3  6.3  6.3  17.4  16.1  7.6  8.2  Task Contrast  Happy vs Neutral evoked by facial emotion stimuli Z Value	Coordinates  6, 22, 32  AAL AAL 2, 2, 56  -46, 8, 28 34, 34, 24  50, 6, 42 54, -44, 34 -36, 20, -4 38, 22, -4 -44, -54, -18 42, -48, -16 4, 26, -10  Neurosynth Search Criteria Terms="monetary reward"; "reward" Number of studies=84; 671 Search Date = 6.4.17 Coordinates

NO	Γ4	PreFrontal Cortex	UNIFIC	IVI	14.4	4, 22, 44
No	P5	dorsal Anterior	dACC	M	11.1	6, 34, 18
		Cingulate				
No	P6	Mid Cingulate Cortex	MACC (BA23)	M	12.1	2, -26, 32
No	P7	Precuneus	PCUN	L	6.9	-10, -56, 16
No	P8	dorsal Lateral	dLPFC/GFi	L	9.8	-44, 6, 32
		PreFrontal	(BA44)			
		Cortex/Inferior Frontal				
No	P9	Gyrus dorsal Lateral	dLPFC/GFi	R	10.5	46, 28, 32
110	1 9	PreFrontal Cortex/	(BA9/44)	K	10.5	40, 28, 32
		Inferior Frontal Gyrus	(B15/11)			
No	P10	dorsal Lateral	dLPFC/GFi	R	6.9	46, 8, 28
		PreFrontal Cortex/	(BA44)			
		Inferior Frontal Gyrus				
No	P11	dorsal Lateral	dLPFC/GFi	L	6.3	-48, 34, 8
		PreFrontal Cortex/	(BA46)			
No	D12	Inferior Frontal Gyrus	CDL (DA7)	T	0.5	29 59 46
No No	P12 P13	Superior Parietal Lobule anterior Inferior Parietal	SPL (BA7) aIPL (BA40)	L L	9.5 6.9	-28, -58, 46 -44, -38, 44
NO	113	Lobule	all L (DA40)	L	0.9	-44, -36, 44
No	P14	anterior Inferior Parietal	aIPL (BA40)	R	7.9	46, -44, 48
		Lobule	( )			-, , -
No	P15	Medial PreFrontal	GfM (BA6)	L	6.9	-28, -2, 52
		Gyrus				
No	P16	Anterior Insula	AI	L	20.8	-32, 22, 0
No	P17	Anterior Insula	AI	R	27.0	34, 22, -4
No	P18	Posterior Insula	PI	L	8.2	-40, -6, 4
No No	P19 P20	Amygdala Putamen	Amy Pu	L R	21.2 6.9	AAL
No	P20 P21	Hippocampus	HC	R	6.9	AAL AAL
140	121		nitive Control Circ		0.7	AAL
Circuit Type			ondition	·uit	Task Contrast	Neurosynth Search
						Criteria
Task-evoked		Go-l	NoGo task		No-Go vs. Go	Terms="cognitive control"
						Number of studies = 428 Search Date = 6.4.17
Defines hypothesized	Region	Regional anatomy:	Region	Left,	Z Value	Template coordinates
					Z value	
dysfunction?	lahel	full name	anatomy:	Right, or		and definitions
dysfunction?	label	full name	anatomy: Abbreviation	Right, or Medial		and definitions
dysfunction? Yes	C1	dorsal Anterior	anatomy: Abbreviation dACC	Right, or Medial M	20.0	and definitions 0, 18, 46
·	C1	dorsal Anterior Cingulate	Abbreviation dACC	<b>Medial</b> M		
·		dorsal Anterior Cingulate dorsal Lateral	Abbreviation dACC dLPFC/GFi	Medial	20.0 20.4	
Yes	C1	dorsal Anterior Cingulate dorsal Lateral PreFrontal	Abbreviation dACC	<b>Medial</b> M		0, 18, 46
Yes	C1	dorsal Anterior Cingulate dorsal Lateral PreFrontal Cortex/Inferior Frontal	Abbreviation dACC dLPFC/GFi	<b>Medial</b> M		0, 18, 46
Yes Yes	C1 C2	dorsal Anterior Cingulate dorsal Lateral PreFrontal Cortex/Inferior Frontal Gyrus	Abbreviation dACC dLPFC/GFi (BA44)	Medial M L	20.4	0, 18, 46 -44, 6, 32
Yes	C1	dorsal Anterior Cingulate dorsal Lateral PreFrontal Cortex/Inferior Frontal Gyrus dorsal Lateral	Abbreviation dACC dLPFC/GFi (BA44) dLPFC/GFi	<b>Medial</b> M		0, 18, 46
