

Results

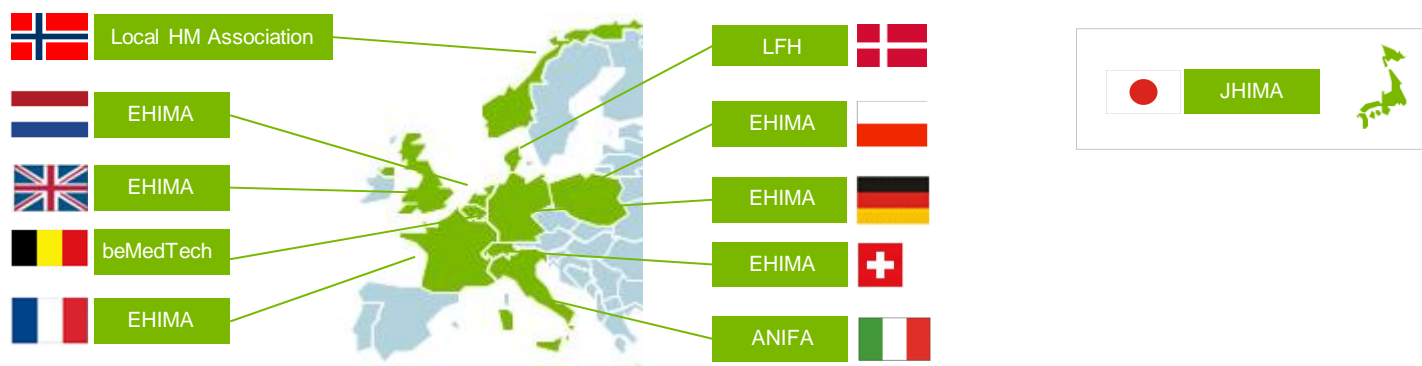
EuroTrak France 2018

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

Summary

1. Introduction

- EuroTrak France 2018 was designed and executed by Anovum (Zurich) on behalf of the European Hearing Instrument Manufacturers Association (EHIMA).
- Sample sizes France 2018:
 - Representative sample (sample 1): n=15'061 people
 - Hearing impaired (sample 2): n=1'311 people
 - Hearing impaired non-owners: n= 761 people with hearing loss (**HL**)
 - HA owners: n= 550 people with hearing aid (**HA**)
- EuroTrak France 2018 is part of the EuroTrak studies:



Summary

2. Market overview

- Stated hearing loss prevalence
 - Total: 10.0%, 18+: 12.3% (2015: 9.3%, 18+: 11.4%).
 - Binaural hearing loss: HA owners: 74%, HA non-owners: 56%.
 - Hearing Tests: 36% (2015: 32%) had a hearing test in the last 5 years, most tests done by ear doctors
- Hearing aid adoption rate (HA penetration)
 - Total: 41.0% (2015: 34.1%).
 - Total age group 18+: 40.5% (2015: 33.6%).
 - 71% of HA owners have binaural treatment.
- The route to the hearing aid
 - 79% of the hearing impaired discussed hearing loss with an ENT doctor or family doctor.
 - 58% got hearing aids recommended from the ENT or family doctor (drop out rate=26% / 2015: 36%).
 - 27% of the GP consultations referred to an hearing aid dispenser (same as in 2015).
 - 76% (2015:75%) of the GP consultations referred to an ENT, 8% (2015: 8%) recommended no action.
 - 41% of ENT consultations referred to a audiologist (2015: 34%), 27% (2015: 39%) 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.
 - Hearing aid owners have a lower risk of being depressed.
 - Quality of sleep seems to improve if hearing impaired use hearing aids.

