

Results

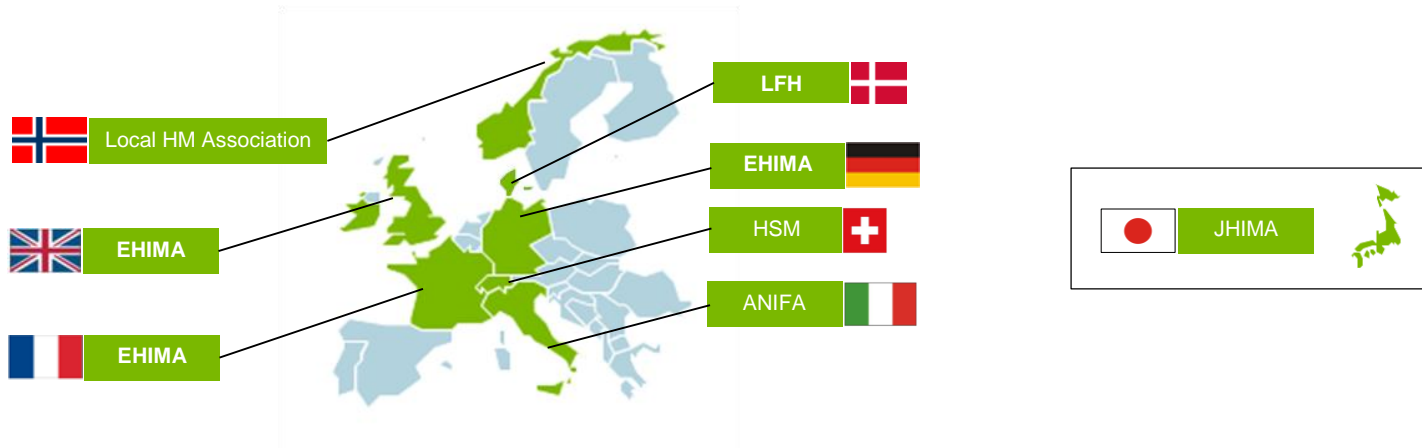
JapanTrak 2015

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

Summary

1. Introduction

- JapanTrak 2015 was designed and executed by Anovum (Zurich) on behalf of Japan Hearing Instruments Manufacturers Association (JHIMA).
- Sample sizes Japan 2015:
 - Representative sample (sample 1): n= 14'316 people
 - Hearing impaired (sample 2): n=1'306 people
 - Hearing impaired non-owners: n= 890 people with hearing loss (**HL**)
 - HA owners: n= 416 people with hearing aid (**HA**)
- JapanTrak 2015 is equivalent to the EuroTrak studies:



Summary

2. Market overview

- Stated hearing loss prevalence
 - Total: 11.3 %, 18+: 13.1% (2012: 10.9%, 18+: 12.8%).
 - Binaural hearing loss: HA owners: 83%, HA non-owners: 60%.
 - Hearing Tests: 51% (2012: 49%) had a hearing test in the last 5 years, most tests done by ENTs and family doctors.
- Hearing aid adoption rate (HA penetration)
 - Total: 13.5% (2012: 14.1%).
 - Total age group 18+: 12.8% (2012: 14.1%).
 - 46% of HA owners have binaural treatment.
- The route to the hearing aid
 - 40% of the hearing impaired discussed hearing loss with an ENT doctor or family doctor.
 - 13% got hearing aids recommended from the ENT or family doctor (drop out rate=68% / 2012: 67%).
 - 17% of the GP consultations referred to a hearing aid dispenser, 18% referred to an ENT
 - 51% recommended no action!
 - 16% of ENT consultations referred to an audiologist, 70% 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
 - 15% (2012: 12%) of all HA owners received some kind of 3rd party reimbursement.
 - 42% of the currently owned HAs were bought in the last two years
 - The average age of the currently owned HAs is 4.1 years (2012: 3.5 years).
 - The median age of hearing aids before replacement is 5 years (2012: 4 years).
 - On average, HAs are worn 6.8 hours a day (2012: 5.7).
 - 48% of today's hearing aid owners are aware of their hearing aid brand, 48% would preferably choose the same brand if they would plan to obtain new hearing aids (41% are indifferent).
 - TV Box is the most often owned electronic accessory: 11% of hearing aid owners have one – 33% have heard of it but don't own one.
- Importance of listening situations and satisfaction with HAs
 - 60% of the hearing aid owners say their hearing aid works better than or as expected, 40% say they are worse than expected.
 - Overall satisfaction with HA is 39% (2012: 36%).
 - The more hours worn per day, the higher the satisfaction.
 - 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.
 - 84% 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 9% of the hearing impaired without hearing aids know the system of supplying hearing aid(s) by the government (2012: 6%).
 - 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: “not necessary yet in daily life”, foreign object in the ear”, “it pinches”, “it hurts”, “it is too big”.
 - 7% who own HAs don’t use them at all (0 hour); 23% use them less than one hour/day (0-1 hour).
- Social rejection, buying intentions and triggers to buy
 - 68% 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, spouse/child and hearing aid center. Price of hearing aids is only relevant for the non owners.
 - 6% (2012: 4%) of non-owners intend to get a hearing aid within the next year.
- Hearing aid centers, doctors and optical shops are the most important sources of information and therefore the major gatekeepers – followed by the internet.

Results

JapanTrak 2015

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 2015 are highlighted in red

1. Introduction

- Organisation of JapanTrak 2015
- 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
- Potential social cost-savings due to the use of hearing aids: Work competitiveness, depressive and dementia symptoms, **sleep quality**

3. Analysis of hearing aid owners

- Hearing aid ownership, **awareness of hearing loss before getting hearing aids**, lifetime of hearing aids and usage
- **Awareness and usage of accessories**
- Satisfaction with hearing aids and drivers
- **Importance of listening situations**
- Positive impact of 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**
- Buying intentions and **most important triggers to buy**

5. Appendix

- Demographics: Hearing instrument adoption rates and populations

1. Introduction

Organisation of JapanTrak 2015

Organisation

- 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: binaural, CORTITON, GNresound, NJH (New Japan Hearing), Oticon, PANASONIC, Phonak, RION, Sivantos (Siemens), Starkey, Widex [JHIMA Companies].
- Anovum Zurich developed the concept of JapanTrak, designed the questionnaire and conducted the fieldwork in cooperation with a panel company. Furthermore Anovum analysed 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 2015/n=[relevant sample size]"
- The principal and JHIMA companies can ask Anovum to further analyse 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 panelist pools of more than 40'000 people
3. Screening questionnaire: Stated hearing loss and hearing aid usage + demographics
4. Result: Representative sample of **n= 14'316** people based on census data.

Step 2: Target population interviews

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

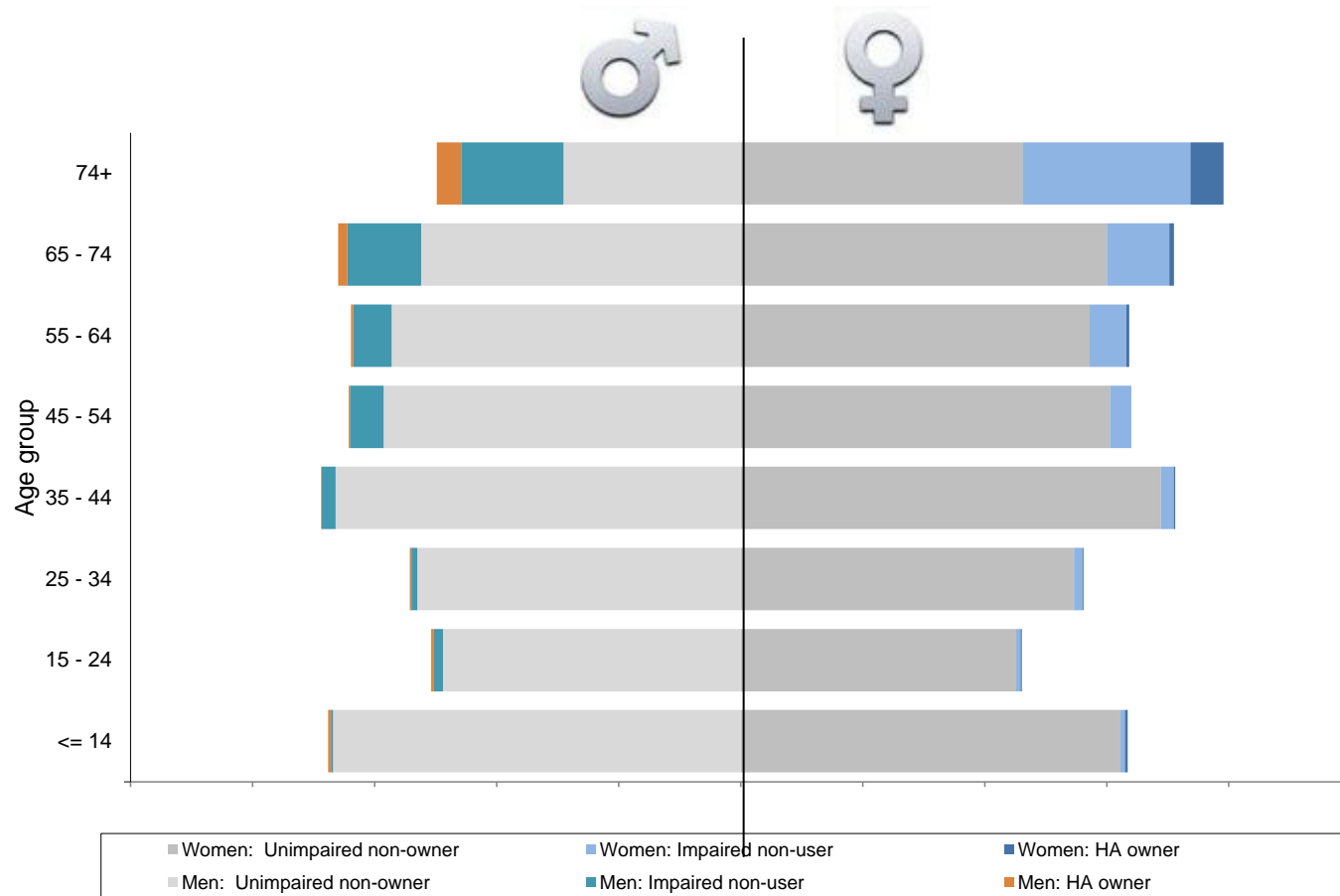
Process:

1. Main questionnaires: Owners and hearing impaired non-owners
2. Balancing through weighting according to representative screening interviews
3. Resulting sample: **n=890** hearing aid owners and **n=416** hearing impaired non-owners

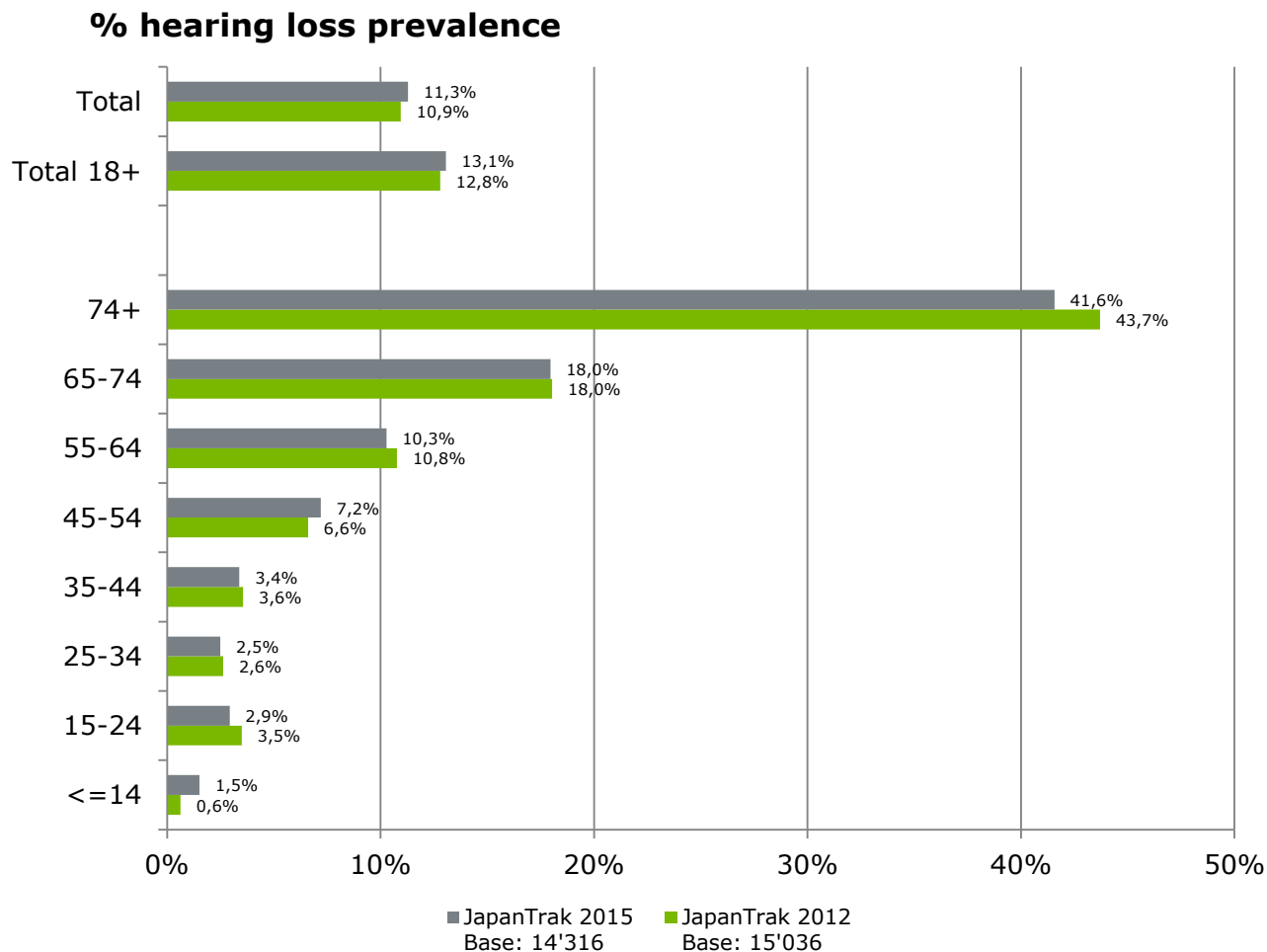
2. Market overview

Prevalence of hearing loss and adoption rate

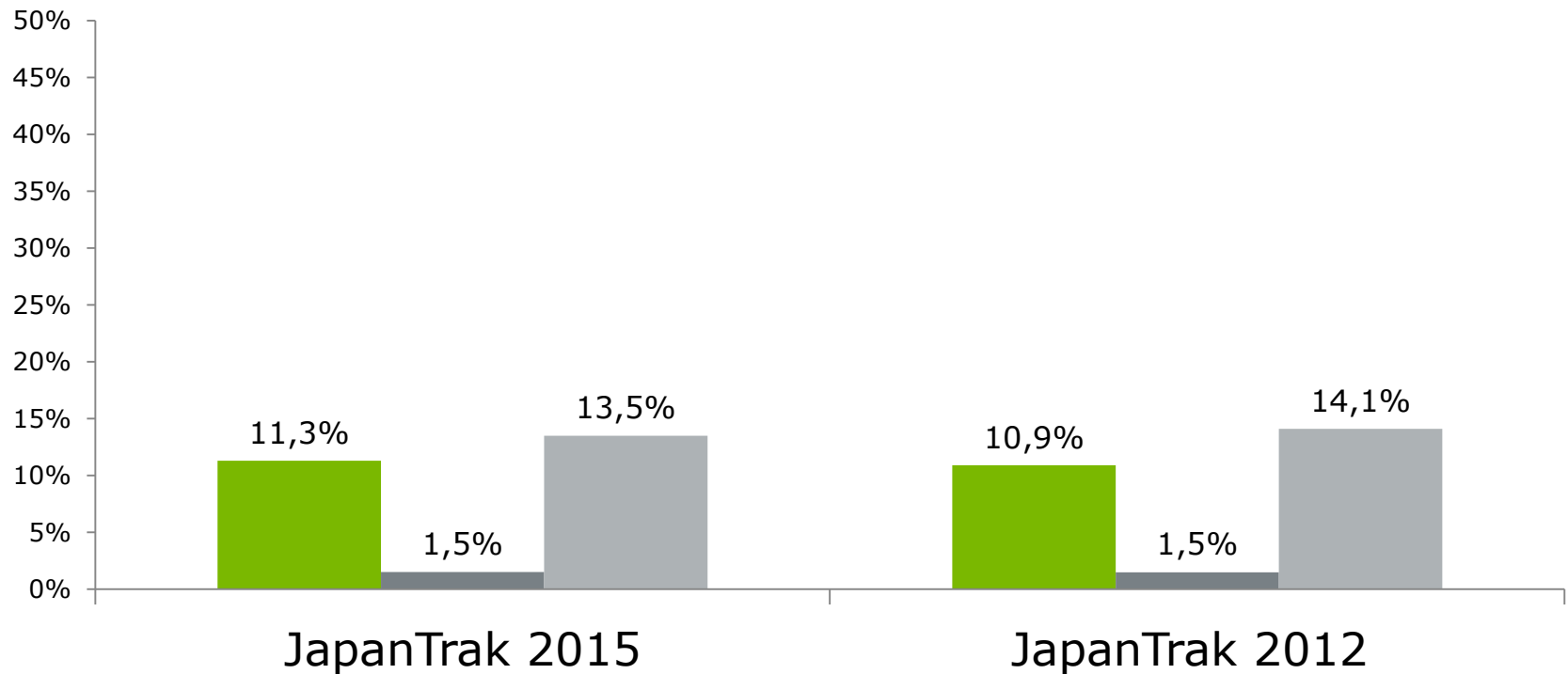
Hearing loss and hearing instrument ownership by gender/age



Hearing loss prevalence Japan

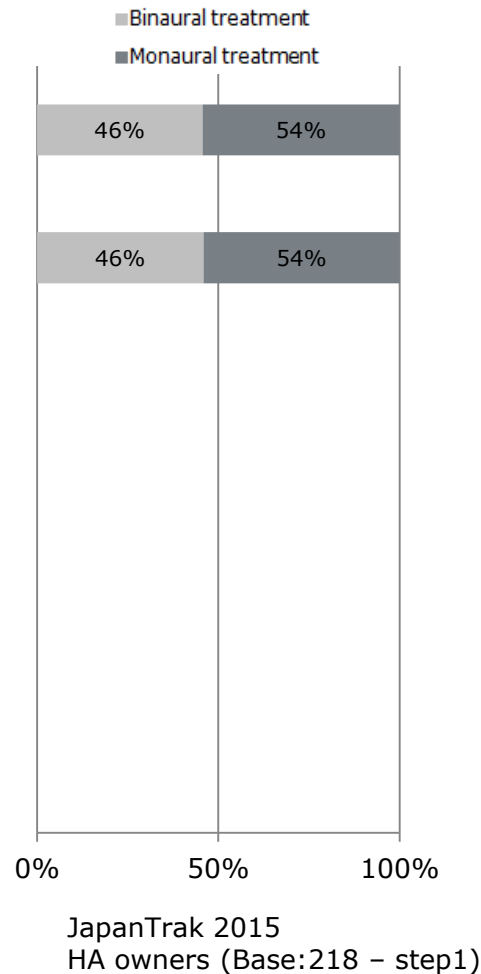
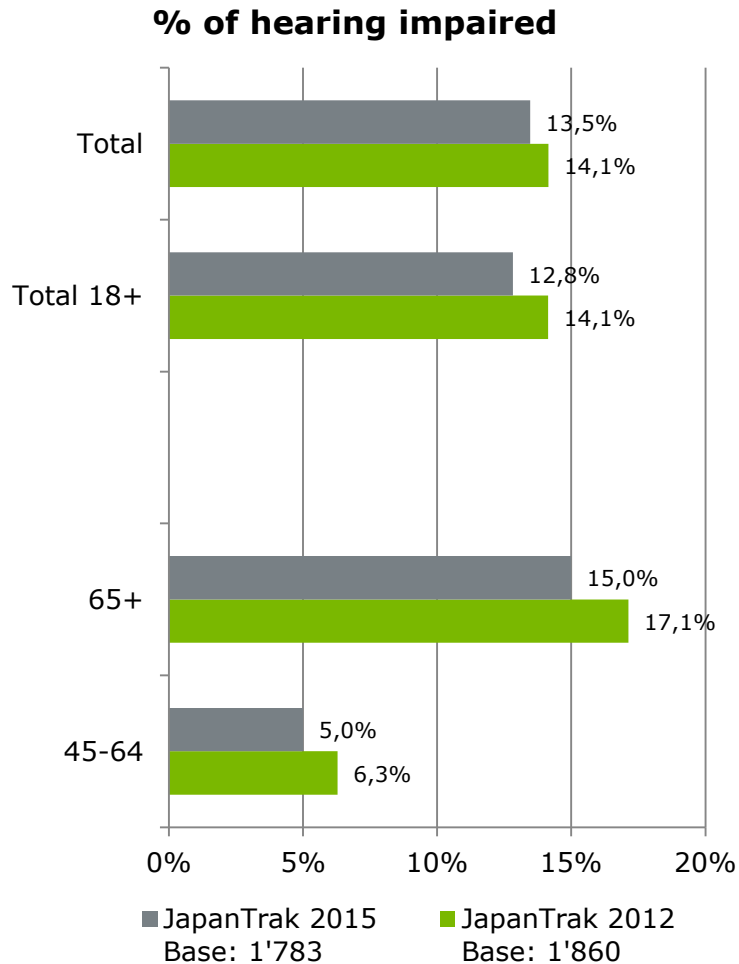


Overview hearing loss prevalence and hearing aid adoption



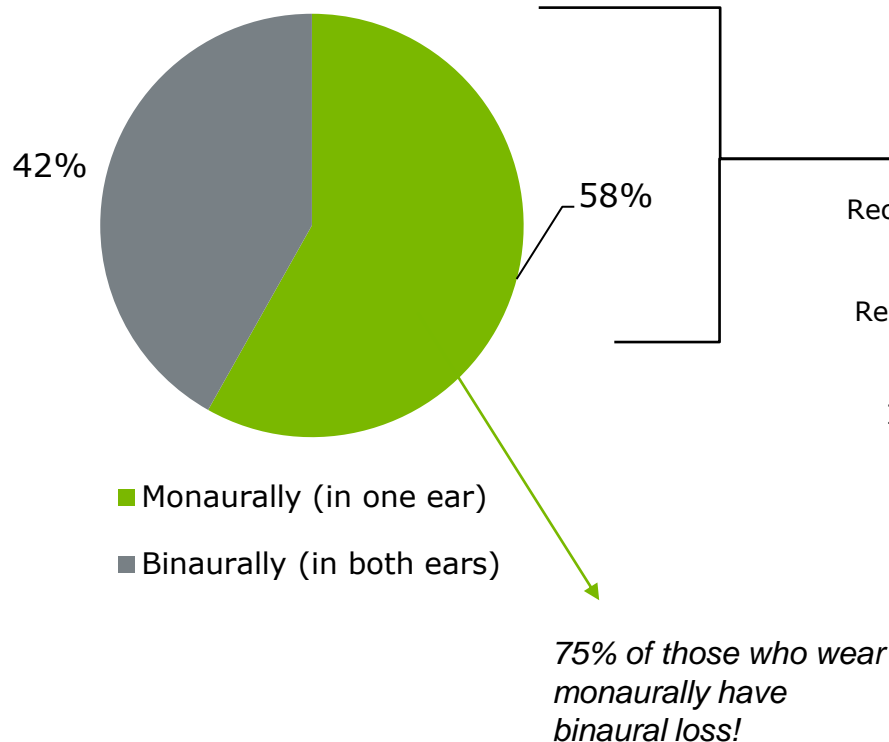
■ Hearing impaired (stated) ■ Adoption (% of population) ■ Adoption (% of stated impaired)

Hearing aid adoption rate Japan: 14% (rounded) of hearing impaired have hearing aid(s), 46% of them have binaural treatment