Yes Yes	C1 C2	dorsal Anterior Cingulate dorsal Lateral PreFrontal Cortex/Inferior Frontal Gyrus dorsal Lateral PreFrontal Cortex/	Abbreviation dACC dLPFC/GFi (BA44)	Medial M L	20.4	0, 18, 46 -44, 6, 32
Yes Yes	C1 C2	dorsal Anterior Cingulate dorsal Lateral PreFrontal Cortex/Inferior Frontal Gyrus dorsal Lateral	Abbreviation dACC dLPFC/GFi (BA44) dLPFC/GFi	Medial M L	20.4	0, 18, 46 -44, 6, 32
Yes Yes Yes	C1 C2 C3	dorsal Anterior Cingulate dorsal Lateral PreFrontal Cortex/Inferior Frontal Gyrus dorsal Lateral PreFrontal Cortex/ Inferior Frontal Gyrus dorsal Anterior Cingulate	Abbreviation dACC  dLPFC/GFi (BA44)  dLPFC/GFi (BA44)  dACC	Medial M L R M	20.4 12.4 9.6	0, 18, 46 -44, 6, 32 44, 34, 22 6, 30, 28
Yes Yes Yes No	C1 C2 C3 C4 C5	dorsal Anterior Cingulate dorsal Lateral PreFrontal Cortex/Inferior Frontal Gyrus dorsal Lateral PreFrontal Cortex/ Inferior Frontal Gyrus dorsal Anterior Cingulate Mid Cingulate Cortex	Abbreviation dACC  dLPFC/GFi (BA44)  dLPFC/GFi (BA44)  dACC  MCC (BA23)	Medial M L R M	20.4 12.4 9.6 12.8	0, 18, 46 -44, 6, 32 44, 34, 22 6, 30, 28 2, -26, 30
Yes Yes  Yes  No No No	C1 C2 C3 C4 C5 C6	dorsal Anterior Cingulate dorsal Lateral PreFrontal Cortex/Inferior Frontal Gyrus dorsal Lateral PreFrontal Cortex/ Inferior Frontal Gyrus dorsal Anterior Cingulate Mid Cingulate Cortex Precuneus	Abbreviation dACC  dLPFC/GFi (BA44)  dLPFC/GFi (BA44)  dACC  MCC (BA23) PCUN	Medial M L R M M	20.4 12.4 9.6 12.8 7.5	0, 18, 46 -44, 6, 32  44, 34, 22  6, 30, 28  2, -26, 30 -10, -70, 52
Yes Yes Yes No	C1 C2 C3 C4 C5	dorsal Anterior Cingulate dorsal Lateral PreFrontal Cortex/Inferior Frontal Gyrus dorsal Lateral PreFrontal Cortex/ Inferior Frontal Gyrus dorsal Anterior Cingulate Mid Cingulate Cortex Precuneus dorsal Lateral	Abbreviation dACC  dLPFC/GFi (BA44)  dLPFC/GFi (BA44)  dACC  MCC (BA23) PCUN dLPFC/GFd	Medial M L R M	20.4 12.4 9.6 12.8	0, 18, 46 -44, 6, 32 44, 34, 22 6, 30, 28 2, -26, 30
Yes Yes  Yes  No No No	C1 C2 C3 C4 C5 C6	dorsal Anterior Cingulate dorsal Lateral PreFrontal Cortex/Inferior Frontal Gyrus dorsal Lateral PreFrontal Cortex/ Inferior Frontal Gyrus dorsal Anterior Cingulate Mid Cingulate Cortex Precuneus dorsal Lateral PreFrontal	Abbreviation dACC  dLPFC/GFi (BA44)  dLPFC/GFi (BA44)  dACC  MCC (BA23) PCUN	Medial M L R M M	20.4 12.4 9.6 12.8 7.5	0, 18, 46 -44, 6, 32  44, 34, 22  6, 30, 28  2, -26, 30 -10, -70, 52
Yes Yes  Yes  No No No	C1 C2 C3 C4 C5 C6	dorsal Anterior Cingulate dorsal Lateral PreFrontal Cortex/Inferior Frontal Gyrus dorsal Lateral PreFrontal Cortex/ Inferior Frontal Gyrus dorsal Anterior Cingulate Mid Cingulate Cortex Precuneus dorsal Lateral PreFrontal Cortex/Middle Frontal	Abbreviation dACC  dLPFC/GFi (BA44)  dLPFC/GFi (BA44)  dACC  MCC (BA23) PCUN dLPFC/GFd	Medial M L R M M	20.4 12.4 9.6 12.8 7.5	0, 18, 46 -44, 6, 32  44, 34, 22  6, 30, 28  2, -26, 30 -10, -70, 52
