

## Supplementary Material S2. Background skills.

*Nonverbal IQ.* Participants were assessed in the nonverbal intelligence with Raven’s Standard Progressive Matrices test (Raven, Court, & Raven, 1995). It requires filling incomplete frames by choosing a missing element between a set of options.

*Receptive oral vocabulary IQ.* It was assessed through the Spanish adaption of the Peabody Picture Vocabulary test (Dunn, Dunn, & Arribas, 2006). The task involved the identification of Spanish oral words, shown in the written form, by choosing the picture depicting the word among four options.

*Working memory.* Working memory was tested by using a N-back task programmed by Robinson and Fuller (2004) in E-prime (Schneider, Eschman, & Zuccolotto, 2002). This is a computerized continuous recognition task in which participants must decide, pressing “yes” or “no” keyboard keys, whether a letter appearing on the computer screen is the same as the one presented “n” items back. At the 1-back level, participants had to compare the letter currently displayed on the screen with the one presented immediately before, at the 2-back level, with the letter shown two positions prior and, at the final level we used, the 3-back level, with the letter appeared three positions prior. The average of the Z-scores of the three levels, computed in relation to all sample, was used for the analyses.

*Lipreading.* Utley test (Utley, 1946, adapted in Spanish by Manrique & Huarte, 2002) was used to assess the lipreading skills of participants. We used the form A of Utley test, consisting of 31 sentences from 1 to 5 words, with 106 words in total, so that participants could score from 0 to 106. The task took approximately 10 minutes. After watching once each video-recorded sentence without sound, participants were asked to repeat it aloud, or to write it down in case their language articulation was not fully clear. Sentences were read at a moderate rate by a woman, Spanish native speaker, and they were presented on a Sony VAIO monitor with a resolution of 1366 × 768 pixels. For the analyses, Z scores of the number of correctly recalled words were computed in relation to the all sample of 36 participants.

## References

- Dunn, L. M., Dunn, L. M., & Arribas, D. (2006). *Peabody Test de Vocabulario en Imagenes (PPVT-III) [Peabody Picture Vocabulary Test (PPVT-III)]*. Madrid, Spain: TEA.
- Manrique, M., & Huarte, A. (2002). *Implantes cocleares [Cochlear implants]*. Barcelona, Spain: Masson.
- Raven, J. C., Court, J. H., & Raven, J. (1995). *Raven Matrices Progresivas (Escalas: CPM, SPM; APM) [Raven’s Progressive Matrices (Forms: CPM; SPM, APM)]*. Madrid, Spain: TEA Ediciones, S.A.
- Robinson, B., & Fuller, B. (2004). *N-BackTest*. Unpublished instrument. Retrieved from <http://step.psy.cmu.edu/scripts-plus/>.
- Schneider, W., Eschman, A., & Zuccolotto, A. (2002). *E-Prime Users’ Guide* (Psychology). Pittsburg, PA.
- Utley, J. (1946). A test of lip reading ability. *Journal of Speech Disorders*, 11(2), 109–116.