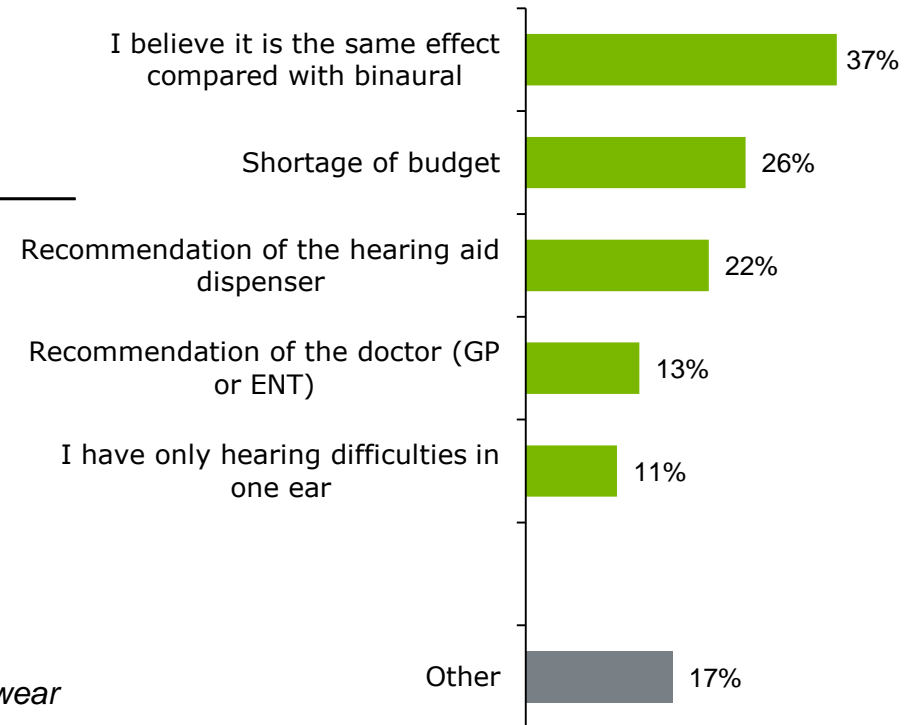


Most people with only one hearing aid believe it is the same effect compared with two hearing aids

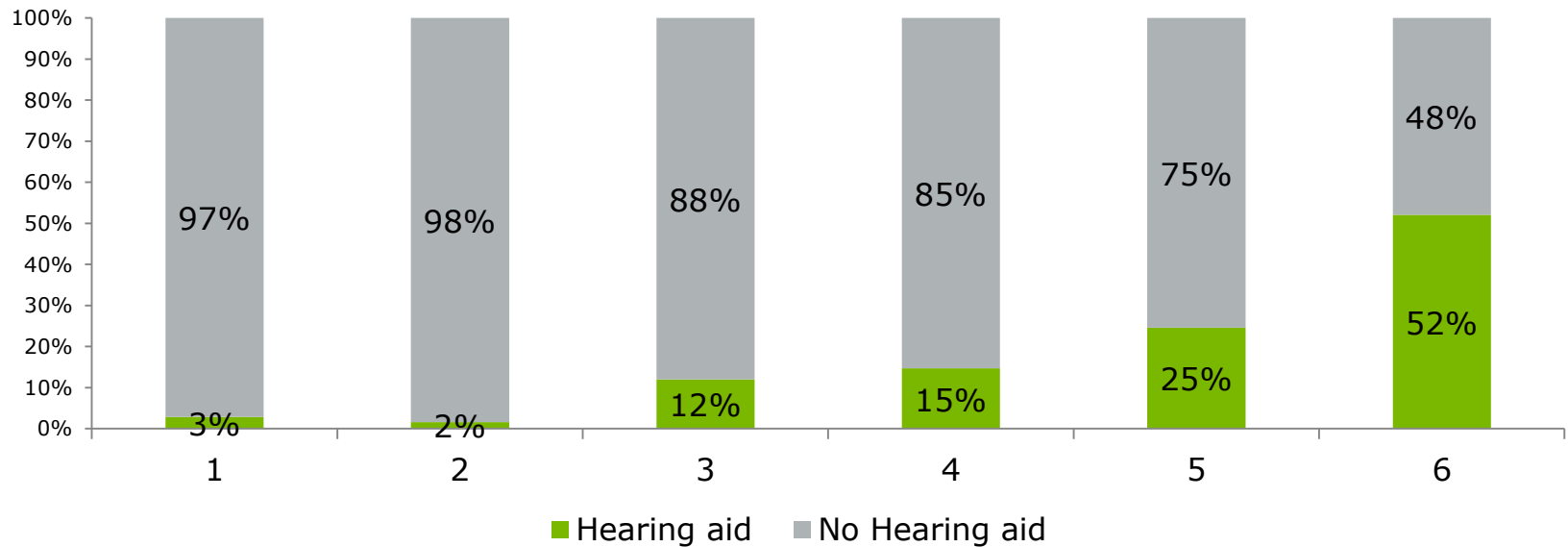
Do you wear hearing aids monaurally or binaurally?



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



The more severe the hearing loss, the higher the adoption rate



Hearing loss 6-groups

HA-non-owner, n=576
HA-owner, n=375

* 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

	HA-Non-owner 2015: n=890 (2012: n= 898)	HA Owner 2015: n=416 (2012: n= 450)	Hearing Aid Adoption (%)
Ears impaired (stated)			
Unilateral loss	40% (40%)	17% (24%)	8% (11%)
Bilateral loss	60% (60%)	83% (76%)	21% (21%)
Perceived loss			
Mild	44% (35%)	18% (17%)	7% (8%)
Moderate	48% (60%)	54% (56%)	17% (14%)
Severe	7% (4%)	23% (24%)	37% (47%)*
Profound	1% (2%)	5% (3%)	

n's are unweighted whereas the shown results are weighted

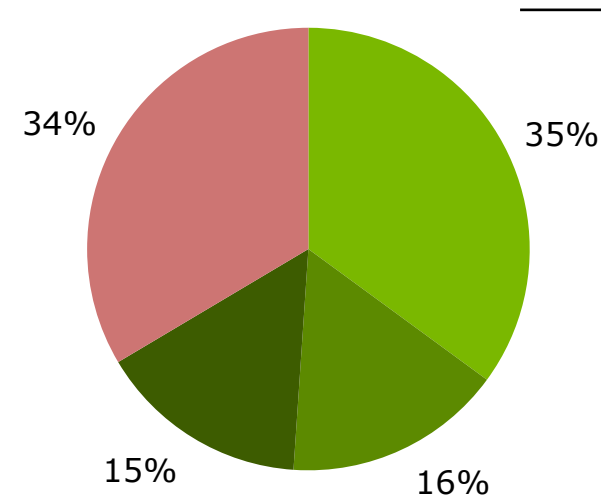
* combined "severe" and "profound" because n is too small

Hearing tests and where hearing is tested

Hearing Tests: 51% (2012: 49%) had a hearing test in the last 5 years, most tests are done at medical check-ups.

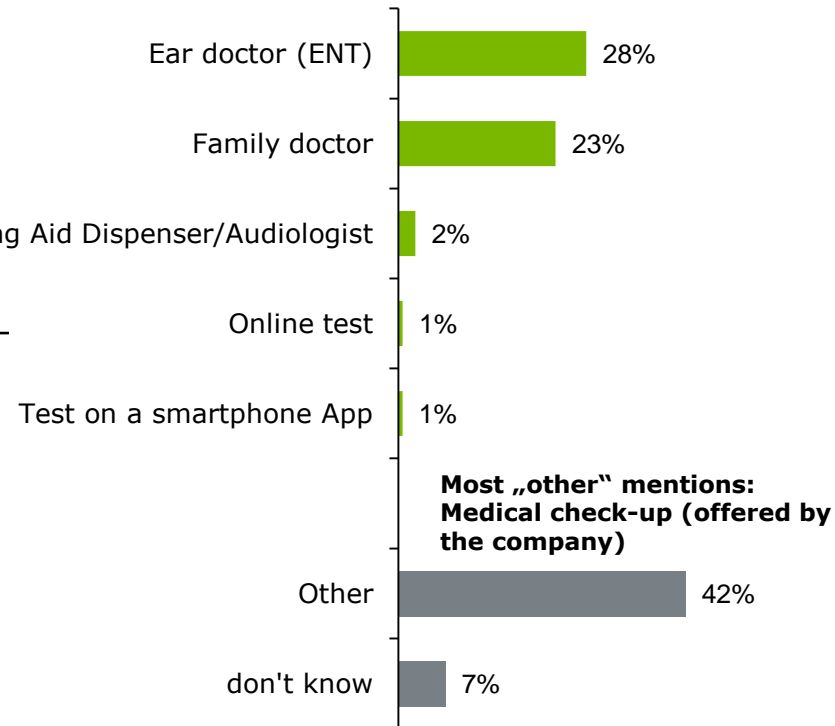
Have you ever taken a hearing test?

- Yes, in the last 12 months
- Yes, in the last 1-5 years
- Yes, more than 5 years ago
- No, never



Base=8'951

Where/how was your hearing tested?



Base= 4'744

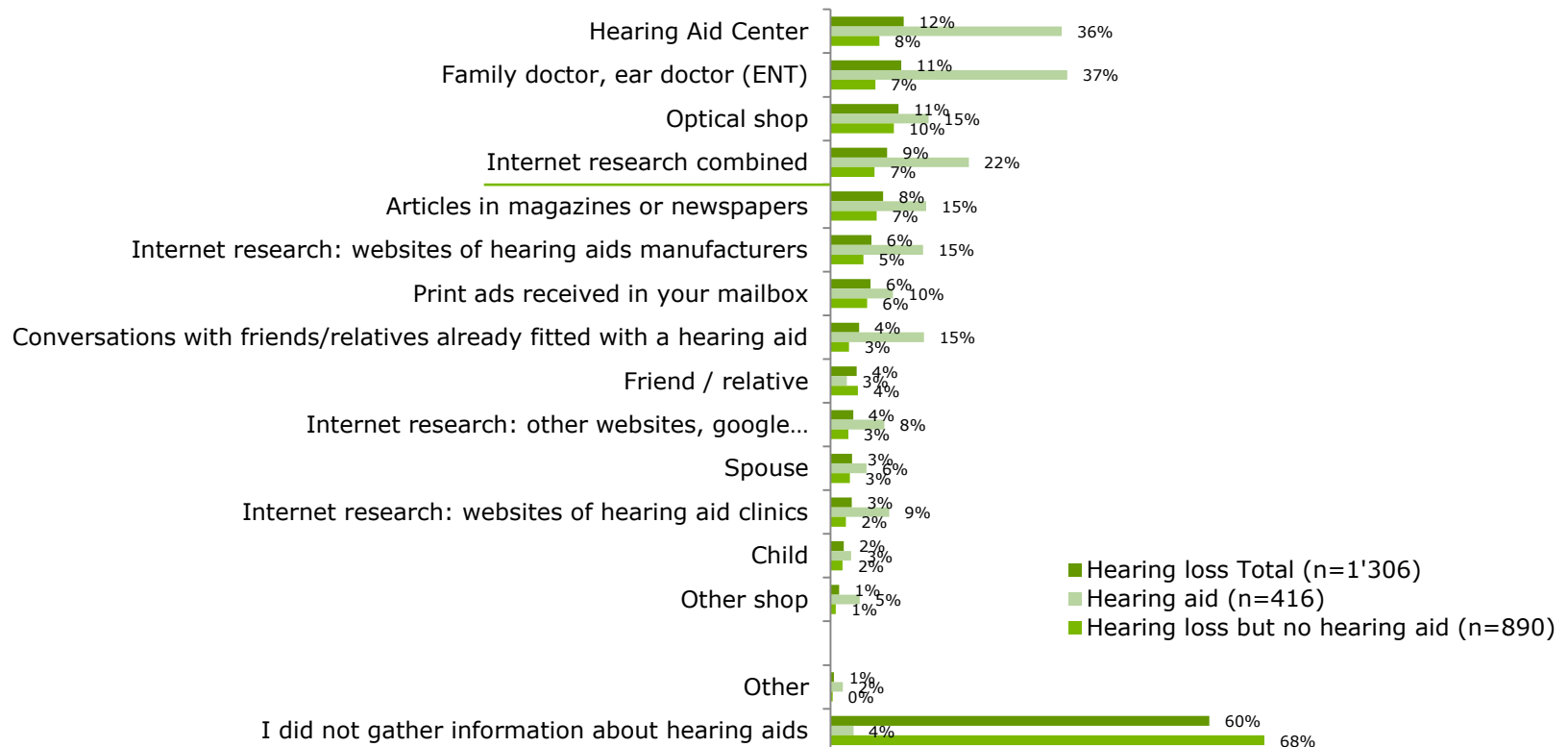
The route to the hearing aid: Sources of information and drop-out rates

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.

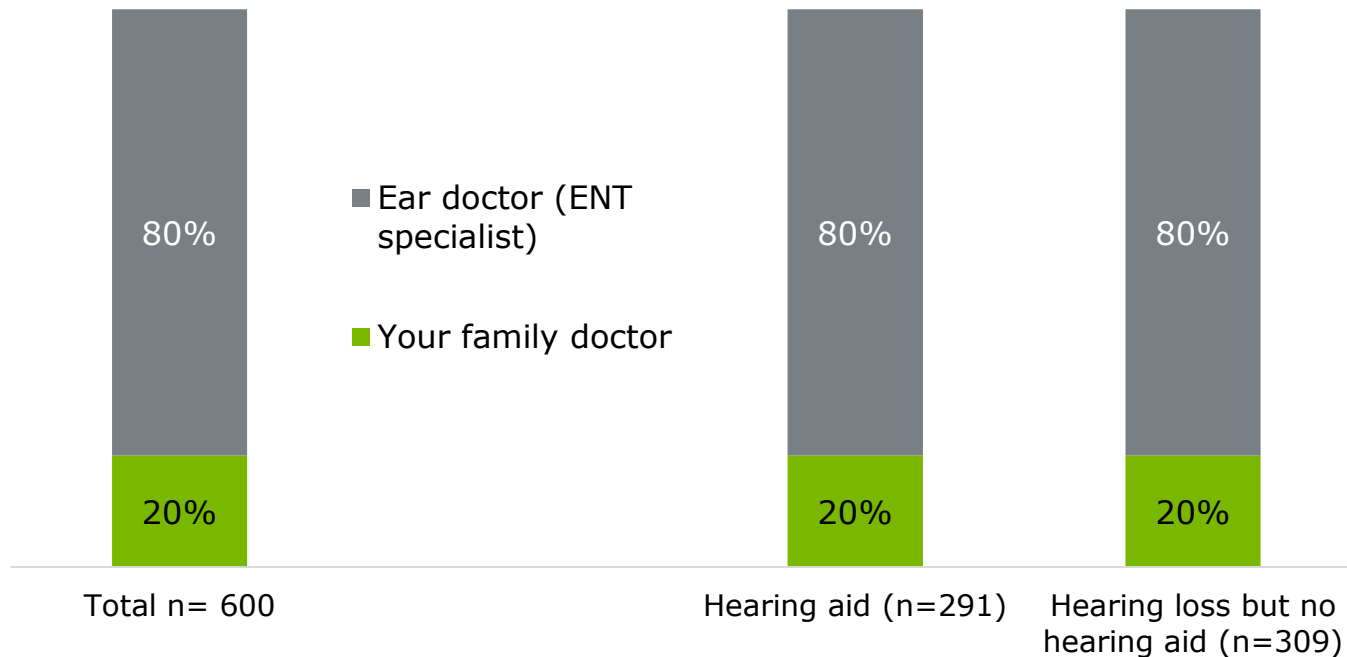
(This question included Japan-specific answers.)



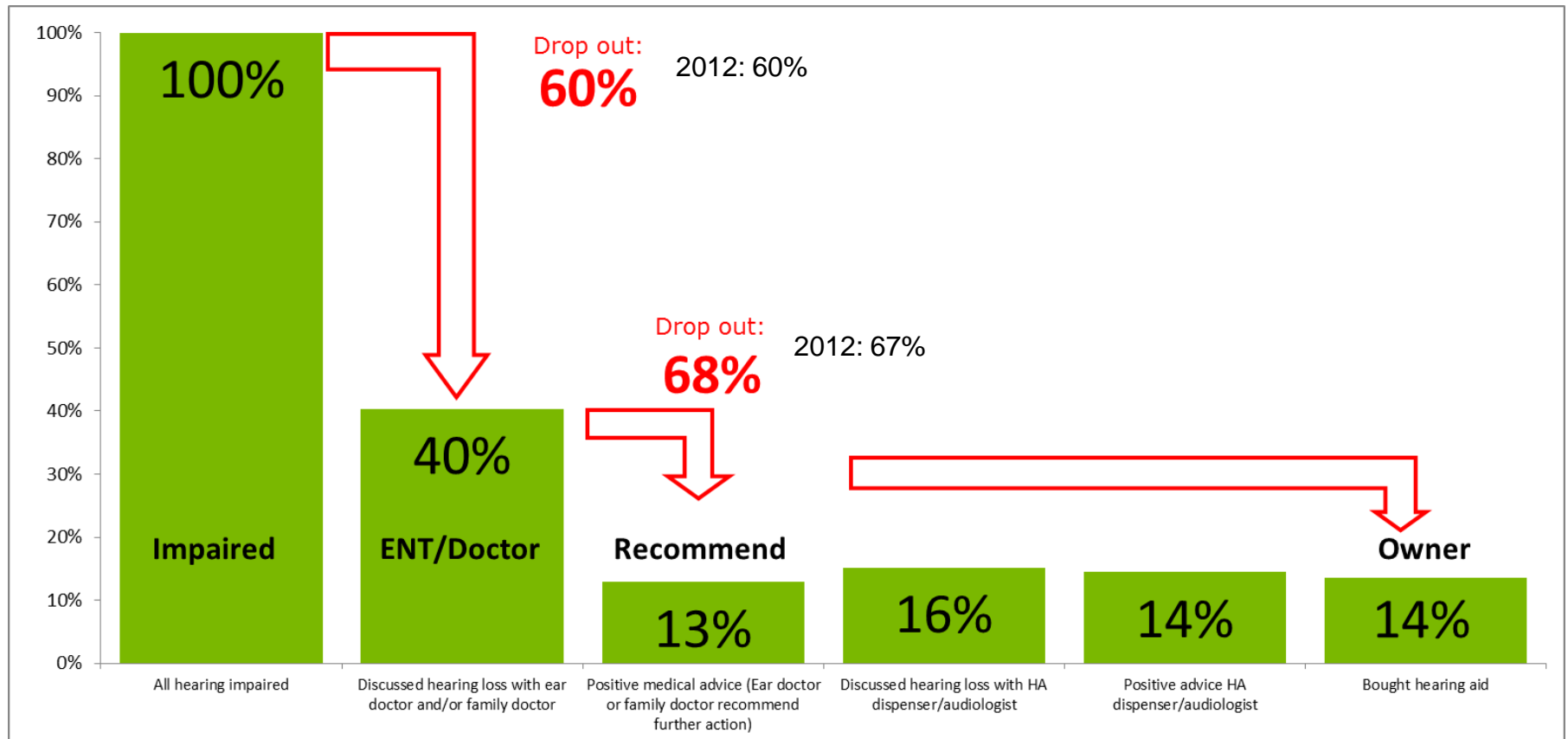
Of those who discussed the hearing loss with a doctor, 80% talked to an ENT first and 20% talked to the family doctor first.

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?



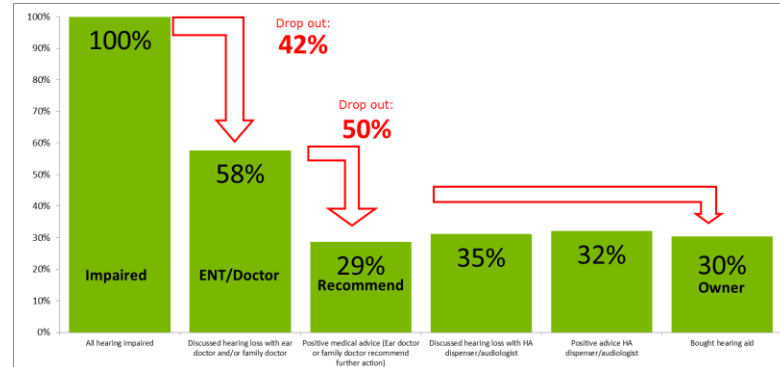
The route to the hearing aid



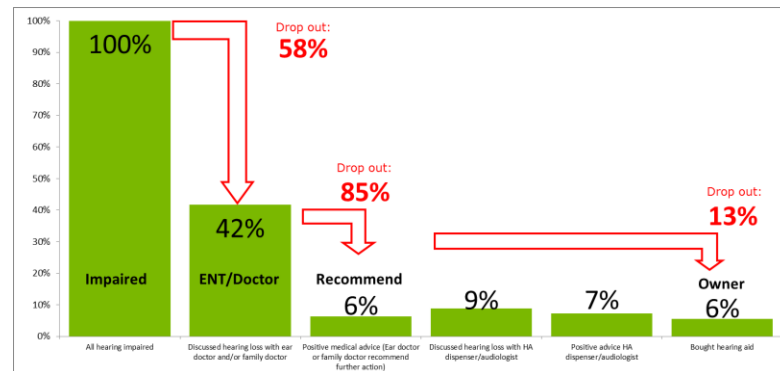
Base: n=1'306

Much higher drop-out-rates for the lower hearing loss segments

Top 50% hearing loss*



Low 50% hearing loss*



Base: n= 534/417

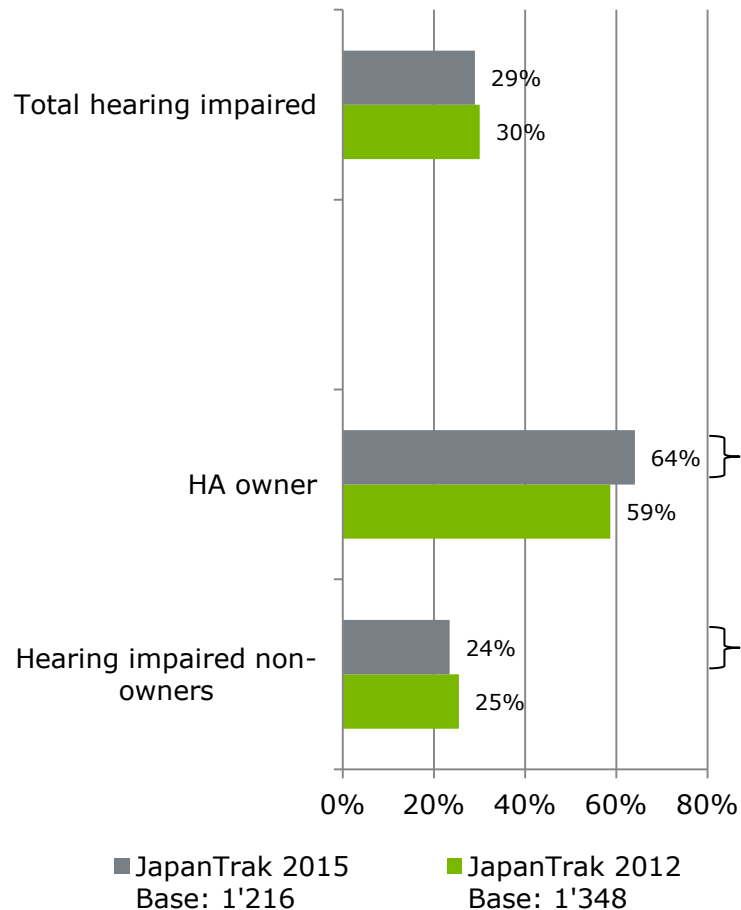
* Construction of 6-groups: A factor analysis was performed to identify one factor "degree of hearing loss". The following questions were included in the factor:

- 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).

The route to the hearing aid: GP/Family doctor

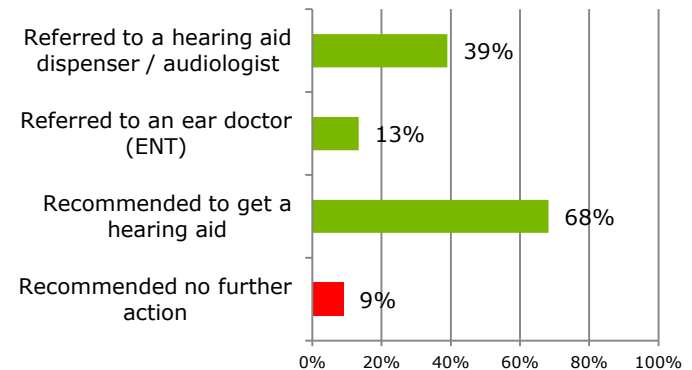
Have you discussed your hearing problem with your family doctor?