Summary

3. Analysis of hearing aid owners

- Hearing aid ownership and usage, accessories and Telecoil
 - 87% (2015: 81%) of all HA owners received some kind of 3rd party reimbursement.
 - 54% of the currently owned HAs were bought in the last two years (EuroTrak 2015: 48%)
 - The average age of the currently owned HAs is 2.5 years (2015: 2.9 years).
 - The median age of hearing aids before replacement is 6 years.
 - On average, HAs are worn 7.9 hours a day (2015: 8.6).
 - 43% of today's hearing aid owners are aware of their hearing aid brand.
 - 45% have been informed about hearing aid accessories by the HCP, 18% use a HA accessory.
- Importance of listening situations and satisfaction with HAs
 - 75% of the hearing aid owners say their hearing aid works better than or as expected
 - 82% (2015:84%) of the HA owners are satisfied with their HAs.
 - The more hours worn per day, the higher the satisfaction.
 - Satisfaction with newer hearing aids is higher than with older hearing aids.
 - Talking at home with family members, talking on a phone and conversations (large group, 1 person) are the most frequent important listening situations.
- Positive impact of HAs
 - Significant positive impact of HAs on different aspects – especially communication, participation in group activities and relationships at home.
 - 97% 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
 - 38% (2015: 30%) of the hearing impaired without hearing aids think that a third party would pay any part of hearing aids.
 - The main reasons for not using hearing aids are that people say they cannot afford a hearing aid, the opinion of ENT's/GPs/HCPs and they think hearing aids are uncomfortable.
 - 7% who own HAs don't use them at all (0 hour); 13% use them less than one hour/day (0-1 hour).
- Social rejection, buying intentions and triggers to buy
 - 69% of hearing aid owners feel that 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 aid (only 28% say they are never made fun of because of their hearing loss).
 - The most important influencing factors for getting hearing aids are worsening hearing loss, ENT and significant others. Insurance coverage/price of hearing aids is only relevant for the non owners.

Detailed Results: Roadmap

New topics for EuroTrak 2018 are highlighted in red

1. Introduction

- Organisation of EuroTrak 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
- Potential social cost-savings due to the use of hearing aids: Work competitiveness, depressive 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
- **Reasons for getting hearing aids sooner**
- **Channels for getting hearing aids, recommendation of channel (NPS)**
- **Awareness and usage of accessories**
- Satisfaction with hearing aids and drivers
- 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
- 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

Organisation of EuroTrak 2018

Organisation

- Principal of the project EuroTrak is the European Hearing Instrument Manufacturers Association [EHIMA]. Members of EHIMA are: GN Resound as, William Demant Holding A/S, Sonova AG, Sivantos Pte. Ltd., STARKEY LABS and WIDEX AS [EHIMA Companies].
- Anovum Zurich developed the concept of EuroTrak, 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.

Use of the data

- The principal as well as the EHIMA 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 EHIMA 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 – EuroTrak – France/2018/n=[relevant sample size]"
- The principal and EHIMA companies can ask Anovum to further analyse the raw data in specific ways at their own expense.
- EHIMA companies can order a report with satisfaction scores for their brand. The other brands will be shown as benchmarks without denomination (brand A, brand B etc.). The report will show all satisfaction values. It is not allowed to communicate any information from these reports outside the EHIMA company.

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 80'000 people
3. Screening questionnaire: Stated hearing loss and hearing aid usage + demographics
4. Result: Representative sample of **n=15'061** people based on census data.

