Results

JapanTrak 2018

1. Introduction
2. Market overview
3. Analysis of hearing aid owners
4. Analysis of hearing impaired non-owners
5. Appendix

Research to create value
Japan specific findings

- **Satisfaction with hearing aids purchased at hearing aid centers is higher than those purchased elsewhere.**
- **Satisfaction with hearing aids bought on the internet is devastating.**

- Most people with only one hearing aid believe it is the same effect compared with two hearing aids... but
- **Binaural treatment leads to much higher satisfaction, longer use time per day and less unused hearing aids.**

- Those hearing impaired who own PSAP/OTC hearing aids believe that it is reasonable for their purposes... but
- **Satisfaction with medical hearing devices fitted by a hearing care professional is much higher.**
Summary
1. Introduction

- JapanTrak 2018 was designed and executed by Anovum (Zurich) on behalf of Japan Hearing Instruments Manufacturers Association (JHIMA).

- Sample sizes Japan 2018:
  - Representative sample (sample 1): n= 13'710 people
  - Hearing impaired (sample 2):
    - Hearing impaired non-owners: n= 885 people with hearing loss (HL)
    - HA owners: n= 421 people with hearing aid (HA)

- JapanTrak 2018 is equivalent to the EuroTrak studies:

Published reports on www.ehima.com/documents
Summary

2. Market overview

- Stated hearing loss prevalence
  - Total: 11.3 %, 18+: 13.2% (stable since 2012).
  - Binaural hearing loss: HA owners: 80%, HA non-owners: 56%.
  - Hearing Tests: 53% (2015: 51%) had a hearing test in the last 5 years, most tests done by ENTs and family doctors but also during health checks at hospitals.

- Hearing aid adoption rate (HA penetration)
  - Total: 14.4% (2015: 13.5%).
  - Total age group 18+: 14.2% (2015: 12.8%).
  - 45% of HA owners have binaural treatment.

- The route to the hearing aid
  - 42% of the hearing impaired discussed hearing loss with an ENT doctor or family doctor.
  - 14% got hearing aids recommended from the ENT or family doctor (drop out rate=58%).
  - 15% of the GP consultations referred to a hearing aid dispenser, 17% referred to an ENT
  - 56% recommended no action!
  - 17% of ENT consultations referred to a hearing aid dispenser, 67% recommended no action!

- Potential social cost-savings due to the use of hearing aids
  - Hearing aids are believed to have a positive impact on the job.
  - Quality of sleep seems to improve if hearing impaired use hearing aids.
Summary

3. Analysis of hearing aid owners

- Hearing aid ownership and usage and accessories
  - 12% (2015: 15%) of all HA owners received some kind of 3rd party reimbursement.
  - 43% of the currently owned HAs were bought in the last two years
  - The average age of the currently owned HAs is 3.5 years (2015: 4.1 years).
  - The median age of hearing aids before replacement remains at 5 years.
  - On average, HAs are worn 7.6 hours a day (2015: 6.8 / 2012: 5.7).
  - 47% of today’s hearing aid owners are aware of their hearing aid brand.

- Satisfaction with HAs
  - 66% of the hearing aid owners say their hearing aid works better than or as expected, 34% say they are worse than expected.
  - Overall satisfaction with HA is 38% (2015: 39% / 2012: 36%).
  - Talking on a phone and talking at home with family members are the most frequent important listening situations.

- Positive impact of HAs
  - Significant positive impact of HAs on different aspects – especially sense of safety, communication and feelings about yourself.
  - 89% of hearing aid owners declare that their hearing aids improve their quality of life at least sometimes
Summary
4. Analysis of hearing impaired non-owners

• Reasons not to own/use HAs
  – Only 7% of the hearing impaired without hearing aids know the system of supplying hearing aid(s) by the government.
  – The main reasons for not using hearing aids are that people say they are uncomfortable, they do not restore hearing to normal and their hearing loss is not severe enough.
  – Uncomfortable means to them: “foreign object in the ear, it pinches, it hurts, it is too big. / “not necessary yet in daily life”
  – 7% who own HAs don’t use them at all (0 hour); 17% use them less than one hour/day (0-1 hour).

• Social rejection, and triggers to buy
  – 75% of hearing aid owners think people don’t make fun of or reject them because of their hearing aids. It is more likely somebody makes fun or rejects a hearing impaired without hearing aids.
  – The most important influencing factors for getting hearing aids are worsening hearing loss, ENT. Price of hearing aids is only relevant for the non owners.
Results

JapanTrak 2018

1. Introduction
2. Market overview
3. Analysis of hearing aid owners
4. Analysis of hearing impaired non-owners
5. Appendix
Detailed Results: Roadmap

New topics for JapanTrak 2018 are highlighted in red

* Japan specific topics are highlighted with ‘*’

1. Introduction
   - Organization of JapanTrak 2018
   - Recruitment process: In search of hearing impaired people

2. Market overview
   - Prevalence of hearing loss and hearing aid adoption rate
   - Hearing tests and where hearing is tested
   - The route to the hearing aid: Sources of information and drop-out rates
     * Awareness of specialized shops, professions and organizations
   - Potential social cost-savings due to the use of hearing aids: Work competitiveness, depressive and dementia symptoms, sleep quality, co-morbidities

3. Analysis of hearing aid owners
   - Hearing aid ownership, awareness of hearing loss before getting hearing aids, lifetime of hearing aids and usage
     * Age when felt need for hearing aids
     - Reasons for getting hearing aids sooner
     - Channels for getting hearing aids, recommendation of channel (NPS)
     - Awareness and usage of accessories
     * Fitting process and price
   - Satisfaction with hearing aids and drivers
     * Reasons for and satisfaction with binaural fitting
     * Satisfaction compared: By place of purchase, type of device and fitting
   - Importance of listening situations
   - Positive impact of hearing aids, safety due to hearing aids, quality of life

4. Analysis of hearing impaired non-owners
   - Reasons for not having hearing aids and why some people can consider hearing aids as uncomfortable
   - Social rejection because of hearing loss compared to the acceptance of hearing aids
   - Most important triggers to buy

5. Appendix
   - Demographics: Hearing instrument adoption rates and populations
1. Introduction
Organization of JapanTrak 2018

**Organization**

- JapanTrak is the Japanese equivalent to the EuroTrak studies.
- Principal of the project JapanTrak is Japan Hearing Instruments Manufacturers Association (JHIMA). Members of JHIMA are: CORTITON, GN Hearing Japan, Oticon Japan, NJH (New Japan Hearing), PANASONIC, Phonak, RION, Sivantos K.K, Starkey, Widex
- Anovum Zurich developed the concept of JapanTrak, designed the questionnaire and conducted the fieldwork in cooperation with a panel company. Furthermore Anovum analyzed the data and prepared the presentation.
- The European Hearing Instrument Manufacturers Association [EHIMA] approved the questionnaire.
- Anovum and JHIMA adapted the EuroTrak questionnaire for JapanTrak. JHIMA translated the questionnaire into Japanese.

**Use of the data**

- The principal as well as the JHIMA companies may use the anonymous delivered tables, charts, reports and conclusions of the survey for further research projects, for archiving and publication in any form whatsoever.

- The raw dataset remains at Anovum. If the principal or the JHIMA companies use the anonymous data (delivered tables, charts, reports) and conclusions of the survey for publications the source of the data needs to be mentioned in the following way:
  “Source: Anovum – JapanTrak 2018/n= [relevant sample size]”

- The principal and JHIMA companies can ask Anovum to further analyze the raw data in specific ways at their own expense.
Recruitment process: In search of hearing impaired people

**Step 1: Screening interviews**

Objective: Prevalence of hearing loss and hearing aid ownership

Process:
1. Representative sample with strict quotas that represent the overall population (Age/Gender interlocked; soft quota on region)
2. Contacts from panellist pools of more than 40’000 people
3. Screening questionnaire: Stated hearing loss and hearing aid usage + demographics
4. Result: Representative sample of n=13’710 people based on census data.

**Step 2: Target population interviews**

Objective: Details about satisfaction with hearing aids and reasons for non-adoption

Process:
1. Main questionnaires: Owners and hearing impaired non-owners
2. Balancing through weighting according to representative screening interviews
3. Resulting sample: n=421 hearing aid owners and n=885 hearing impaired non-owners
2. Market overview
Prevalence of hearing loss and adoption rate
Hearing loss and hearing instrument ownership by gender/age

Sample based on census data 2018 projection
Hearing loss prevalence Japan

% hearing loss prevalence

- **Total**: 11.3% (2018), 13.2% (2015), 17.6% (2012)
- **Total 18+**: 13.1% (2018), 12.8% (2015), 18.0% (2012)
- **75+**: 39.2% (2018), 41.6% (2015), 39.2% (2012)
- **65-74**: 11.3% (2018), 10.3% (2015), 10.8% (2012)
- **55-64**: 6.8% (2018), 7.0% (2015), 10.3% (2012)
- **45-54**: 3.4% (2018), 2.5% (2015), 2.6% (2012)
- **35-44**: 0.6% (2018), 0.6% (2015), 0.5% (2012)
- **25-34**: 0.6% (2018), 0.6% (2015), 0.5% (2012)
- **15-24**: 0.6% (2018), 0.6% (2015), 0.5% (2012)
- **<=14**: 10.9% (2018), 12.8% (2015), 11.3% (2012)


© Anovum 2018 - JapanTrak 2018
Overview hearing loss prevalence and hearing aid adoption

Hearing impaired (stated)  Adoption (% of population)  Adoption (% of stated impaired)

JapanTrak 2018: 11.3% (stated) 1.6% (population) 14.4% (stated impaired)
JapanTrak 2015: 11.3% (stated) 1.5% (population) 13.5% (stated impaired)
JapanTrak 2012: 10.9% (stated) 1.5% (population) 14.1% (stated impaired)
Hearing aid adoption rate Japan:
14% (rounded) of hearing impaired have hearing aid(s), 45% of them have binaural treatment
The more severe the hearing loss, the higher the adoption rate

Hearing loss 6-groups

<table>
<thead>
<tr>
<th>Group</th>
<th>Hearing aid (%)</th>
<th>No Hearing aid (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>97</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>94</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>95</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>86</td>
<td>14</td>
</tr>
<tr>
<td>5</td>
<td>66</td>
<td>34</td>
</tr>
<tr>
<td>6</td>
<td>48</td>
<td>52</td>
</tr>
</tbody>
</table>

