Supplementary Information

Sample. 129 girls completed the DPT. Because there were fewer overall trials that met the aforementioned criteria for disengagement trials, we excluded participants with less than five usable trials for analyses using the disengagement indices. Participants were also excluded from the dataset if they had less than 50% valid gaze data, as determined by Tobii software, resulting in a final sample of *N*=117. 120 girls completed the fMRI scan for the current study; data from 33 participants were unusable due to excess movement in the MRI scanner (*n*=25), missing data (*n*=7), or incidental findings from the fMRI scan (*n*=1), leaving a final sample of 87 youths with usable fMRI data. 127 girls completed the social interaction task. 107 participants completed the EMA protocol and contributed data on connectedness with a peer. Six participants reported less than 3 negative events, thus data on socio-affective negativity following negative peer interactions were included for 100 participants. Excluded participants did not differ from included participants by age, pubertal status, total income, or shy/fearful temperament.

P-SID stimuli. The faces used as virtual peers were taken from a standardized and validated set of facial expressions, the NIMH ChEFS photo set (Egger et al., 2011). Both happy and angry expressions of 20 female actors were used. The morphed faces were generated using a Gaussian smoothing kernel in Adobe Photoshop (www.adobe.com/Photoshop). All facial features were removed but size and luminance were the same across the control and feedback stimuli. Data was acquired using a Siemens 3T PRISMA with a 64-channel phase array coil. Pillows and tape were used to minimize head movement. A PC running E-Prime (www.pstnet.com) was used to control stimulus display. Stimuli were projected onto a screen at the head of the scanner bore, viewable via a mirror attached to the head coil.

Egger, H.L., Pine, D.S., Nelson, E., Leibenluft, E., Ernst, M., Towbin, K.E., & Angold, A. (2011). The NIMH Child Emotional Faces Picture Set (NIMH-ChEFS): A new set of children's facial emotion stimuli. *International Journal of Methods in Psychiatric Research*, *20*(3), 145–156.

fMRI Data Acquisition and Preprocessing. Functional images were acquired using multi-band gradient echo-planar (EPI) sequences (60 slices, three-factor multiband) sensitive to BOLD contrast [T2*] (TR=1500ms, TE=30ms, flip angle 55°, voxel size=2.3mm^3). Field maps were acquired using gradient echo planar imaging sequence for correction of field distortions in the functional images with the following parameters: TR=590ms, TE1=4.92ms, TE2=7.38ms, voxel size=2.3mm^3, flip angle 60°. Participants then performed the SID task (480 volumes; duration = 12 min 2 s).

All preprocessing was carried out on a Dell Precision 7810 computer running Ubuntu 14.04.5 using several software packages: Freesurfer 5.3.0, FSL 5.0, Matlab R2015a (8.5.0.197613), SPM12, and AFNI 17.3.03. Preprocessing of functional images was conducted using Statistical Parametric Mapping software (SPM12; Wellcome Trust Centre for Neuroimaging, UK) and consisted of the following steps: 1) Anatomical and functional images were reoriented to the anterior and posterior commissure line. 2) The FieldMap toolbox was used to create a voxel displacement map (VDM) for distortion correction of the functional images. 3) The Realign and Unwarp procedure in SPM12 was used to generate motion parameter files and for distortion correction using the VDM. 4) Functional images were registered to the anatomical image. 5) Anatomical images were segmented into gray and white matter maps using the International

Consortium for Human Brain Mapping (ICBM) tissue probability maps. 6) Anatomical and functional images were registered to MNI space using the ICBM152 template with 2 mm^3 voxels. 7) Normalized images were smoothed using a 6 mm^3 full-width at half-maximum gaussian kernel. 8) Motion artifacts were repaired using ArtRepair (Mazaika et al. 2005[1]), scans with > 0.5 mm of incremental motion, > 3mm from the baseline image, and/or 3 standard deviations [SD] intensity shifts were considered outliers. Outlier scans were replaced with a linear interpolation between the two nearest non-outlier scans.

Table S1.

Coordinates and volume of anatomically-derived amygdala sub-nuclei

Region	x	y	z	Volume
Right Amyg LB	30	-3	-24	330
Left Amyg LB	-26	-4	-24	316
Left Amyg SF	-18	-4	-16	191
Right Amyg SF	22	-4	-15	177
Right Amyg CM	28	-10	-9	66
Left Amy CM	-24	-9	-9	58

Note: Montreal Neurological Institute (MNI) coordinates x, y, z; laterobasal group (LB), the superficial group (SF), and the centromedial group (CM)

Table S2.

Neural activation to punishment receipt > neutral condition on the P-SID task.

Region		**Max**	**Peak**		
	Volume	Z	x	y	z
Parahippocampal Gyrus/Amygdala	18350	13	22	-4	-16
Medial Frontal Gyrus BA9	2877	6.2854	-4	56	20
Posterior Cingulate Cortex	1290	6.2989	-6	-54	28
Supramarginal Gyrus	867	4.9297	-60	-54	26

[1] Mazaika, P.K., Whitfield, S., & Cooper, J. C. (n.d.). *Detection and Repair of Transient Artifacts in fMRI Data*. 1.