

# Perceptions of People with Hearing Loss

Among Various Social Groups in  
National University of Singapore

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# Introduction

- ◆ Challenges exist for hearing-impaired people despite technological and design advancements in hearing devices, increased public awareness on hearing impairment, and achievements of hearing-impaired people over the years
- ◆ This attitudinal barrier, even if intangible, is thought to be one of the most significant barriers hearing-impaired people face (Coryell, Holcomb, & Scherer, 1992)
- ◆ Negative perceptions held by normal hearing people toward people with hearing loss can create obstacles in areas of education, employment and interpersonal relationships (Strong & Shaver, 1991)



# Background

Studies done in other countries yielded mixed results:

- ◆ Walter (1969) - RIT college faculty members
- ◆ Emerton and Rothman (1978) - 100 RIT students
- ◆ Kiger (1997) - 175 university undergraduates
- ◆ Weisel (1989) - 7th and 8th graders in Israel
- ◆ Alrayes (2004) - 471 Lamar University faculty members
- ◆ Thrash (2012) - 286 students from 10 social groups in University of Southern Mississippi
- ◆ Elser (1959) - Students between 9 - 12 years old
- ◆ Isaacs (1973) - College students
- ◆ Silverman and Klees (1989) - 40 high school juniors
- ◆ Antia and Kreimeyer (1996) - 136 children in preschool, kindergarten and first-grade programs from different states



**No such studies done in Singapore before!**





# Aims

1. To develop a questionnaire that would measure hearing people's perceptions of people with hearing loss
2. To utilise the questionnaire to measure the degrees of positive or negative attitudes held by hearing university alumni and students in various social groups toward people with hearing loss
3. To determine if there were statistically significant differences in attitudes between categories of social groups, and if so, to rank them in order of positivity and negativity
4. To determine if a) age, b) gender or c) contact with hearing-impaired people influence the degrees of positive or negative attitudes



# Hypotheses

1. The attitude scores across all categories will be positive toward people with hearing loss
2. The hypothesised order of attitude scores from most positive to least positive across categories will be:
3. There will be no significant difference in attitudes when grouped by gender, age, or contact with hearing-impaired people

No.	Hypothesised Order
1	Alumni
2	Faculty of Arts and Social Sciences
3	School of Medicine
4	Centre for the Arts
5	Scholars
6	Religious Organisations
7	School of Business
8	School of Engineering
9	Athletic Organisations



# Methods

## 1. Instrument Development

- ◆ Based on the existing “Opinions about Deaf People” scale (Berkay, Gardner & Smith, 1995)
- ◆ “Deaf” modified to “hearing-impaired” to encompass a broader population of the hearing-impaired community

It is **unfair** to limit hearing-impaired people to low-paying, unskilled jobs.  
Strongly Agree   Agree   Somewhat Agree   Somewhat Disagree   Disagree   Strongly Disagree

Educated hearing-impaired people have better **speech** than less educated hearing-impaired people.  
Strongly Agree   Agree   Somewhat Agree   Somewhat Disagree   Disagree   Strongly Disagree

A hearing-impaired person can possess the **leadership abilities** needed to run an organization.  
Strongly Agree   Agree   Somewhat Agree   Somewhat Disagree   Disagree   Strongly Disagree

Hearing-impaired people **drive** just as safely as hearing people.

Hearing-impaired people cost taxpayers lots of money because they are unable to keep their **jobs**.  
Strongly Agree   Agree   Somewhat Agree   Somewhat Disagree   Disagree   Strongly Disagree

Hearing-impaired people should only work in jobs where they do not need to **communicate** with anyone.  
Strongly Agree   Agree   Somewhat Agree   Somewhat Disagree   Disagree   Strongly Disagree

It is not safe to leave a baby alone with a hearing-impaired person, because he/she cannot hear the baby cry.  
Strongly Agree   Agree   Somewhat Agree   Somewhat Disagree   Disagree   Strongly Disagree

Hearing-impaired adults must depend on their parents to make **important decisions**.

If a hearing-impaired person is qualified for a job, he/she would stand **being hired**.