% Discussed with GP

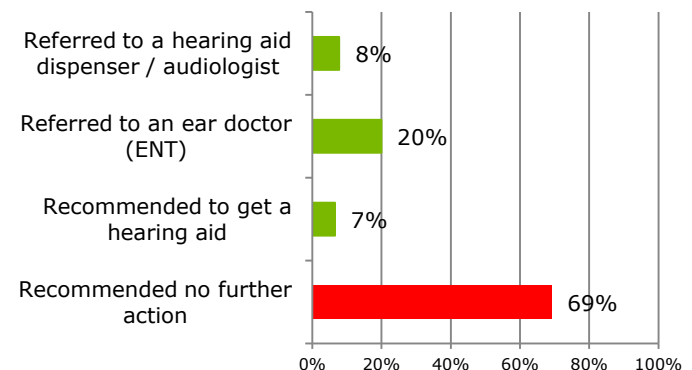


What did he/she recommend ?

HA owner (Base: 240)



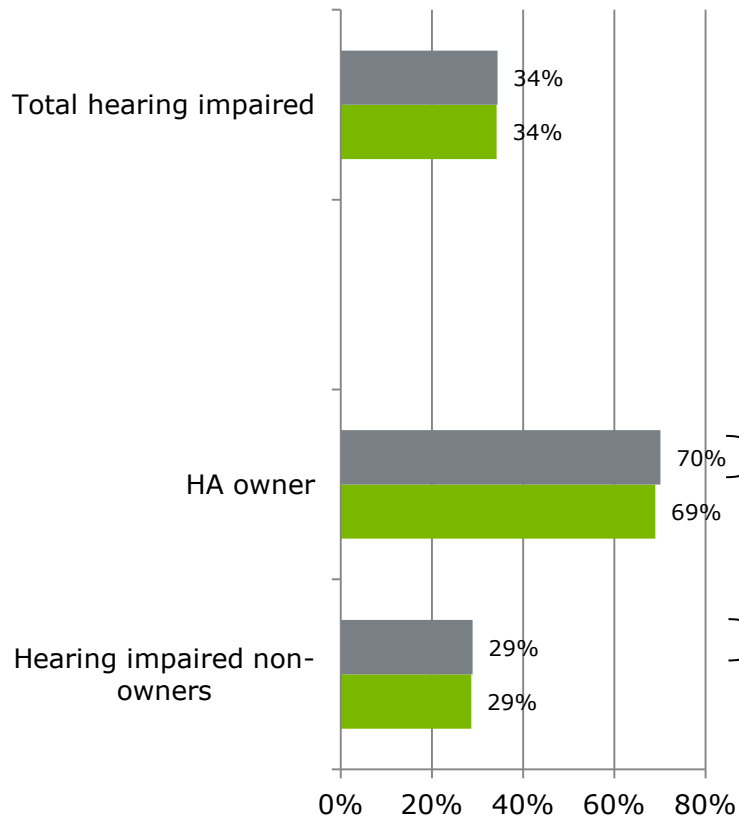
Impaired non-owner (Base: 219)



The route to the hearing aid: ENT

Have you discussed your hearing problem with an ear doctor (ENT)?

% Discussed with ENT

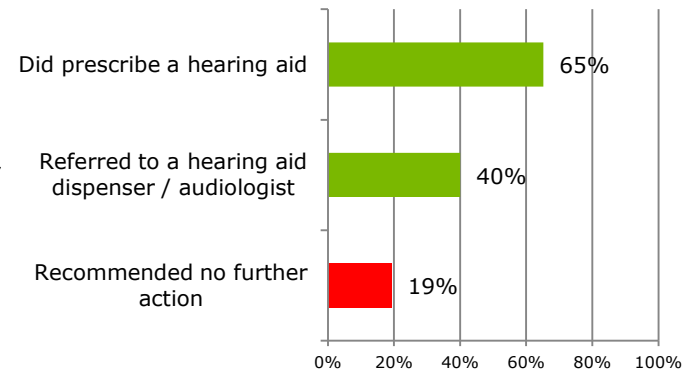


■ JapanTrak 2015
Base: 1'230

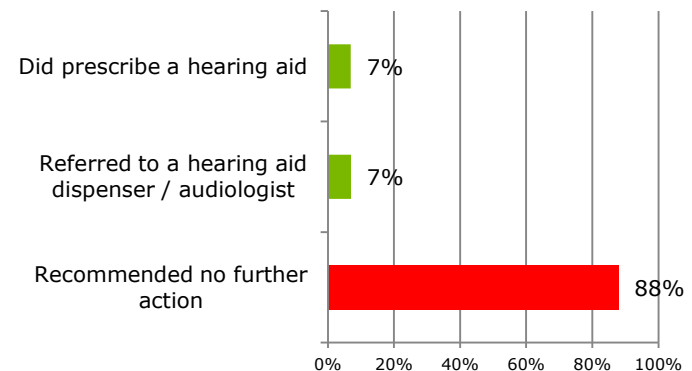
■ JapanTrak 2012
Base: 1'348

What did he/she recommend ?

HA owner (Base: 282)



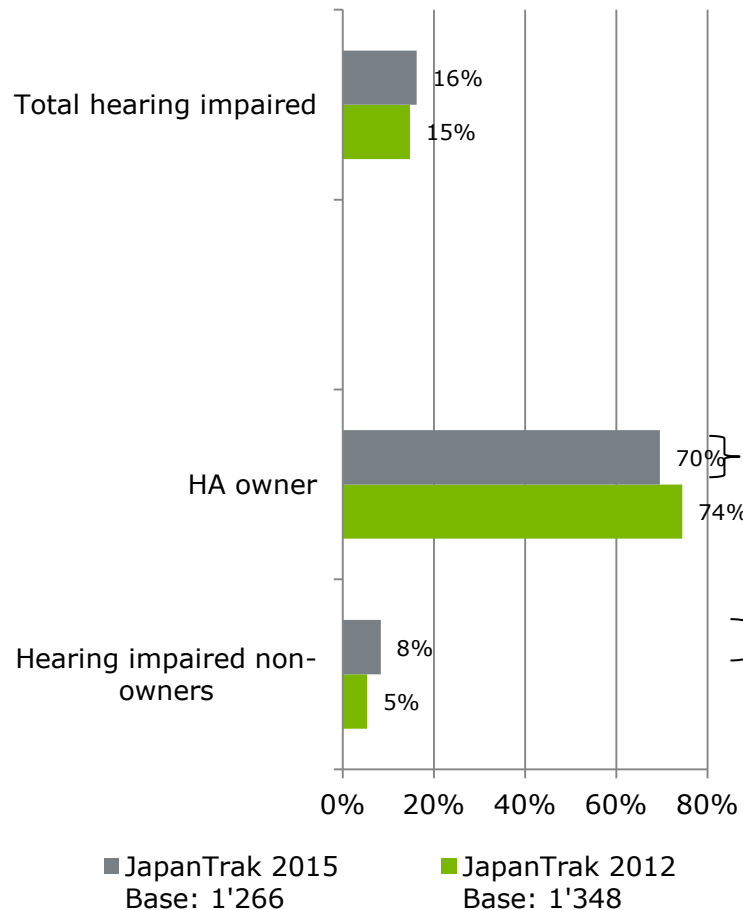
Impaired non-owner (Base: 300)



The route to the hearing aid: HA dispenser

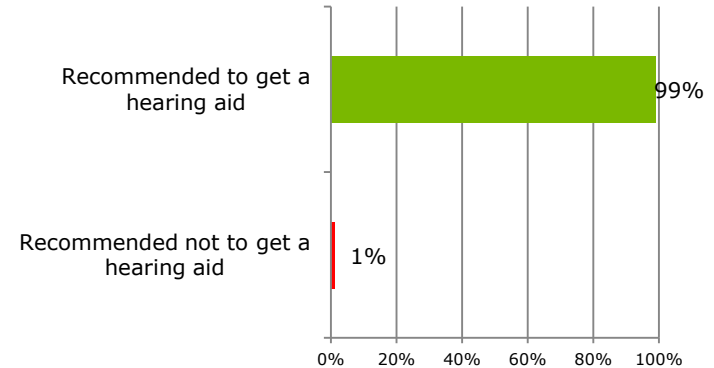
Have you discussed your hearing problem with a Hearing Aid Dispenser/Audiologist?

% Discussed with Audiologist

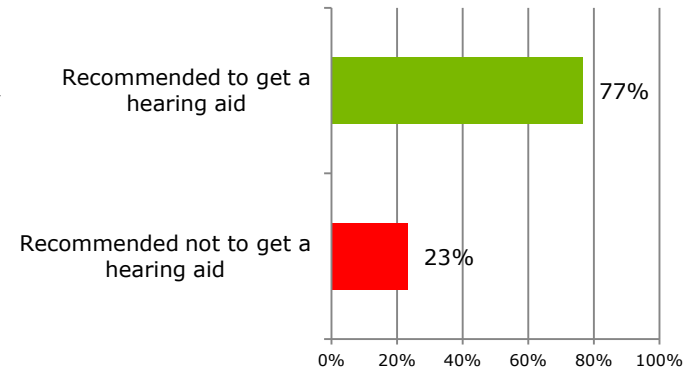


What did he/she recommend ?

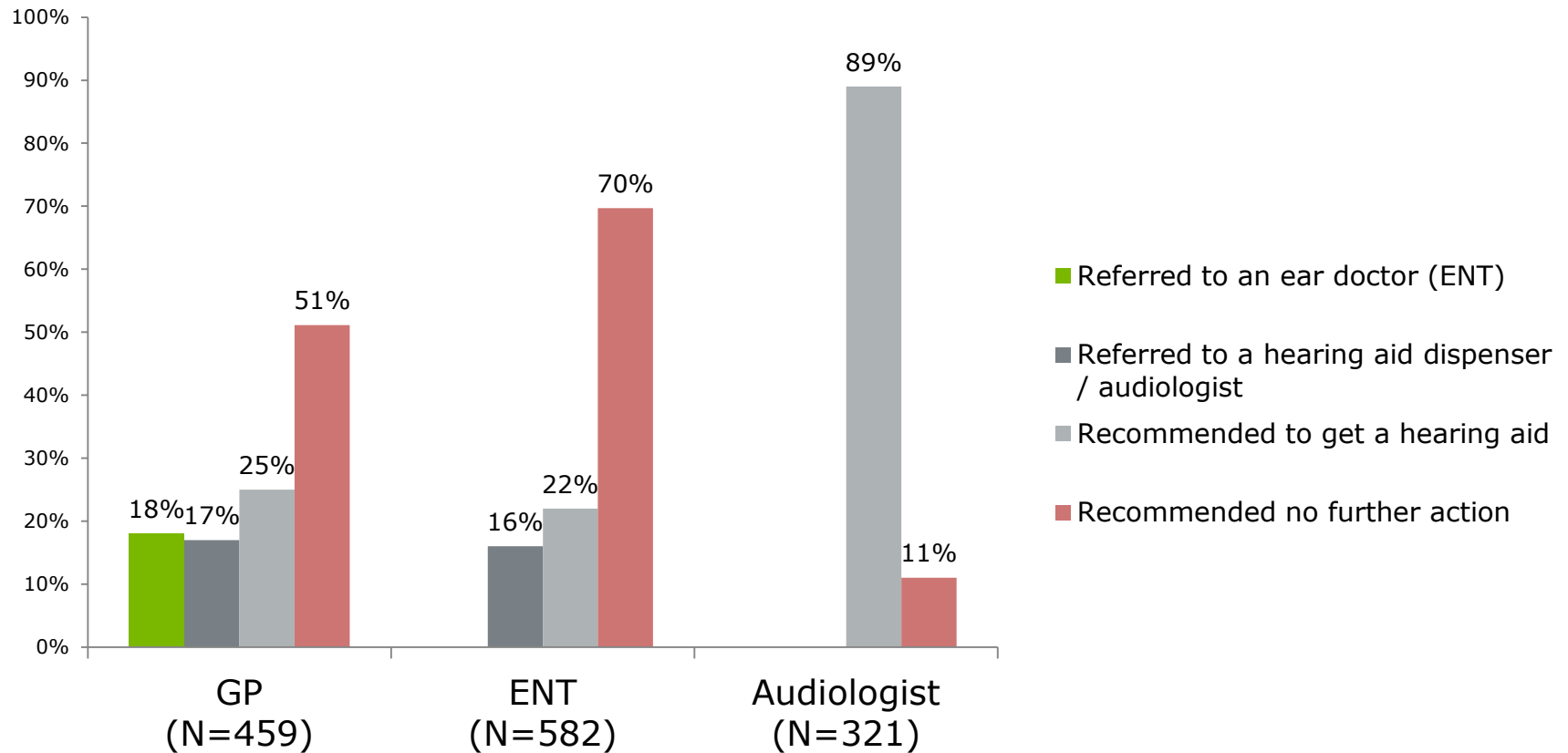
HA owner (Base: 257)



Impaired non-owner (Base: 64)



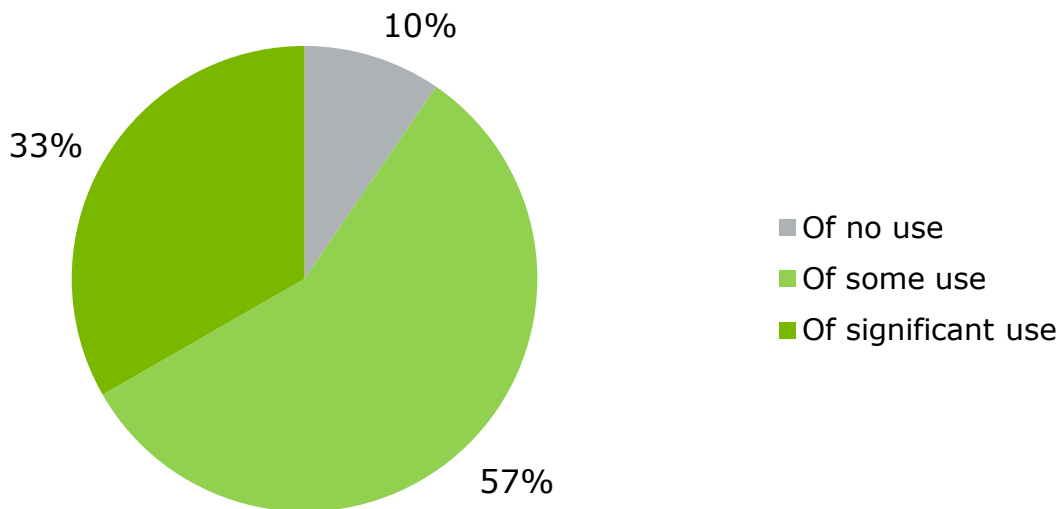
Recommendations by profession



Potential social cost-savings due to the use of hearing aids: Work competitiveness, depressive and dementia symptoms, sleep quality

Work competitiveness: 90% 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?

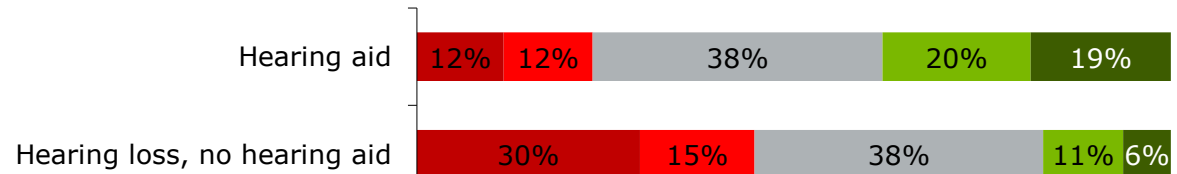


Base: N=153

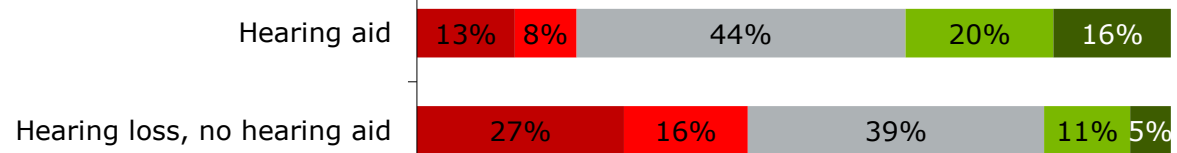
Work competitiveness: People with hearing aids recognize that hearing aids increase the chance of hearing impaired to get promoted, to get the right job and to get more salary.

■ Disagree strongly ■ Rather disagree ■ Neutral ■ Rather agree ■ Strongly agree

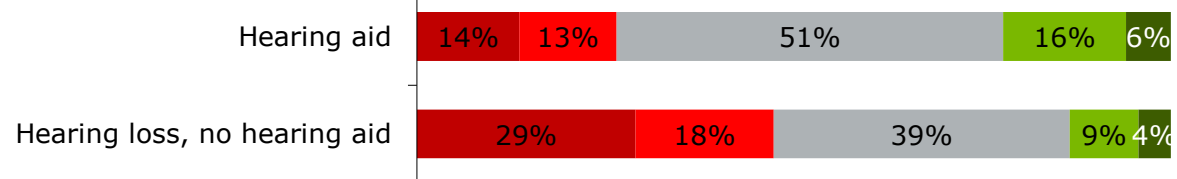
I think that people with an untreated hearing loss tend to be less promoted in their job



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

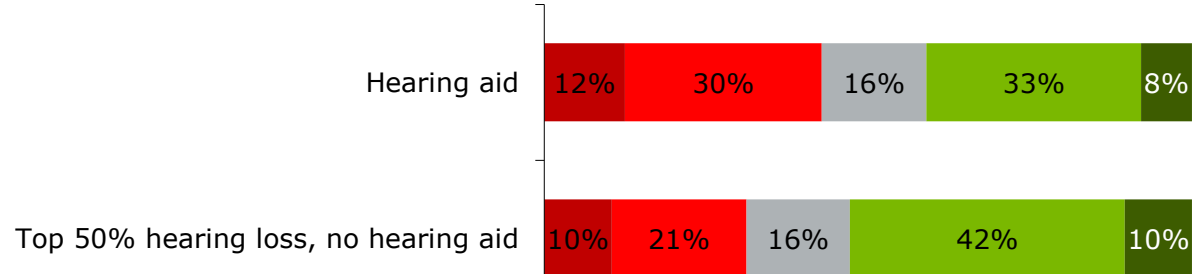


Base: Hearing loss, no hearing aid =769/ hearing aid n=382

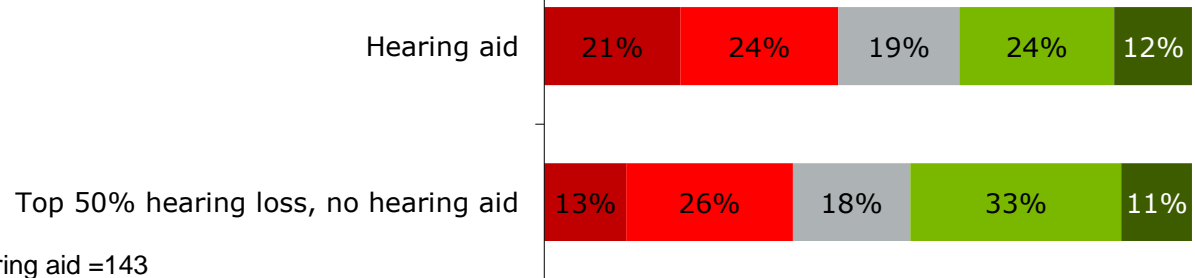
General health problems: Compared to impaired hearing aid non-owners with significant hearing loss (Top 50% hearing loss*), hearing aid owners feel less exhausted in the evenings

■ Disagree strongly ■ Rather disagree ■ Neutral ■ Rather agree ■ Strongly agree

In the evenings I often feel physically exhausted



In the evenings I often feel mentally exhausted



Base: hearing aid n=345 / Top 50% no hearing aid =143

*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: Hearing aid owners have a lower risk of being depressed (PHQ-2 Screening) and being forgetful compared to impaired non-owners with comparable hearing loss (**Top50% hearing loss group***).

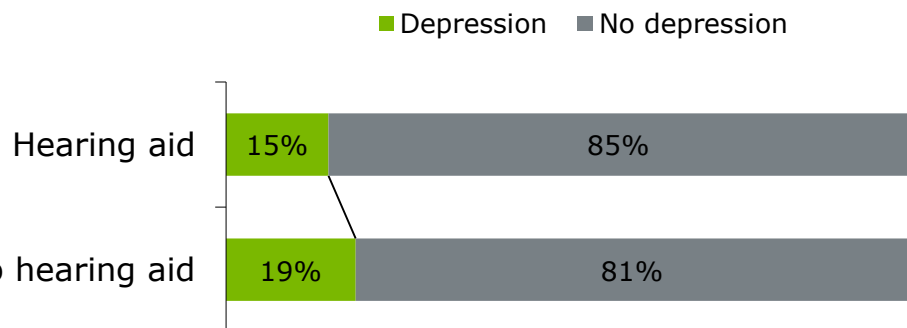
Depression symptoms:

PHQ-2 Screening:

In the last 2 weeks:

- Little interest or pleasure
- Feeling down, depressed, hopeless

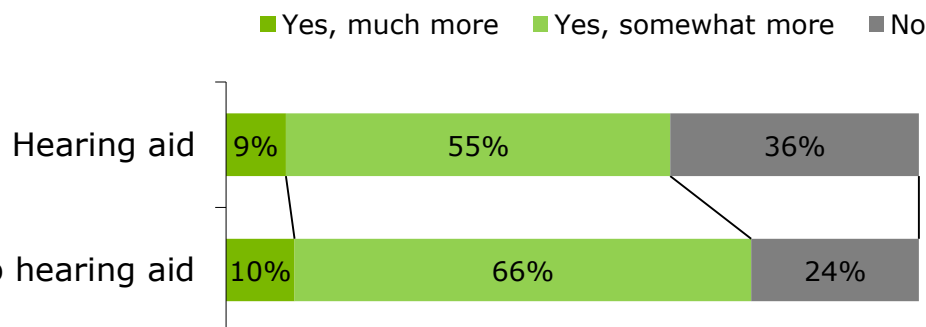
Top 50% hearing loss, no hearing aid



Dementia symptom:

Getting more forgetful in the last year?