Yes Yes  Yes  No No No No	C1 C2 C3 C4 C5 C6 C7	dorsal Anterior Cingulate dorsal Lateral PreFrontal Cortex/Inferior Frontal Gyrus dorsal Lateral PreFrontal Cortex/ Inferior Frontal Gyrus dorsal Anterior Cingulate Mid Cingulate Cortex Precuneus dorsal Lateral PreFrontal Cortex/Middle Frontal Gyrus	Abbreviation dACC  dLPFC/GFi (BA44)  dLPFC/GFi (BA44)  dACC  MCC (BA23) PCUN dLPFC/GFd (BA6)	Medial M L R M M L L L	20.4 12.4 9.6 12.8 7.5 10.4	0, 18, 46 -44, 6, 32 44, 34, 22 6, 30, 28 2, -26, 30 -10, -70, 52 -28, -2, 56
Yes Yes  Yes  No No No	C1 C2 C3 C4 C5 C6	dorsal Anterior Cingulate dorsal Lateral PreFrontal Cortex/Inferior Frontal Gyrus dorsal Lateral PreFrontal Cortex/ Inferior Frontal Gyrus dorsal Anterior Cingulate Mid Cingulate Cortex Precuneus dorsal Lateral PreFrontal Cortex/Middle Frontal	Abbreviation dACC  dLPFC/GFi (BA44)  dLPFC/GFi (BA44)  dACC  MCC (BA23) PCUN dLPFC/GFd	Medial M L R M M	20.4 12.4 9.6 12.8 7.5	0, 18, 46 -44, 6, 32  44, 34, 22  6, 30, 28  2, -26, 30 -10, -70, 52
Yes Yes  Yes  No No No No No	C1 C2 C3 C4 C5 C6 C7	dorsal Anterior Cingulate dorsal Lateral PreFrontal Cortex/Inferior Frontal Gyrus dorsal Lateral PreFrontal Cortex/ Inferior Frontal Gyrus dorsal Anterior Cingulate Mid Cingulate Cortex Precuneus dorsal Lateral PreFrontal Cortex/Middle Frontal Gyrus dorsal Lateral	Abbreviation dACC  dLPFC/GFi (BA44)  dLPFC/GFi (BA44)  dACC  MCC (BA23) PCUN dLPFC/GFd (BA6)  dLPFC/GFi (BA6/44)	Medial M L R M M L L R R R R	20.4 12.4 9.6 12.8 7.5 10.4	0, 18, 46 -44, 6, 32 44, 34, 22 6, 30, 28 2, -26, 30 -10, -70, 52 -28, -2, 56
Yes Yes  Yes  No No No No	C1 C2 C3 C4 C5 C6 C7	dorsal Anterior Cingulate dorsal Lateral PreFrontal Cortex/Inferior Frontal Gyrus dorsal Lateral PreFrontal Cortex/ Inferior Frontal Gyrus dorsal Anterior Cingulate Mid Cingulate Cortex Precuneus dorsal Lateral PreFrontal Cortex/Middle Frontal Gyrus dorsal Lateral PreFrontal Cortex Inferior Frontal Cortex/ Inferior Frontal Cortex Inferior Frontal Gyrus dorsal Lateral	Abbreviation dACC  dLPFC/GFi (BA44)  dLPFC/GFi (BA44)  dACC  MCC (BA23) PCUN dLPFC/GFd (BA6)  dLPFC/GFd (BA6)	Medial M L R M M L L L	20.4 12.4 9.6 12.8 7.5 10.4	0, 18, 46 -44, 6, 32 44, 34, 22 6, 30, 28 2, -26, 30 -10, -70, 52 -28, -2, 56
Yes Yes  Yes  No No No No No	C1 C2 C3 C4 C5 C6 C7	dorsal Anterior Cingulate dorsal Lateral PreFrontal Cortex/Inferior Frontal Gyrus dorsal Lateral PreFrontal Cortex/ Inferior Frontal Gyrus dorsal Anterior Cingulate Mid Cingulate Cortex Precuneus dorsal Lateral PreFrontal Cortex/Middle Frontal Gyrus dorsal Lateral PreFrontal Cortex Inferior Frontal Gyrus dorsal Lateral PreFrontal Cortex Inferior Frontal Gyrus dorsal Lateral PreFrontal Cortex Inferior Frontal Gyrus dorsal Lateral	Abbreviation dACC  dLPFC/GFi (BA44)  dLPFC/GFi (BA44)  dACC  MCC (BA23) PCUN dLPFC/GFd (BA6)  dLPFC/GFi (BA6/44)	Medial M L R M M L L R R R R	20.4 12.4 9.6 12.8 7.5 10.4	0, 18, 46 -44, 6, 32  44, 34, 22  6, 30, 28  2, -26, 30 -10, -70, 52 -28, -2, 56  46, 10, 32
