

Supplementary Materials

Pre-test results

(1) The changes in attention values corresponding to the 12 specified scenic spots were not obvious, possibly owing to a high degree of similarity in landscape features, indicating that landscapes with more varied features and more appeal contrasts are better suited for an EEG test.

(2) The four data sets seemed to vary in correspondence with prior experience with the track. Those who had previously visited the track produced attention values lower than those who had not. Hence, the effect of prior visit must be controlled and the sampling framework for the main experiment must exclude revisiting tourists to enable a more accurate measurement of the novel effect of landscape attractions.

(3) The attention values were easily influenced by weather, other visitors, and the varying level of physical demand at different sections of the track. As a result, the test is not suitable for rainy days, peak dates in the tourist season, and tracks with a steep slope.

(4) Video recording of the entire test process is impractical because identifying arrival times in the video proved to be overly time-consuming. In the main study, video recording was therefore replaced by manual noting of subjects' arrival time at each test spot.

Experimental procedure

To minimize the influence of other tourists on participants' physiological responses, the study was conducted during a two-week period in the tourism off-season, with a pause of two days because of rain.

Participants toured all three tracks in one day, spending approximately 60 minutes to visit Jinbianxi track, 45 minutes for Huangshizhai track, and 45 minutes for Yuanjiajie track, with the time spent at each scenic spot averaging a minute and a half. Participants were allowed half an hour for rest between tracks but no rest during their visits to each of the tracks. To ensure the reliability of the experimental data and minimize human disturbance and the influence of factors such as quality of scenic interpretation, the note-takers did not interpret the features of scenic landscapes except for informing participants of the names of the scenic spots and best directions for viewing. During the tour, one note-taker stayed in front of the group as a guide and the other stayed behind the group to record the arrival time at each spot. The note-takers did not check and calibrate the headsets for participants, as this would have unduly influenced the physiological responses of participants.

Data processing

MindWave EEG devices were connected to the mobile phones through Bluetooth so that the mobile phones would show the real-time attention value of the participants, which was subsequently saved in the txt. format (as an illustration, Figure S1 shows the raw data for one participant).

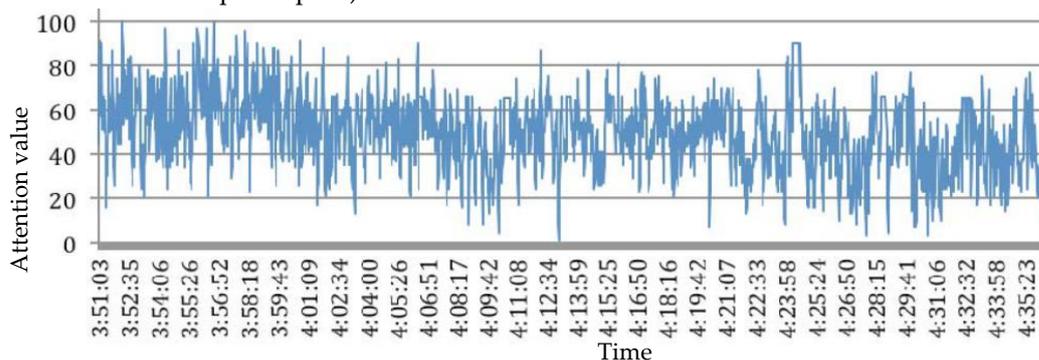


Figure S1. Raw EEG data of one participant in the Yuanjiajie track.

As an example, the data of Yuanjiajie track on March 25 for one group of participants are shown in Table S1.

Table S1. Processed EEG Data of Yuanjiajie Track for One Group of Participants.

Participant Number	Average Attention Values of 20-50 Seconds of the Arrival Time in Each Spot											
	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12
1	55.4	46.3	61.1	47.6	58.9	59.8	64.7	60.3	81.1	64.2	55.2	64.0
2	55.1	41.0	60.1	53.6	43.0	48.8	55.3	59.9	44.0	56.9	13.0	51.4
3	55.3	54.5	58.0	53.2	59.2	61.4	62.6	58.3	81.9	55.3	45.6	57.6
4	61.4	63.8	56.2	57.8	62.8	57.8	54.6	57.3	82.7	51.0	58.6	60.9
5	56.9	52.1	62.5	51.4	52.2	45.4	54.5	50.6	67.4	48.3	42.7	55.6
6	67.4	63.6	63.6	66.5	63.8	82.8	37.0	47.4	79.1	79.1	55.3	57.6
7	51.7	60.1	49.9	58.7	60.2	63.2	59.5	62.0	80.4	80.4	56.8	64.9
8	55.0	52.3	53.2	51.4	55.0	61.4	58.7	51.9	80.8	80.8	45.6	55.3
9	57.1	49.5	61.7	55.2	54.0	50.1	51.1	50.0	63.9	63.9	48.0	57.1
10	51.6	60.1	62.6	49.5	60.0	50.8	56.3	61.1	66.6	66.6	60.9	50.8

Owing to uncontrollable factors such as the separation of EEG devices from the participants' forehead and the disconnection of mobile phones with Bluetooth, 1,226 samples (approximately 20 percent of the total samples) were regarded as invalid and were removed from the analysis, resulting in a sample of 5,274 units of data for analysis (2,006 from the Huangshizhai track, 1,895 from the Jinbianxi track, and 1,373 from the Yuanjiajie track). Furthermore, 71 participants recorded valid data in all scenic spots of Yuanjiajie track, while the numbers are 56 for the Huangshizhai track and 68 for the Jinbianxi track. Only 37 participants recorded valid data for all scenic spots across the three tracks, accounting for less than 30 percent of all participants.