Strongly Agree   Agree   Somewhat Agree   Somewhat Disagree   Disagree

A hearing-impaired person can have close friends who have normal hearing.  
Strongly Agree   Agree   Somewhat Agree   Somewhat Disagree   Disagree

A person’s ability to hear should not affect his/her performance as an employee.  
Strongly Agree   Agree   Somewhat Agree   Somewhat Disagree   Disagree

**Dating** a hearing-impaired person would be difficult because of communication challenges.

Strongly Agree   Agree   Somewhat Agree   Somewhat Disagree   Disagree

A doctor with hearing loss can be **competent** at providing patient care.  
Strongly Agree   Agree   Somewhat Agree   Somewhat Disagree   Disagree

Hearing-impaired people generally have a **less mature personality** than hearing people.  
Strongly Agree   Agree   Somewhat Agree   Somewhat Disagree   Disagree

Hearing-impaired people generally will have more **difficulties**.



# Methods

## 2. Questionnaire Administration

- ◆ 9 different categories of social groups
- ◆ Minimum: 30 per category
- ◆ Have to belong to only one category
- ◆ Administered online or face-to-face
- ◆ People with (self-reported / known) hearing loss excluded

Categories	Social Groups
Alumni	NUS Alumni
Athletic Organisations	Waterpolo team, Floorball team, Sports Club
Religious Organisations	Navigators, Cru, Varsity Christian Fellowship, Buddhist Society
Centre for the Arts	Choir, Cultural Activities Club
School of Business	Economic Society, Business Club
Faculty of Arts and Social Sciences	Psychology Society, Society of Social Work, FASS Club
School of Medicine	Pharmaceutical Society, Medical Society
School of Engineering	ECE Club, Engineering Club
Scholars	University Scholars Programme, Student Branch of Mensa