Top 50% hearing loss, no hearing aid



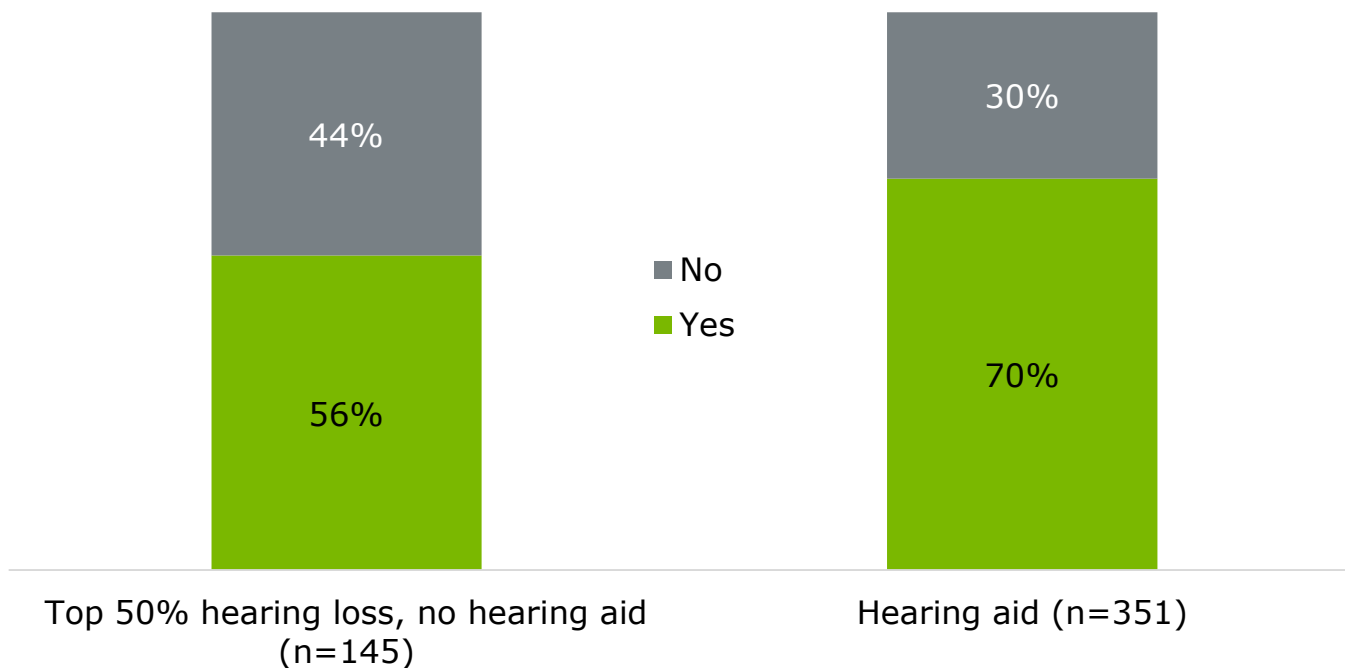
Base: hearing aid n=351 / no hearing aid =145

*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

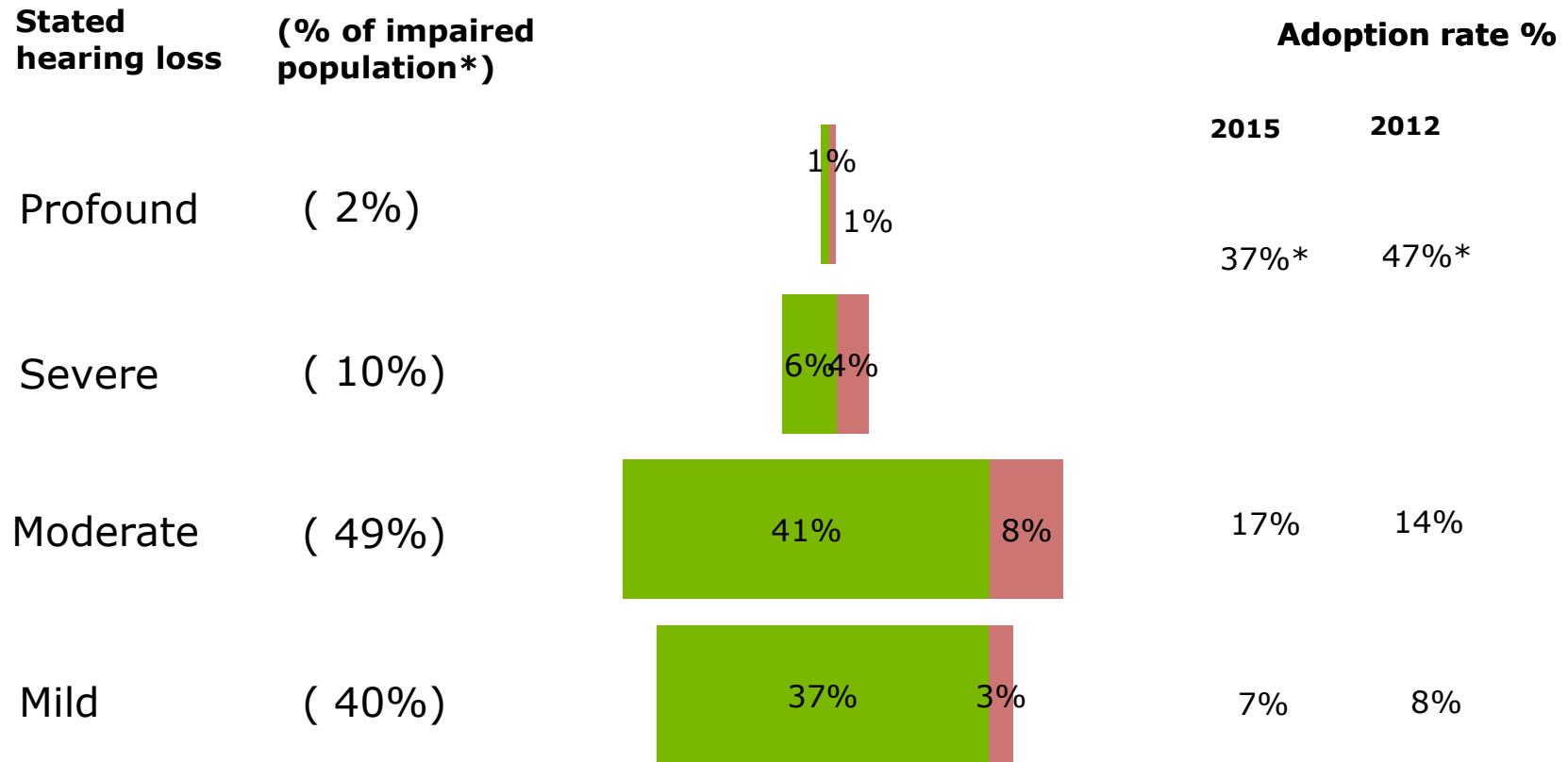
Are you generally satisfied with the quality of your sleep?



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



Base: n= 1'180

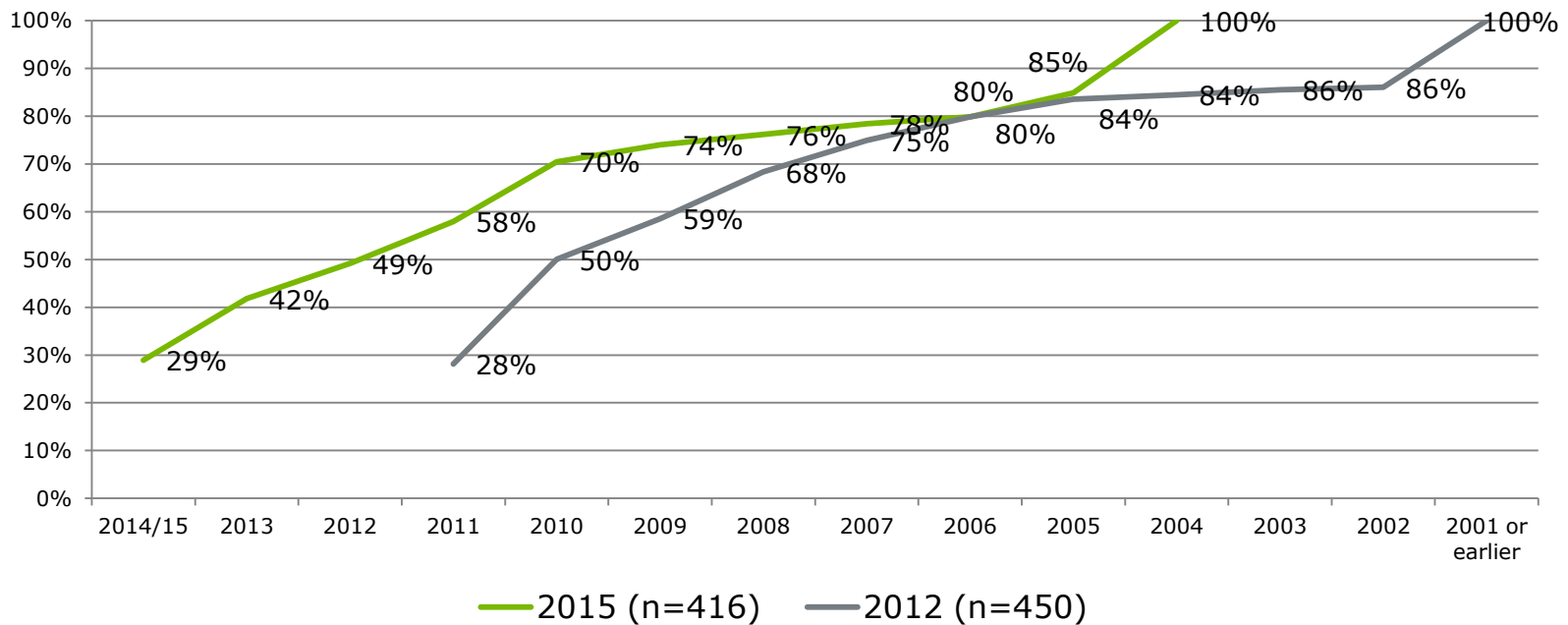
Sums can differ from 100% due to rounding

* combined "severe" and "profound" because n is too small

■ No hearing aid
■ Hearing aid

42% of the currently owned HAs were bought in the last two years

Year of purchase



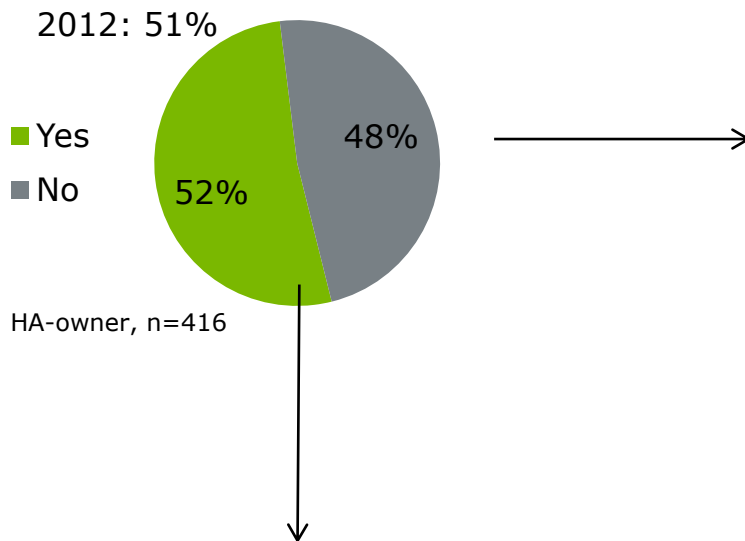
Age of currently owned HAs (Mean):

2015: 4.1 years

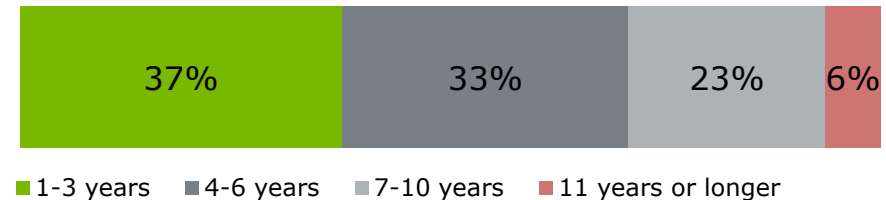
2012: 3.5 years

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?



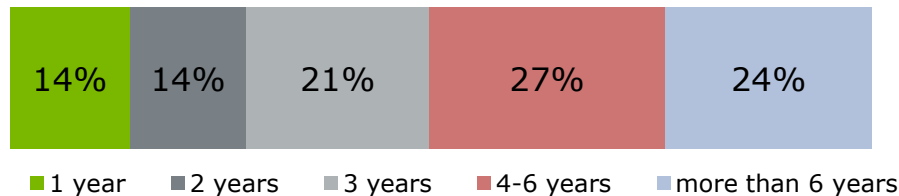
How many years did you own your previous HAs?



Base: n=195

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

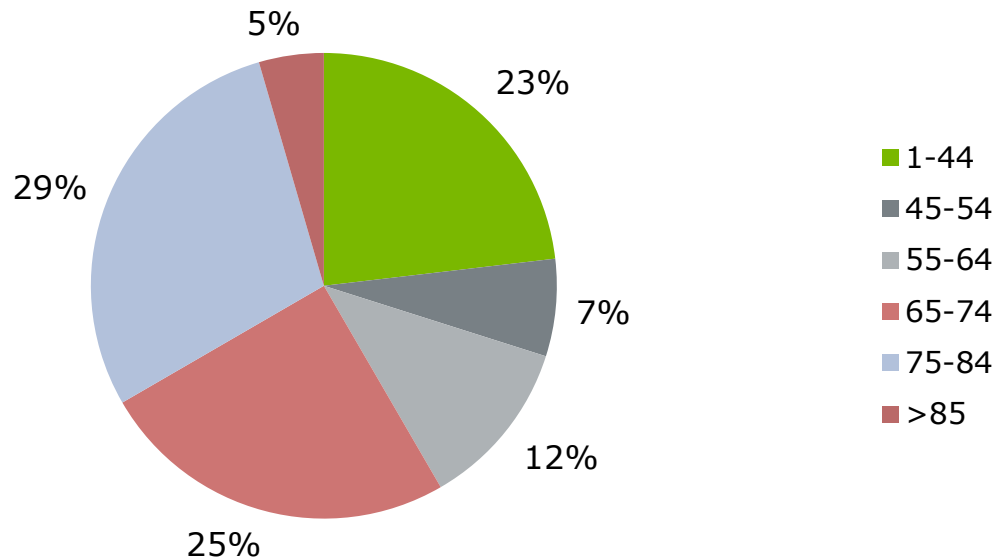
Thinking back before you purchased your first hearing aid: How many years have passed since you became aware of your hearing loss until you purchased a hearing aid? (Scale recoded)



Base: n=221

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?

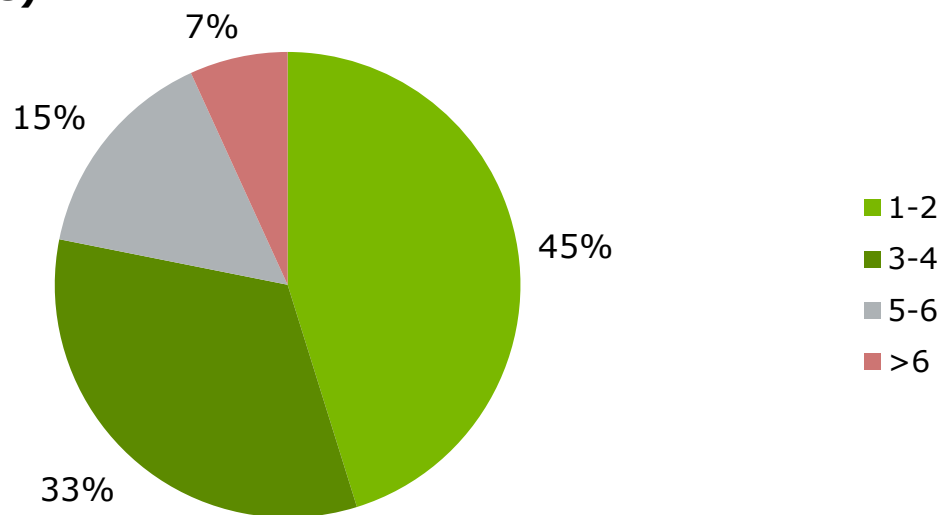


Median: 70 years

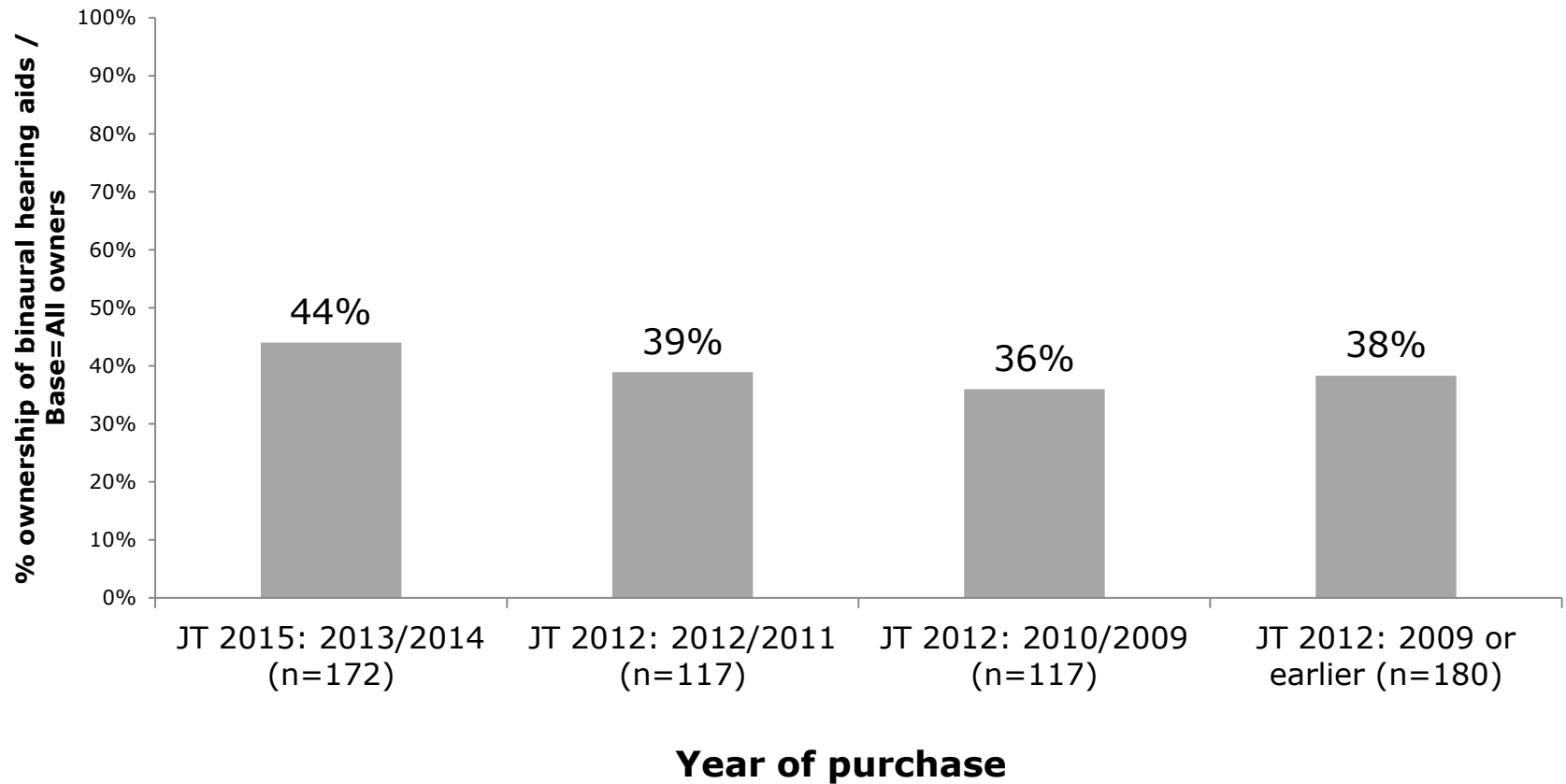
Base: N=416

45% fo the HA owners have 1-2 hearing aids

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



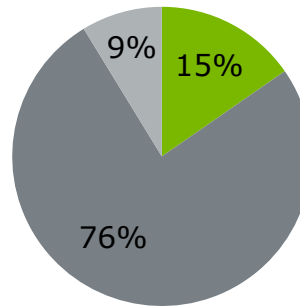
Binaural treatment by purchase date



15% received some kind of reimbursement from the government. Only 9% of non-owners know the system of supplying hearing aid(s) by the government.

2015

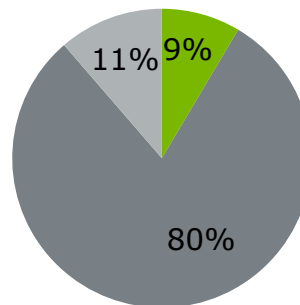
Owners: Was any part or all of your hearing aid(s) paid by the government?



HA-owner, n=416

■ Yes (2012: 12%)
 ■ No (2012: 81%)
 ■ don't know (2012: 7%)

Non-owners: Do you know the system of supplying hearing aid(s) by government ?



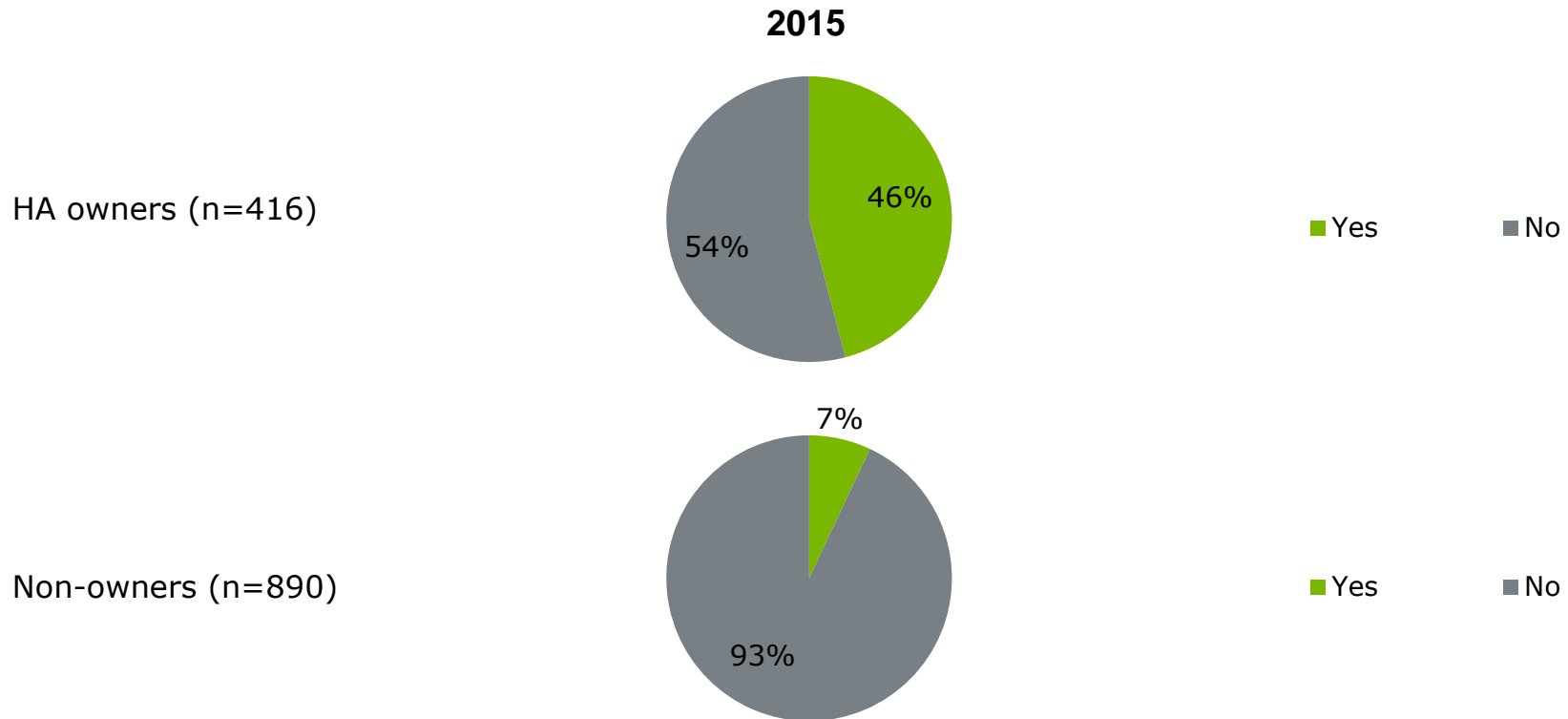
HA-non-owners, n=890

■ Yes (2012: 6%)
 ■ No (2012: 84%)
 ■ don't know (2012: 10%)

Generally people are not aware that hearing aids are untaxed articles in the VAT system

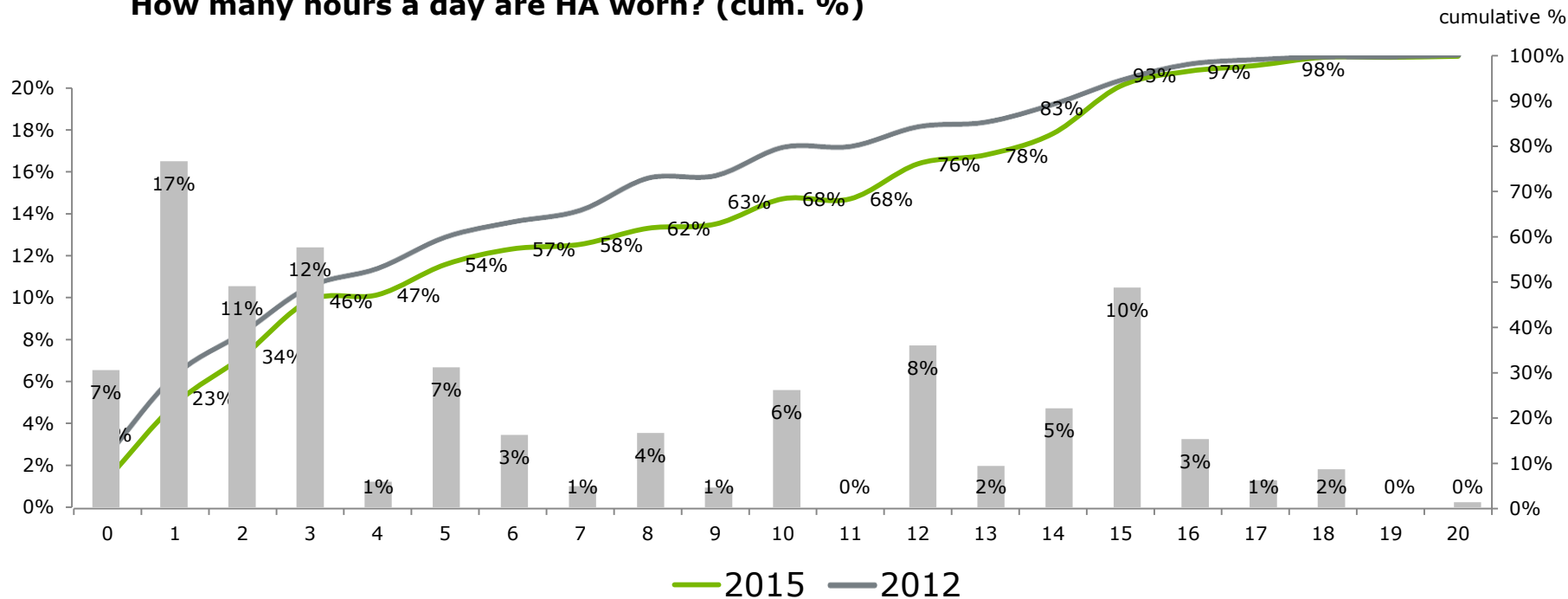
Do you know that hearing aids are untaxed articles in the Japanese Value added Tax system?