Step 2: Target population interviews

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

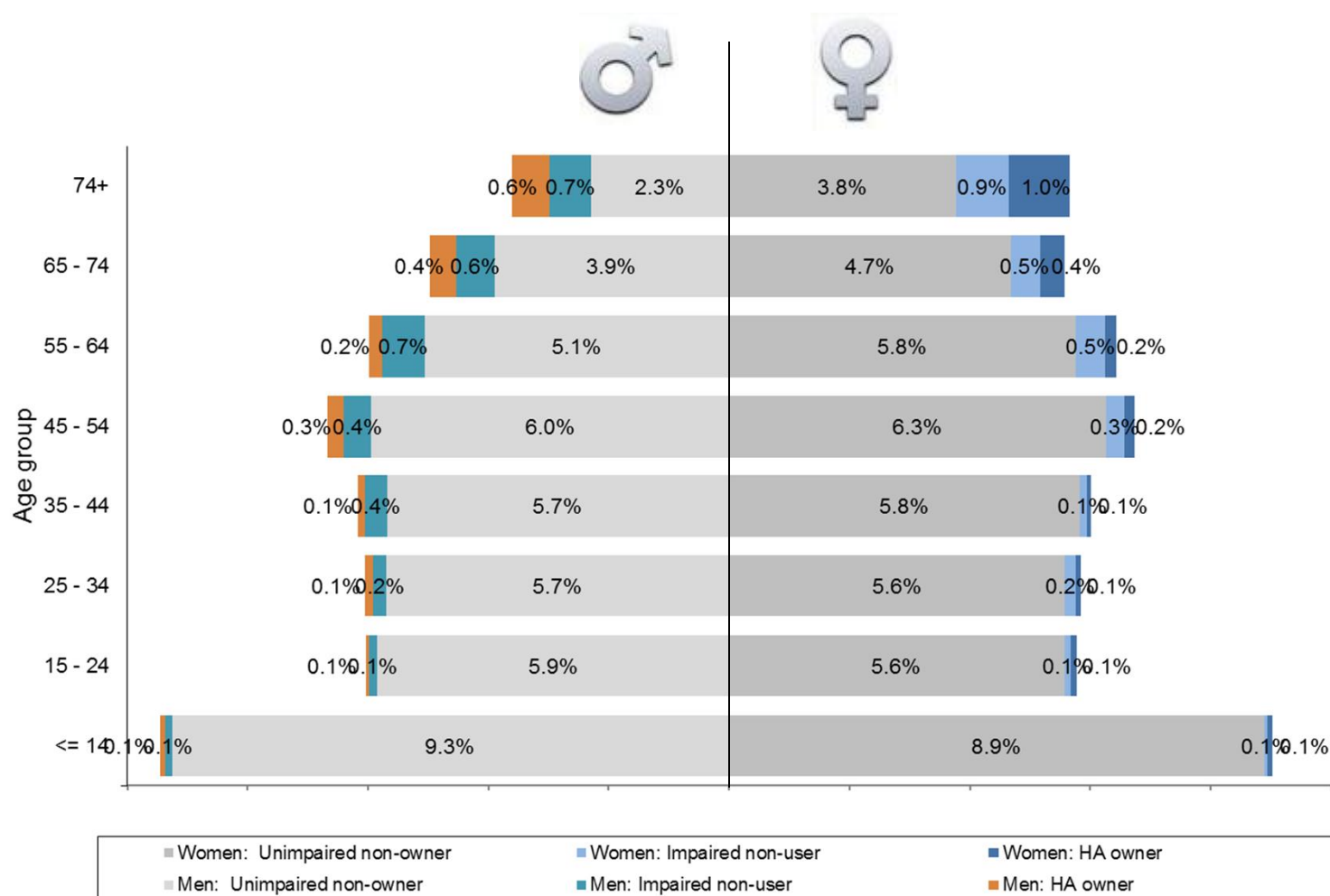
Process:

1. Main questionnaires: Owners and hearing impaired non-owners
2. Balancing through weighting according to representative screening interviews
3. Resulting sample: **n=550** hearing aid owners and **n=761** hearing impaired non-owners