Yes Yes Yes No No No No No No	C1 C2 C3 C4 C5 C6 C7	dorsal Anterior Cingulate dorsal Lateral PreFrontal Cortex/Inferior Frontal Gyrus dorsal Lateral PreFrontal Cortex/ Inferior Frontal Gyrus dorsal Anterior Cingulate Mid Cingulate Cortex Precuneus dorsal Lateral PreFrontal Cortex/Middle Frontal Gyrus dorsal Lateral PreFrontal Cortex Inferior Frontal Gyrus dorsal Lateral PreFrontal Cortex Inferior Frontal Gyrus dorsal Lateral PreFrontal Cortex Inferior Frontal Gyrus dorsal Lateral PreFrontal Cortex /Middle Frontal Gyrus	Abbreviation dACC  dLPFC/GFi (BA44)  dLPFC/GFi (BA44)  dACC  MCC (BA23) PCUN dLPFC/GFd (BA6)  dLPFC/GFd (BA6/44)  dLPFC/GFi (BA6/44)	Medial M L R M L L R R R R R	20.4 12.4 9.6 12.8 7.5 10.4 18.0 7.5	0, 18, 46 -44, 6, 32  44, 34, 22  6, 30, 28  2, -26, 30 -10, -70, 52 -28, -2, 56  46, 10, 32  34, -2, 52
Yes Yes Yes No No No No No No	C1 C2 C3 C4 C5 C6 C7 C8 C9 C10	dorsal Anterior Cingulate dorsal Lateral PreFrontal Cortex/Inferior Frontal Gyrus dorsal Lateral PreFrontal Cortex/ Inferior Frontal Gyrus dorsal Anterior Cingulate Mid Cingulate Cortex Precuneus dorsal Lateral PreFrontal Cortex/Middle Frontal Gyrus dorsal Lateral PreFrontal Cortex Inferior Frontal Gyrus dorsal Lateral PreFrontal Cortex Inferior Frontal Gyrus dorsal Lateral PreFrontal Gyrus dorsal Lateral PreFrontal Gyrus dorsal Lateral PreFrontal Gyrus	Abbreviation dACC  dLPFC/GFi (BA44)  dLPFC/GFi (BA44)  dACC  MCC (BA23) PCUN dLPFC/GFd (BA6)  dLPFC/GFd (BA6/44)  dLPFC/GFi (BA6/44)  dLPFC/GFd (BA44)	Medial M L R M L L R R R R R	20.4  12.4  9.6  12.8  7.5  10.4  18.0  7.5	0, 18, 46 -44, 6, 32  44, 34, 22  6, 30, 28  2, -26, 30 -10, -70, 52 -28, -2, 56  46, 10, 32  34, -2, 52  -30, -58, 44
Yes Yes Yes No No No No No No	C1 C2 C3 C4 C5 C6 C7 C8 C9	dorsal Anterior Cingulate dorsal Lateral PreFrontal Cortex/Inferior Frontal Gyrus dorsal Lateral PreFrontal Cortex/ Inferior Frontal Gyrus dorsal Anterior Cingulate Mid Cingulate Cortex Precuneus dorsal Lateral PreFrontal Cortex/Middle Frontal Gyrus dorsal Lateral PreFrontal Cortex Inferior Frontal Gyrus dorsal Lateral PreFrontal Cortex Inferior Frontal Gyrus dorsal Lateral PreFrontal Gyrus dorsal Lateral PreFrontal Gyrus dorsal Lateral PreFrontal Cortex /Middle Frontal Gyrus Inferior Parietal Lobule Inferior Parietal Lobule	Abbreviation dACC  dLPFC/GFi (BA44)  dLPFC/GFi (BA44)  dACC  MCC (BA23) PCUN dLPFC/GFd (BA6)  dLPFC/GFd (BA6/44)  dLPFC/GFd (BA44)  dLPFC/GFd (BA44)	Medial M L R M L L R R R R L L R	20.4  12.4  9.6  12.8  7.5  10.4  18.0  7.5	0, 18, 46 -44, 6, 32  44, 34, 22  6, 30, 28  2, -26, 30 -10, -70, 52 -28, -2, 56  46, 10, 32  34, -2, 52  -30, -58, 44 48, -46, 44
Yes Yes Yes No No No No No No	C1 C2 C3 C4 C5 C6 C7 C8 C9 C10	dorsal Anterior Cingulate dorsal Lateral PreFrontal Cortex/Inferior Frontal Gyrus dorsal Lateral PreFrontal Cortex/ Inferior Frontal Gyrus dorsal Anterior Cingulate Mid Cingulate Cortex Precuneus dorsal Lateral PreFrontal Cortex/Middle Frontal Gyrus dorsal Lateral PreFrontal Cortex Inferior Frontal Gyrus dorsal Lateral PreFrontal Cortex /Middle Frontal Gyrus Inferior Parietal Lobule Inferior Parietal Lobule	Abbreviation dACC  dLPFC/GFi (BA44)  dLPFC/GFi (BA44)  dACC  MCC (BA23) PCUN dLPFC/GFd (BA6)  dLPFC/GFd (BA6/44)  dLPFC/GFd (BA44)  dLPFC/GFd (BA44)  IPL (BA19/40) IPL (BA40) IPL (BA40)	Medial M L R M L L R R R C R R R R R	20.4  12.4  9.6  12.8  7.5  10.4  18.0  7.5	0, 18, 46 -44, 6, 32  44, 34, 22  6, 30, 28  2, -26, 30 -10, -70, 52 -28, -2, 56  46, 10, 32  34, -2, 52  -30, -58, 44 48, -46, 44 -46, -44, 48
