

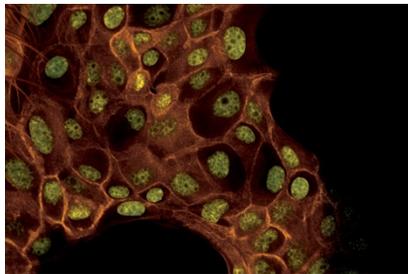
# DEMOGRAPHIC AND ACTIVITY STATISTICS OF AUSTRALIAN YOUNG ADULTS LIVING WITH HEARING LOSS

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Young adulthood (16-25) is a time of rapid development: (Arnett, 2006)

- Moving away from home
- Beginning tertiary study
- Entering the workforce
- Establish family of their own

More than 8000 young adults in Australia are living with chronic hearing loss (Australian Hearing, 2016)

Hearing loss causes significant impacts on childhood development

- language delay
- educational impacts

Appropriate intervention can bring these outcomes back to normal (Vohr et al., 2012; Yoshinaga-Itano, 2003)

It is unclear whether outcomes after secondary education are affected

- Tertiary education
- Employment
- Personal
  - Social/romantic engagement

Longitudinal Survey of Australian Youth (National Centre for Vocational Education Research, 2012)

- Nationally representative data set
- Educational, employment, and personal characteristics of 16–25 year old Australians
- 66,521 respondents surveyed yearly over up to 11 years

Also unclear whether young adults' relationships with audiologists are of a high enough quality that we can support them to meet their goals

*“to investigate the educational, employment, and personal life-courses, and life satisfaction of Australian young adults living with hearing loss, and compare these with a nationally representative sample of their peers.”*

*“to investigate the patient-centredness of and satisfaction with hearing rehabilitation offered to these young people”*

Survey in four parts:

- Demographic details
  - Age, gender, location, Aboriginal or Torres Strait Islander status, language preference
- Hearing Loss
  - Kind and duration of hearing loss
  - History of and satisfaction with hearing services
  - History of and satisfaction with hearing devices
- LSAY
  - Education and Employment situation
  - Life Satisfaction
- Measure of Processes of Care – Adult (MPoC-A) (Bamm, Rosenbaum, and Stratford, 2010)
  - Measure of patient-centredness of service delivery
  - Thanks to CanChild Centre for Childhood Disability Research

Invitation to complete survey sent to young adult clients of Australian Hearing:

- Had a recorded hearing loss (including congenital and acquired hearing losses)
- Between 16 and 25
- Had consented to be contacted about research

Survey provided electronically

857 contacted by email, 2,100 contacted by post

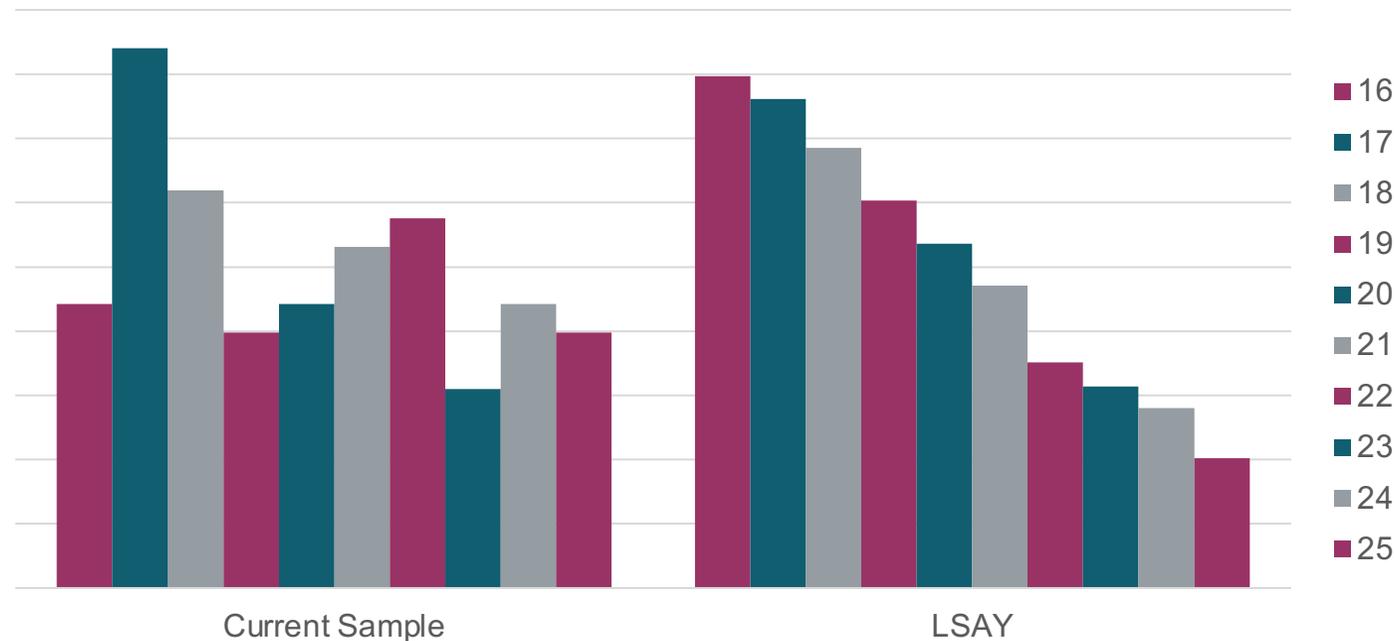
Quantitative analysis reported below:

- U refers to the Mann-Whitney U test
- Logistic regression results are reported in odds ratios  $e^B$
- Due to the large number of comparisons, the significance criterion was set at  $\alpha = .001$

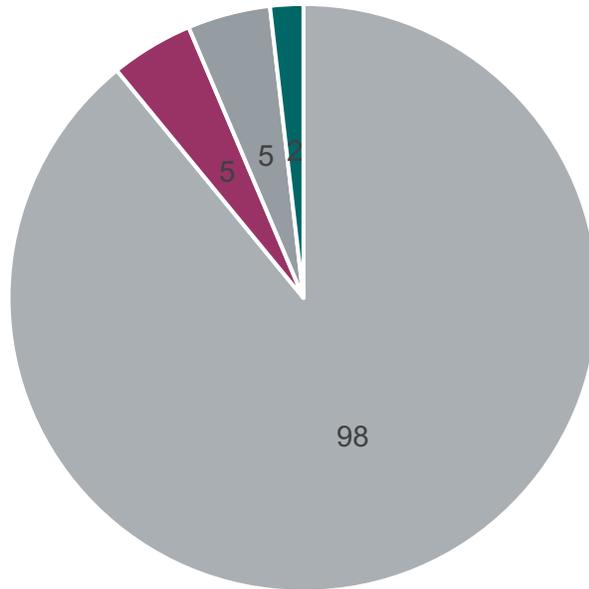
113 respondents

- Range of ages 16–25
- 67% female, significantly different to the LSAY sample ( $z = 3.5, p < .001$ )
- Majority had a regular audiologist (63%) and had been seeing them for more than 5 years (56%)