Total hearing impaired: 12% yes (n=1306)



On average, HAs are worn 6.8 hours a day

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

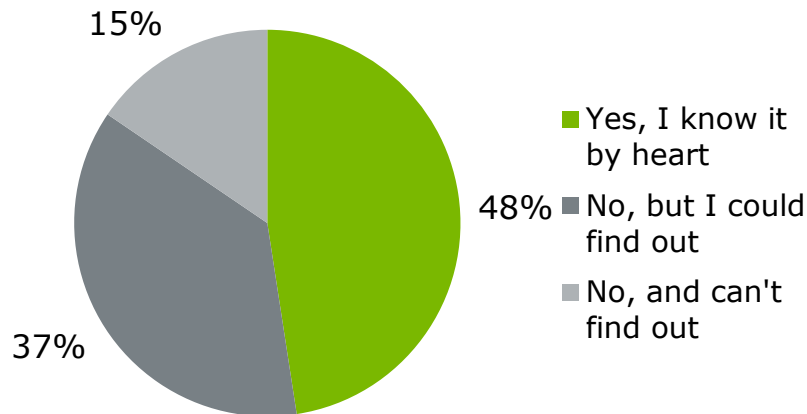


HA-owner:
2015: n=416
2012: n=450

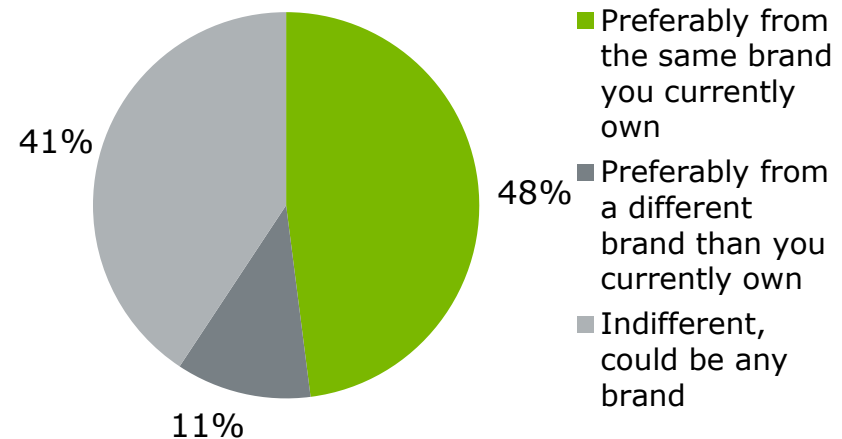
HA worn:
2015 Mean: 6.8 hours/day
2012 Mean: 5.7 hours/day

48% of today's hearing aid owners are aware of their hearing aid brand

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

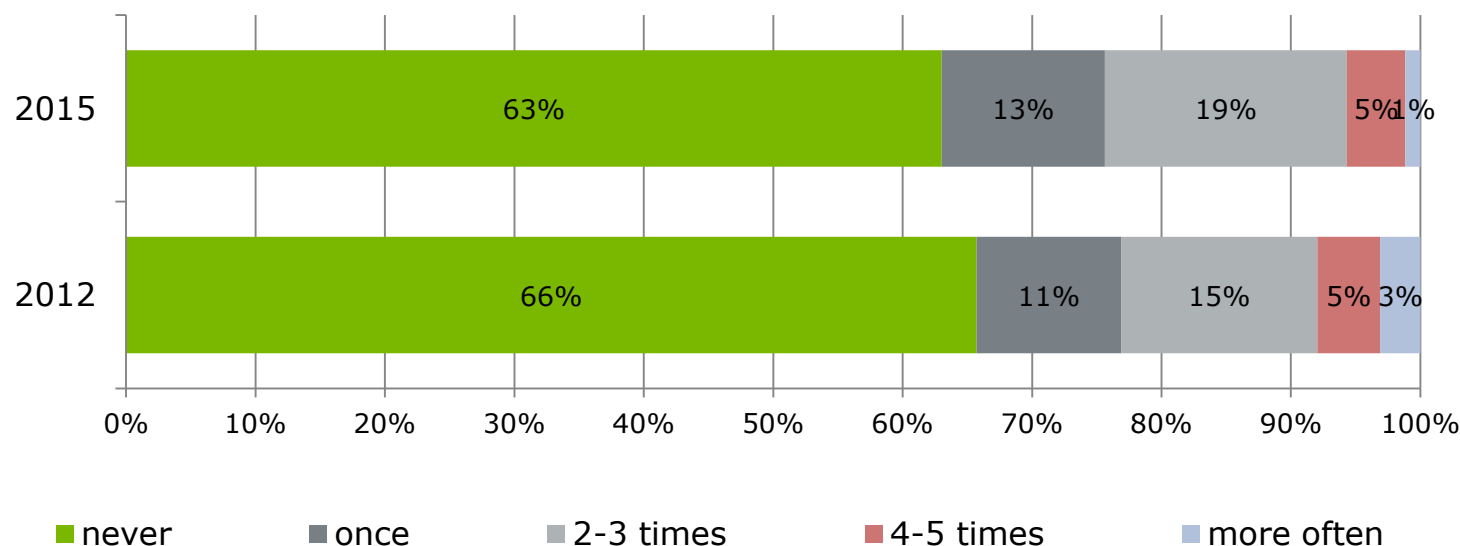


In case you plan to obtain new hearing aid(s), what brand would you choose?



76% of the currently owned HAs either had no repair need or only once

How often has your current hearing aid required a repair because it was not working properly?

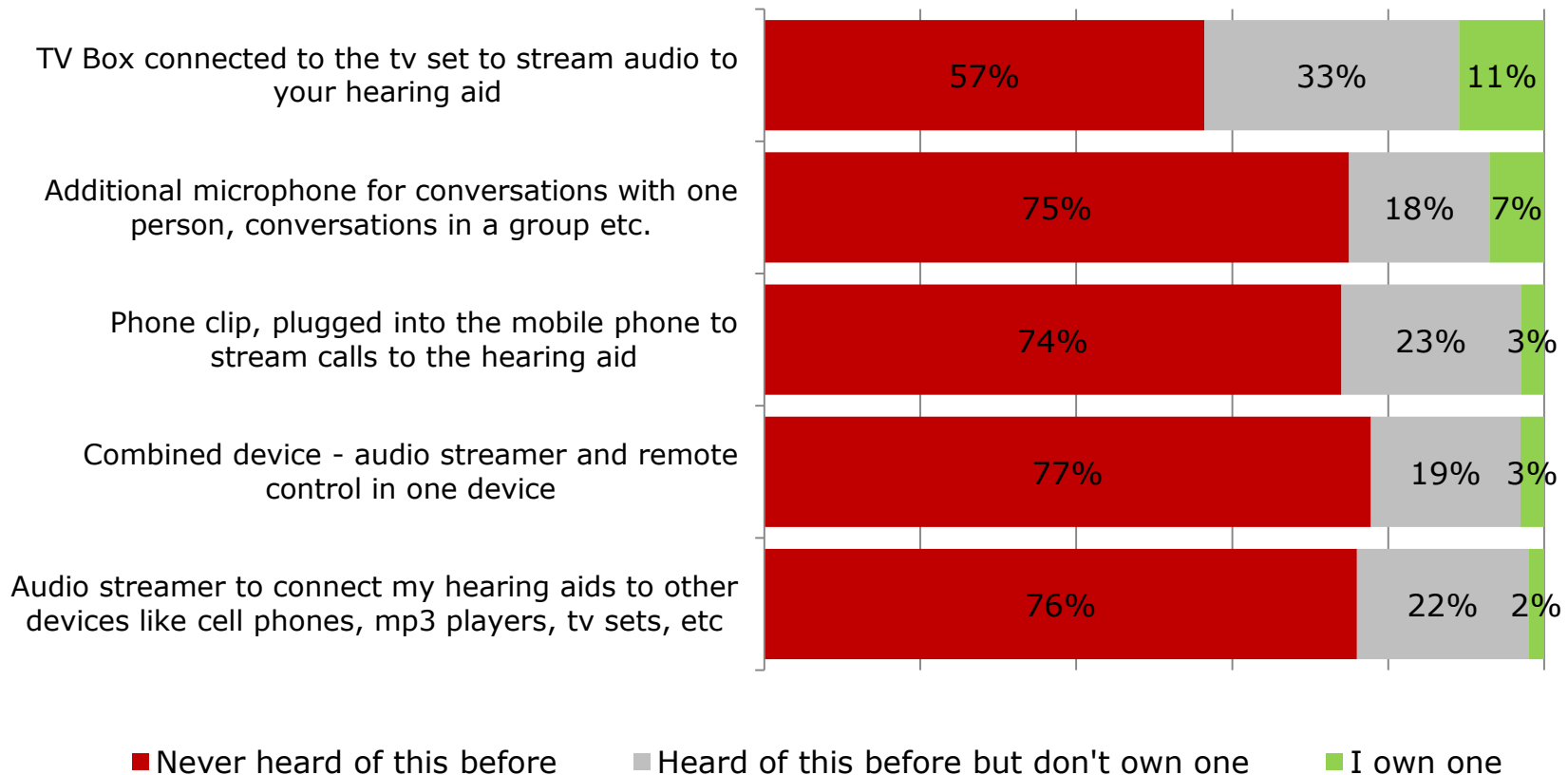


HA-owner:
2015: n=419
2012: n=450

Awareness and usage of accessories

TV Box is the most often owned electronic accessory: 11% of hearing aid owners have one – 33% have heard of it but don't own one.

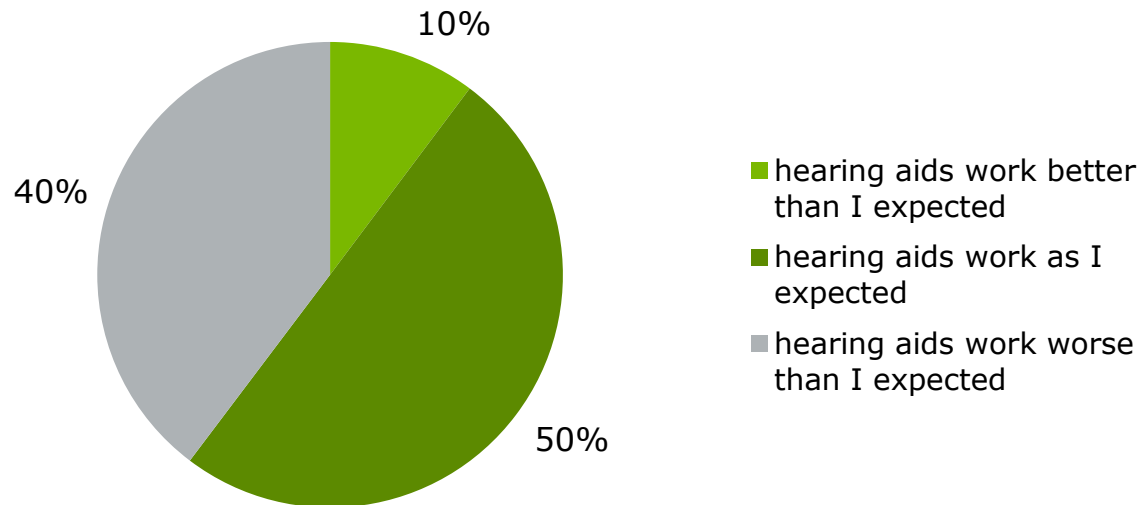
Which of the following accessories have you heard of and which ones do you own?



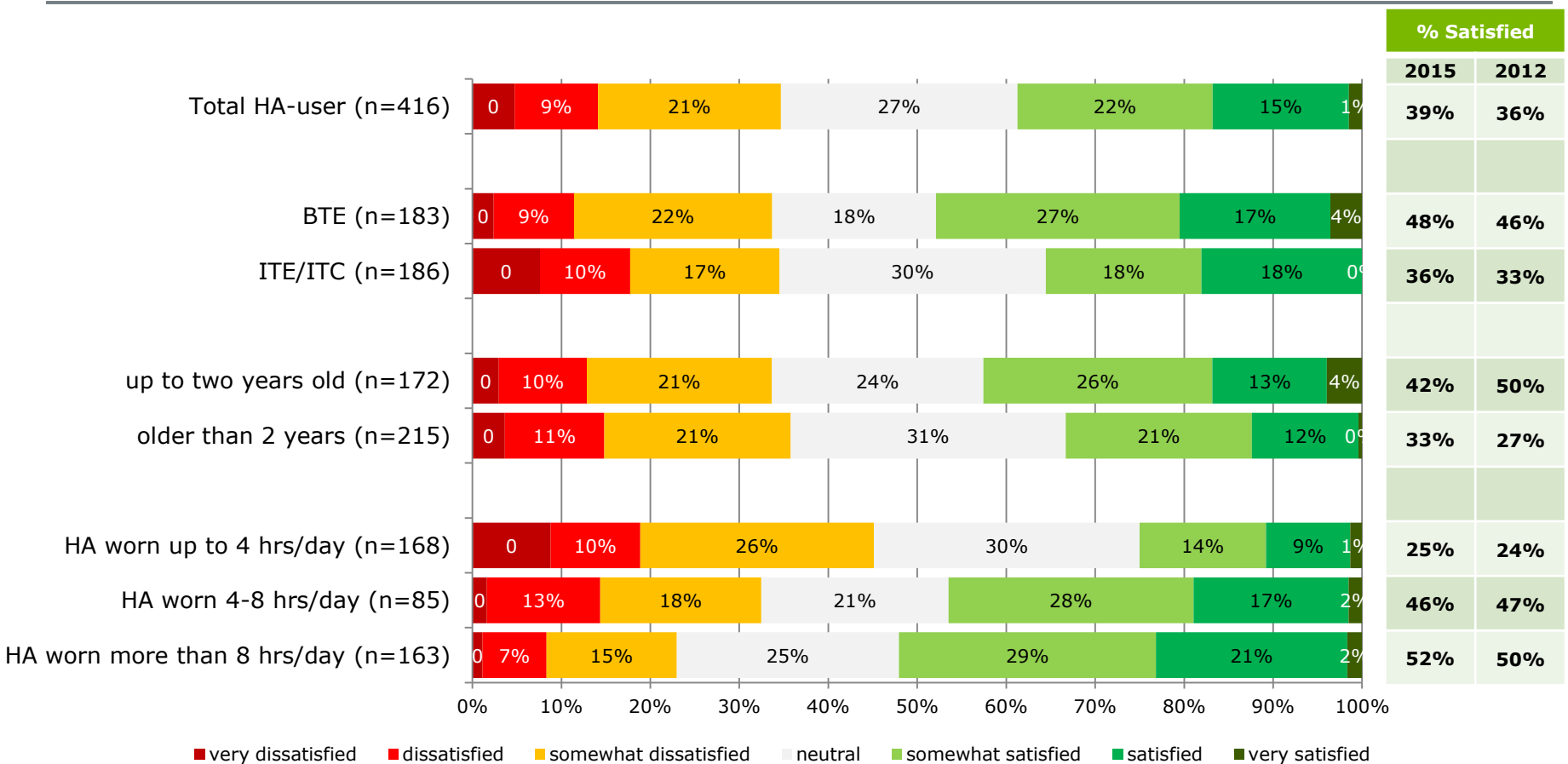
Satisfaction with hearing aids and drivers

60% of the hearing aid owners say their hearing aid works better than or as expected

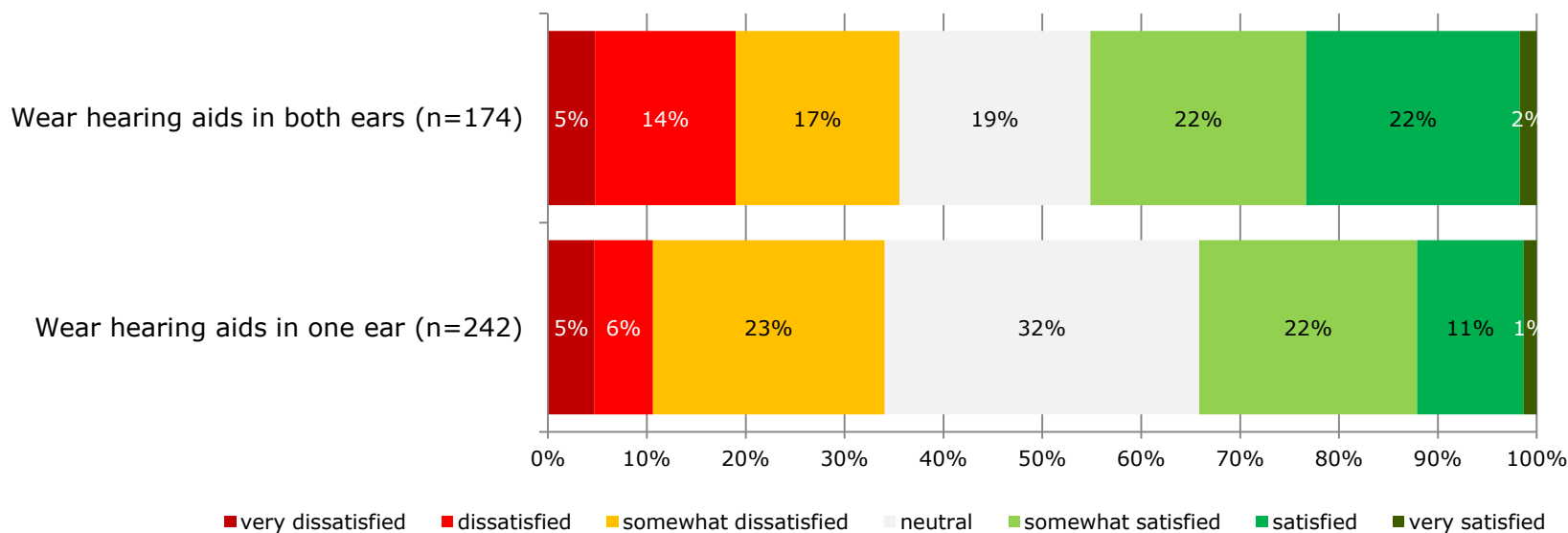
How have the expectations you had towards hearing aids before trying them on for the first time been met?



Overall satisfaction with HA increased from 36% to 39% since 2012

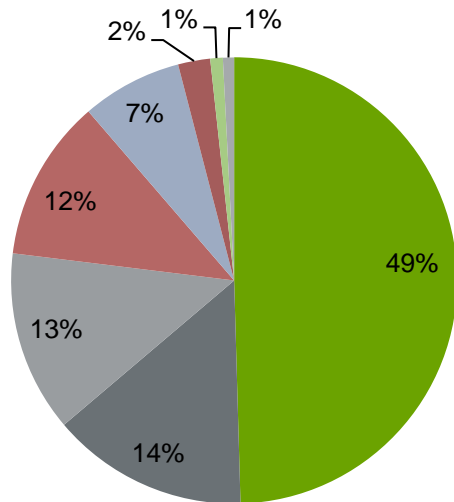


Overall satisfaction is higher for people with binaural treatment



Satisfaction with hearing aids purchased online is lower than with those purchased in hearing aid centers

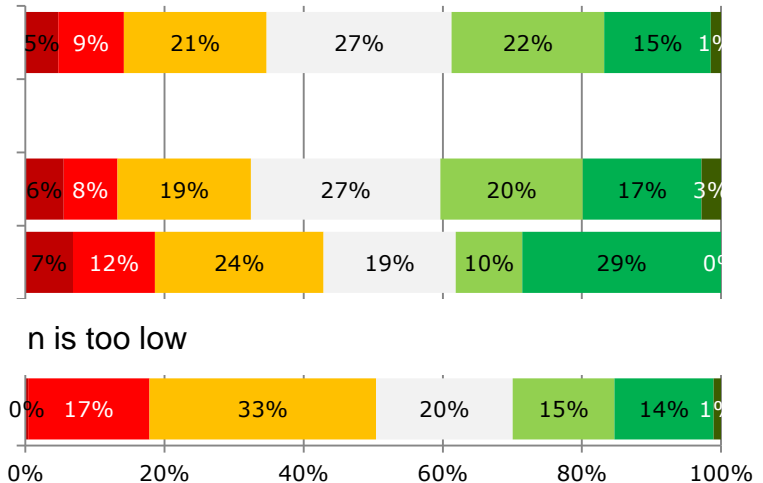
Where was your most current hearing aid purchased?