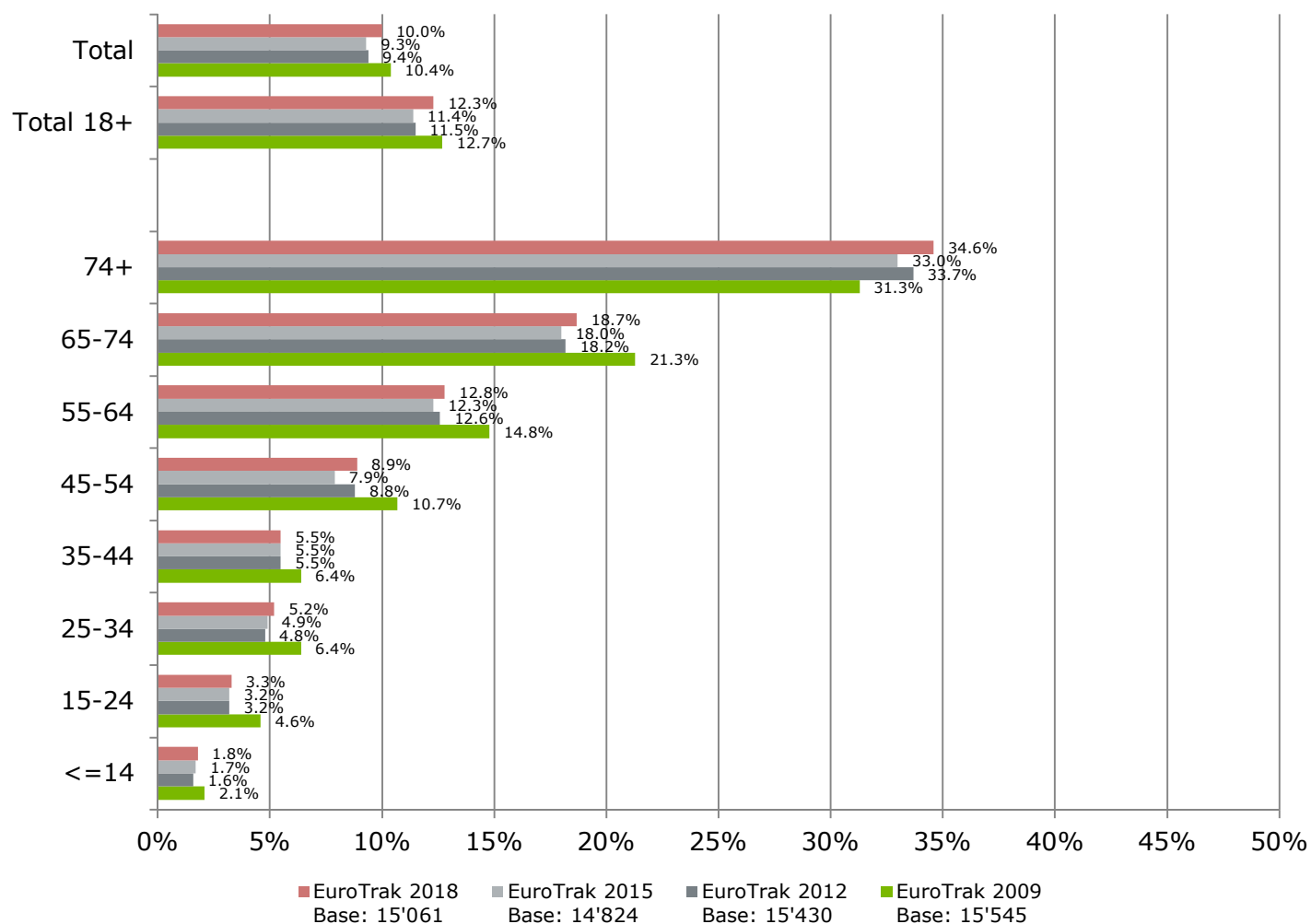
2. Market overview

Prevalence of hearing loss and adoption rate