# Results

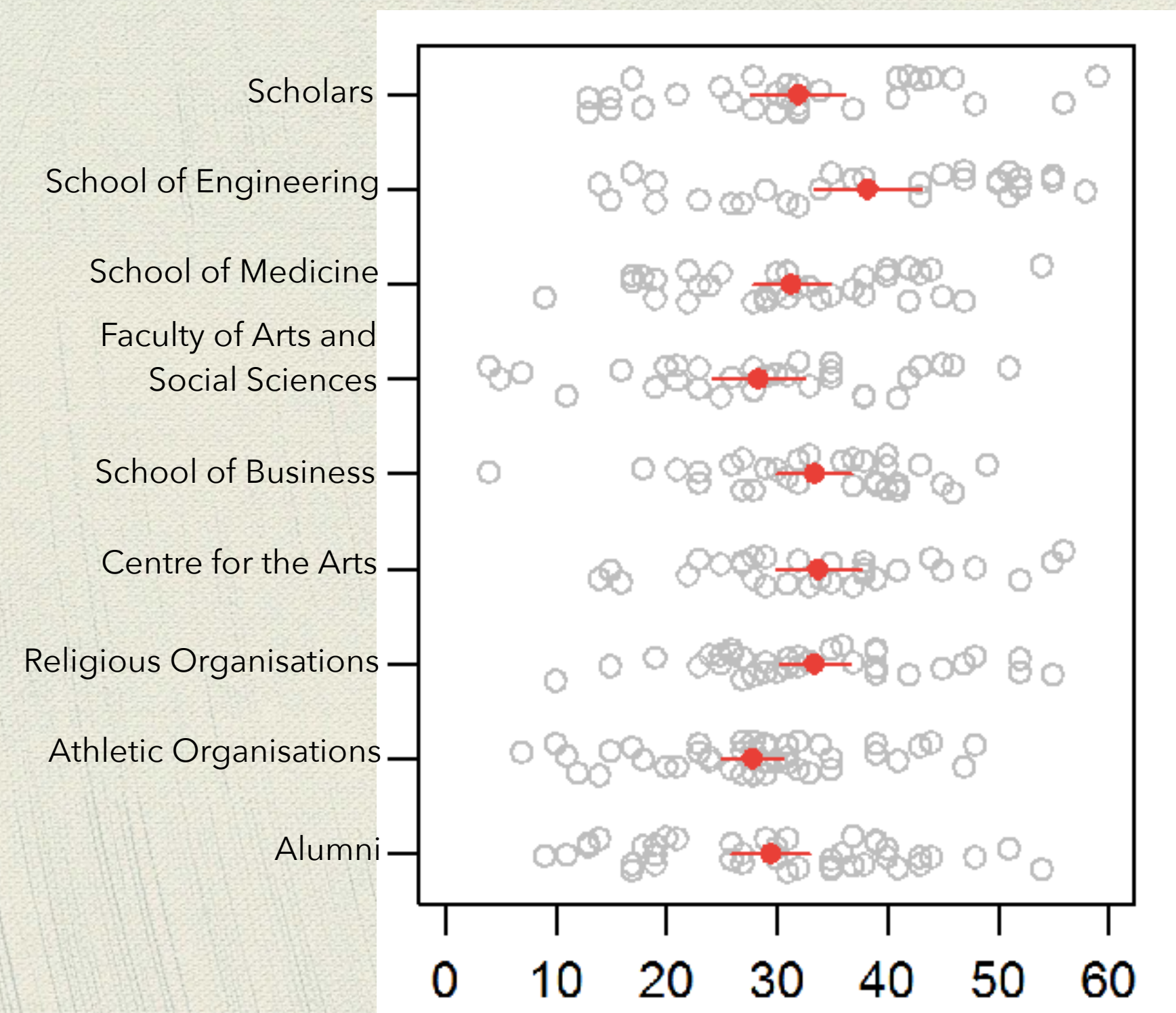


- ◆ n=312
- ◆ 135 (43.3%) male, 177 (56.7%) female
- ◆ 18 to 45 years old
- ◆ 237 (76%) had previous or current contact with hearing-impaired people, 75 (24%) had no contact with hearing-impaired people



# Results

- ◆ Positive attitudes (< 60 points out of a total of 120 points) across all categories of social groups



Categories	Mean	Min	Max
Athletic Organisations	27.83	7	48
Faculty of Arts and Social Sciences	28.41	4	51
Alumni	29.49	9	54
School of Medicine	31.38	9	54
Scholars	31.98	13	59
School of Business	33.42	4	49
Religious Organisations	33.50	10	55
Centre for the Arts	33.83	14	56
School of Engineering	38.23	14	58



# Results

◆ Significant statistical differences in mean scores found between:

1. Athletic Organisations and School of Engineering
2. Faculty of Arts and Social Sciences and School of Engineering
3. Alumni and School of Engineering

