READING, PHONOLOGICAL PROCESSING AND WRITING OUTCOMES FOR ADOLESCENTS WHO RECEIVED THEIR FIRST COCHLEAR IMPLANT YOUNGER THAN TWO YEARS AND WHO ARE NOW AGED 11 TO 19 YEARS

Shani Dettman¹,²,³
Wendy Amott⁴
Robert Cowan¹,³

¹. The University of Melbourne, Parkville, Australia
². The HEARing CRC, Carlton, Australia
³. The Cochlear Implant Clinic Royal Victorian Eye & Ear Hospital, Victoria, Australia
⁴. The Hear and Say Centre Queensland, Australia
DISCLOSURES

The University of Melbourne is a member organisation of the HEARing Cooperative Research Centre.

The Department of Audiology and Speech Pathology at The University of Melbourne received research funding in the past from Cochlear Limited.
PARTICIPANTS: Invited through our HEARing Co-operative Research Centres
9 girls, 16 boys received first CI younger than 2 years

n=24 bilateral sequential, 1 unilateral CI

range of early intervention approaches;
• n=10 aural/oral
• n=14 auditory verbal
• n=1 speech and sign and auditory verbal

mean test age 14;6 years
(range 11 to 19; SD 2.3 years)

median SEIFA rank 8 (range 4 to 10; SD 2) *
INTRODUCING THE CTOPP AND WRMT-III

CTOPP (60 minutes)  
age range 4;0 to 24;11 years

WRMT-III (60 minutes)  
age range 4;6 to 79;11 years

Recorded materials
INTRODUCING THE TOWL

Just the Spontaneous Narrative Subtest (20min)
age range 9;0 to 17;11 years
RESULTS: CTOPP SUBTESTS
RESULTS: CTOPP CLUSTERS

CTOPP Cluster Standard Scores

Form A

Phon Awareness  Phon Memory  Rapid Naming  Alternate Phon Awareness  Alternate Rapid Naming

145  130  115  100  85  70  55  40
RESULTS: WRMT SUBTESTS
RESULTS: WRMT CLUSTERS

WRMT Cluster Standard Scores

Total Reading Cluster
Reading Comprehension
Basic Skills

40 55 60 70 80 90 100 110 120 130 140

Basic Skills  Reading Comprehension  Total Reading Cluster

WRMT Cluster Standard Scores

40 55 60 70 80 90 100 110 120 130 140

Basic Skills  Reading Comprehension  Total Reading Cluster
TOWL WRITING A SPONTANEOUS NARRATIVE
CONCLUSIONS: MEAN LITERACY SKILLS FOR THIS GROUP ARE WITHIN THE NORMAL RANGE.
CONSIDERATIONS

early first CI
access to bilateral sequential CIs (except one)
volunteered to participate
relatively high median SEIFA
GREAT EXPECTATIONS

illustrate what is possible, in terms of long-term literacy outcomes, when infants and young children receive CIs younger than two years of age.
THANK YOU
dettmans@unimelb.edu.au