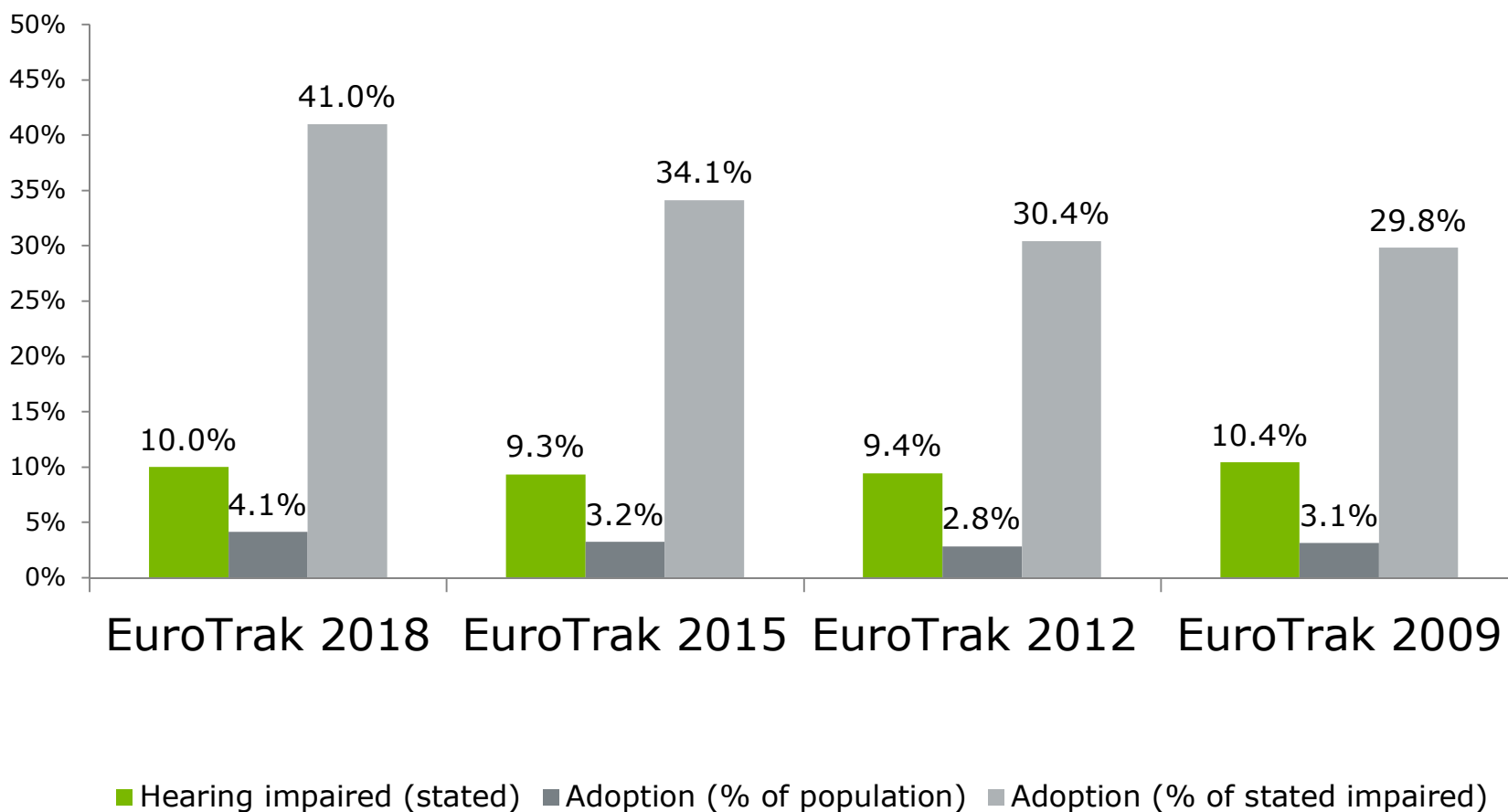
Hearing loss and hearing instrument ownership by gender/age