* Construction of 6-groups: A factor analysis was performed to identify one factor "degree of hearing loss". The following questions were included in the factor:
  - Number of ears impaired (one or two)
  - Stated hearing loss (Mild to Profound)
  - Scores on 6 APHAB-EC – like questions (Scaled 1-5)
  - When NOT using a hearing aid, how difficult is it for you to follow conversations in the presence of noise

People were segmented into 6 groups of same size (16.67% of all hearing impaired in the sample).
## Hearing loss

### Hearing loss characteristics: Owners compared to non-owners

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ears impaired</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(stated)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unilateral loss</td>
<td>44% (40%)</td>
<td>20% (17%)</td>
<td>8% (8%)</td>
</tr>
<tr>
<td>Bilateral loss</td>
<td>56% (60%)</td>
<td>80% (83%)</td>
<td>22% (21%)</td>
</tr>
<tr>
<td><strong>Perceived loss</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mild</td>
<td>42% (44%)</td>
<td>24% (18%)</td>
<td>10% (7%)</td>
</tr>
<tr>
<td>Moderate</td>
<td>52% (48%)</td>
<td>51% (54%)</td>
<td>15% (17%)</td>
</tr>
<tr>
<td>Severe</td>
<td>4% (7%)</td>
<td>17% (23%)</td>
<td>43%* (37%)</td>
</tr>
<tr>
<td>Profound</td>
<td>1% (1%)</td>
<td>7% (5%)</td>
<td></td>
</tr>
</tbody>
</table>

n’s are unweighted whereas the shown results are weighted
* combined “severe” and “profound” because n is too small
Hearing tests and where hearing is tested
**Hearing Tests:** 53% (2015 51%, 2012: 49%) had a hearing test in the last 5 years, most tests are done at medical check-ups.

Have you ever taken a hearing test?

- Yes, in the last 12 months: 37%
- Yes, in the last 1-5 years: 29%
- Yes, more than 5 years ago: 17%
- No, never: 16%

Where/how was your hearing tested (last 5 years)?

- Family doctor: 25%
- Ear doctor (ENT): 24%
- Hearing Aid Dispenser/Audiologist: 3%
- Online test / Test on a smartphone App: 1%
- Other: 42%
- don't know: 9%

**Most “other” mentions:**
1. Annual health check of working place (in hospital)
2. Voluntary health check in hospital
3. School

Base=8’300
Base= 4’580
The route to the hearing aid: Sources of information and drop-out rates
Hearing aid centers, doctors and optical shops are the most important sources of information and therefore the major gatekeepers.

Where did you gather information about hearing aids? Please check all that apply. (This question included Japan-specific answers.)

- Internet research combined
- Hearing Aid Center
- Optical shop
- Family doctor, ear doctor (ENT)
- Internet research: websites of hearing aids manufacturers
- Articles in magazines or newspapers
- Print ads received in your mailbox
- Internet research: other websites, google...
- Conversations with friends/relatives already fitted with a hearing aid
- Internet research: websites of hearing aid clinics
- Friend / relative
- Child
- Spouse
- Other shop
- I did not gather information about hearing aids

© Anovum 2018 - JapanTrak 2018
Of those who discussed the hearing loss with a doctor, 78% talked to an ENT first and 22% talked to the family doctor first.

Those who discussed hearing loss with family doctor and/or ENT:
Who was the doctor you discussed your hearing loss with for the first time – your family doctor or the ENT specialist?

- Ear doctor (ENT specialist): 78%
- Your family doctor: 22%

Total n= 579

- Hearing aid (n=307): 70%
- Hearing loss but no hearing aid (n=272): 81%
The route to the hearing aid

- Impaired: 100%
- ENT/Doctor: 42%
  - Discussed hearing loss with ear doctor and/or family doctor: 14%
  - Positive medical advice (ear doctor or family doctor recommend further action): 17%
- Recommend: 14%
  - Discussed hearing loss with HA dispenser/audiologist: 15%
  - Positive advice HA dispenser/audiologist: 14%
- Owner: 14%

Drop out:
- Impaired: 58%
- ENT/Doctor: 66%

Base: n=1'306

Hearing aid dispenser was asked in general without any further specification.
Much higher drop-out-rates for the lower hearing loss segments

Top 50% hearing loss*

![Graph showing drop-out rates for Top 50% hearing loss segments.]

Low 50% hearing loss*

![Graph showing drop-out rates for Low 50% hearing loss segments.]

* Construction of 6-groups: A factor analysis was performed to identify one factor "degree of hearing loss". The following questions were included in the factor:
- Number of ears impaired (one or two)
- Stated hearing loss (Mild to Profound)
- Scores on 6 APHAB-EC – like questions (Scaled 1-5)
- When NOT using a hearing aid, how difficult is it for you to follow conversations in the presence of noise

People were segmented into 6 groups of same size (16.67% of all hearing impaired in the sample).

© Anovum 2018 - JapanTrak 2018
The route to the hearing aid: GP/Family doctor

Have you discussed your hearing problem with your family doctor?

---

**% Discussed with GP**

<table>
<thead>
<tr>
<th>Category</th>
<th>Total hearing impaired</th>
<th>HA owner</th>
<th>Hearing impaired non-owners</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>30%</td>
<td>30%</td>
<td>23%</td>
</tr>
<tr>
<td></td>
<td>29%</td>
<td>64%</td>
<td>24%</td>
</tr>
<tr>
<td></td>
<td>30%</td>
<td>59%</td>
<td>25%</td>
</tr>
</tbody>
</table>

---

**What did he/she recommend?**

**HA owner (Base: 253)**

- Referred to a hearing aid dispenser/audiologist: 38%
- Referred to an ear doctor (ENT): 19%
- Recommended to get a hearing aid: 52%
- Recommended no further action: 18%

**Impaired non-owner (Base: 186)**

- Referred to a hearing aid dispenser/audiologist: 7%
- Referred to an ear doctor (ENT): 13%
- Recommended to get a hearing aid: 10%
- Recommended no further action: 75%

---

JapanTrak 2018 ■ JapanTrak 2015 ■ JapanTrak 2012
Base: 1'306 ■ Base: 1'216 ■ Base: 1'348

© Anovum 2018 - JapanTrak 2018
Page 27
The route to the hearing aid: ENT
Have you discussed your hearing problem with an ear doctor (ENT)?

<table>
<thead>
<tr>
<th>% Discussed with ENT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total hearing impaired</strong></td>
</tr>
<tr>
<td>HA owner</td>
</tr>
<tr>
<td>36%</td>
</tr>
<tr>
<td>34%</td>
</tr>
<tr>
<td>76%</td>
</tr>
</tbody>
</table>

What did he/she recommend?

**HA owner (Base: 259)**
- Did prescribe a hearing aid: 58%
- Referred to a hearing aid dispenser / audiologist: 42%
- Recommended no further action: 17%

**Impaired non-owner (Base: 299)**
- Did prescribe a hearing aid: 6%
- Referred to a hearing aid dispenser / audiologist: 6%
- Recommended no further action: 89%
The route to the hearing aid: HA dispenser
Have you discussed your hearing problem with a Hearing Aid Dispenser?

<table>
<thead>
<tr>
<th>% Discussed with hearing aid dispenser</th>
<th>What did he/she recommend?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total hearing impaired</td>
<td></td>
</tr>
<tr>
<td>HA owner</td>
<td>Recommended to get a hearing aid: 100%</td>
</tr>
<tr>
<td>Impaired non-owners</td>
<td>Recommended not to get a hearing aid: 0%</td>
</tr>
<tr>
<td>HA owner</td>
<td>Recommended to get a hearing aid: 72%</td>
</tr>
<tr>
<td>Impaired non-owners</td>
<td>Recommended not to get a hearing aid: 28%</td>
</tr>
</tbody>
</table>

Hearing aid dispenser was asked in general without any further specification.

© Anovum 2018 - JapanTrak 2018
Recommendations by profession

- GP (N=439):
  - Referred to an ear doctor (ENT): 17%
  - Referred to a hearing aid dispenser: 15%
  - Recommended to get a hearing aid: 24%
  - Recommended no further action: 17%

- ENT (N=558):
  - Referred to an ear doctor (ENT): 22%
  - Referred to a hearing aid dispenser: 17%
  - Recommended to get a hearing aid: 67%
  - Recommended no further action: 12%

- Hearing aid dispenser (N=347):
  - Referred to an ear doctor (ENT): 88%
  - Referred to a hearing aid dispenser: 12%
  - Recommended to get a hearing aid: 0%
  - Recommended no further action: 0%
Hearing aid shops are not very well known

In the area where you live, are you aware of any hearing aid shop?

- Yes
- No
- Don’t know

<table>
<thead>
<tr>
<th>Category</th>
<th>Yes</th>
<th>No</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>37%</td>
<td>42%</td>
<td>21%</td>
</tr>
<tr>
<td>Hearing loss but no hearing aid</td>
<td>21%</td>
<td>38%</td>
<td>23%</td>
</tr>
<tr>
<td>Hearing aid owner</td>
<td>9%</td>
<td>68%</td>
<td>23%</td>
</tr>
</tbody>
</table>

Unweighted Sample Size = 1306

© Anovum 2018 - JapanTrak 2018
Only 24% of the hearing impaired know the expression “Nintei - Hocyouki - Senmon - Ten” (“certified hearing aid shop”)

Do you know, what the following expressions mean? Nintei - Hocyouki - Senmon - Ten

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>76%</td>
<td>24%</td>
</tr>
<tr>
<td>Hearing loss but no hearing aid</td>
<td>81%</td>
<td>19%</td>
</tr>
<tr>
<td>Hearing aid owner</td>
<td>43%</td>
<td>57%</td>
</tr>
</tbody>
</table>

Unweighted Sample Size = 1306

© Anovum 2018 - JapanTrak 2018
Only 16% of the hearing impaired know the expression “Nintei - Hocyouki - Ginou - Sha” (“certified hearing aid worker”)

Do you know, what the following expressions mean? Nintei - Hocyouki - Ginou - Sha

<table>
<thead>
<tr>
<th>Total</th>
<th>Hearing loss but no hearing aid</th>
<th>Hearing aid owner</th>
</tr>
</thead>
<tbody>
<tr>
<td>84%</td>
<td>11%</td>
<td>54%</td>
</tr>
</tbody>
</table>

Unweighted Sample Size = 1306
Only 3% of the hearing impaired know the expression “Techno-aid-kyoukai” ("association technical aids")

Do you know, what the following expressions mean? Techno-aid-kyoukai

- Total: 97% Yes, 3% No
- Hearing loss but no hearing aid: 98% Yes, 2% No
- Hearing aid owner: 88% Yes, 12% No

Unweighted Sample Size = 1306

© Anovum 2018 - JapanTrak 2018
Potential social cost-savings due to the use of hearing aids: Work competitiveness, depressive symptoms, sleep quality
**Work competitiveness:** 93% of the working hearing aid owners state their hearing aid(s) are useful on their job.