Participant Age

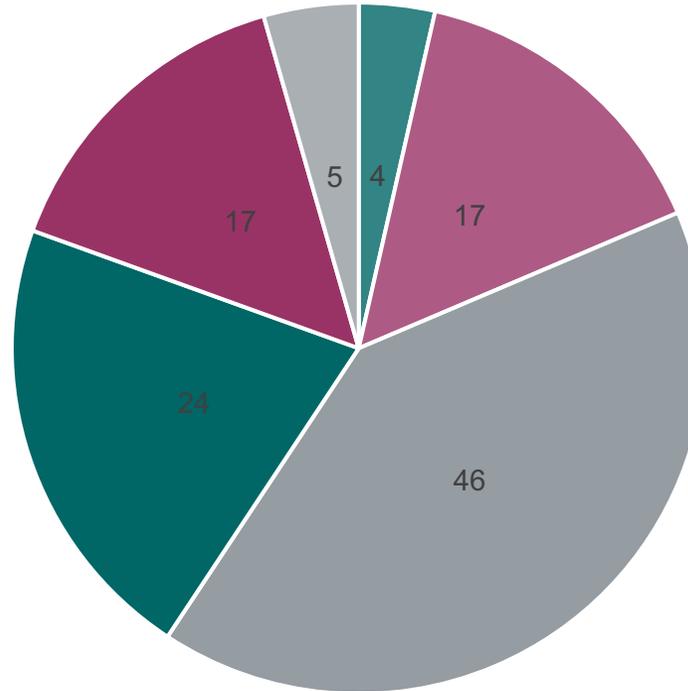


Language Use



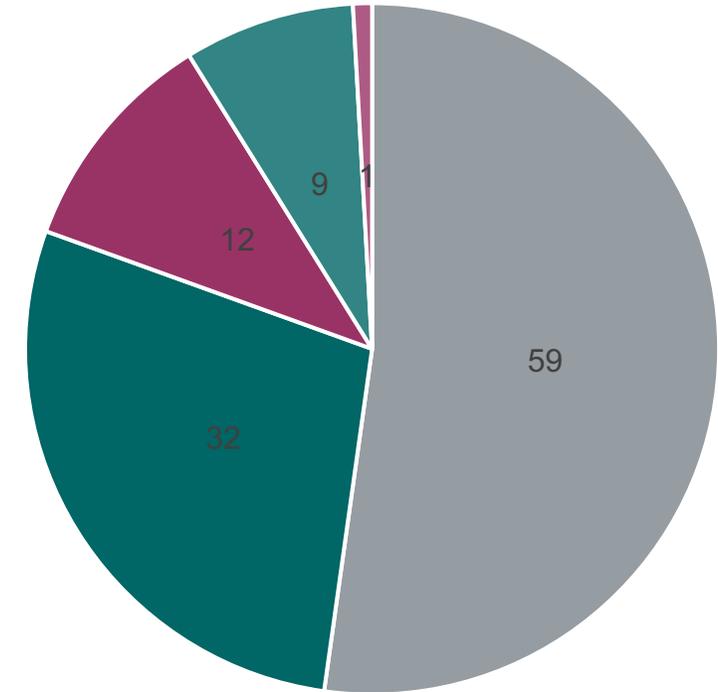
- Primarily English
- English and other spoken language
- English and Auslan
- Language other than English

Hearing Loss Severity



- I don't know
- Severe
- Mild
- Profound
- Moderate
- Total

Hearing Loss Type



- I don't know
- Sensorineural
- Mixed
- Conductive
- Central

Reported hearing loss severity significantly worse than those previously reported by Australian Hearing (Australian Hearing, 2016);  $U = 1800000$ ,  $p < .001$ .

Compared to young Australians as a whole:

- No less likely to complete Year 12 ( $e^B = 1.6$ ,  $p = .17$ )
- No less likely to continue to a Bachelor's Degree if they completed Year 12 ( $e^B = 1.6$ ,  $p = .027$ )
- Significantly less likely to be working at all ( $e^B = 0.45$ ,  $p < .001$ )
- Significantly more likely to have been unemployed during the previous year ( $e^B = 2.3$ ,  $p < .001$ )
- When employed:
  - Not taking home significantly less take-home pay ( $t = -1.1$ ,  $p = .28$ )
  - Not working significantly fewer hours a week ( $t = -2.4$ ,  $p = .018$ )
  - Not significantly less likely to be working full-time ( $e^B = 0.45$ ,  $p = .0049$ )

Compared to young Australians as a whole:

- Lived in less remote areas of the country ( $U = 2.8 \times 10^6$ ,  $p < .001$ )
- Not significantly more likely to be living at home ( $e^B = 1.6$ ,  $p = .099$ )
- Not significantly more likely to be unmarried ( $e^B = 3.6$ ,  $p = .20$ )
- Not significantly more likely to be single ( $e^B = 1.4$ ,  $p = .26$ )

# Findings – life satisfaction

Self-reported life satisfaction was poorer than young Australians as a whole on every measure.

<b>How satisfied are you with...</b>	<b>U (x 10<sup>6</sup>)</b>	<b>p</b>
Your future?	12	<.001
The work that you do?	11	<.001
What you do in your spare time?	11	<.001
How you get on with people?	12	<.001
The money you get each week?	12	<.001
Your social life?	13	<.001
Your independence?	11	<.001
Your career prospects?	11	<.001
Your standard of living?	10	.066
The way the country is run?	9.7	.27
The state of the economy?	10	.0048
Where you live?	10	.079
Your life at home?	10	.074
Your life as a whole?	12	<.001

# Findings – MPoC-A

Domain	Overall Score (SD)	t	p
Overall	23.8 (8.17)	-5.06	< .001
Enabling and Partnership	4.96 (1.41)	-3.88	< .001
Providing General Information	4.40 (1.80)	-1.08	.28
Providing Specific Information	4.31 (1.94)	-0.57	.57
Coordinated and Comprehensive Care	4.78 (1.61)	-2.80	.0055
Respectful and Supportive Care	5.09 (1.40)	-2.98	.0031