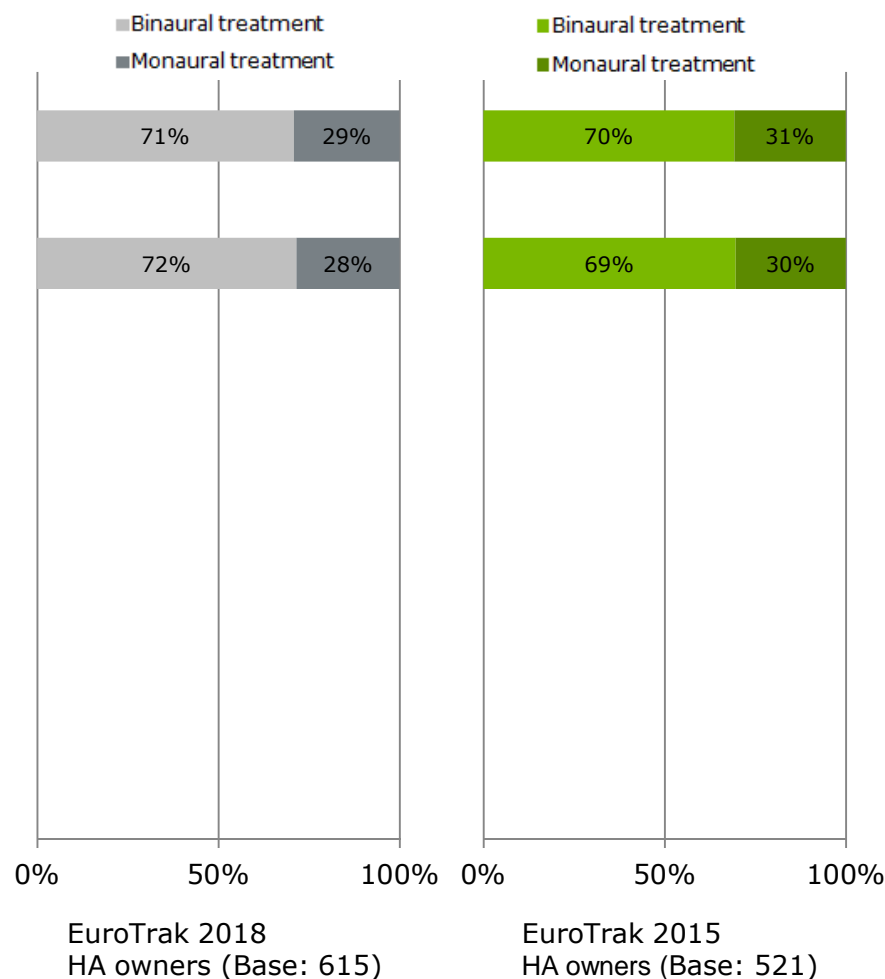
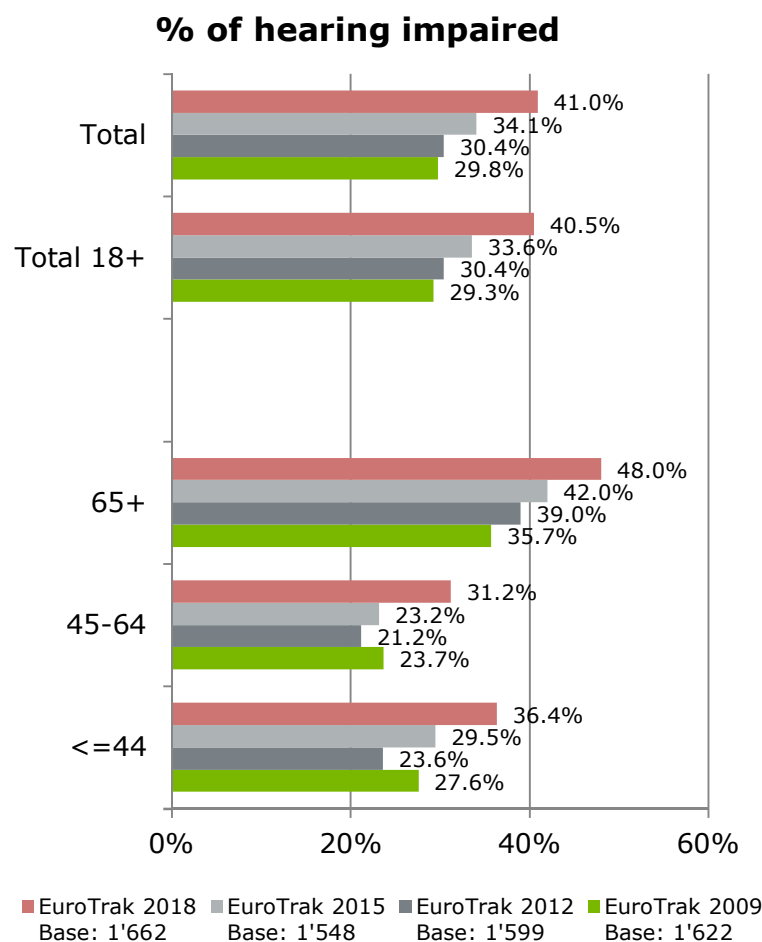
Hearing loss prevalence France