**How useful are your hearing aids on your job?**

- 54% Of significant use
- 39% Of some use
- 7% Of no use

Base: N=150
Work competitiveness: People with hearing aids recognize that hearing aids increase the chance of hearing impaired to get promoted, to get the right job and to get more salary.

I think that people with an untreated hearing loss tend to be less promoted in their job

I think that people with an untreated hearing loss tend not to get the job they deserve

I think that people with an untreated hearing loss tend to be under salaried

Base: Hearing loss, no hearing aid =741/ hearing aid n=382
**General health problems:** Hearing aid owners have a lower risk of being depressed (PHQ-2 Screening) compared to impaired non-owners with comparable hearing loss (Top50% hearing loss group*).

**Depression symptoms:**
**PHQ-2 Screening:**
In the last 2 weeks:
- Little interest or pleasure
- Feeling down, depressed, hopeless

---

**Construction of 6-groups:** A factor analysis was performed to identify one factor “degree of hearing loss”. The following questions were included in the factor:
- Number of ears impaired (one or two)
- Stated hearing loss (Mild to Profound)
- Scores on 6 APHAB-EC - like questions (Scaled 1-5)
- When NOT using a hearing aid, how difficult is it for you to follow conversations in the presence of noise

People were segmented into 6 groups of same size (16.67% of all hearing impaired in the sample).

© Anovum 2018 - JapanTrak 2018
General health problems: Compared to impaired hearing aid non-owners with significant hearing loss (Top 50% hearing loss*), hearing aid owners feel less exhausted in the evenings.

- **In the evenings I often feel physically exhausted**
  - Hearing aid owners: 13% Disagree strongly, 31% Rather disagree, 19% Neutral, 30% Rather agree, 7% Strongly agree.
  - Top 50% hearing loss, no hearing aid: 7% Disagree strongly, 23% Rather disagree, 15% Neutral, 38% Rather agree, 17% Strongly agree.

- **In the evenings I often feel mentally exhausted**
  - Hearing aid owners: 15% Disagree strongly, 34% Rather disagree, 20% Neutral, 22% Rather agree, 8% Strongly agree.
  - Top 50% hearing loss, no hearing aid: 16% Disagree strongly, 22% Rather disagree, 16% Neutral, 24% Rather agree, 22% Strongly agree.

Base: hearing aid n=351 / Top 50% no hearing aid =137

*Construction of 6-groups: A factor analysis was performed to identify one factor “degree of hearing loss”. The following questions were included in the factor:
- Number of ears impaired (one or two)
- Stated hearing loss (Mild to Profound)
- Scores on 6 APHAB-EC – like questions (Scaled 1-5)
- When NOT using a hearing aid, how difficult is it for you to follow conversations in the presence of noise

People were segmented into 6 groups of same size (16.67% of all hearing impaired in the sample).
**General health problems:** Quality of sleep seems to improve if hearing impaired use hearing aids

Are you generally satisfied with the quality of your sleep?

- Top 50% hearing loss, no hearing aid (n=141)
  - Yes: 49%
  - No: 51%

- Hearing aid (n=354)
  - Yes: 67%
  - No: 33%
Between 12% and 18% of hearing impaired think that hearing loss could be linked to depression, sleeping disorders, dementia or back problems/stiff neck.

Please tick all of the health issues below which you think could be linked to one’s hearing loss.

- Back problems / stiff neck*: 18%
- Dementia: 14%
- Sleeping disorder: 14%
- Depression: 12%
- High blood pressure: 11%
- Poor eyesight: 7%
- Diabetes: 6%

Hearing loss is not linked to any of those health issues: 61%

Hearing impaired, N=1’303
*JapanTrak specific wording
3. Analysis of hearing aid owners
Hearing aid ownership, awareness of hearing loss before getting hearing aids, lifetime of hearing aids and usage
Low adoption rates within mild and moderate hearing loss

<table>
<thead>
<tr>
<th>Stated hearing loss</th>
<th>(% of impaired population*)</th>
<th>Adoption rate %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2018</td>
</tr>
<tr>
<td>Profound</td>
<td>(2%)</td>
<td>1%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4%</td>
</tr>
<tr>
<td>Severe</td>
<td>(6%)</td>
<td>4%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>14%</td>
</tr>
<tr>
<td>Moderate</td>
<td>(52%)</td>
<td>44%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15%</td>
</tr>
<tr>
<td>Mild</td>
<td>(39%)</td>
<td>35%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10%</td>
</tr>
</tbody>
</table>

Base: n= 1’161
Sums can differ from 100% due to rounding
* combined “severe” and “profound” because n is too small
43% of the currently owned HAs were bought in the last two years

**Age of currently owned HAs (Mean):**
- **2018:** 3.5 years
- **2015:** 4.1 years
- **2012:** 3.5 years
58% are first time users, 16% own hearing aids for the second time

How many hearing aids have you used so far including the current hearing aids? (one pair counts as one)

- 58% have not used any hearing aids
- 16% have used 1 hearing aid
- 8% have used 2 hearing aids
- 8% have used 3 hearing aids
- 5% have used 4 hearing aids
- 5% have used 5 hearing aids
- 5% have used 6 or more hearing aids

For this analysis «First time users» were set to «1» – they did not see the question

Base: N=421
On average 4-6 years pass between becoming aware of the hearing loss and the purchase of hearing aids. Hearing aids are used for 5 years before they are being replaced.

**Current HAs = first HAs?**

- 2012: 51%
- 2015: 52%

- Yes: 58%
- No: 42%

HA-owner, n=421

**How many years did you own your previous HAs?**

- 34%
- 39%
- 23%
- 4%

1-3 years  | 4-6 years  | 7-10 years  | 11 years or longer
---|---|---|---
34% | 39% | 23% | 4%

Base: n=167

Age of HA before it has been replaced:
- 2018: 5 years (median)
- 2015: 5 years (median)
- 2012: 4 years (median)

**Thinking back before you purchased your first hearing aid: How many years have passed since you became aware of your hearing loss until you purchased a hearing aid? (Scale recoded)**

- 18%
- 23%
- 17%
- 29%
- 12%

1 year  | 2 years  | 3 years  | 4-6 years  | more than 6 years
---|---|---|---|---
18% | 23% | 17% | 29% | 12%

Base: n=234
People are around 70 years old when they feel the need for a hearing aid

How old were you when you felt the need for a hearing aid?

- Median: 70 years
- Base: N=421
54% of all HA owners think they should have gotten their HAs sooner! Main reason is missing out on social life.

Thinking back before you obtained your first hearing aid(s): do you think, you should have gotten them sooner?

IF YES:
What are the reasons why you think you should have gotten your hearing aid(s) sooner? What are the opportunities you think you have missed because of this?
Please tick all that apply

- Better social life: 72%
- Better mental/emotional health: 49%
- Better performance at work: 14%
- Less fatigue in the evening: 6%
- Other opportunity: 5%

Base: n=226
12% received some kind of reimbursement from the government. Only 7% of non-owners know the system of supplying hearing aid(s) by the government.

**Owners:** Was any part or all of your hearing aid(s) paid by the government?

**Non-owners:** Do you know the system of supplying hearing aid(s) by government?
Generally people are not aware that hearing aids are untaxed articles in the VAT system.

Do you know that hearing aids are untaxed articles in the Japanese Value added Tax system?
Total hearing impaired: 12% yes (n=1306)

- **2018**
  - HA owners (n=421)
    - 64% responded no.
    - 36% responded yes.
    - For 2015: 46% yes, 54% no.
  - Non-owners (n=885)
    - 95% responded no.
    - 5% responded yes.
    - For 2015: 7% yes, 93% no.

© Anovum 2018 - JapanTrak 2018
Most medical devices were sold at a hearing aid center, PSAP’s/OTC are sold online

Would you classify your hearing aid as a... (n=421)

- A personal sound amplifier (PSAP, OTC hearing aid). This is a device that amplifies sound but is NOT fit by a hearing care professional, 14%
- A medical device that is sold and fitted by a hearing care professional, 85%
- Don't know, 1%

Where was your most current hearing aid purchased?

- Hearing Aid Center 71%
- Optical Shop 15%
- Online/Internet 67%
- Hospital/clinic 8%
- Was a present 15%
- Electric shop 2%
- Mail order: Newspaper 11%
- Mail order: Magazine 2%
- Mail order: TV 5%
- Administration 1%
- Other 0%
- Don't know 0%
- Mail order: Radio 0%
- PSAP, OTC NOT fit by a hearing care professional, etc. n=65
Recommendation intention of the place where the hearing aid(s) have been obtained low.

Considering your complete experience, how likely would you be to recommend the place where you obtained your hearing aids to a friend or colleague?

**NPS = PROMOTERS – DETRACTORS = -58**

HA-owner, n=421
Recommendation intention of the place where the hearing aid(s) have been obtained low.

Considering your complete experience, how likely would you be to recommend the place where you obtained your hearing aids to a friend or colleague?

**DETRACTORS**
- Hearing aid centers: 58%
- Optical Shop: 82%
- Online/Internet: 95%

**PROMOTERS**
- 9%
- 0%
- 0%

**PASSIVES**
- 33%
- 18%
- 5%

NPS = PROMOTERS – DETRACTORS

- Hearing aid centers: -49
- Optical Shop: -82
- Online/Internet: -95
On average, HAs are worn 7.6 hours a day – trend increasing

How many hours a day are HA worn? (cum. %)

HA-worn:
2018: n=421
2015: n=416
2012: n=450

HA-owner:
2018: n=421
2015: n=416
2012: n=450

© Anovum 2018 - JapanTrak 2018
47% of today’s hearing aid owners are aware of their hearing aid brand

Are you aware of the brand of your hearing aid(s)?

- Yes, I know it by heart: 47%
- No, but I could find out: 35%
- No, and can't find out: 18%

Base: N=421

© Anovum 2018 - JapanTrak 2018
16% of the HA owners use an accessory for their hearing aids. 63% of those who use an accessory, are satisfied with it.