- Hearing Aid Center → (n=231)
- Optical Shop → (n=60)
- Hospital / Clinic
- Internet → (n=55)
- Mail order
- Electric shop
- Administration
- Other

Overall satisfaction with Hearing aids

Total HA-user (n=416)



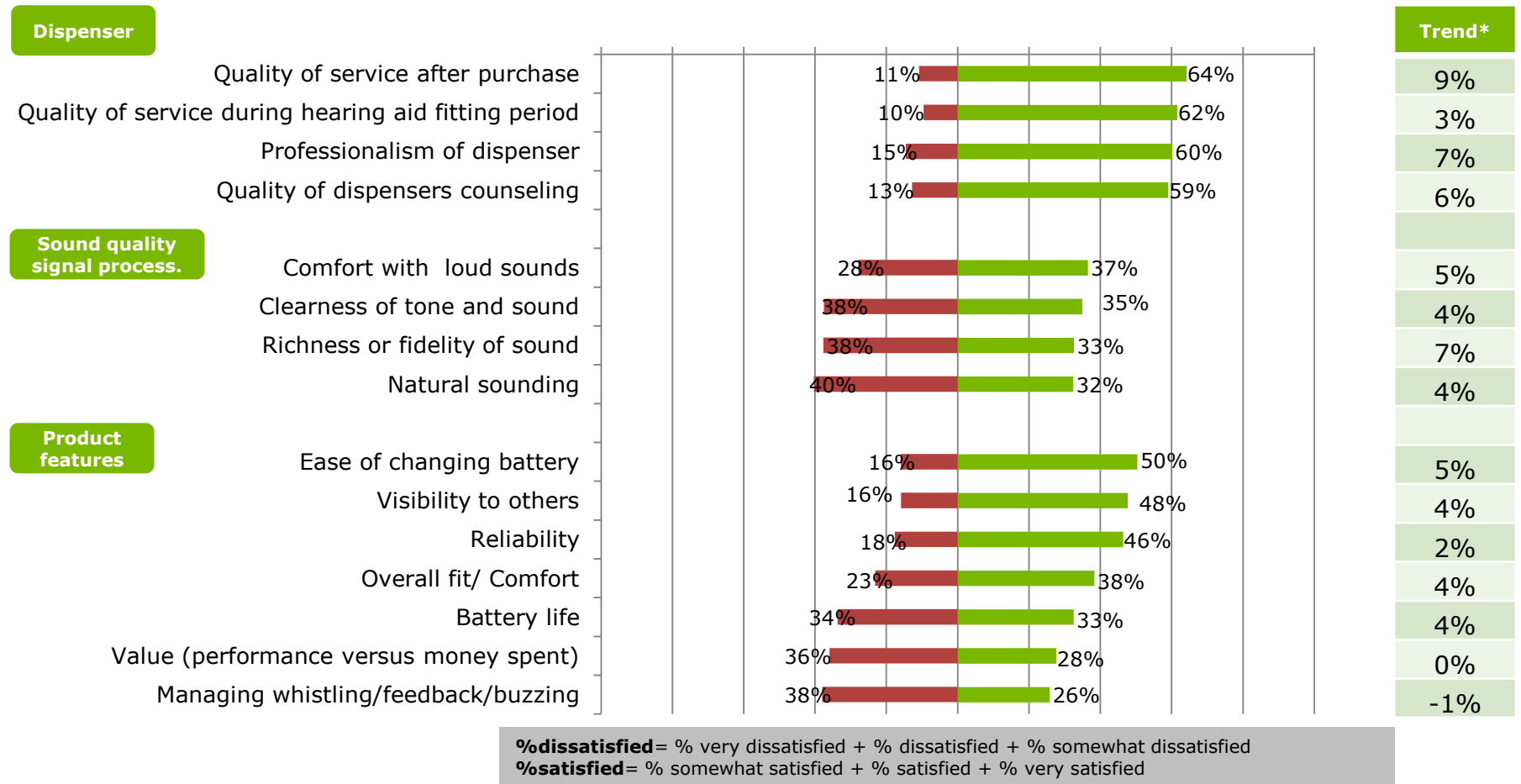
n is too low

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

Overall Satisfaction with HA: Country comparison

	France	Switzerland	UK	Germany	Denmark	Norway	Italy	Japan
Overall satisfaction 2009	86%	-	77%	72%	-	-	-	-
Overall satisfaction 2012	80%	84%	72%	77%	70%	72%	70%	36%
Overall satisfaction 2015	84%	81%	70%	77%	-	-	79%	39%

Satisfaction with current hearing aids



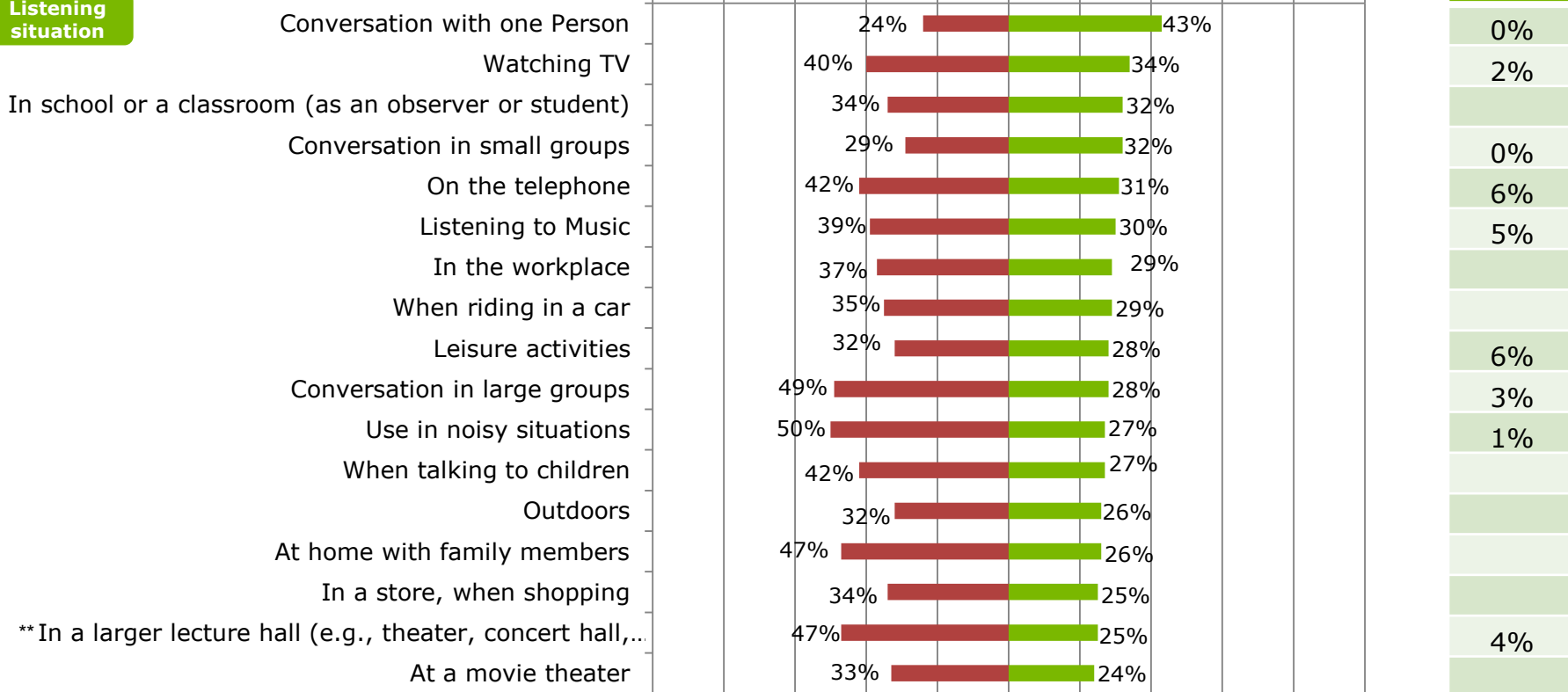
* % of satisfied HA owners compared to JapanTrak 2012

■ dissatisfied ■ satisfied

HA-owner, n=416

Satisfaction with current hearing aids

Listening situation



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

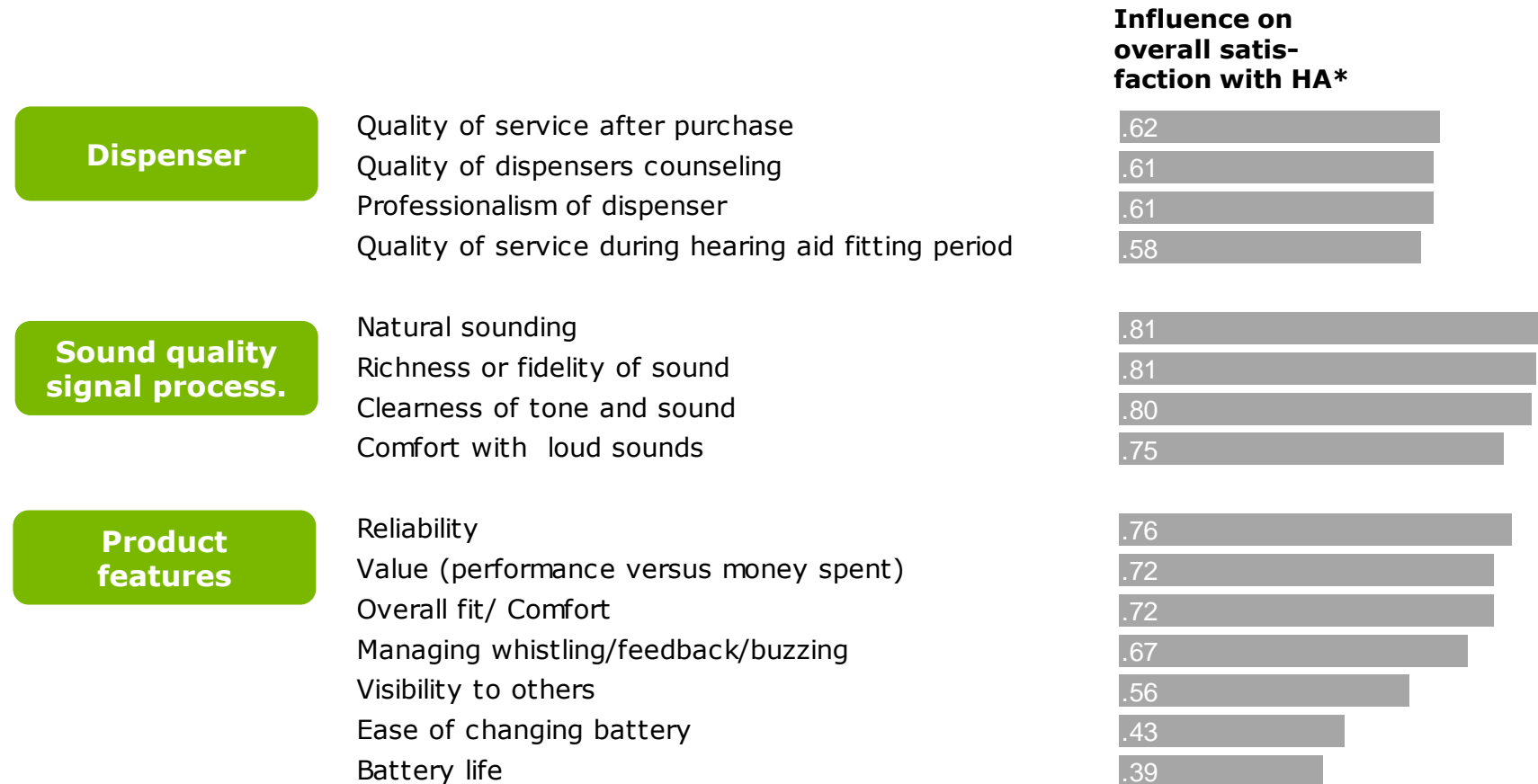
* % of satisfied HA owners compared to JapanTrak 2012

** question slightly changed: 2012=Understanding a lecture in a large public place

■ dissatisfied ■ satisfied

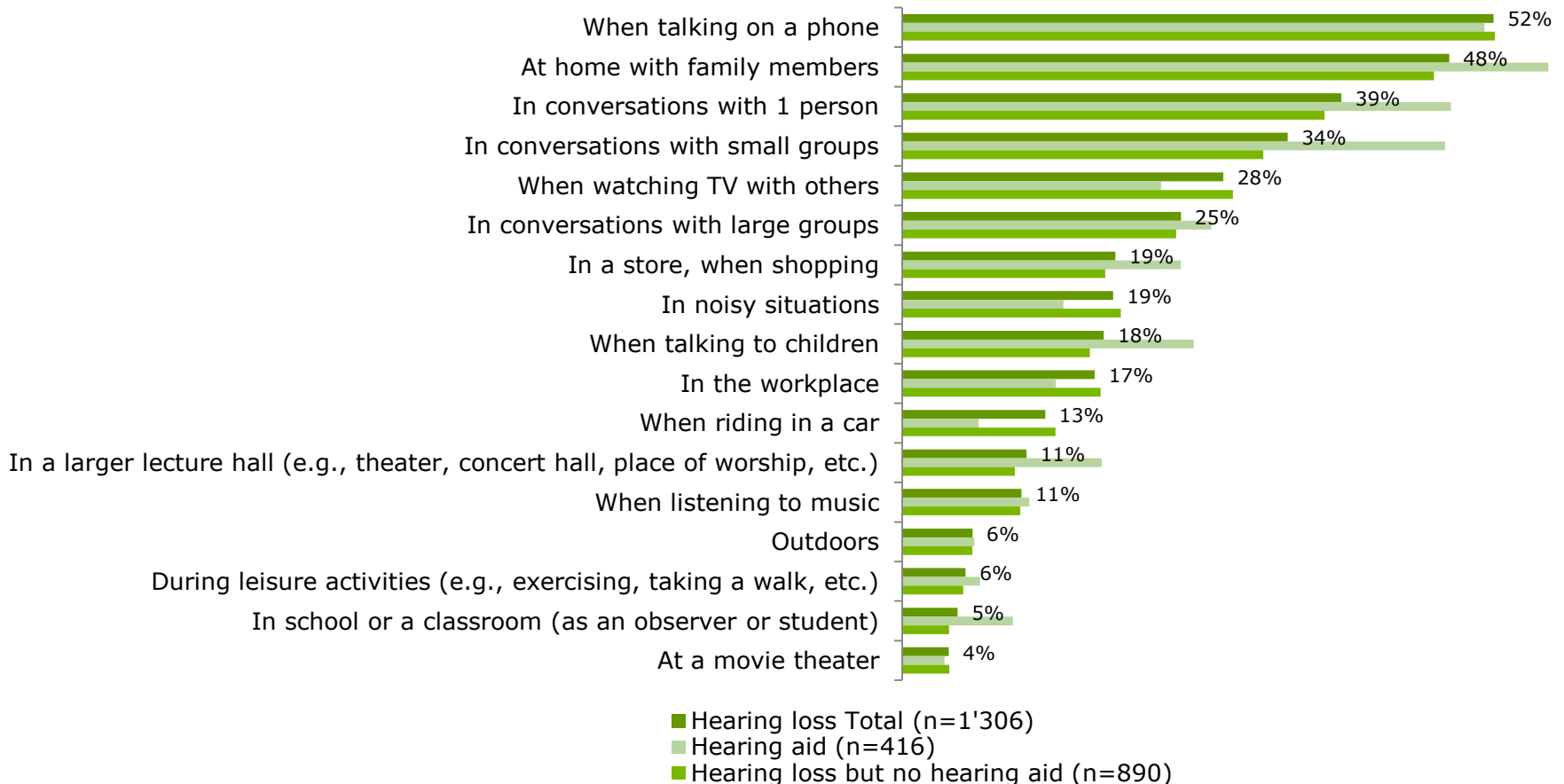
HA-owner, n=416

Factors influencing satisfaction with current HA: Sound quality/signal processing is most important for overall satisfaction with HA



Important listening situations

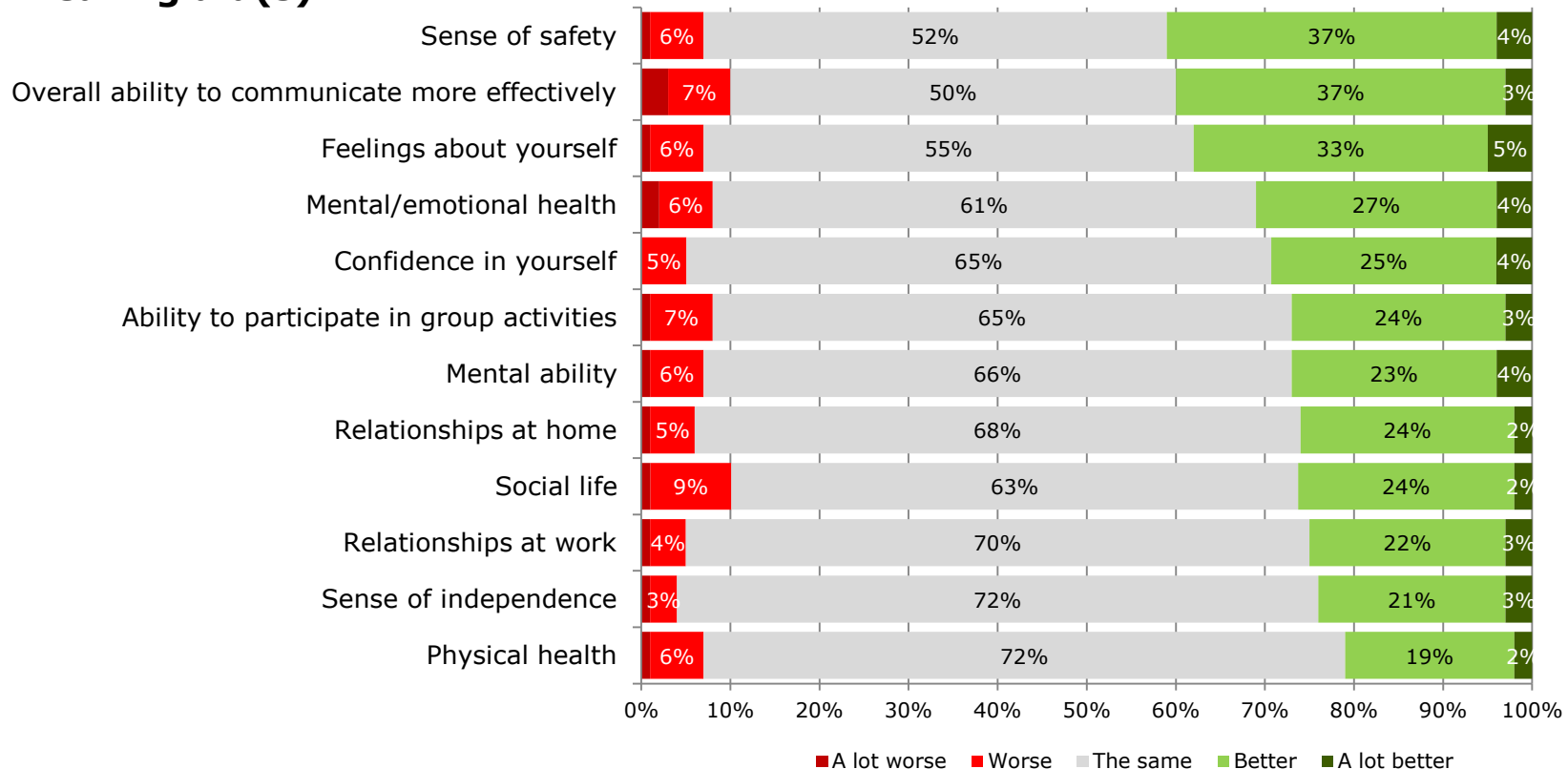
**In which of these situations is it most important for you to hear well?
(choose up to 5)**



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

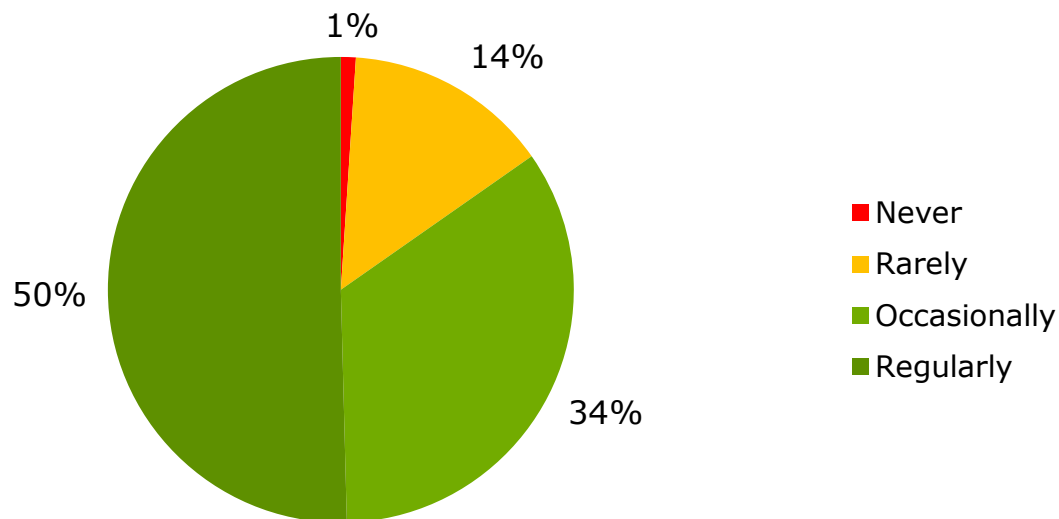
Since you started using your hearing aid(s), please rate the changes you have experienced in each of the following areas, that you believe are due to your hearing aid(s).



HA-owner, n=416

84% 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?



4. Analysis of hearing impaired non-owners

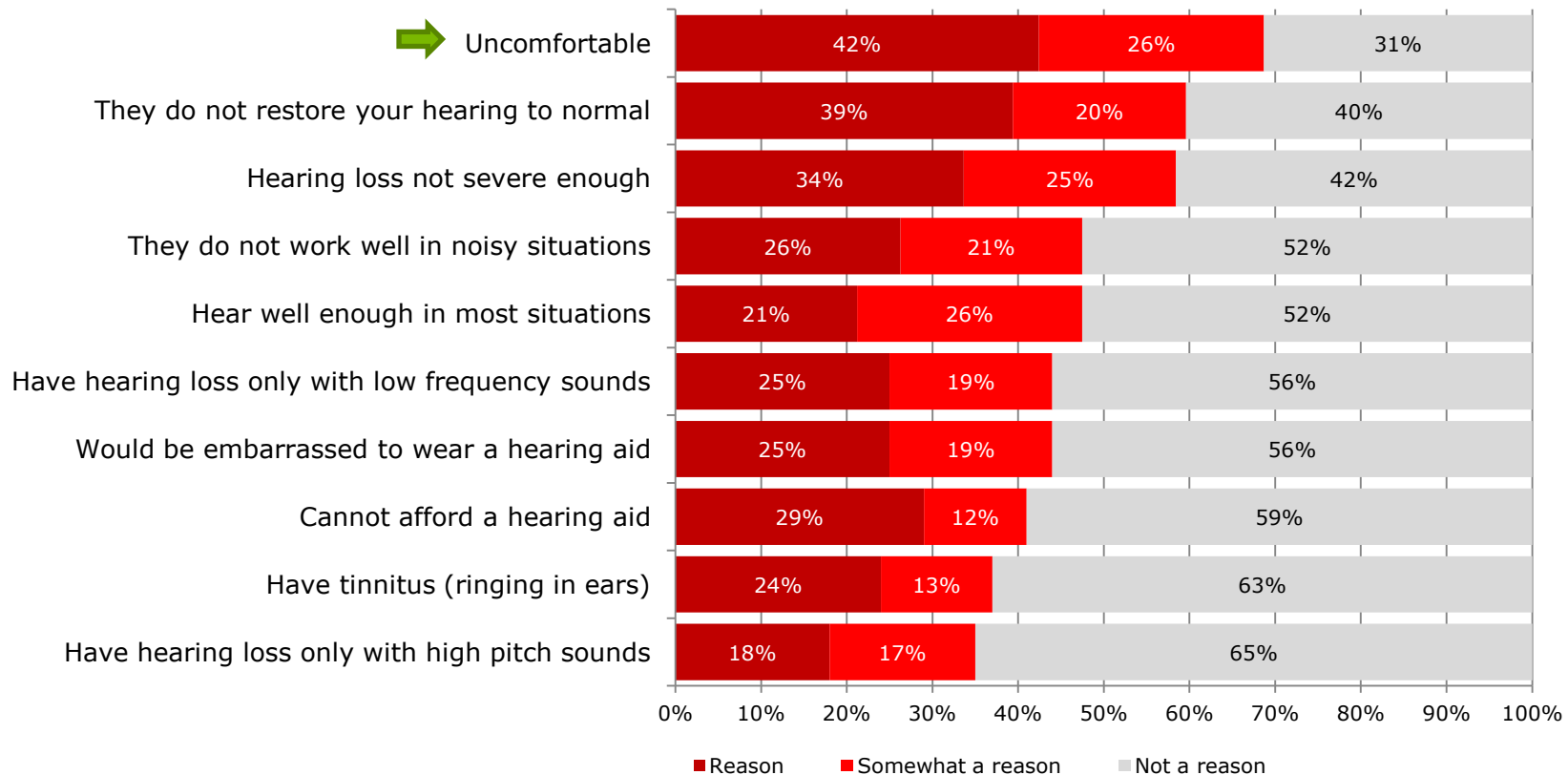
Reasons for not having hearing aids and why some people can consider hearing aids as uncomfortable

