

1 The Effects of Music intervention on Functional connectivity
2 strength of Brain in Schizophrenia

3 *Supplemental Information*

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1 **Section1. Neuropsychological measurements**

2 Moreover, we administered Block Design Test (BDT), the Benton Visual Retention
3 Test (BVRT), as well as Spatial Maze Test from the Wechsler Adult Intelligence Scale
4 Revised (WAIS-R) [1] at three timepoints (baseline, 1-month later and 6-month later)
5 during the music intervention in the two patient groups. The BDT, which reflect the
6 visuospatial ability [2], requires the subjects to duplicate 10 target patterns using a set
7 of two-colored blocks. The patterns were presented in order of ascending difficulty.
8 The Benton Visual Retention Test is a well-established neurodiagnostic instrument
9 that had been used to assess visuospatial perception and retention [3, 4]. The target
10 patterns containing geometric and abstract figures were displayed to the subjects for
11 10 seconds. After that, the subjects were required to duplicate the figures from
12 immediate memory. Finally, the Spatial Maze, which also comes from the Wechsler
13 Adult Intelligence Scale, is one of the most reliable measures of visuospatial
14 anterograde memory function.

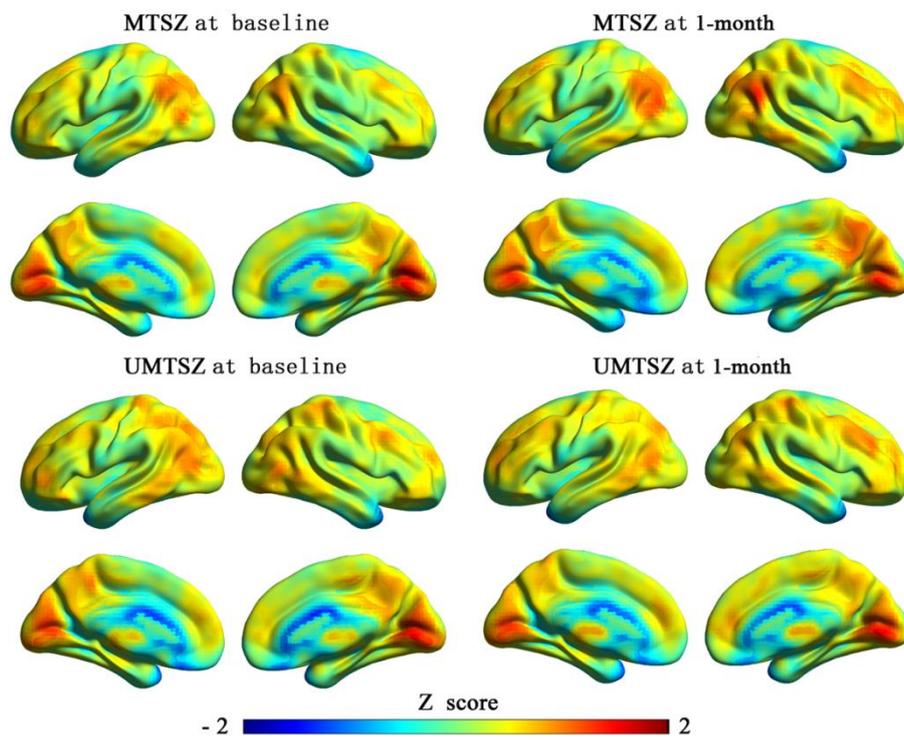
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1 Section2. Imaging data acquisition

2 Experiments were performed on a 3T MRI scanner (GE DISCOVERY MR750) in the
3 University of Electronic Science and Technology of China. During scanning, we used
4 foam padding and ear plugs to reduce head motion and scanning noise, respectively.
5 Resting state functional MRI data were acquired using gradient-echo echo planar
6 imaging sequences (repetition time [TR] = 2000 ms, echo time [TE] = 30 ms, flip
7 angle [FA] = 90°, matrix = 64 × 64, field of view [FOV] = 24 × 24 cm², slice
8 thickness/gap = 4 mm/0.4 mm), with an eight channel-phased array head coil. All
9 subjects underwent a 510-second resting state scan to yield 255 volumes (32 slices per
10 volume). The first five volumes were discarded for the magnetization equilibrium.
11 Subsequently, High-resolution T1-weighted images were acquired using a
12 3-dimensional fast spoiled gradient echo sequence (TR = 6.008 msec, FA = 9°, matrix
13 = 256 × 256, FOV = 25.6 × 25.6 cm², slice thickness = 1 mm, no gap, 152 slices).
14 During resting-state fMRI, all subjects were instructed to have their eyes-closed and
15 to move as little as possible without falling asleep.

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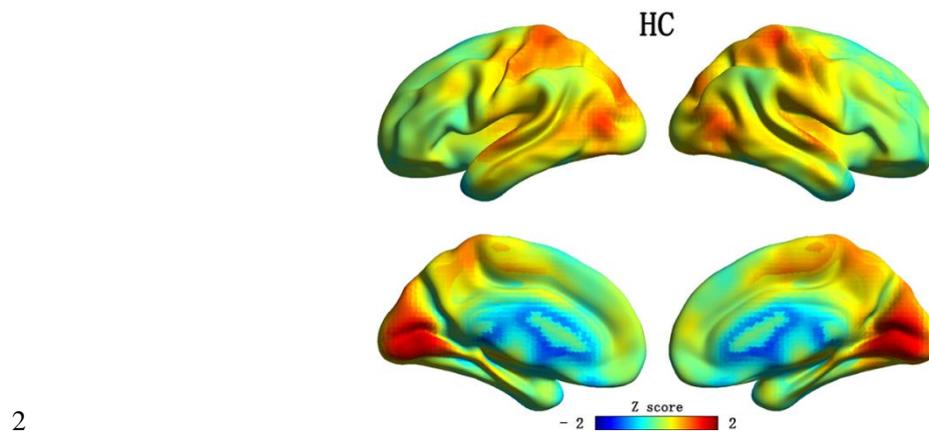
1 **Fig.S1**

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3 Fig.S1. Functional connectivity strength (FCS) maps. Mean FCS maps in the MTSZ and UMTSZ

4 groups at baseline and 1-month. The color bar represents the strength of FCS.

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1 **Fig.S2**

3 Fig.S2 Functional connectivity strength (FCS) maps. Mean FCS maps in the healthy controls (HC).

4 The color bar represents the strength of FCS.

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