Have you been informed by your hearing care professional about hearing aid accessories, such as TV-Streamer/Apps/Remote Control/etc.? *(HA owners, n=421)*

- 14% Yes
- 74% No
- 12% don’t know / no answer

Do you personally use accessories for your hearing aids (TV-Streamer/Apps/Remote Control/etc.)? *(HA owners, n=421)*

- 16% Yes
- 84% No

*IF ACCESSORIES USED (n=49):*
Overall, how satisfied with the performance of your accessory(s)?

- 8% very dissatisfied
- 12% dissatisfied
- 18% somewhat dissatisfied
- 32% neutral
- 26% somewhat satisfied
- 5% satisfied
44% are aware that a certified hearing aid technician fitted the hearing aids

Has Nintei-Hocyouki-Ginousya (certified HA technician) consulted and fitted your hearing aid when you bought it?

- Total n=421
- 47% Don't know
- 44% Yes
- 9% No

A medical device that is sold and fitted by a hearing care professional n=349
- 46% Don't know
- 50% Yes
- 4% No

A personal sound amplifier (PSAP, OTC hearing aid). This is a device that amplifies sound but is NOT fit by a hearing care professional. N=65
- 53% Don't know
- 42% Yes
- 5% No
Hearing aids need to be refitted about 3-10 times

How many times your hearing aid(s) had to be adjusted by a hearing healthcare professional until it was working satisfactory for you?

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Total n=421</th>
<th>A medical device that is sold and fitted by a hearing care professional n=349</th>
<th>A personal sound amplifier (PSAP, OTC hearing aid). This is a device that amplifies sound but is NOT fit by a hearing care professional. N=65</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>15%</td>
<td>14%</td>
<td>25%</td>
</tr>
<tr>
<td></td>
<td>15%</td>
<td>14%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6%</td>
<td>7%</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>9%</td>
<td>11%</td>
<td>20%</td>
</tr>
<tr>
<td></td>
<td>25%</td>
<td>25%</td>
<td>20%</td>
</tr>
<tr>
<td></td>
<td>16%</td>
<td>17%</td>
<td>9%</td>
</tr>
<tr>
<td></td>
<td>8%</td>
<td>9%</td>
<td>3%</td>
</tr>
<tr>
<td></td>
<td>6%</td>
<td>3%</td>
<td>23%</td>
</tr>
</tbody>
</table>

© Anovum 2018 - JapanTrak 2018
An average price for a hearing aid is 150’000 yen

How much have you paid for your hearing aids (PER EAR)

- Total n=343
- A medical device that is sold and fitted by a hearing care professional n=282
- A personal sound amplifier (PSAP, OTC hearing aid). This is a device that amplifies sound but is NOT fit by a hearing care professional. N=56

More than 500,000 yen
- 4% (Total)

400,001 - 500,000 yen
- 2% (Total)

300,001 - 400,000 yen
- 1% (Total)

200,001 - 300,000 yen
- 1% (Total)

100,001 -200,000 yen
- 2% (Total)

50,001 -100,000 yen
- 1% (Total)

40,001 -50,000 yen
- 1% (Total)

30,001 -40,000 yen
- 1% (Total)

20,001 -30,000 yen
- 1% (Total)

10,001 -20,000 yen
- 2% (Total)

Less than 10,000 yen
- 3% (Total)
Satisfaction with hearing aids and drivers
66% of the hearing aid owners say their hearing aid works better than or as expected

How have the expectations you had towards hearing aids before trying them on for the first time been met?

- 50% hearing aids work better than I expected
- 34% hearing aids work as I expected
- 16% hearing aids work worse than I expected

Base: N=421
Overall, how satisfied are you with your hearing aid(s)?

Overall satisfaction with HA is 38%

- Total HA-user (n=421)
  - 4% Very dissatisfied
  - 6% Dissatisfied
  - 24% Somewhat dissatisfied
  - 28% Neutral
  - 19% Somewhat satisfied
  - 16% Satisfied
  - 3% Very satisfied

- BTE (n=210)
  - 5% Very dissatisfied
  - 24% Dissatisfied
  - 30% Somewhat dissatisfied
  - 23% Neutral
  - 15% Somewhat satisfied
  - 3% Satisfied
  - 3% Very satisfied

- ITE/ITC (n=161)
  - 7% Very dissatisfied
  - 6% Dissatisfied
  - 32% Somewhat dissatisfied
  - 16% Neutral
  - 18% Somewhat satisfied
  - 20% Satisfied
  - 1% Very satisfied

- Up to two years old (n=172)
  - 3% Very dissatisfied
  - 6% Dissatisfied
  - 22% Somewhat dissatisfied
  - 20% Neutral
  - 22% Somewhat satisfied
  - 25% Satisfied
  - 2% Very satisfied

- Older than 2 years (n=222)
  - 5% Very dissatisfied
  - 5% Dissatisfied
  - 22% Somewhat dissatisfied
  - 34% Neutral
  - 19% Somewhat satisfied
  - 10% Satisfied
  - 4% Very satisfied

- Wear hearing aids in both ears (n=192)
  - 4% Very dissatisfied
  - 8% Dissatisfied
  - 20% Somewhat dissatisfied
  - 27% Neutral
  - 21% Somewhat satisfied
  - 22% Satisfied
  - 4% Very satisfied

- Wear hearing aids in one ear (n=228)
  - 4% Very dissatisfied
  - 9% Dissatisfied
  - 30% Somewhat dissatisfied
  - 30% Neutral
  - 18% Somewhat satisfied
  - 9% Satisfied
  - 1% Very satisfied
Satisfaction with hearing aids purchased at hearing aid centers is higher than with those purchased elsewhere. Satisfaction with those bought on the internet is devastating.

### Where was your most current hearing aid purchased?

<table>
<thead>
<tr>
<th>Location</th>
<th>% Distribution</th>
<th>Base: N=421</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hearing Aid Center</td>
<td>61.0% (n=245)</td>
<td></td>
</tr>
<tr>
<td>Optical Shop</td>
<td>12.9% (n=58)</td>
<td></td>
</tr>
<tr>
<td>Online/Internet</td>
<td>9.4% (n=55)</td>
<td></td>
</tr>
<tr>
<td>Hospital/clinic</td>
<td>7.3% (n=28)</td>
<td></td>
</tr>
<tr>
<td>Was a present</td>
<td>3.3% (n=23)</td>
<td></td>
</tr>
<tr>
<td>Electric shop</td>
<td>1.9%</td>
<td></td>
</tr>
<tr>
<td>Mail order: Newspaper</td>
<td>1.6%</td>
<td></td>
</tr>
<tr>
<td>Mail order: Magazine</td>
<td>1.1%</td>
<td></td>
</tr>
<tr>
<td>Mail order: TV</td>
<td>0.7%</td>
<td></td>
</tr>
<tr>
<td>Administration</td>
<td>0.6%</td>
<td></td>
</tr>
<tr>
<td>Mail order: Radio</td>
<td>0.0%</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>0.2%</td>
<td></td>
</tr>
<tr>
<td>Don't know</td>
<td>0.1%</td>
<td></td>
</tr>
</tbody>
</table>

### Overall satisfaction with Hearing aids

<table>
<thead>
<tr>
<th>Year</th>
<th>Satisfied</th>
<th>Dissatisfied</th>
<th>Somewhat dissatisfied</th>
<th>Neutral</th>
<th>Somewhat satisfied</th>
<th>Satisfied</th>
<th>Very satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>45%</td>
<td>21%</td>
<td>27%</td>
<td>21%</td>
<td>22%</td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>31%</td>
<td>45%</td>
<td>37%</td>
<td>21%</td>
<td>23%</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>15%</td>
<td>34%</td>
<td>13%</td>
<td>45%</td>
<td>17%</td>
<td>10%</td>
<td></td>
</tr>
</tbody>
</table>

- very dissatisfied
- dissatisfied
- somewhat dissatisfied
- neutral
- somewhat satisfied
- satisfied
- very satisfied

Base: N=421
Overall Satisfaction with HA: Country comparison

<table>
<thead>
<tr>
<th>Overall satisfaction 2012</th>
<th>UK</th>
<th>Belgium</th>
<th>Netherlands</th>
<th>Poland</th>
<th>France</th>
<th>Switzerland</th>
<th>Denmark</th>
<th>Norway</th>
<th>Italy</th>
<th>Japan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>72%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>80%</td>
<td>84%</td>
<td>70%</td>
<td>72%</td>
<td>70%</td>
<td>36%</td>
</tr>
<tr>
<td>Overall satisfaction 2015/16/17</td>
<td>70%</td>
<td>80%</td>
<td>73%</td>
<td>80%</td>
<td>84%</td>
<td>81%</td>
<td>71%</td>
<td>-</td>
<td>79%</td>
<td>39%</td>
</tr>
<tr>
<td>Overall satisfaction 2018</td>
<td>74%</td>
<td></td>
<td></td>
<td>82%</td>
<td></td>
<td></td>
<td></td>
<td>81%</td>
<td></td>
<td>38%</td>
</tr>
</tbody>
</table>
### Satisfaction with current hearing aids

#### Dispenser
- Quality of service during hearing aid fitting period
  - Professionalism of dispenser: 9% dissatisfied, 62% satisfied
  - Quality of dispensers counseling: 9% dissatisfied, 61% satisfied
  - Quality of service after purchase: 7% dissatisfied, 60% satisfied

#### Sound quality
- Comfort with loud sounds: 12% dissatisfied, 59% satisfied
- Clearness of tone and sound: 30% dissatisfied, 34% satisfied
- Richness or fidelity of sound: 35% dissatisfied, 31% satisfied
- Natural sounding: 26% dissatisfied, 41% satisfied

#### Product features
- Reliability: 18% dissatisfied, 50% satisfied
- Visibility to others: 19% dissatisfied, 48% satisfied
- Ease of changing battery: 15% dissatisfied, 43% satisfied
- Overall fit/ Comfort: 26% dissatisfied, 41% satisfied
- Managing whistling/feedback/buzzing: 35% dissatisfied, 40% satisfied
- Value (performance versus money spent): 30% dissatisfied, 34% satisfied
- Battery life: 35% dissatisfied, 29% satisfied

---

%dissatisfied = % very dissatisfied + % dissatisfied + % somewhat dissatisfied
%satisfied = % somewhat satisfied + % satisfied + % very satisfied

© Anovum 2018 - JapanTrak 2018

* % of satisfied HA owners compared to JapanTrak 2015

HA-owner, n=421
Satisfaction with current hearing aids

Listening situation

- Conversation with one Person
- Watching TV
- In a store, when shopping
- Conversation in small groups
- At a movie theater
- Outdoors
- At home with family members
- In the workplace
- When riding in a car
- When talking to children
- Conversation in large groups
- On the telephone
- Listening to Music
- Leisure activities
- In a larger lecture hall (e.g., theater, concert hall,...)
- In school or a classroom (as an observer or student)
- Use in noisy situations
- Talking / conversation in background**

% of satisfied HA owners compared to JapanTrak 2015

** JapanTrak specific

Trend*

-8%
-13%
-11%
-13%
-12%
-12%
-6%
2%
4%
-5%
9%
4%
4%
4%
7%
-2%
2%
-
Most people with only one hearing aid believe it is the same effect compared with two hearing aids.

