A questionnaire study was undertaken by the South of England Cochlear Implant Centre (SOECIC) to investigate the extent to which young deaf children with cochlear implants (CIs) are able to appreciate music in comparison with their normally hearing (NH) peers. Here we present the results which relate to their singing appreciation and production abilities.

### Materials & Methods

The questionnaire was developed by a multi-disciplinary team and explores various aspects of music exposure and appreciation. It was distributed to the parents of:

- Children with normal hearing (screened by an additional questionnaire) at local playgroups and nurseries.
- Children with CIs who had been implanted for at least one year and are patients at the SOECIC.

All children were aged at least 1 year but less than 5 years old with no known additional special needs.

### Results

#### NH Group

- 23 children (13 female, 10 male) Mean age 44.87 months (± 9.19 SD)

#### CI Group

- 23 children (13 female, 10 male) Mean age 44.78 months (± 9.35 SD). Mean duration CI use 20.78 months (± 6.98 SD)

- 3 Nucleus 24 Contour
- 22 Nucleus Freedom
- 15 unilateral
- 8 bilateral
- 17 congenitally deaf
- 6 pre-lingually deaf

### Discussion & Conclusions

- The results of this study indicate that parents of children with NH and CIs view music as important for their children similarly.
- Most parents sing to their children from a young age.
- Children with CIs tend to respond to their parents’ singing in a less sophisticated way than NH children and at an older age.
- Encouragingly the average delay in the age at which children with CIs sing and respond to singing is similar to or less than the duration of deafness pre-implant.
- The singing of children with CIs is less accurate than that of children with NH for rhythm, pitch and words.
- Previous studies indicate that pitch discrimination is less accurate in adults with CIs than in NH adults. However rhythm perception is reported being as similar (Gfeller & Lansig, 1991). It is interesting to note that in the age group studied here, rhythm accuracy within singing production is perceived by parents as being less accurate for the CI group.

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### References


For more info…

www.isvr.soton.ac.uk/MFG
mlf@isvr.soton.ac.uk

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