To analyse 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

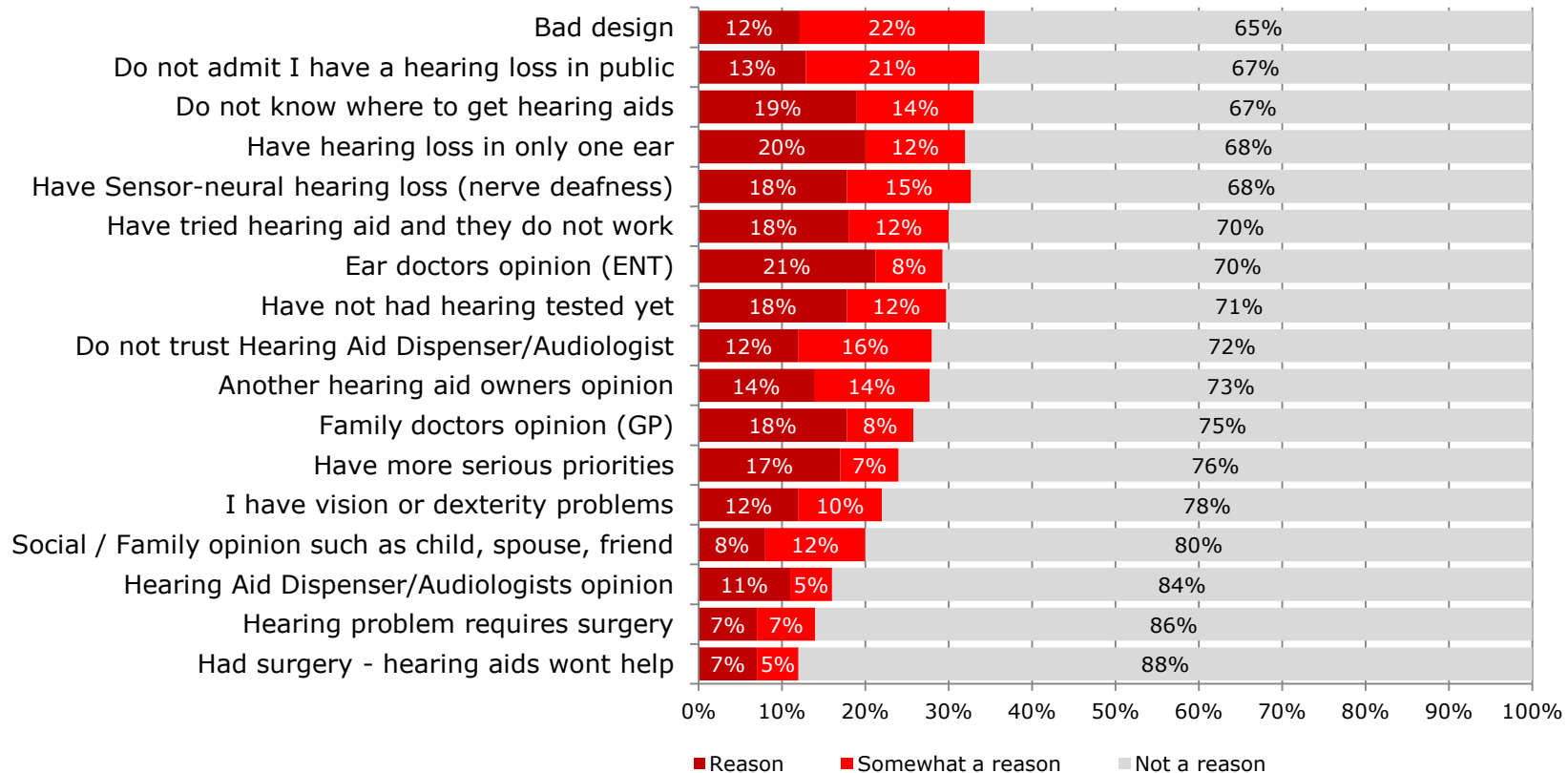
Hearing loss characteristics: Owners compared to non-owners

	% HA Owner (n=405)	%HA-Non- owner Low 50% HL (n=368)	%HA-Non- owner Top 50% HL (n=208)
Ears impaired			
Unilateral loss	17%	49%	25%
Bilateral loss	83%	51%	75%
Perceived loss		More similar hearing loss- structure	
Mild	18%	55%	32%
Moderate	54%	43%	50%
Severe	23%	1%	17%
Profound	5%	1%	2%

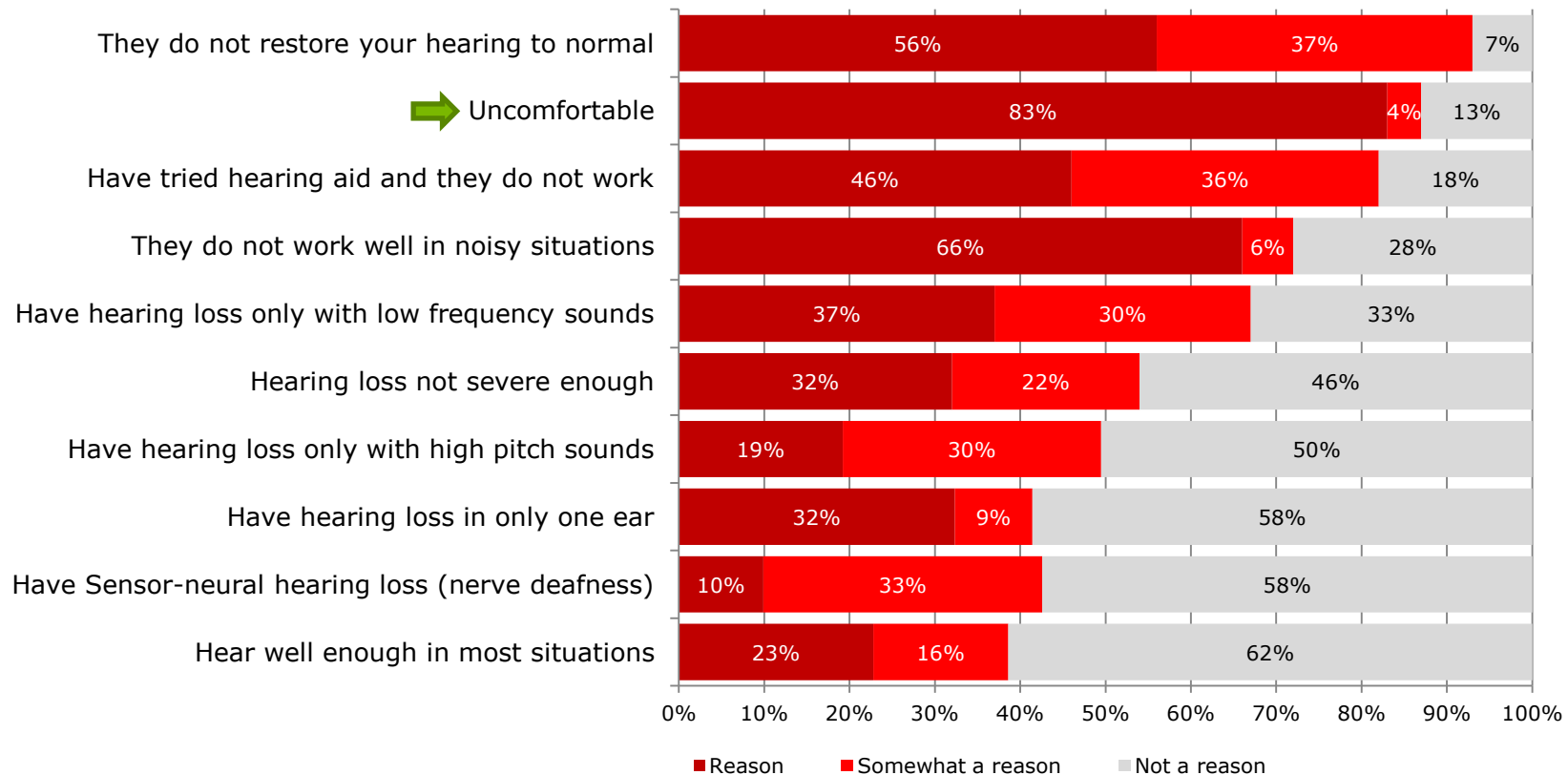
Top 10 reasons for not having a hearing aid (I/II)



Less important reasons for not having a hearing aid (II/II)



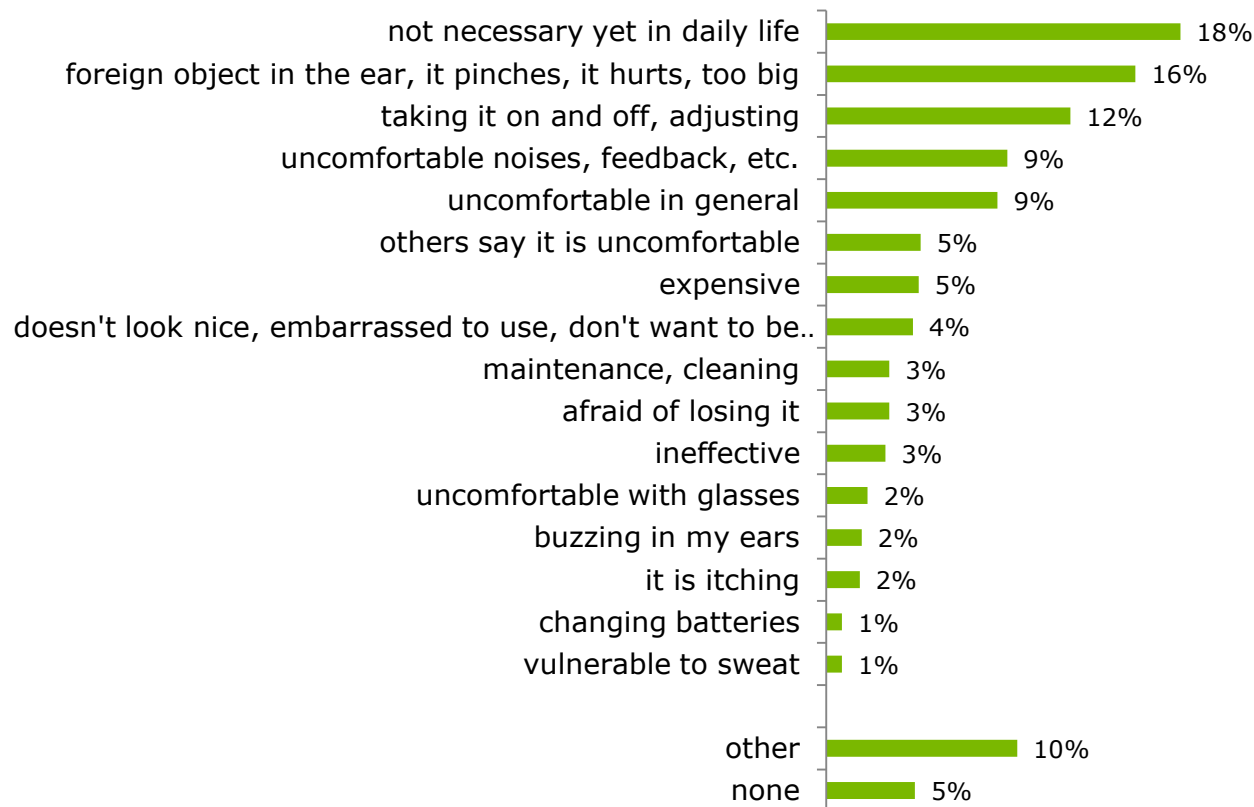
Top 10 reasons for HA owners NOT using them



Owners who don't use, n=34

Meaning of «uncomfortable» (open question)

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.



Base: n=361

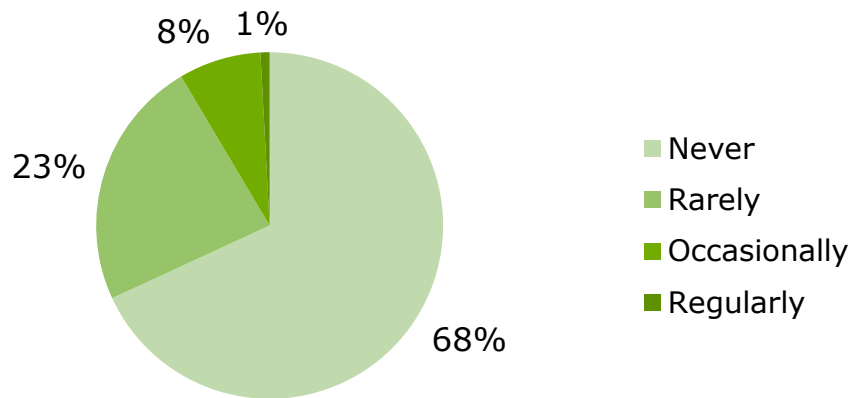


Social rejection because of hearing loss
compared to the acceptance of hearing aids



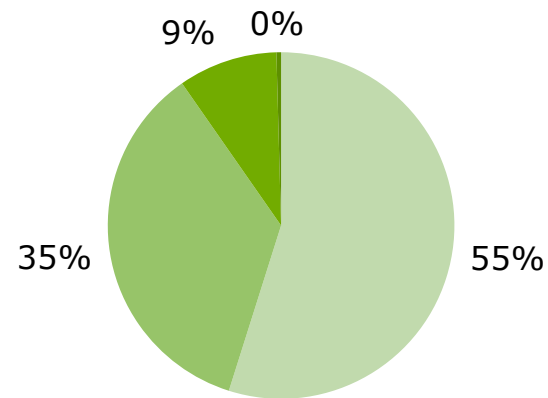
91% of hearing aid owners think people don't make fun of or reject them because of their hearing aids. It tends to be more likely that somebody makes fun or rejects a hearing impaired without hearing aids.

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



Base: N=416

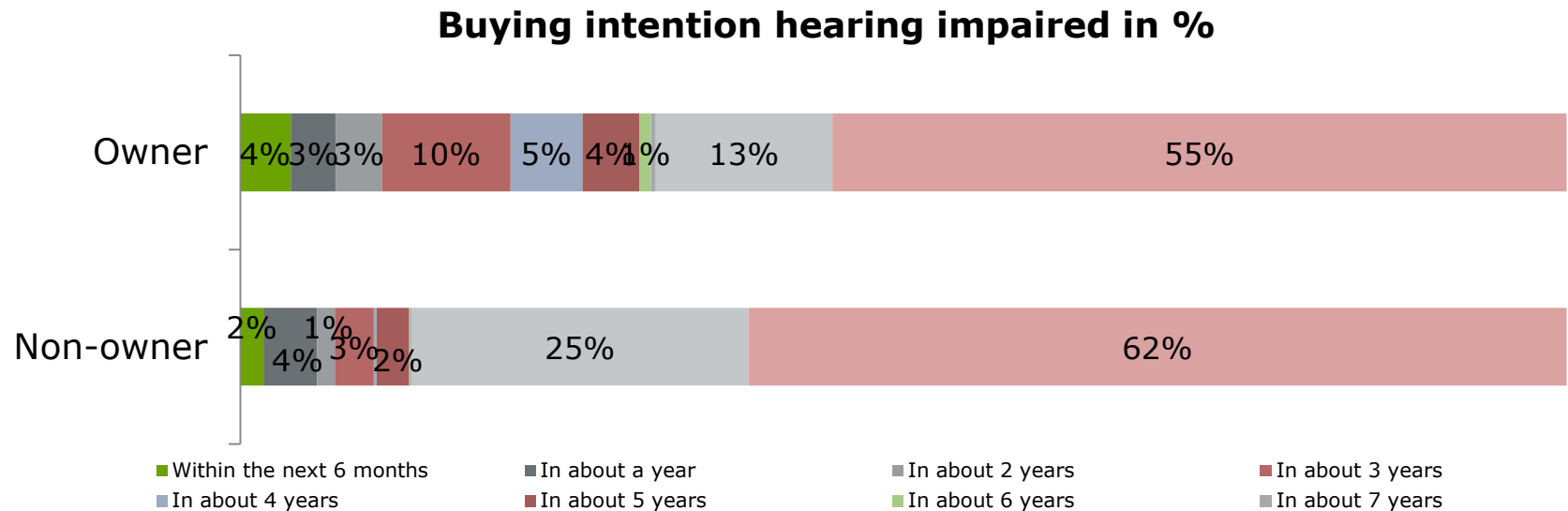
**Hearing impaired non-owners:
How often do you feel you are
made fun of or rejected because
your hearing loss?**



Base: Top 50% hearing loss, no hearing aid N=208

Buying intentions and most important triggers to buy

6% (2012:4%) of non-owners intend to get a hearing aid within the next year. Re-buying intention is higher than first-buying intention

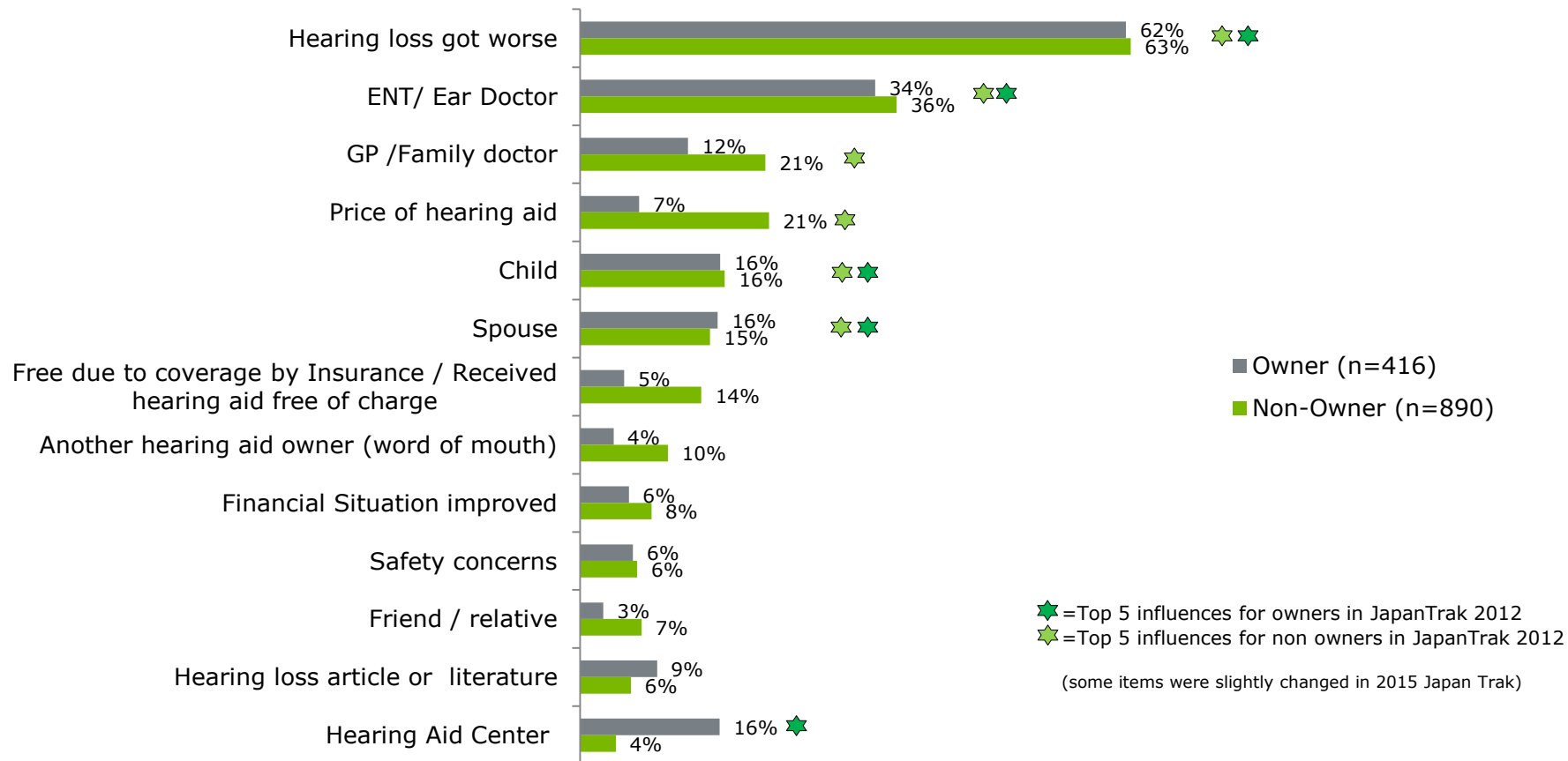


The most important influencing factors are worsening hearing loss, ENT and significant others (and: price for non owners)

Page 1 of 2

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)?

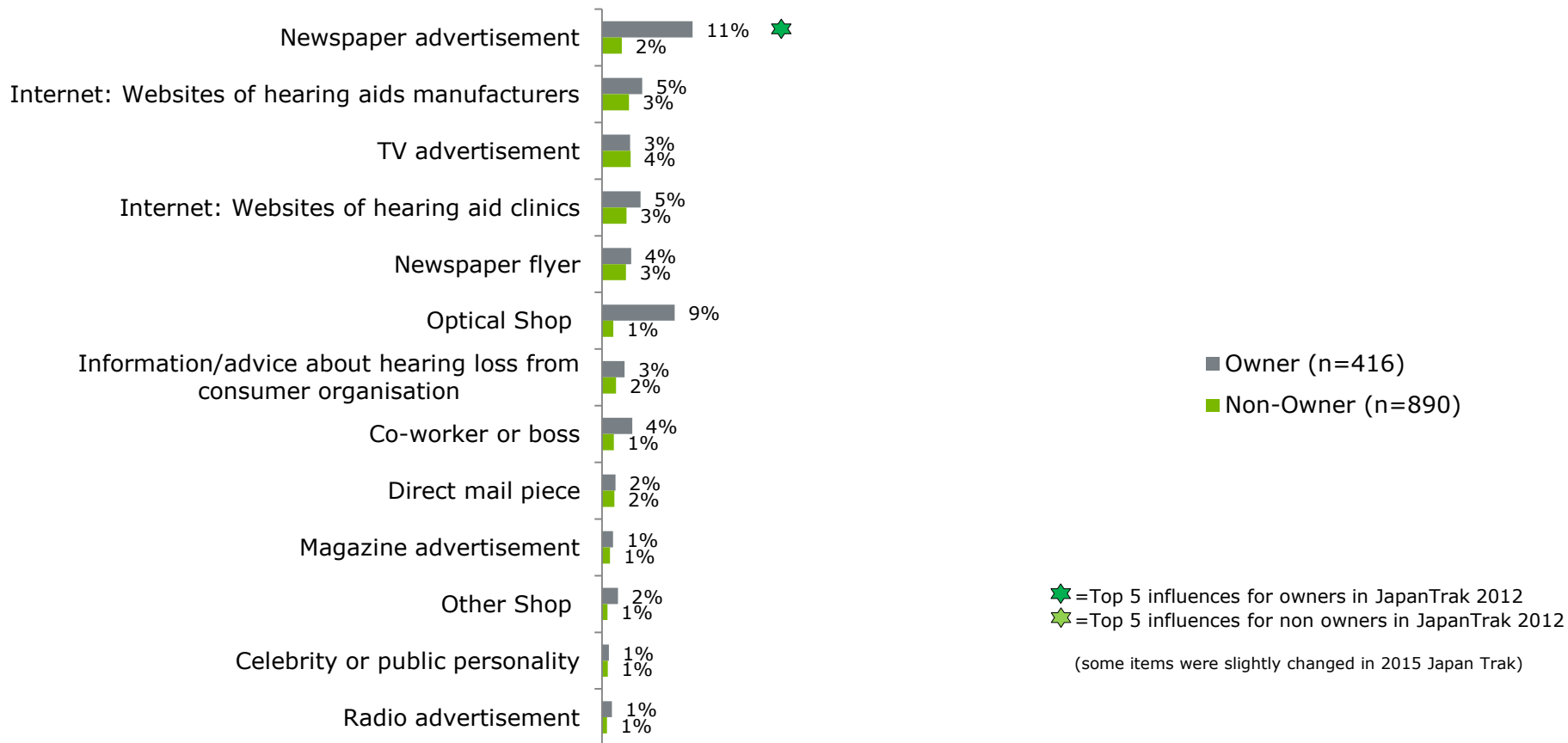


The most important influencing factors are worsening hearing loss, ENT and significant others (and: price for non owners)

Page 2 of 2

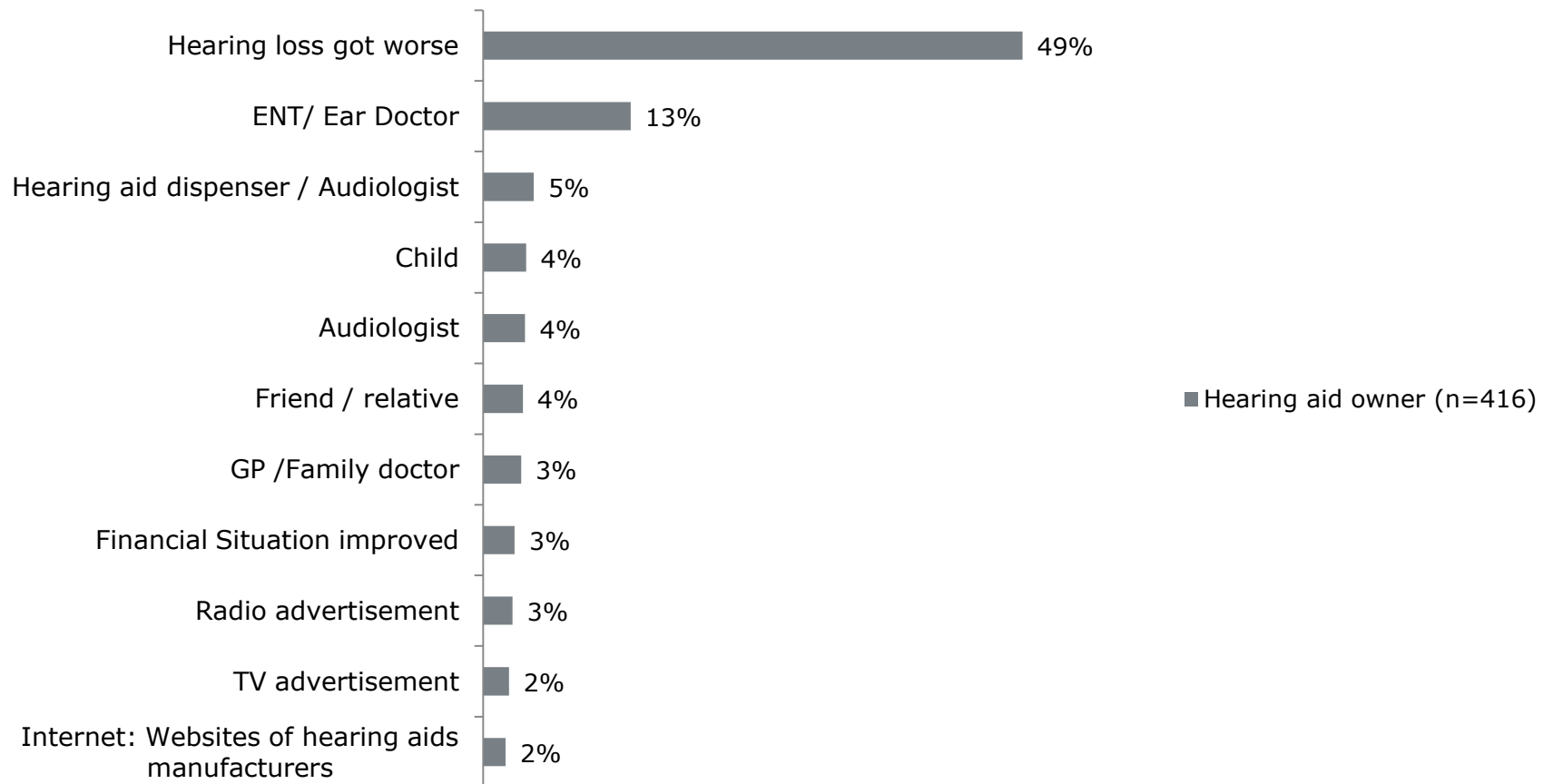
Non-owner: Think about the option to obtain / purchase a hearing aid. What do you think would influence you to obtain / purchase a hearing aid ?