**Do you wear hearing aids monaurally or binaurally?**

- 53% Binaurally (in both ears)
- 44% Monaurally (in one ear)
- 3% I don’t use them anymore

84% of those who wear monaurally have binaural loss!

**What are the reasons why you wear hearing aids only in one ear (monaural)?**

- I believe it is the same effect compared with binaural: 34%
- I have only hearing difficulties in one ear: 23%
- Shortage of budget: 23%
- Recommendation of the doctor (GP or ENT): 17%
- Recommendation of the hearing aid dispenser: 14%
- Other (70% of other mentions said: Cannot hear in one ear at all): 13%

Base: Step2 Sample: N=421/224

© Anovum 2018 - JapanTrak 2018
Binaural treatment leads to higher satisfaction, longer use time per day and less unused hearing aids

<table>
<thead>
<tr>
<th>% Satisfied</th>
<th>Average use time per day in hours</th>
<th>Hearing aids in the drawer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hearing loss both ears; hearing aids in both ears (n=176)</td>
<td>42%</td>
<td>8.9</td>
</tr>
<tr>
<td>Hearing loss both ears; hearing aids in one ear (n=160)</td>
<td>25%</td>
<td>6.7</td>
</tr>
</tbody>
</table>

- very dissatisfied
- dissatisfied
- neutral
- somewhat dissatisfied
- somewhat satisfied
- satisfied
Satisfaction with current hearing aids I
Binaural vs. monaural treatment

<table>
<thead>
<tr>
<th>Dispenser</th>
<th>% satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of service during hearing aid fitting period</td>
<td>49%</td>
</tr>
<tr>
<td>Professionalism of dispenser</td>
<td>52%</td>
</tr>
<tr>
<td>Quality of dispensers counseling</td>
<td>50%</td>
</tr>
<tr>
<td>Quality of service after purchase</td>
<td>43%</td>
</tr>
</tbody>
</table>

| Sound quality signal process.                  |             |
| Comfort with loud sounds                       | 24%         |
| Clearness of tone and sound                    | 24%         |
| Richness or fidelity of sound                  | 24%         |
| Natural sounding                               | 22%         |

| Product features                               |             |
| Reliability                                    | 39%         |
| Visibility to others                           | 31%         |
| Ease of changing battery                       | 34%         |
| Overall fit/ Comfort                            | 32%         |
| Managing whistling/feedback/buzzing            | 27%         |
| Value (performance versus money spent)         | 30%         |
| Battery life                                   | 25%         |

- Hearing loss both ears; hearing aids in one ear (n=160)
- Hearing loss both ears; hearing aids in both ears (n=176)
Satisfaction with current hearing aids II
Binaural vs. monaural treatment

<table>
<thead>
<tr>
<th>Listening situation</th>
<th>% satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conversation with one Person</td>
<td>33%</td>
</tr>
<tr>
<td>Watching TV</td>
<td>32%</td>
</tr>
<tr>
<td>In a store, when shopping</td>
<td>34%</td>
</tr>
<tr>
<td>Conversation in small groups</td>
<td>28%</td>
</tr>
<tr>
<td>At a movie theater</td>
<td>36%</td>
</tr>
<tr>
<td>Outdoors</td>
<td>36%</td>
</tr>
<tr>
<td>At home with family members</td>
<td>28%</td>
</tr>
<tr>
<td>In the workplace</td>
<td>35%</td>
</tr>
<tr>
<td>When riding in a car</td>
<td>33%</td>
</tr>
<tr>
<td>When talking to children</td>
<td>22%</td>
</tr>
<tr>
<td>Conversation in large groups</td>
<td>23%</td>
</tr>
<tr>
<td>On the telephone</td>
<td>25%</td>
</tr>
<tr>
<td>Listening to Music</td>
<td>27%</td>
</tr>
<tr>
<td>Leisure activities</td>
<td>23%</td>
</tr>
<tr>
<td>In a larger lecture hall (e.g., theater, concert hall,...)</td>
<td>27%</td>
</tr>
<tr>
<td>In school or a classroom (as an observer or student)</td>
<td>22%</td>
</tr>
<tr>
<td>Use in noisy situations</td>
<td>22%</td>
</tr>
<tr>
<td>Talking / conversation in background**</td>
<td>21%</td>
</tr>
</tbody>
</table>

- Hearing loss both ears; hearing aids in one ear (n=160)
- Hearing loss both ears; hearing aids in both ears (n=176)
Those hearing impaired who own PSAP/OTC hearing aids believe that it is reasonable for their purposes.

Would you classify your hearing aid as a... (n=421)

- **A medical device that is sold and fitted by a hearing care professional**, 85%
- **A personal sound amplifier (PSAP, OTC hearing aid)**. This is a device that amplifies sound but is NOT fit by a hearing care professional., 14%
- **Don't know**, 1%
- **Reasonable for my purposes** 59%
- **Easy to order / access** 25%
- **It was a present** 15%
- **Recommended by friends** 0%
- **Other** 0%

**Total n=65**
Satisfaction with medical hearing devices fitted by a hearing care professional is much higher than with PSAP’s/OTC hearing aids.

<table>
<thead>
<tr>
<th>% Satisfied</th>
<th>Average use time per day in hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>40%</td>
<td>8.1</td>
</tr>
<tr>
<td>21%</td>
<td>4.9</td>
</tr>
</tbody>
</table>

A medical device that is sold and fitted by a hearing care professional, n=348

A personal sound amplifier (PSAP, OTC hearing aid). This is a device that amplifies sound but is NOT fit by a hearing care professional, N=65

100% of these devices were bought online/mail order or were a present

100% of these devices were fit by a HCP

very dissatisfied
dissatisfied
neutral
somewhat dissatisfied
satisfied

© Anovum 2018 - JapanTrak 2018
A medical device that is sold and fitted by a hearing care professional, n=348

A personal sound amplifier (PSAP, OTC hearing aid). This is a device that amplifies sound but is NOT fit by a hearing care professional. N=65
Satisfaction with current hearing aids II
Medical device vs. PSAP/OTC

Listening situation

Conversation with one Person
Watching TV
In a store, when shopping
Conversation in small groups
At a movie theater
Outdoors
At home with family members
In the workplace
When riding in a car
When talking to children
Conversation in large groups
On the telephone
Listening to Music
Leisure activities
In a larger lecture hall (e.g., theater, concert hall,...)
In school or a classroom (as an observer or student)
Use in noisy situations
Talking / conversation in background**

100% of these devices were bought online/mall order or were a present
100% of these devices were fit by a HCP with high quality of service

% satisfied

53%
47%
47%
48%
48%
48%
47%
47%
42%
45%
47%
47%
42%
42%
39%
38%
37%
37%
36%
36%
36%
34%
36%
34%
34%
34%
34%
30%
29%
28%
27%
26%
25%
25%
23%
23%
22%
22%
21%
20%
20%
20%
19%
19%
17%
17%
15%
14%
0%
10%
20%
30%
40%
50%
60%
70%
80%

A medical device that is sold and fitted by a hearing care profession professional n=348

A personal sound amplifier (PSAP, OTC hearing aid). This is a device that amplifies sound but is NOT fit by a hearing care professional. N=65
Satisfaction with medical hearing devices fitted by a hearing care professional is much higher than with PSAP’s/OTC hearing aids.

A medical device that is sold and fitted to by a hearing care professional with satisfying service quality* n=199

- 15%: very dissatisfied
- 22%: dissatisfied
- 29%: somewhat dissatisfied
- 25%: neutral
- 6%: somewhat satisfied
- 6%: satisfied

% Satisfied: 60%
Average use time per day in hours: 8.1

A personal sound amplifier (PSAP, OTC hearing aid). This is a device that amplifies sound but is NOT fit by a hearing care professional. N=65

- 10%: very dissatisfied
- 15%: dissatisfied
- 31%: somewhat dissatisfied
- 23%: neutral
- 17%: somewhat satisfied
- 4%: satisfied

% Satisfied: 21%
Average use time per day in hours: 4.9

100% of these devices were fit by a HCP with high quality of service
100% of these devices were bought online/mail order or were a present

* a) Fitted by a hearing care professional at least once
   b) Satisfied with quality of service during fitting period
# Satisfaction with current hearing aids I
## Medical device vs. PSAP/OTC

### Dispenser
- Quality of service during hearing aid fitting period
  - Professionalism of dispenser
    - 100% satisfied
  - Quality of dispensers counseling
    - 94% satisfied
  - Quality of service after purchase
    - 94% satisfied

### Sound quality
- Signal process.
  - Comfort with loud sounds
    - 54% satisfied
  - Cleanness of tone and sound
    - 50% satisfied
  - Richness or fidelity of sound
    - 49% satisfied
  - Natural sounding
    - 45% satisfied

### Product features
- Reliability
  - 80% satisfied
- Visibility to others
  - 74% satisfied
- Ease of changing battery
  - 61% satisfied
- Overall fit/Comfort
  - 70% satisfied
- Managing whistling/feedback/buzzing
  - 58% satisfied
- Value (performance versus money spent)
  - 50% satisfied
- Battery life
  - 42% satisfied

---

* A medical device that is sold and fitted to by a hearing care professional with satisfying service quality*  n=199

* A personal sound amplifier (PSAP, OTC hearing aid). This is a device that amplifies sound but is NOT fit by a hearing care professional. N=65
Satisfaction with current hearing aids II
Medical device vs. PSAP/OTC