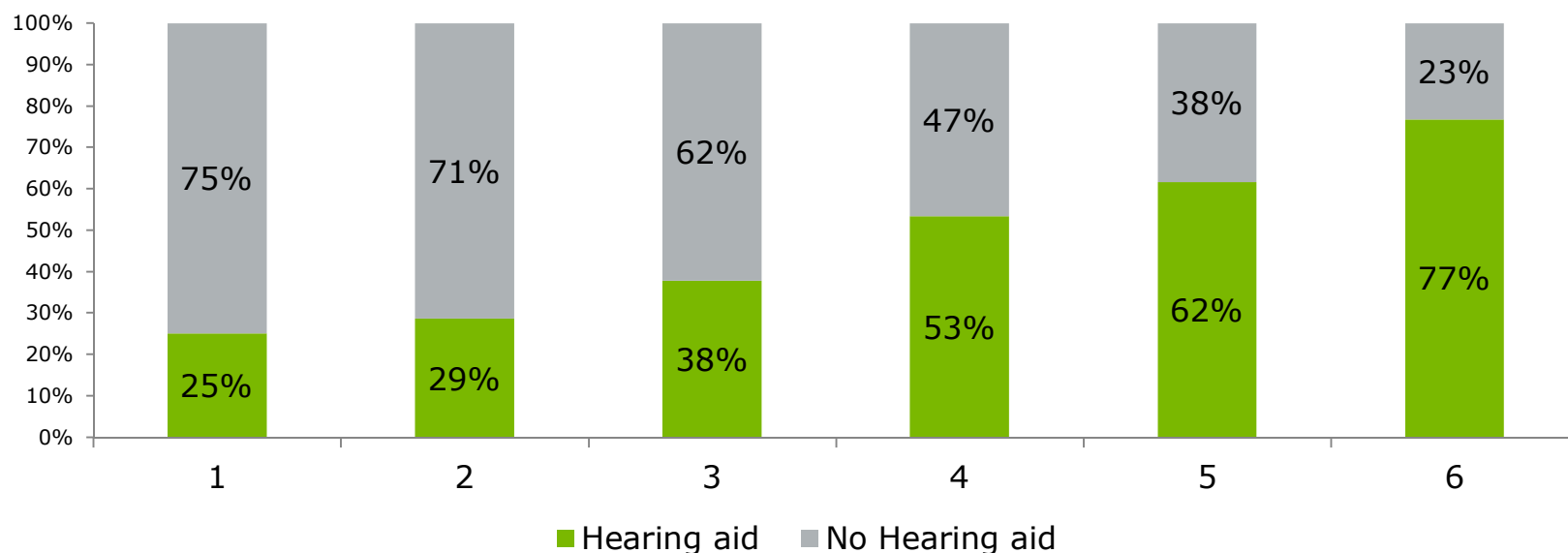
Overview hearing loss prevalence and hearing aid adoption