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



The most important trigger to buy a hearing aid is worsening hearing loss

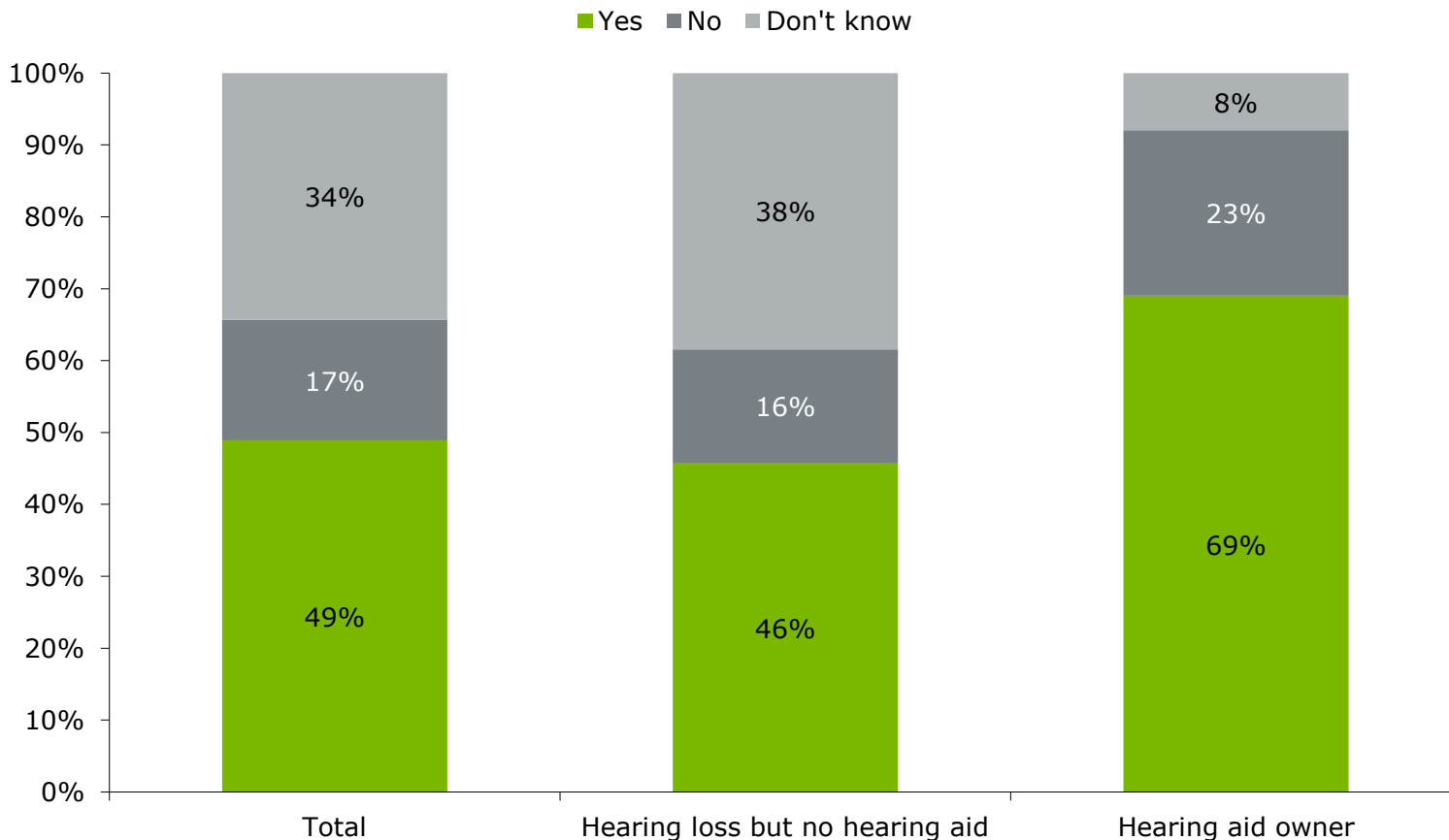
What made you finally decide to get your actual hearing aid(s)?



5. Additional JapanTrak questions

Half of the people with hearing loss are aware of any hearing aid shop in the area where they live (similar to 2012: 50%)

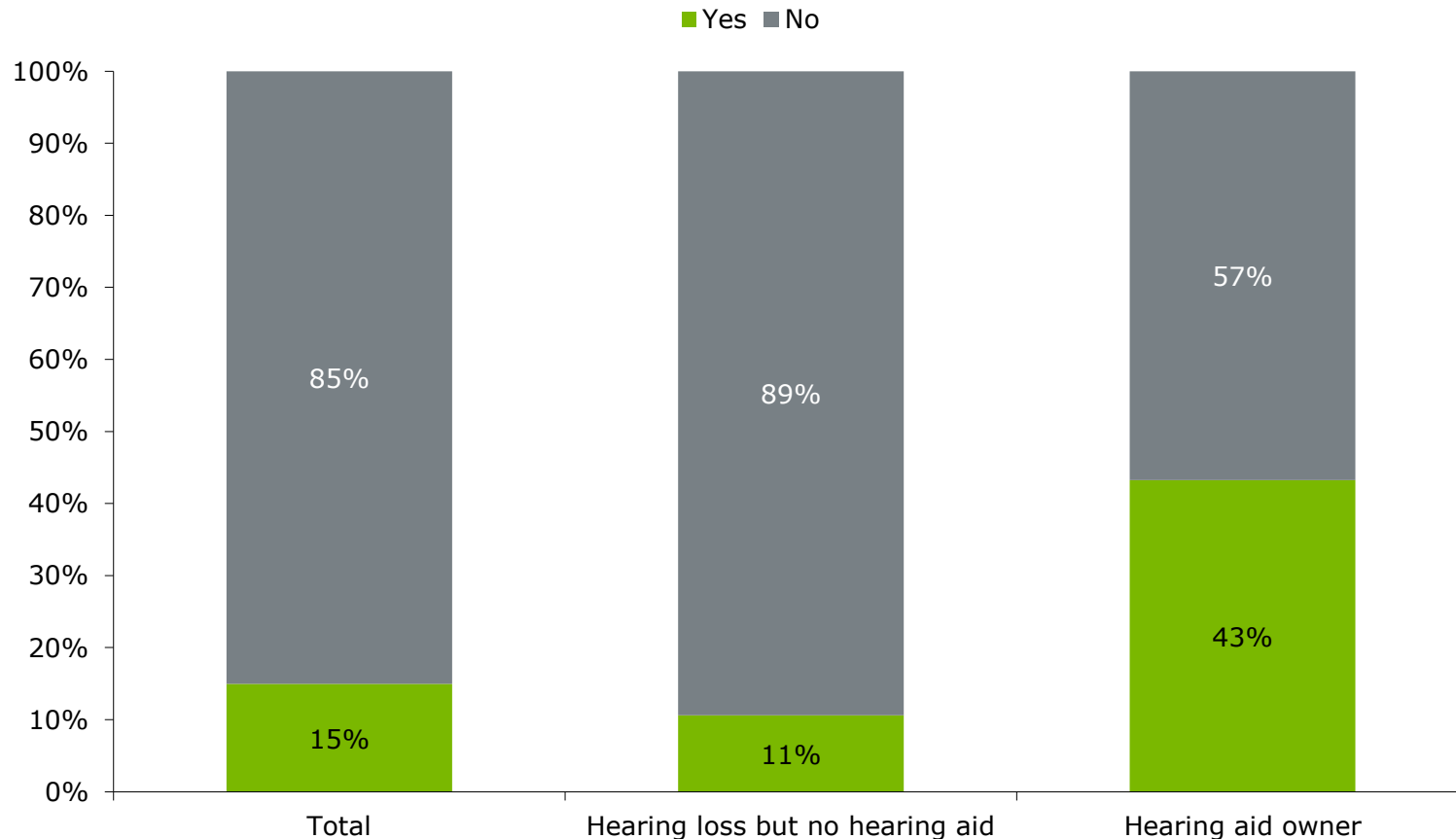
In the area where you live, are you aware of any hearing aid shop?



Unweighted Sample Size = 1306

15% (2012:16%) of the hearing impaired know the expression “Nintei - Hocyouki - Ginou - Sha” (“certified hearing aid worker”)

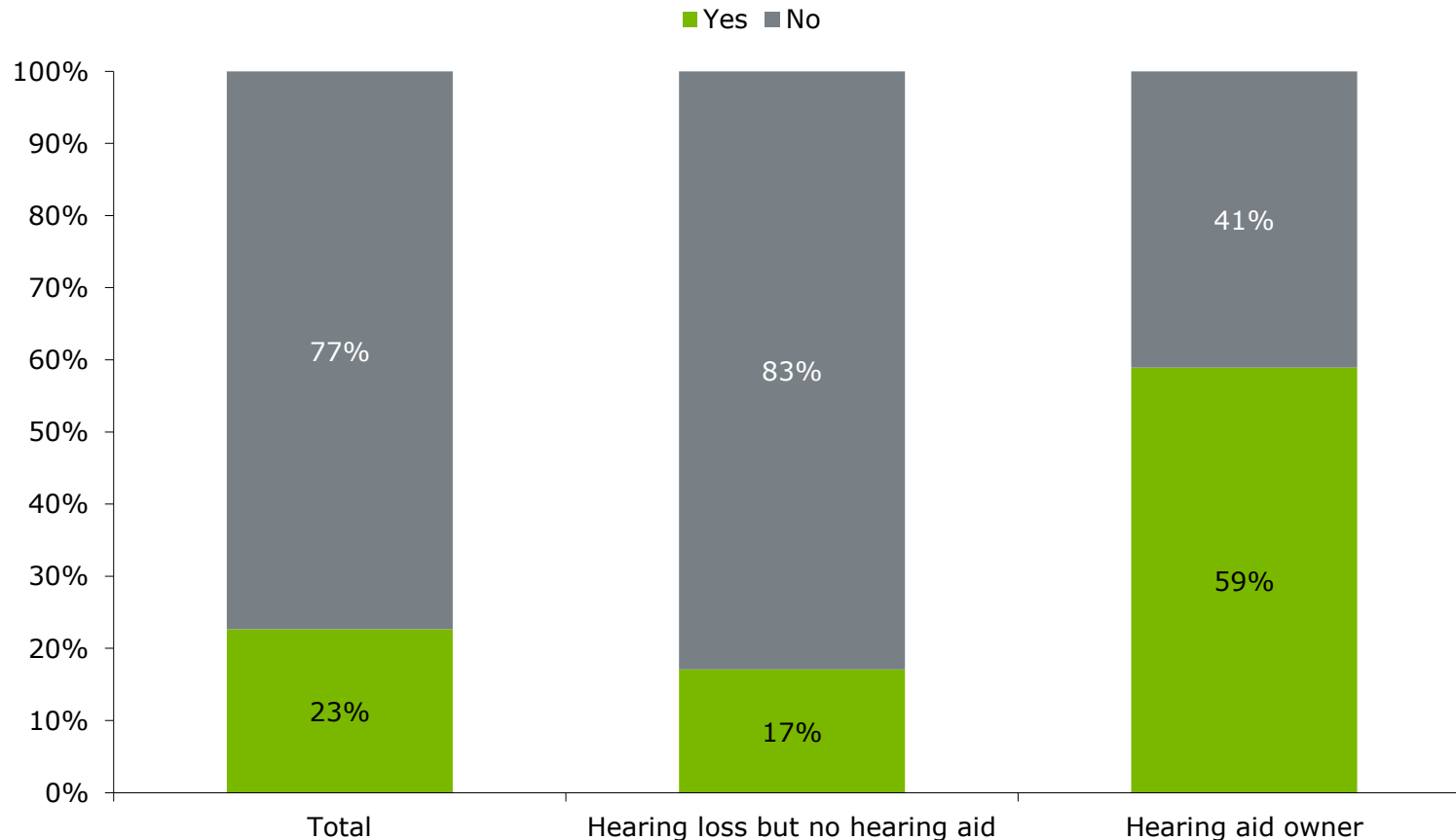
Do you know, what the following expressions mean? Nintei - Hocyouki - Ginou - Sha



Unweighted Sample Size = 1306

23% (2012: 24%) of the hearing impaired know the expression “Nintei - Hocyouki - Senmon - Ten” (“certified hearing aid shop”)

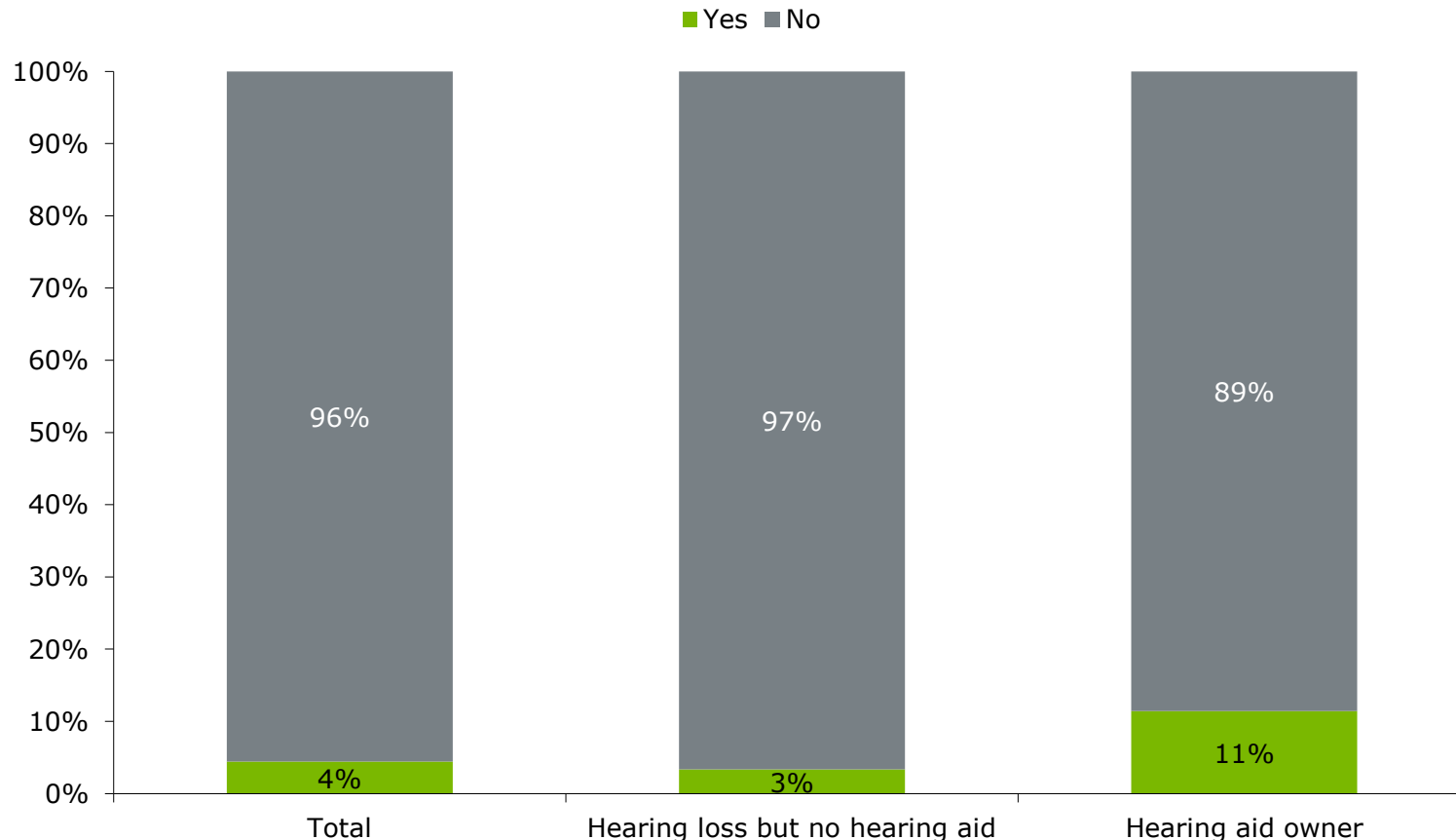
Do you know, what the following expressions mean? Nintei - Hocyouki - Senmon - Ten



Unweighted Sample Size = 1306

Only 4% (2012: 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



Unweighted Sample Size = 1306



Stefan Ruf lic. rer. pol.

Anovum GmbH
Sumatrastrasse 25
CH-8006 Zürich

Telefon +41 (0)44 576 76 77
Mobil +41 (0)78 717 88 01
Email stefan.ruf@anovum.com

www.anovum.com



Christian Egger lic. phil.

Anovum GmbH
Sumatrastrasse 25
CH-8006 Zürich

Telefon +41 (0)44 576 76 78
Mobil +41 (0)76 318 57 51
E-Mail christian.egger@anovum.com

www.anovum.com



EHIMA

Soeren Hougaard

EHIMA secretary general

Phone: (+45) 4045 7135

Email: sh@ehima.com





APPENDIX



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)

Sample size	Random sample error	
	Real value is within interval:	
	Level of proportion: 50%/50%	Level of proportion: 15%/85%
50	± 13.9	± 9.9
100	± 9.8	± 7.0
250	± 6.2	± 4.4
500	± 4.4	± 3.1
1000	± 3.1	± 2.2
5'000	± 1.4	± 1.0
10'000	± 1.0	± 0.7

Demographics (1): Hearing instrument adoption rates and populations

Profiles: Categories add to 100%*

	Count	Hearing difficulty	Hearing aid adoption rate % (Base=hearing impaired)	No hearing loss	Hearing loss but no hearing aid	Hearing aid
Gender						
Male	6946	10.9%	13.8%	48.7%	46.8%	48.1%
Female	7370	11.6%	13.2%	51.3%	53.2%	51.9%
Age recoded						
1 - 14	1876	1.5%	46.8%	14.5%	1.1%	6.1%
15 - 24	1386	2.9%	23.1%	10.6%	2.2%	4.3%
25 - 34	1581	2.5%	15.4%	12.1%	2.4%	2.8%
35 - 44	2004	3.4%	7.3%	15.2%	4.5%	2.3%
45 - 54	1836	7.2%	3.0%	13.4%	9.2%	1.8%
55 - 64	1826	10.3%	6.4%	12.9%	12.6%	5.6%
65 - 74	1961	18.0%	9.2%	12.7%	22.9%	14.9%
74+	1846	41.6%	17.6%	8.5%	45.2%	62.2%
Type of household						
single household	1093	18.1%	12.3%	7.1%	12.4%	11.2%
Couple, no kids	2807	15.6%	11.7%	18.7%	27.6%	23.6%
Couple with kid(s)	6518	5.7%	9.1%	48.4%	24.1%	15.4%
Single mom/dad with kid(s)	2221	13.8%	21.8%	15.1%	17.1%	30.5%
Retirement home, hospital etc.	182	45.4%	14.4%	0.8%	5.0%	5.5%
Other	1495	14.9%	13.5%	10.0%	13.8%	13.8%

Demographics (2) Hearing instrument adoption rates and populations

Profiles: Categories add to 100%*

	Count	Hearing difficulty	Hearing aid adoption rate % (Base=hearing impaired)	No hearing loss	Hearing loss but no hearing aid	Hearing aid
Status						
The head of the household	5218	16.3%	12.7%	34.6%	56.0%	52.6%
The spouse of the head of the household	3499	10.0%	12.4%	25.0%	23.0%	21.0%
Daughter/son of head of household	4385	1.8%	11.3%	34.2%	5.2%	4.3%
Parent of the head of the household	611	35.0%	18.3%	3.2%	13.2%	19.0%
Other person	423	9.8%	15.7%	3.0%	2.6%	3.2%
Employment						
Full time employed	4578	6.3%	8.9%	39.8%	19.1%	12.7%
Part time employed	1789	7.3%	4.7%	15.4%	9.1%	3.0%
Unemployed / not working	2560	14.5%	16.1%	20.3%	22.5%	29.4%
Retired under a disability pension scheme (fully or partly)	2051	30.9%	14.3%	13.2%	39.2%	44.7%
Early retired under an early retirement benefit scheme	74	19.2%	17.1%	0.6%	0.9%	1.2%
Retired (at the official retirement age)	500	25.3%	11.9%	3.5%	8.1%	7.4%
Student / pupil / in training	803	2.6%	15.1%	7.3%	1.3%	1.6%
Education						
a middle school	1013	26.4%	15.8%	6.9%	16.3%	20.8%
a high school	4220	13.6%	10.5%	33.9%	37.1%	29.8%
a vocational (technical) school	1080	9.2%	11.7%	9.1%	6.3%	5.7%
a junior college	1001	9.3%	7.2%	8.4%	6.3%	3.3%
a university	3557	9.0%	14.2%	30.1%	19.9%	22.5%
a graduate school	336	6.3%	4.4%	2.9%	1.5%	0.5%
Other	342	27.2%	19.0%	2.3%	5.4%	8.7%
Prefer not to say	805	14.6%	15.3%	6.4%	7.2%	8.8%