<table>
<thead>
<tr>
<th>Listening situation</th>
<th>100% of these devices were bought online/mail order or were a present</th>
<th>100% of these devices were fit by a HCP with high quality of service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of service during hearing aid fitting period</td>
<td>34%</td>
<td>34%</td>
</tr>
<tr>
<td>Quality of dispensers counseling</td>
<td>27%</td>
<td>27%</td>
</tr>
<tr>
<td>Clearness of tone and sound</td>
<td>24%</td>
<td>24%</td>
</tr>
<tr>
<td>Natural sounding</td>
<td>24%</td>
<td>24%</td>
</tr>
<tr>
<td>Reliability</td>
<td>45%</td>
<td>45%</td>
</tr>
<tr>
<td>Ease of changing battery</td>
<td>49%</td>
<td>49%</td>
</tr>
<tr>
<td>Managing whistling/feedback/buzzing</td>
<td>74%</td>
<td>74%</td>
</tr>
<tr>
<td>Battery life</td>
<td>61%</td>
<td>61%</td>
</tr>
<tr>
<td>Conversation with one Person</td>
<td>70%</td>
<td>70%</td>
</tr>
<tr>
<td>In a store, when shopping</td>
<td>68%</td>
<td>68%</td>
</tr>
<tr>
<td>At a movie theater</td>
<td>65%</td>
<td>65%</td>
</tr>
<tr>
<td>At home with family members</td>
<td>62%</td>
<td>62%</td>
</tr>
<tr>
<td>When riding in a car</td>
<td>54%</td>
<td>54%</td>
</tr>
<tr>
<td>Conversation in large groups</td>
<td>53%</td>
<td>53%</td>
</tr>
<tr>
<td>Listening to Music</td>
<td>51%</td>
<td>51%</td>
</tr>
<tr>
<td>In a larger lecture hall (e.g., theater, concert hall,...)</td>
<td>48%</td>
<td>48%</td>
</tr>
<tr>
<td>Use in noisy situations</td>
<td>44%</td>
<td>44%</td>
</tr>
</tbody>
</table>

A medical device that is sold and fitted to by a hearing care professioal professional with satisfying service quality*  n=199
A personal sound amplifier (PSAP, OTC hearing aid). This is a device that amplifies sound but is NOT fit by a hearing care professional. N=65
Factors influencing satisfaction with current HA: Sound quality/signal processing is most important for overall satisfaction with HA

<table>
<thead>
<tr>
<th>Dispenser</th>
<th>Influence on overall satisfaction with HA*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of service after purchase</td>
<td>.51</td>
</tr>
<tr>
<td>Quality of service during hearing aid fitting period</td>
<td>.50</td>
</tr>
<tr>
<td>Quality of dispensers counseling</td>
<td>.48</td>
</tr>
<tr>
<td>Professionalism of dispenser</td>
<td>.47</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sound quality signal process.</th>
<th>Influence on overall satisfaction with HA*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Richness or fidelity of sound</td>
<td>.75</td>
</tr>
<tr>
<td>Clearness of tone and sound</td>
<td>.74</td>
</tr>
<tr>
<td>Natural sounding</td>
<td>.73</td>
</tr>
<tr>
<td>Comfort with loud sounds</td>
<td>.66</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Product features</th>
<th>Influence on overall satisfaction with HA*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reliability</td>
<td>.66</td>
</tr>
<tr>
<td>Overall fit/ Comfort</td>
<td>.59</td>
</tr>
<tr>
<td>Value (performance versus money spent)</td>
<td>.59</td>
</tr>
<tr>
<td>Managing whistling/feedback/buzzing</td>
<td>.56</td>
</tr>
<tr>
<td>Battery life</td>
<td>.45</td>
</tr>
<tr>
<td>Visibility to others</td>
<td>.45</td>
</tr>
<tr>
<td>Ease of changing battery</td>
<td>.43</td>
</tr>
</tbody>
</table>

*The Influence has been calculated with a correlation: 0 means no relation between a criterion and overall satisfaction; 1 means a maximal relationship. Read: richness or fidelity of sound is the most important criterion for satisfaction.
Important listening situations

In which of these situations is it most important for you to hear well? (choose up to 5)

<table>
<thead>
<tr>
<th>Situation</th>
<th>Hearing loss Total (n=1'306)</th>
<th>Hearing aid (n=421)</th>
<th>Hearing loss but no hearing aid (n=885)</th>
</tr>
</thead>
<tbody>
<tr>
<td>When talking on a phone</td>
<td>51%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>At home with family members</td>
<td>49%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>In conversations with 1 person</td>
<td>46%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>In conversations with small groups</td>
<td>35%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>When watching TV with others</td>
<td>31%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>In conversations with large groups</td>
<td>29%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>In noisy situations</td>
<td>20%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>In a store, when shopping</td>
<td>20%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>When talking to children</td>
<td>19%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>In the workplace</td>
<td>19%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>In a larger lecture hall (e.g., theater, concert hall, place of worship, etc.)</td>
<td>13%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>When riding in a car</td>
<td>13%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>When listening to music</td>
<td>11%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>During leisure activities (e.g., exercising, taking a walk, etc.)</td>
<td>7%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outdoors</td>
<td>5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>In school or a classroom (as an observer or student)</td>
<td>3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>At a movie theater</td>
<td>3%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Positive impact of hearing aids, quality of life
Significant positive impact of HAs on different aspects: Especially “sense of safety”, “ability to communicate more effectively” and “feelings about yourself” improved

Since you started using your hearing aid(s), please rate the changes you have experienced in each of the following areas, that you believe are due to your hearing aid(s).

<table>
<thead>
<tr>
<th>Area</th>
<th>A lot worse</th>
<th>Worse</th>
<th>The same</th>
<th>Better</th>
<th>A lot better</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sense of safety</td>
<td>7%</td>
<td>44%</td>
<td>42%</td>
<td>6%</td>
<td></td>
</tr>
<tr>
<td>Overall ability to communicate more effectively</td>
<td>6%</td>
<td>51%</td>
<td>34%</td>
<td>6%</td>
<td></td>
</tr>
<tr>
<td>Feelings about yourself</td>
<td>6%</td>
<td>56%</td>
<td>28%</td>
<td>8%</td>
<td></td>
</tr>
<tr>
<td>Confidence in yourself</td>
<td>8%</td>
<td>57%</td>
<td>27%</td>
<td>6%</td>
<td></td>
</tr>
<tr>
<td>Mental ability</td>
<td>6%</td>
<td>58%</td>
<td>29%</td>
<td>4%</td>
<td></td>
</tr>
<tr>
<td>Social life</td>
<td>4%</td>
<td>62%</td>
<td>28%</td>
<td>4%</td>
<td></td>
</tr>
<tr>
<td>Mental/emotional health</td>
<td>8%</td>
<td>58%</td>
<td>27%</td>
<td>5%</td>
<td></td>
</tr>
<tr>
<td>Relationships at home</td>
<td>6%</td>
<td>67%</td>
<td>23%</td>
<td>4%</td>
<td></td>
</tr>
<tr>
<td>Ability to participate in group activities</td>
<td>6%</td>
<td>62%</td>
<td>21%</td>
<td>6%</td>
<td></td>
</tr>
<tr>
<td>Relationships at work</td>
<td>2%</td>
<td>73%</td>
<td>14%</td>
<td>8%</td>
<td></td>
</tr>
<tr>
<td>Physical health</td>
<td>3%</td>
<td>75%</td>
<td>18%</td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td>Sense of independence</td>
<td>5%</td>
<td>72%</td>
<td>16%</td>
<td>4%</td>
<td></td>
</tr>
</tbody>
</table>
Most hearing aid owners feel more confident moving in a city and driving their car since wearing hearing aids!

Since wearing a hearing aid, do you feel more confident moving in a city, e.g. because you hear traffic signals/vehicles approaching?

- Yes: 70%
- No: 30%

Base: N=421
89% of hearing aid owners declare that their hearing aids improve their quality of life at least sometimes.

How often do your hearing aids improve your quality of life?

- Never: 1%
- Rarely: 10%
- Occasionally: 47%
- Regularly: 42%

Base: N=421
4. Analysis of hearing impaired non-owners
Reasons for not having hearing aids and why some people can consider hearing aids as uncomfortable
To analyze reasons of non-adoption we look at the Top 50% HL group, as the structure of hearing loss is more similar to that of HA owners.

Hearing loss characteristics: Owners compared to non-owners

<table>
<thead>
<tr>
<th></th>
<th>% HA Owner (n=421)</th>
<th>%HA-Non-owner Low 50% HL (n=345)</th>
<th>%HA-Non-owner Top 50% HL (n=212)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ears impaired</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unilateral loss</td>
<td>20%</td>
<td>50%</td>
<td>38%</td>
</tr>
<tr>
<td>Bilateral loss</td>
<td>80%</td>
<td>50%</td>
<td>62%</td>
</tr>
<tr>
<td><strong>Perceived loss</strong></td>
<td></td>
<td>More similar hearing loss-structure</td>
<td></td>
</tr>
<tr>
<td>Mild</td>
<td>24%</td>
<td>52%</td>
<td>33%</td>
</tr>
<tr>
<td>Moderate</td>
<td>51%</td>
<td>44%</td>
<td>57%</td>
</tr>
<tr>
<td>Severe</td>
<td>17%</td>
<td>4%</td>
<td>5%</td>
</tr>
<tr>
<td>Profound</td>
<td>7%</td>
<td>0%</td>
<td>5%</td>
</tr>
</tbody>
</table>
## Top 10 reasons for not having a hearing aid (I/II)

<table>
<thead>
<tr>
<th>Reason</th>
<th>Uncomfortable</th>
<th>Somewhat a reason</th>
<th>Not a reason</th>
<th>Base: non owners Top 50% HL: n=212</th>
</tr>
</thead>
<tbody>
<tr>
<td>They do not restore your hearing to normal</td>
<td>46%</td>
<td>15%</td>
<td>39%</td>
<td></td>
</tr>
<tr>
<td>Hearing loss not severe enough</td>
<td>34%</td>
<td>19%</td>
<td>46%</td>
<td></td>
</tr>
<tr>
<td>Hear well enough in most situations</td>
<td>25%</td>
<td>28%</td>
<td>46%</td>
<td></td>
</tr>
<tr>
<td>They do not work well in noisy situations</td>
<td>25%</td>
<td>25%</td>
<td>50%</td>
<td></td>
</tr>
<tr>
<td>Have hearing loss only with low frequency sounds</td>
<td>22%</td>
<td>24%</td>
<td>54%</td>
<td></td>
</tr>
<tr>
<td>Would be embarrassed to wear a hearing aid</td>
<td>17%</td>
<td>26%</td>
<td>57%</td>
<td></td>
</tr>
<tr>
<td>Have hearing loss only with high pitch sounds</td>
<td>19%</td>
<td>22%</td>
<td>59%</td>
<td></td>
</tr>
<tr>
<td>Cannot afford a hearing aid</td>
<td>23%</td>
<td>18%</td>
<td>60%</td>
<td></td>
</tr>
<tr>
<td>Have hearing loss in only one ear</td>
<td>24%</td>
<td>13%</td>
<td>62%</td>
<td></td>
</tr>
</tbody>
</table>
Less important reasons for not having a hearing aid (II/II)