Yes Yes Yes No No No No No No	C1 C2 C3 C4 C5 C6 C7 C8 C9 C10 C11 C12	dorsal Anterior Cingulate dorsal Lateral PreFrontal Cortex/Inferior Frontal Gyrus dorsal Lateral PreFrontal Cortex/ Inferior Frontal Gyrus dorsal Anterior Cingulate Mid Cingulate Cortex Precuneus dorsal Lateral PreFrontal Cortex/Middle Frontal Gyrus dorsal Lateral PreFrontal Cortex Inferior Frontal Gyrus dorsal Lateral PreFrontal Cortex Inferior Frontal Gyrus dorsal Lateral PreFrontal Gyrus dorsal Lateral PreFrontal Gyrus dorsal Lateral PreFrontal Cortex /Middle Frontal Gyrus Inferior Parietal Lobule Inferior Parietal Lobule	Abbreviation dACC  dLPFC/GFi (BA44)  dLPFC/GFi (BA44)  dACC  MCC (BA23) PCUN dLPFC/GFd (BA6)  dLPFC/GFd (BA6/44)  dLPFC/GFd (BA44)  dLPFC/GFd (BA44)	Medial M L R M L L R R R R L L R	20.4  12.4  9.6  12.8  7.5  10.4  18.0  7.5	0, 18, 46 -44, 6, 32  44, 34, 22  6, 30, 28  2, -26, 30 -10, -70, 52 -28, -2, 56  46, 10, 32  34, -2, 52  -30, -58, 44 48, -46, 44
Yes Yes Yes No No No No No No No	C1 C2 C3 C4 C5 C6 C7 C8 C9 C10 C11 C12 C13	dorsal Anterior Cingulate dorsal Lateral PreFrontal Cortex/Inferior Frontal Gyrus dorsal Lateral PreFrontal Cortex/ Inferior Frontal Gyrus dorsal Anterior Cingulate Mid Cingulate Cortex Precuneus dorsal Lateral PreFrontal Cortex/Middle Frontal Gyrus dorsal Lateral PreFrontal Cortex Inferior Frontal Gyrus dorsal Lateral PreFrontal Cortex /Middle Frontal Gyrus Inferior Parietal Lobule Inferior Parietal Lobule Superior Parietal Lobule	Abbreviation dACC  dLPFC/GFi (BA44)  dLPFC/GFi (BA44)  dACC  MCC (BA23) PCUN dLPFC/GFd (BA6)  dLPFC/GFd (BA6/44)  dLPFC/GFd (BA44)  dLPFC/GFd (BA44)  IPL (BA19/40) IPL (BA40) IPL (BA40) SPL (BA7)	Medial M L R M L L R R C R R R R R R	20.4  12.4  9.6  12.8  7.5  10.4  18.0  7.5  15.6  12.8  11.2  10.4	0, 18, 46 -44, 6, 32  44, 34, 22  6, 30, 28  2, -26, 30 -10, -70, 52 -28, -2, 56  46, 10, 32  34, -2, 52  -30, -58, 44 48, -46, 44 -46, -44, 48 30, -60, 50
Yes Yes Yes No	C1 C2 C3 C4 C5 C6 C7 C8 C9 C10 C11 C12 C13 C14	dorsal Anterior Cingulate dorsal Lateral PreFrontal Cortex/Inferior Frontal Gyrus dorsal Lateral PreFrontal Cortex/ Inferior Frontal Gyrus dorsal Anterior Cingulate Mid Cingulate Cortex Precuneus dorsal Lateral PreFrontal Cortex/Middle Frontal Gyrus dorsal Lateral PreFrontal Cortex Inferior Frontal Gyrus dorsal Lateral PreFrontal Cortex Inferior Frontal Gyrus dorsal Lateral PreFrontal Cortex Inferior Frontal Gyrus Inferior Parietal Lobule Inferior Parietal Lobule Inferior Parietal Lobule Superior Parietal Lobule Lateral PreFrontal Cortex/Superior Frontal Gyrus	Abbreviation