## Processing of (f)MRI data

We analyzed anatomical and functional images using BrainVoyager 20 (version 20.0; Brain Innovation; Maastricht, The Netherlands) and custom code in MATLAB (version 2017a; The Mathworks Inc.; Natick, MA, USA). We interpolated anatomical images to a nominal resolution of 0.8 mm isotropic. Anatomical images were then automatically processed with the longitudinal stream in FreeSurfer (Reuter et al., 2012; <http://surfer.nmr.mgh.harvard.edu/>) including probabilistic atlas-based cortical parcellation according to the Desikan-Killany (DK) atlas (Desikan, Segonne et al. 2006). Functional images were corrected for motion artefacts using the 3D rigid body motion correction algorithm implemented in BrainVoyager 20 and all functional runs were aligned to the first volume of the first functional run. We corrected EPI distortions using the COPE (“Correction based on Opposite Phase Encoding”) plugin of BrainVoyager that implements a method similar to that described in Andersson, Skare, and Ashburner (Andersson et al. 2003) and the ‘topup’ tool implemented in FSL (Smith et al. 2004). We recorded reversed phase encoding images after the first and after the last functional runs. From these two pairs, we estimated the susceptibility-induced off-resonance field and corrected distortions in the remaining functional runs. For each functional run, we used the estimate from the pair measured closest to it in time for correction. After this correction, functional data were high-pass filtered with a frequency cutoff of 0.01 Hz. Subsequently, functional images were registered to anatomical images. Using MATLAB (2017a, The MathWorks,Natick, MA), signals were then cleaned further by regressing out a global noise signal estimated from the first five principal components of signals observed within the cerebrospinal fluid of the ventricles and performing wavelet despiking (Patel & Bullmore, 2015). Finally, voxels were uniquely assigned to one of the 68 cortical regions of the DK atlas and an average BOLD signal for each region was computed as the mean time-series over all voxels within that region.