

# Supporting Information

Röder et al. 10.1073/pnas.1309963110

## SI Text

### Face Recognition Screening

We screened whether participants are able to recognize face identity. We presented black-and-white pictures of faces (taken from [http://pics.psych.stir.ac.uk/2D\\_face\\_sets.htm](http://pics.psych.stir.ac.uk/2D_face_sets.htm); only cropped versions of female faces were used) on a computer screen. Two female faces—images of the same person (identical images) or of two different people with neutral facial expressions—were presented side by side. Participants were allowed to watch the pictures as long as they needed and from their preferred viewing distance. They had to decide whether the faces were from the same or from different female individuals. As this test was

treated as screening only, no more than two or three trials per condition were run. This test was conducted in 9 of the 11 congenital cataract (cc) individuals (not in participants cc-a and not cc-h) and in all developmental cataract (dc) individuals, as well as in the control participants for the cc and dc individuals included in this screening test. Mean correct responses are listed in Table S1. Despite the screening character of this test, the results are clear: participants in all groups were able to distinguish the identity of two faces (in accordance with previous reports in cataract individual with shorter deprivation epochs; e.g., refs. 1, 2). Indeed, the performance of the groups did not differ significantly ( $P > 0.3$ ).

1. Geldart S, Mondloch CJ, Maurer D, de Schonen S, Brent HP (2002) The effect of early visual deprivation on the development of face processing. *Dev Sci* 5(4):490–501.

2. Putzar L, Hötting K, Röder B (2010) Early visual deprivation affects the development of face recognition and of audio-visual speech perception. *Restor Neurol Neurosci* 28(2): 251–257.

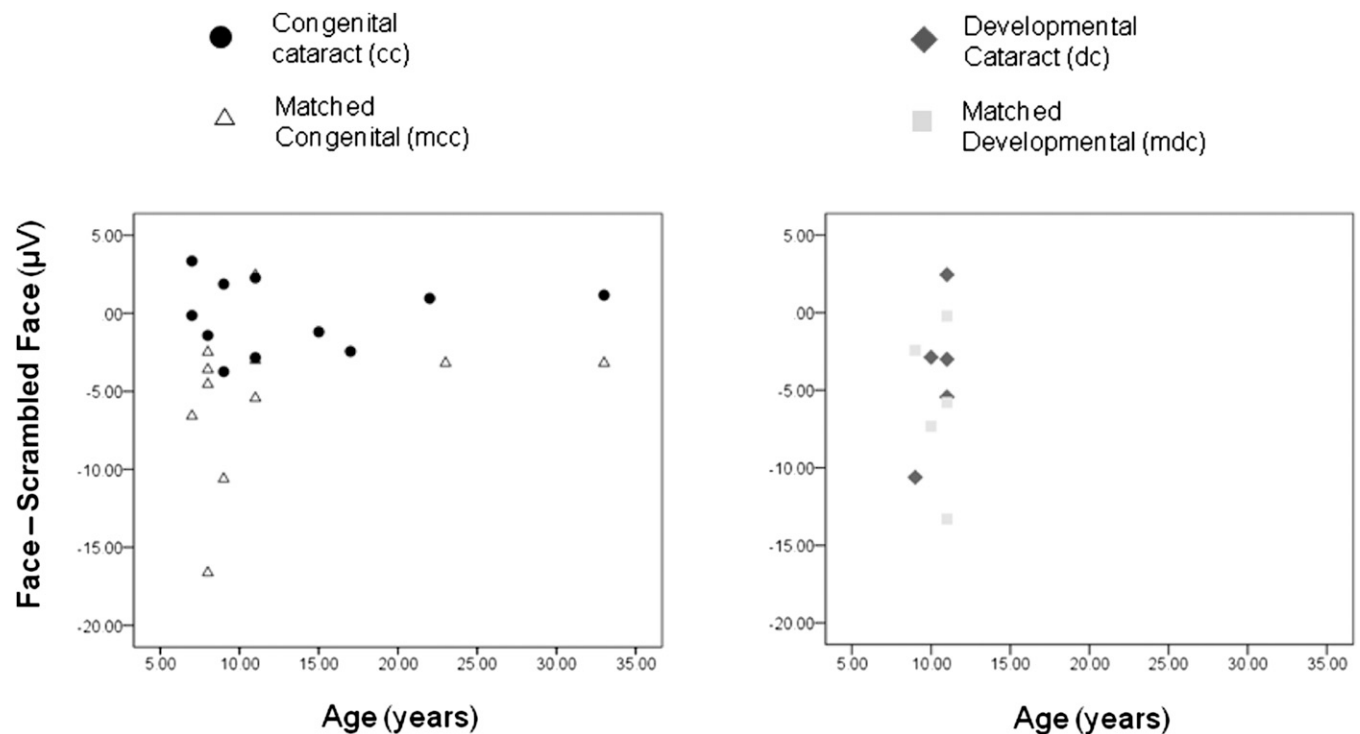


Fig. S1. Face-specific N170 (mean amplitude of the 30-ms interval centered on the negative peak between 170 and 230 ms) response. The amplitude difference of the N170 (at O2) for faces minus scrambled faces is shown for single participants of the cc group and their matched participants (mcc; *Left*) and for the dc group and their matched participants (mdc; *Right*). Negative values indicate a larger N170 to intact faces than to scrambled faces