dACC  dLPFC/GFi (BA44)  dLPFC/GFi (BA44)  dACC  MCC (BA23) PCUN dLPFC/GFd (BA6)  dLPFC/GFd (BA6)  dLPFC/GFi (BA6/44)  dLPFC/GFd (BA44)  IPL (BA19/40) IPL (BA40) IPL (BA40) SPL (BA7) LPFC/GFs (BA10)	Medial M L R M L L R R L R R	20.4  12.4  9.6  12.8  7.5  10.4  18.0  7.5  15.6  12.8  11.2  10.4  7.1	0, 18, 46 -44, 6, 32  44, 34, 22  6, 30, 28  2, -26, 30 -10, -70, 52 -28, -2, 56  46, 10, 32  34, -2, 52  -30, -58, 44 48, -46, 44 -46, -44, 48 30, -60, 50 -34, 46, 24
Yes Yes Yes No No No No No No No	C1 C2 C3 C4 C5 C6 C7 C8 C9 C10 C11 C12 C13	dorsal Anterior Cingulate dorsal Lateral PreFrontal Cortex/Inferior Frontal Gyrus dorsal Lateral PreFrontal Cortex/ Inferior Frontal Gyrus dorsal Anterior Cingulate Mid Cingulate Cortex Precuneus dorsal Lateral PreFrontal Cortex/Middle Frontal Gyrus dorsal Lateral PreFrontal Cortex Inferior Frontal Gyrus dorsal Lateral PreFrontal Cortex Inferior Frontal Gyrus dorsal Lateral PreFrontal Cortex /Middle Frontal Gyrus Inferior Parietal Lobule Inferior Parietal Lobule Inferior Parietal Lobule Superior Parietal Lobule Lateral PreFrontal Cortex/Superior Frontal Gyrus Lateral PreFrontal	Abbreviation dACC  dLPFC/GFi (BA44)  dLPFC/GFi (BA44)  dACC  MCC (BA23) PCUN dLPFC/GFd (BA6)  dLPFC/GFd (BA6)  dLPFC/GFi (BA6/44)  dLPFC/GFd (BA44)  IPL (BA19/40) IPL (BA40) IPL (BA40) SPL (BA7) LPFC/GFs (BA10)  LPFC/GFs	Medial M L R M L L R R C R R R R R R	20.4  12.4  9.6  12.8  7.5  10.4  18.0  7.5  15.6  12.8  11.2  10.4	0, 18, 46 -44, 6, 32  44, 34, 22  6, 30, 28  2, -26, 30 -10, -70, 52 -28, -2, 56  46, 10, 32  34, -2, 52  -30, -58, 44 48, -46, 44 -46, -44, 48 30, -60, 50
Yes Yes Yes No	C1 C2 C3 C4 C5 C6 C7 C8 C9 C10 C11 C12 C13 C14	dorsal Anterior Cingulate dorsal Lateral PreFrontal Cortex/Inferior Frontal Gyrus dorsal Lateral PreFrontal Cortex/ Inferior Frontal Gyrus dorsal Anterior Cingulate Mid Cingulate Cortex Precuneus dorsal Lateral PreFrontal Cortex/Middle Frontal Gyrus dorsal Lateral PreFrontal Cortex Inferior Frontal Gyrus dorsal Lateral PreFrontal Cortex Inferior Frontal Gyrus dorsal Lateral PreFrontal Cortex /Middle Frontal Gyrus Inferior Parietal Lobule Inferior Parietal Lobule Inferior Parietal Lobule Superior Parietal Lobule Lateral PreFrontal Cortex/Superior Frontal Gyrus Lateral PreFrontal Cortex/Superior Frontal	Abbreviation dACC  dLPFC/GFi (BA44)  dLPFC/GFi (BA44)  dACC  MCC (BA23) PCUN dLPFC/GFd (BA6)  dLPFC/GFd (BA6)  dLPFC/GFi (BA6/44)  dLPFC/GFd (BA44)  IPL (BA19/40) IPL (BA40) IPL (BA40) SPL (BA7) LPFC/GFs (BA10)	Medial M L R M L L R R L R R	20.4  12.4  9.6  12.8  7.5  10.4  18.0  7.5  15.6  12.8  11.2  10.4  7.1	0, 18, 46 -44, 6, 32  44, 34, 22  6, 30, 28  2, -26, 30 -10, -70, 52 -28, -2, 56  46, 10, 32  34, -2, 52  -30, -58, 44 48, -46, 44 -46, -44, 48 30, -60, 50 -34, 46, 24