<table>
<thead>
<tr>
<th>Reason</th>
<th>Reason</th>
<th>Somewhat a reason</th>
<th>Not a reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bad design</td>
<td>15%</td>
<td>19%</td>
<td>67%</td>
</tr>
<tr>
<td>Have tinnitus (ringing in ears)</td>
<td>22%</td>
<td>11%</td>
<td>67%</td>
</tr>
<tr>
<td>Have not had hearing tested yet</td>
<td>14%</td>
<td>18%</td>
<td>68%</td>
</tr>
<tr>
<td>Do not know where to get hearing aids</td>
<td>13%</td>
<td>15%</td>
<td>72%</td>
</tr>
<tr>
<td>Do not admit I have a hearing loss in public</td>
<td>13%</td>
<td>15%</td>
<td>74%</td>
</tr>
<tr>
<td>Ear doctors opinion (ENT)</td>
<td>14%</td>
<td>13%</td>
<td>75%</td>
</tr>
<tr>
<td>Have more serious priorities</td>
<td>10%</td>
<td>15%</td>
<td>75%</td>
</tr>
<tr>
<td>Have tried hearing aid and they do not work</td>
<td>14%</td>
<td>10%</td>
<td>76%</td>
</tr>
<tr>
<td>Family doctors opinion (GP)</td>
<td>10%</td>
<td>12%</td>
<td>78%</td>
</tr>
<tr>
<td>Another hearing aid owners opinion</td>
<td>9%</td>
<td>14%</td>
<td>78%</td>
</tr>
<tr>
<td>Do not trust Hearing Aid Dispenser/Audiologist</td>
<td>9%</td>
<td>13%</td>
<td>78%</td>
</tr>
<tr>
<td>Have Sensor-neural hearing loss (nerve deafness)</td>
<td>10%</td>
<td>11%</td>
<td>79%</td>
</tr>
<tr>
<td>I have vision or dexterity problems</td>
<td>4%</td>
<td>15%</td>
<td>81%</td>
</tr>
<tr>
<td>Social / Family opinion such as child, spouse, friend</td>
<td>5%</td>
<td>12%</td>
<td>83%</td>
</tr>
<tr>
<td>Hearing Aid Dispenser/Audiologists opinion</td>
<td>6%</td>
<td>10%</td>
<td>84%</td>
</tr>
<tr>
<td>Hearing problem requires surgery</td>
<td>6%</td>
<td>6%</td>
<td>88%</td>
</tr>
<tr>
<td>Had surgery - hearing aids wont help</td>
<td>4%</td>
<td></td>
<td>92%</td>
</tr>
</tbody>
</table>

Base: non owners Top 50% HL: n=212
## Top 10 reasons for HA owners NOT using them

<table>
<thead>
<tr>
<th>Reason</th>
<th>Reason (n=27)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uncomfortable</td>
<td></td>
</tr>
<tr>
<td>- They do not work well in noisy situations</td>
<td>38%</td>
</tr>
<tr>
<td>- They do not restore your hearing to normal</td>
<td>55%</td>
</tr>
<tr>
<td>- Have tried hearing aid and they do not work</td>
<td>56%</td>
</tr>
<tr>
<td>- Hearing loss not severe enough</td>
<td>57%</td>
</tr>
<tr>
<td>- Have hearing loss in only one ear</td>
<td>28%</td>
</tr>
<tr>
<td>- Have hearing loss only with high pitch sounds</td>
<td>4%</td>
</tr>
<tr>
<td>- Have hearing loss only with low frequency sounds</td>
<td>28%</td>
</tr>
<tr>
<td>- Have tinnitus (ringing in ears)</td>
<td>36%</td>
</tr>
<tr>
<td>- Bad design</td>
<td>10%</td>
</tr>
<tr>
<td>- Hear well enough in most situations</td>
<td>1%</td>
</tr>
<tr>
<td>- Have Sensor-neural hearing loss (nerve deafness)</td>
<td>5%</td>
</tr>
<tr>
<td>- Do not admit I have a hearing loss in public</td>
<td>26%</td>
</tr>
<tr>
<td>- Would be embarrassed to wear a hearing aid</td>
<td>0%</td>
</tr>
<tr>
<td>- Have more serious priorities</td>
<td></td>
</tr>
<tr>
<td>- Social / Family opinion such as child, spouse, friend</td>
<td>11%</td>
</tr>
<tr>
<td>- Had surgery - hearing aids wont help</td>
<td>17%</td>
</tr>
<tr>
<td>- Hearing problem requires surgery</td>
<td>9%</td>
</tr>
<tr>
<td>- I have vision or dexterity problems</td>
<td>6%</td>
</tr>
</tbody>
</table>

Owners who don't use, n=27
Meaning of «uncomfortable» (open question) coded

You mentioned "uncomfortable" as a reason why you don't own/use hearing aid(s). Please describe in detail why you consider hearing aids uncomfortable.

- foreign object in the ear, it pinches, it hurts, too big: 34%
- not necessary yet in daily life: 22%
- uncomfortable in general: 10%
- ineffective: 8%
- taking it on and off, adjusting: 8%
- others say it is uncomfortable: 7%
- uncomfortable noises, feedback, etc.: 6%
- expensive: 5%
- doesn't look nice, embarrassed to use, don't want to be...: 3%
- maintenance, cleaning: 3%
- afraid of losing it: 3%
- buzzing in my ears: 2%
- uncomfortable with glasses: 2%
- changing batteries: 2%
- vulnerable to sweat: 1%
- it is itching: 0%
- cerumen, dirt, infection: 0%
- other: 3%
- none: 8%

Base: n=299

© Anovum 2018 - JapanTrak 2018
Social rejection, and triggers to buy
75% of hearing aid owners think people don’t make fun of or reject them because of their hearing aids. It tends to be more likely that somebody makes fun or rejects a hearing impaired without hearing aids.

Hearing aid owners: How often do you feel you are made fun of or rejected because you are wearing a hearing aid?

- Never: 75%
- Rarely: 16%
- Occasionally: 6%
- Regularly: 3%

Hearing impaired non-owners: How often do you feel you are made fun of or rejected because your hearing loss?

- Never: 65%
- Rarely: 26%
- Occasionally: 9%
- Regularly: 1%

Base: N=421

Base: Top 50% hearing loss, no hearing aid N=212
The most important influencing factors are worsening hearing loss, ENT and significant others (and: price for non owners)

**Non-owner:** Think about the option to obtain / purchase a hearing aid. What do you think would influence you to obtain / purchase a hearing aid?

**Owner:** Thinking back to when you obtained your first hearing aid(s), what influenced you to obtain / purchase the hearing aid(s)?

<table>
<thead>
<tr>
<th>Factor</th>
<th>Owner (n=421)</th>
<th>Non-Owner (n=885)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hearing loss got worse</td>
<td>57%</td>
<td>65%</td>
</tr>
<tr>
<td>ENT/ Ear Doctor</td>
<td>30%</td>
<td>39%</td>
</tr>
<tr>
<td>GP /Family doctor</td>
<td>9%</td>
<td>25%</td>
</tr>
<tr>
<td>Price of hearing aid</td>
<td>6%</td>
<td>23%</td>
</tr>
<tr>
<td>Child</td>
<td>16%</td>
<td>20%</td>
</tr>
<tr>
<td>Spouse</td>
<td>16%</td>
<td>19%</td>
</tr>
<tr>
<td>Free due to coverage by Insurance / Received</td>
<td>1%</td>
<td>13%</td>
</tr>
<tr>
<td>hearing aid free of charge</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Another hearing aid owner (word of mouth)</td>
<td>8%</td>
<td>11%</td>
</tr>
<tr>
<td>Safety concerns</td>
<td>11%</td>
<td>11%</td>
</tr>
<tr>
<td>Friend / relative</td>
<td>4%</td>
<td>9%</td>
</tr>
<tr>
<td>Hearing loss article or literature</td>
<td>6%</td>
<td>10%</td>
</tr>
<tr>
<td>Hearing Aid Center</td>
<td>6%</td>
<td>14%</td>
</tr>
<tr>
<td>Financial Situation improved</td>
<td>4%</td>
<td>7%</td>
</tr>
</tbody>
</table>
The most important influencing factors are worsening hearing loss, ENT and significant others (and: price for non owners)

**Non-owner:** Think about the option to obtain / purchase a hearing aid. What do you think would influence you to obtain / purchase a hearing aid?

**Owner:** Thinking back to when you obtained your first hearing aid(s), what influenced you to obtain / purchase the hearing aid(s)?

- TV advertisement: 3% (Owner), 3% (Non-Owner)
- Newspaper advertisement: 9% (Owner), 9% (Non-Owner)
- Internet: Websites of hearing aids manufacturers: 5% (Owner), 5% (Non-Owner)
- Newspaper flyer: 4% (Owner), 4% (Non-Owner)
- Internet: Other websites, google…: 4% (Owner), 4% (Non-Owner)
- Optical Shop: 4% (Owner), 4% (Non-Owner)
- Internet: Websites of hearing aid clinics: 4% (Owner), 4% (Non-Owner)
- Information/advice about hearing loss from...: 2% (Owner), 2% (Non-Owner)
- Direct mail piece: 2% (Owner), 2% (Non-Owner)
- Magazine advertisement: 1% (Owner), 1% (Non-Owner)
- Co-worker or boss: 1% (Owner), 1% (Non-Owner)
- Other Shop: 0% (Owner), 0% (Non-Owner)
- Celebrity or public personality: 2% (Owner), 2% (Non-Owner)
- Radio advertisement: 1% (Owner), 1% (Non-Owner)

=Top 5 influences for owners in JapanTrak 2012
=Top 5 influences for non owners in JapanTrak 2012

(some items were slightly changed in 2018 Japan Trak)
The most important trigger to buy a hearing aid is worsening hearing loss

What made you finally decide to get your actual hearing aid(s)?