- One participant removed due to inconsistent results
- Poorer scores than those recorded in other datasets in all domains, particularly Enabling and Partnership (Bamm, Rosenbaum, & Stratford, 2010)
- Not associated with severity of hearing loss ( $r_s = -.006$ ,  $p = .50$ )
- Not associated with duration of hearing loss ( $r_s = .12$ ,  $p = .20$ )
- Not associated with having a regular audiologist ( $U = 1103$ ,  $p = .016$ )
- Not associated with regularity of seeing an audiologist ( $r_s = -.12$ ,  $p = .19$ )
- One item consistently scored lower:
  - “To what extent does your audiologist provide advice on how to contact other people with the same condition?”

How satisfied are you with your hearing service?

- 63% Very Satisfied, 26% Satisfied
- significantly higher among those who had a regular audiologist ( $U = 1943$ ,  $p < .001$ )
- not associated with length of relationship with a regular audiologist ( $r_s = .22$ ,  $p = .059$ )
- not associated with severity of hearing loss ( $r_s = .098$ ,  $p = .31$ )

How satisfied are you with your hearing devices?

- 42% Very Satisfied, 42% Satisfied
- significantly associated with increased frequency of hearing device use ( $r_s = .42$ ,  $p < .001$ )
- not associated with having a regular audiologist ( $U = 1500$ ,  $p = .48$ )
- not associated with length of relationship with a regular audiologist ( $r_s = .21$ ,  $p = .089$ )
- not associated with severity of hearing loss ( $r_s = -.13$ ,  $p = .19$ ).

Young people with hearing loss have similar educational and employment outcomes to young Australians as a whole, however:

- Increased difficulty finding and maintaining permanent employment
  - Work with employment providers and other social services
- Lower life satisfaction
  - Educational variables aren't enough – need to address psychosocial concerns

High levels of satisfaction

- Satisfaction strongly associated with a regular clinician
  - Maintaining continuity of care a vital part of achieving patient satisfaction

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Bamm, E. L., Rosenbaum, P., & Stratford, P. (2010). Validation of the measure of processes of care for adults: a measure of client-centred care. *Int J Qual Health Care*, 22(4), 302-309. doi:10.1093/intqhc/mzq031

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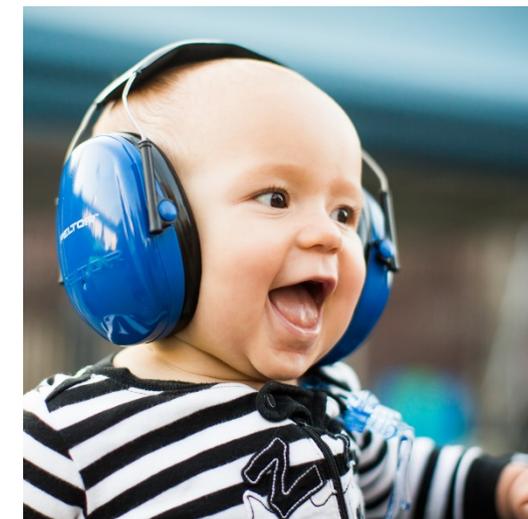
Yoshinaga-Itano, C. (2003). From Screening to Early Identification and Intervention: Discovering Predictors to Successful Outcomes for Children With Significant Hearing Loss. *J Deaf Stud Deaf Educ*, 8(1), 11-30. doi:10.1093/deafed/8.1.11

## Development of a Minimum Data Set for a Needs Assessment Tool for Families of Children with Hearing Loss Transitioning to Early Intervention (an eDelphi study)

**Australian professionals (Audiologists, Speech Pathologists, ENTs, Teacher of the Deaf, Social workers, Psychologists, Paediatricians,...)!**

If you have experience and/or expertise in working with families and children with hearing loss in **Australia**, please help us identify what to include in **Needs Assessment Tool** for families of children with hearing loss by completing a short online questionnaire (approximately 8 minutes):

<https://bit.ly/2GQeDTX>



# Members + Acknowledgements



## MEMBER ORGANISATIONS




**Australian Government**  
Department of Industry,  
Innovation and Science

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Centres Programme

The CRC Programme supports industry led end-user driven research collaborations to address the major challenges facing Australia.