Yes Yes  Yes  No	C1 C2 C3 C4 C5 C6 C7 C8 C9 C10 C11 C12 C13 C14 C15	dorsal Anterior Cingulate dorsal Lateral PreFrontal Cortex/Inferior Frontal Gyrus dorsal Lateral PreFrontal Cortex/ Inferior Frontal Gyrus dorsal Anterior Cingulate Mid Cingulate Cortex Precuneus dorsal Lateral PreFrontal Cortex/Middle Frontal Gyrus dorsal Lateral PreFrontal Cortex Inferior Frontal Gyrus dorsal Lateral PreFrontal Cortex Inferior Frontal Gyrus dorsal Lateral PreFrontal Cortex Inferior Frontal Gyrus dorsal Lateral PreFrontal Cortex /Middle Frontal Gyrus Inferior Parietal Lobule Inferior Parietal Lobule Inferior Parietal Lobule Cortex/Superior Frontal Gyrus Lateral PreFrontal Cortex/Superior Frontal Gyrus	Abbreviation dACC  dLPFC/GFi (BA44)  dLPFC/GFi (BA44)  dACC  MCC (BA23) PCUN dLPFC/GFd (BA6)  dLPFC/GFd (BA6/44)  dLPFC/GFi (BA6/44)  dLPFC/GFd (BA44)  IPL (BA19/40) IPL (BA40) IPL (BA40) IPL (BA7) LPFC/GFs (BA10)  LPFC/GFs (BA10)	Medial M L R M L L R R L R R R R	20.4  12.4  9.6  12.8  7.5  10.4  18.0  7.5  15.6  12.8  11.2  10.4  7.1	0, 18, 46 -44, 6, 32  44, 34, 22  6, 30, 28  2, -26, 30 -10, -70, 52 -28, -2, 56  46, 10, 32  34, -2, 52  -30, -58, 44 48, -46, 44 -46, -44, 48 30, -60, 50 -34, 46, 24  34, 52, 8
Yes Yes  Yes  No	C1 C2 C3 C4 C5 C6 C7 C8 C9 C10 C11 C12 C13 C14 C15 C16	dorsal Anterior Cingulate dorsal Lateral PreFrontal Cortex/Inferior Frontal Gyrus dorsal Lateral PreFrontal Cortex/ Inferior Frontal Gyrus dorsal Anterior Cingulate Mid Cingulate Cortex Precuneus dorsal Lateral PreFrontal Cortex/Middle Frontal Gyrus dorsal Lateral PreFrontal Cortex Inferior Frontal Gyrus dorsal Lateral PreFrontal Cortex Inferior Frontal Gyrus dorsal Lateral PreFrontal Cortex Inferior Frontal Gyrus Lateral PreFrontal Cortex /Middle Frontal Gyrus Inferior Parietal Lobule Inferior Parietal Lobule Inferior Parietal Lobule Superior Parietal Lobule Lateral PreFrontal Cortex/Superior Frontal Gyrus Lateral PreFrontal Cortex/Superior Frontal Gyrus Fusiform Gyrus	Abbreviation dACC  dLPFC/GFi (BA44)  dLPFC/GFi (BA44)  dACC  MCC (BA23) PCUN dLPFC/GFd (BA6)  dLPFC/GFd (BA6/44)  dLPFC/GFs (BA44)  IPL (BA19/40) IPL (BA40) IPL (BA40) SPL (BA7) LPFC/GFs (BA10)  LPFC/GFs (BA10)  FFG	Medial M L R M L R M L L R R R R L R L R L R L	20.4  12.4  9.6  12.8  7.5  10.4  18.0  7.5  15.6  12.8  11.2  10.4  7.1  8.3	0, 18, 46 -44, 6, 32  44, 34, 22  6, 30, 28  2, -26, 30 -10, -70, 52 -28, -2, 56  46, 10, 32  34, -2, 52  -30, -58, 44 48, -46, 44 -46, -44, 48 30, -60, 50 -34, 46, 24  34, 52, 8  -44, -60, -12
Yes Yes Yes No	C1 C2 C3 C4 C5 C6 C7 C8 C9 C10 C11 C12 C13 C14 C15 C16 C17	dorsal Anterior Cingulate dorsal Lateral PreFrontal Cortex/Inferior Frontal Gyrus dorsal Lateral PreFrontal Cortex/ Inferior Frontal Gyrus dorsal Anterior Cingulate Mid Cingulate Cortex Precuneus dorsal Lateral PreFrontal Cortex/Middle Frontal Gyrus dorsal Lateral PreFrontal Cortex Inferior Parietal Lobule Inferior Parietal Lobule Inferior Parietal Lobule Superior Parietal Lobule Lateral PreFrontal Cortex/Superior Frontal Gyrus Lateral PreFrontal Cortex/Superior Frontal Gyrus Fusiform Gyrus Angular Gyrus	Abbreviation dACC  dLPFC/GFi (BA44)  dLPFC/GFi (BA44)  dACC  MCC (BA23) PCUN dLPFC/GFd (BA6)  dLPFC/GFd (BA6)  dLPFC/GFs (BA6/44)  dLPFC/GFd (BA40) IPL (BA19/40) IPL (BA40) IPL (BA40) SPL (BA7) LPFC/GFs (BA10)  LPFC/GFs (BA10)  FFG AG	Medial M L R M L R M L L R R L R L R L R L R L	20.4  12.4  9.6  12.8  7.5  10.4  18.0  7.5  15.6  12.8  11.2  10.4  7.1  8.3  7.1  6.3	0, 18, 46 -44, 6, 32  44, 34, 22  6, 30, 28  2, -26, 30 -10, -70, 52 -28, -2, 56  46, 10, 32  34, -2, 52  -30, -58, 44 48, -46, 44 -46, -44, 48 30, -60, 50 -34, 46, 24  34, 52, 8  -44, -60, -12 -54, -62, 28
Yes Yes  Yes  No	C1 C2 C3 C4 C5 C6 C7 C8 C9 C10 C11 C12 C13 C14 C15 C16	dorsal Anterior Cingulate dorsal Lateral PreFrontal Cortex/Inferior Frontal Gyrus dorsal Lateral PreFrontal Cortex/ Inferior Frontal Gyrus dorsal Anterior Cingulate Mid Cingulate Cortex Precuneus dorsal Lateral PreFrontal Cortex/Middle Frontal Gyrus dorsal Lateral PreFrontal Cortex Inferior Frontal Gyrus dorsal Lateral PreFrontal Cortex Inferior Frontal Gyrus dorsal Lateral PreFrontal Cortex Inferior Frontal Gyrus Lateral PreFrontal Cortex /Middle Frontal Gyrus Inferior Parietal Lobule Inferior Parietal Lobule Inferior Parietal Lobule Superior Parietal Lobule Lateral PreFrontal Cortex/Superior Frontal Gyrus Lateral PreFrontal Cortex/Superior Frontal Gyrus Fusiform Gyrus	Abbreviation dACC  dLPFC/GFi (BA44)  dLPFC/GFi (BA44)  dACC  MCC (BA23) PCUN dLPFC/GFd (BA6)  dLPFC/GFd (BA6/44)  dLPFC/GFs (BA44)  IPL (BA19/40) IPL (BA40) IPL (BA40) SPL (BA7) LPFC/GFs (BA10)  LPFC/GFs (BA10)  FFG	Medial M L R M L R M L L R R R R L R L R L R L	20.4  12.4  9.6  12.8  7.5  10.4  18.0  7.5  15.6  12.8  11.2  10.4  7.1  8.3	0, 18, 46 -44, 6, 32  44, 34, 22  6, 30, 28  2, -26, 30 -10, -70, 52 -28, -2, 56  46, 10, 32  34, -2, 52  -30, -58, 44 48, -46, 44 -46, -44, 48 30, -60, 50 -34, 46, 24  34, 52, 8  -44, -60, -12

dMPFC

M

14.4

4, 22, 44

No

P4

dorsal Medial

No	C20	Caudate nucleus	CdN	L	8.3	AAL	
No	C21	Caudate nucleus	CdN	R	11.2	AAL	
No	C22	Amygdala	Amy	L	7.1	AAL	

Notes: Z-scores and coordinates refer to peaks of meta-analytic Z values. Coordinates are in MNI atlas space and subcortical regions are defined by overlap with the AAL or FSL atlas.

Coordinates represent peaks as defined by decreasing the minimum cluster distance in the 3dCluster algorithm and the clusters are visualized in Figure S2. \*Region T13 (subgenual anterior cingulate) was used instead of T1 (dorsal anterior cingulate) for the non-conscious threat vs neutral contrast only. Although the subgenual anterior cingulate region did not meet

our quality control metrics for temporal signal-to-noise ratio, given both the difficulty of imaging this region and its importance of this region to defining the negative affect circuit elicited by implicit threat stimuli and to prior imaging findings in depression, we report supplementary analyses including this region.

Abbreviations: AAL = Automated Anatomical Labeling Atlas; FSL = FMRIB Software Library; MNI = Montreal Neurological Institute; BA = Brodmann Area; L = Left; R = Right; M = Medial