- Hearing loss gets worse: 47%
- ENT/Ear Doctor: 13%
- Child: 9%
- Spouse: 5%
- GP/Family doctor: 5%
- Newspaper advertisement: 3%
- Hearing Aid Center: 3%
- Internet: Websites of hearing aids manufacturers: 2%
- Another hearing aid owner (word of mouth): 2%
- Celebrity or public personality: 1%
- Financial situation improved: 1%
Demographics (1): Hearing instrument adoption rates and populations

Profiles: Categories add to 100%*

<table>
<thead>
<tr>
<th></th>
<th>Count</th>
<th>Hearing difficulty</th>
<th>Hearing aid adoption rate % (Base=hearing impaired)</th>
<th>No hearing loss</th>
<th>Hearing loss but no hearing aid</th>
<th>Hearing aid</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>6'644</td>
<td>10.6%</td>
<td>13.1%</td>
<td>48.9%</td>
<td>46.0%</td>
<td>41.1%</td>
</tr>
<tr>
<td>Female</td>
<td>7'066</td>
<td>12.0%</td>
<td>15.5%</td>
<td>51.1%</td>
<td>54.0%</td>
<td>58.9%</td>
</tr>
<tr>
<td><strong>Age recoded</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 - 14</td>
<td>1'743</td>
<td>0.6%</td>
<td>60.8%</td>
<td>14.3%</td>
<td>0.3%</td>
<td>2.6%</td>
</tr>
<tr>
<td>15 - 24</td>
<td>1'320</td>
<td>3.6%</td>
<td>8.7%</td>
<td>10.5%</td>
<td>3.2%</td>
<td>1.8%</td>
</tr>
<tr>
<td>25 - 34</td>
<td>1'426</td>
<td>2.8%</td>
<td>21.1%</td>
<td>11.4%</td>
<td>2.4%</td>
<td>3.8%</td>
</tr>
<tr>
<td>35 - 44</td>
<td>1'798</td>
<td>3.8%</td>
<td>7.2%</td>
<td>14.2%</td>
<td>4.8%</td>
<td>2.2%</td>
</tr>
<tr>
<td>45 - 54</td>
<td>1'887</td>
<td>7.0%</td>
<td>6.5%</td>
<td>14.4%</td>
<td>9.2%</td>
<td>3.8%</td>
</tr>
<tr>
<td>55 - 64</td>
<td>1'646</td>
<td>8.9%</td>
<td>3.7%</td>
<td>12.3%</td>
<td>10.6%</td>
<td>2.4%</td>
</tr>
<tr>
<td>65 - 74</td>
<td>1'913</td>
<td>17.6%</td>
<td>8.0%</td>
<td>13.0%</td>
<td>23.2%</td>
<td>12.0%</td>
</tr>
<tr>
<td>74+</td>
<td>1'977</td>
<td>39.2%</td>
<td>20.6%</td>
<td>9.9%</td>
<td>46.2%</td>
<td>71.3%</td>
</tr>
<tr>
<td><strong>Type of household</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>single household</td>
<td>1'267</td>
<td>15.2%</td>
<td>14.6%</td>
<td>8.8%</td>
<td>12.4%</td>
<td>12.6%</td>
</tr>
<tr>
<td>Couple, no kids</td>
<td>2'832</td>
<td>14.4%</td>
<td>13.5%</td>
<td>19.9%</td>
<td>26.5%</td>
<td>24.7%</td>
</tr>
<tr>
<td>Couple with kid(s)</td>
<td>5'062</td>
<td>5.8%</td>
<td>12.2%</td>
<td>39.2%</td>
<td>19.3%</td>
<td>15.9%</td>
</tr>
<tr>
<td>Single mom/dad with kid(s)</td>
<td>2'299</td>
<td>13.7%</td>
<td>14.9%</td>
<td>16.3%</td>
<td>20.2%</td>
<td>21.0%</td>
</tr>
<tr>
<td>Couple with kid(s) and/or grandchildren</td>
<td>323</td>
<td>12.7%</td>
<td>24.6%</td>
<td>2.3%</td>
<td>2.3%</td>
<td>4.5%</td>
</tr>
<tr>
<td>Single grandfather/mother with kid(s) and/or grandchildren</td>
<td>49</td>
<td>9.5%</td>
<td>0.0%</td>
<td>0.4%</td>
<td>0.4%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Retirement home, hospital etc.</td>
<td>432</td>
<td>27.0%</td>
<td>20.1%</td>
<td>2.6%</td>
<td>7.0%</td>
<td>10.4%</td>
</tr>
<tr>
<td>Other</td>
<td>1'447</td>
<td>12.7%</td>
<td>13.2%</td>
<td>10.4%</td>
<td>12.0%</td>
<td>10.8%</td>
</tr>
</tbody>
</table>

* Small sample sizes in some categories
Demographics (2) Hearing instrument adoption rates and populations

<table>
<thead>
<tr>
<th>Status</th>
<th>Count</th>
<th>Hearing difficulty</th>
<th>Hearing aid adoption rate % (Base=hearing impaired)</th>
<th>No hearing loss</th>
<th>Hearing loss but no hearing aid</th>
<th>Hearing aid</th>
</tr>
</thead>
<tbody>
<tr>
<td>The head of the household</td>
<td>5'348</td>
<td>16.8%</td>
<td>14.8%</td>
<td>36.6%</td>
<td>57.4%</td>
<td>59.5%</td>
</tr>
<tr>
<td>The spouse of the head of the household</td>
<td>3'214</td>
<td>10.6%</td>
<td>10.8%</td>
<td>23.6%</td>
<td>22.8%</td>
<td>16.5%</td>
</tr>
<tr>
<td>Daughter/son of head of household</td>
<td>4'083</td>
<td>2.0%</td>
<td>12.3%</td>
<td>32.9%</td>
<td>5.3%</td>
<td>4.4%</td>
</tr>
<tr>
<td>Parent of the head of the household</td>
<td>631</td>
<td>31.9%</td>
<td>19.7%</td>
<td>3.5%</td>
<td>12.1%</td>
<td>17.7%</td>
</tr>
<tr>
<td>Other person</td>
<td>431</td>
<td>8.3%</td>
<td>12.1%</td>
<td>3.3%</td>
<td>2.4%</td>
<td>1.9%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Employment</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Full time employed</td>
<td>4'408</td>
<td>6.3%</td>
<td>7.4%</td>
<td>40.0%</td>
<td>19.2%</td>
<td>9.4%</td>
</tr>
<tr>
<td>Part time employed</td>
<td>1'737</td>
<td>8.0%</td>
<td>7.4%</td>
<td>15.5%</td>
<td>9.7%</td>
<td>4.8%</td>
</tr>
<tr>
<td>Unemployed / not working</td>
<td>2'227</td>
<td>13.4%</td>
<td>13.7%</td>
<td>18.6%</td>
<td>19.4%</td>
<td>18.8%</td>
</tr>
<tr>
<td>Retired under a disability pension scheme (fully or partly)</td>
<td>2'143</td>
<td>31.6%</td>
<td>19.7%</td>
<td>14.2%</td>
<td>40.9%</td>
<td>61.2%</td>
</tr>
<tr>
<td>Early retired under an early retirement benefit scheme</td>
<td>84</td>
<td>14.4%</td>
<td>0.0%</td>
<td>0.7%</td>
<td>0.9%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Retired (at the official retirement age)</td>
<td>553</td>
<td>21.6%</td>
<td>9.6%</td>
<td>4.2%</td>
<td>8.1%</td>
<td>5.3%</td>
</tr>
<tr>
<td>Student / pupil / in training</td>
<td>731</td>
<td>3.1%</td>
<td>4.7%</td>
<td>6.9%</td>
<td>1.6%</td>
<td>0.5%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Education</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a middle school</td>
<td>991</td>
<td>28.8%</td>
<td>18.0%</td>
<td>6.8%</td>
<td>17.7%</td>
<td>23.6%</td>
</tr>
<tr>
<td>a high school</td>
<td>3'899</td>
<td>13.2%</td>
<td>15.0%</td>
<td>32.8%</td>
<td>32.9%</td>
<td>35.2%</td>
</tr>
<tr>
<td>a vocational ( technical ) school</td>
<td>1'067</td>
<td>10.4%</td>
<td>14.5%</td>
<td>9.2%</td>
<td>7.2%</td>
<td>7.4%</td>
</tr>
<tr>
<td>a junior college</td>
<td>936</td>
<td>10.0%</td>
<td>11.9%</td>
<td>8.1%</td>
<td>6.2%</td>
<td>5.1%</td>
</tr>
<tr>
<td>a university</td>
<td>3'432</td>
<td>9.1%</td>
<td>8.1%</td>
<td>30.2%</td>
<td>21.5%</td>
<td>11.6%</td>
</tr>
<tr>
<td>a graduate school</td>
<td>350</td>
<td>8.3%</td>
<td>13.4%</td>
<td>3.1%</td>
<td>1.9%</td>
<td>1.8%</td>
</tr>
<tr>
<td>Other</td>
<td>296</td>
<td>29.8%</td>
<td>16.0%</td>
<td>2.0%</td>
<td>5.6%</td>
<td>6.5%</td>
</tr>
<tr>
<td>Prefer not to say</td>
<td>913</td>
<td>12.4%</td>
<td>17.0%</td>
<td>7.7%</td>
<td>7.1%</td>
<td>8.8%</td>
</tr>
</tbody>
</table>

Profiles: Categories add to 100%*  
* Small sample sizes in some categories
Sample size and random sample error: Rules of thumb

READ: At a sample size of n=500 and a value of 15% we would expect the real value of an interval +-3.1 around 15% - which means between 11.9% and 18.1% (Conservative assumption: 95% confidence level)

<table>
<thead>
<tr>
<th>Sample size</th>
<th>Random sample error</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Real value is within interval:</td>
</tr>
<tr>
<td></td>
<td>Level of proportion: 50%/50%</td>
</tr>
<tr>
<td>50</td>
<td>+/- 13.9</td>
</tr>
<tr>
<td>100</td>
<td>+/- 9.8</td>
</tr>
<tr>
<td>250</td>
<td>+/- 6.2</td>
</tr>
<tr>
<td>500</td>
<td>+/- 4.4</td>
</tr>
<tr>
<td>1000</td>
<td>+/- 3.1</td>
</tr>
<tr>
<td>5’000</td>
<td>+/- 1.4</td>
</tr>
<tr>
<td>10’000</td>
<td>+/- 1.0</td>
</tr>
</tbody>
</table>