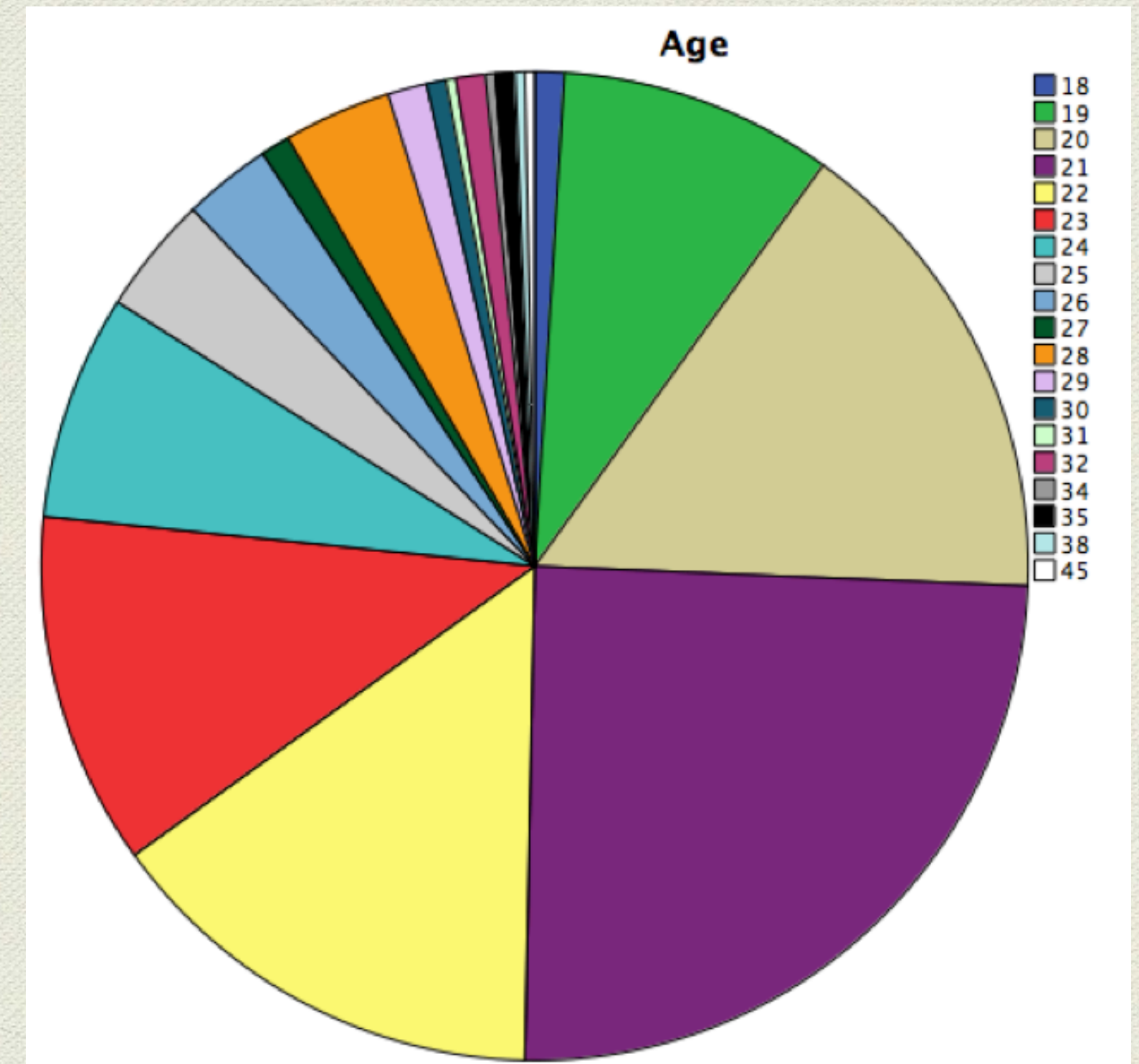
Order of Categories from Most Positive to Least Positive

No.	Hypothesised Order	Resultant Order
1	Alumni	Athletic Organisations
2	Faculty of Arts and Social Sciences	Faculty of Arts and Social Sciences
3	School of Medicine	Alumni
4	Centre for the Arts	School of Medicine
5	Scholars	Scholars
6	Religious Organisations	School of Business
7	School of Business	Religious Organisations
8	School of Engineering	Centre for the Arts
9	Athletic Organisations	School of Engineering



# Results

- ◆ Unable to analyse effect of age on attitudes due to a heavily skewed age distribution
- ◆ No significant statistical difference found between gender
- ◆ No significant statistical difference found between participants who had contact or no contact with hearing-impaired people



