

Fig. 1. ERPs for the speech stimuli in the two participant groups. (a) Grand average ERPs for the standard and deviant stimuli from F3 (electrodes 19, 23, 24) and F4 sites (electrodes 3, 4, 124). Point-to-point significant differences were indicated by the black/white bars on x-axis ($p < 0.01$). (b) Topographical maps for the peaks in MMN waveforms.



Fig. 2. ERPs for the nonspeech stimuli in the two participant groups. (a) Grand average ERPs for the standard and deviant stimuli from F3 and F4 sites. Point-to-point significant differences are indicated by the black/white bars on x-axis ($p < 0.01$). (b) Topographical maps for the peaks in MMN waveforms.

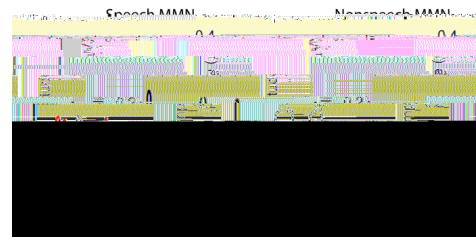


Fig. 3. Global field power of MMN waveforms in all the 129 electrodes for the speech and nonspeech conditions. Significant point-to-point differences between the native and nonnative groups are indicated by the black/white bars on x-axis ($p < 0.01$).

4. DISCUSSION

Despite different patterns of MMN elicitation in the speech and nonspeech conditions, the MMNs were present for both native and nonnative listeners, but the magnitude was much smaller in the nonnative listeners for the speech stimuli. These data are consistent with our previous (3, or 6, or 7/11).