Mean Scores by Contact with Hearing-Impaired People

Contact	N	Mean	SD
No	75	31.93	11.562
Yes	237	31.66	11.310

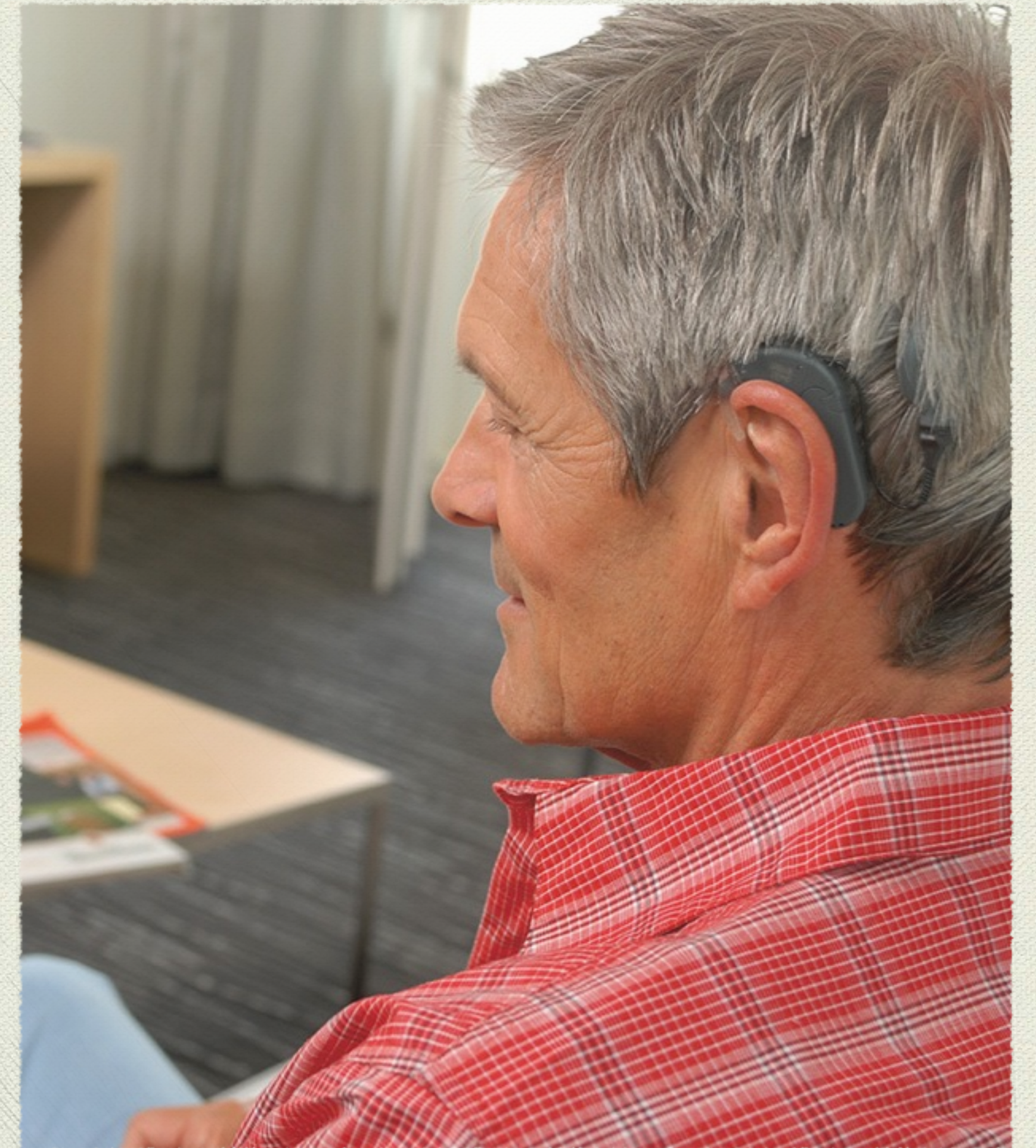
Mean Scores by Gender

Gender	N	Mean	SD
Male	135	32.56	12.037
Female	177	31.09	10.793



# Discussion

- ◆ Significant differences were found between four categories of social groups, suggesting varying views about people with hearing loss
- ◆ Could be due to individual's beliefs or character, or a group culture
- ◆ No significant influence of gender or contact with hearing-impaired people found
- ◆ Overall positive attitudes across all categories of social groups
- ◆ Could be due to political, societal or cultural changes in Singapore



Credits: [www.medel.com](http://www.medel.com)



# Limitations



- ◆ Limited to a small sample group of participants and was not representative of the general population of Singapore
- ◆ Future longitudinal studies could examine just that



# Implications



- ◆ Can pave the way to social acceptance in Singapore
- ◆ Professionals in the education, hearing, or public health sectors can chart interventions and policies to improve hearing-impaired people's QoL
- ◆ Work on reducing or even eliminating covert and overt discrimination against hearing-impaired people
- ◆ Integrate hearing-impaired people into society



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“Blindness cuts us off from things; deafness cuts us off from people.”

– *Helen Keller*