Hearing aid adoption rate France: 41% of hearing impaired have hearing aid(s), 71% of them have binaural treatment



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



Hearing loss 6-groups

HA-non-owner, n=761
HA-owner, n=550

* 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 2018: n=761 | HA Owner 2018: n=550 | Hearing Aid Adoption (%) |
|-----------------------------------|-----------------------------|-------------------------|-----------------------------|
| Ears impaired (stated) | | | |
| Unilateral loss | 44% | 26% | 34% |
| Bilateral loss | 56% | 74% | 54% |
| | | | |
| Perceived loss | | | |
| Mild | 29% | 8% | 18% |
| Moderate | 56% | 53% | 43% |
| Severe | 13% | 34% | 68%* |
| Profound | 1% | 5% | |

n's are unweighted whereas the shown results are weighted

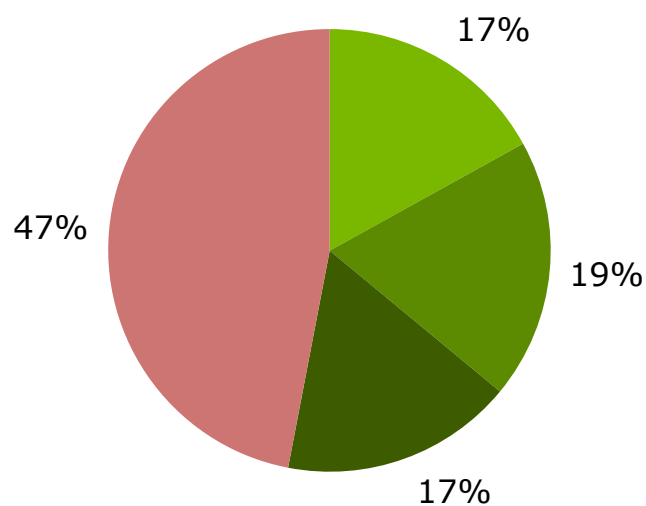
* combined %severe+ and %profound+ because n is too small

Hearing tests and where hearing is tested

Hearing Tests: 36% (2015: 32%) had a hearing test in the last 5 years, most tests done by ear doctors

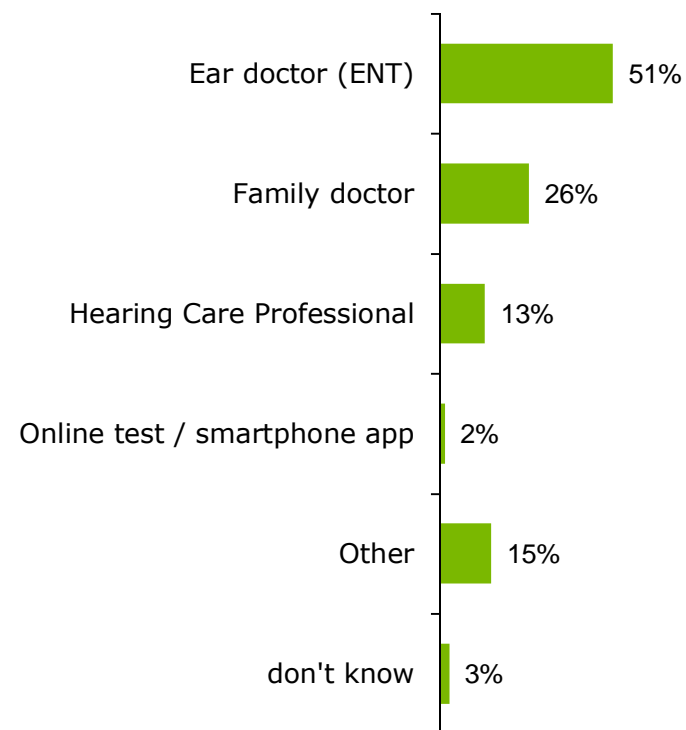
Have you ever taken a hearing test?

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



Base=12'551

Where/how was your hearing tested?



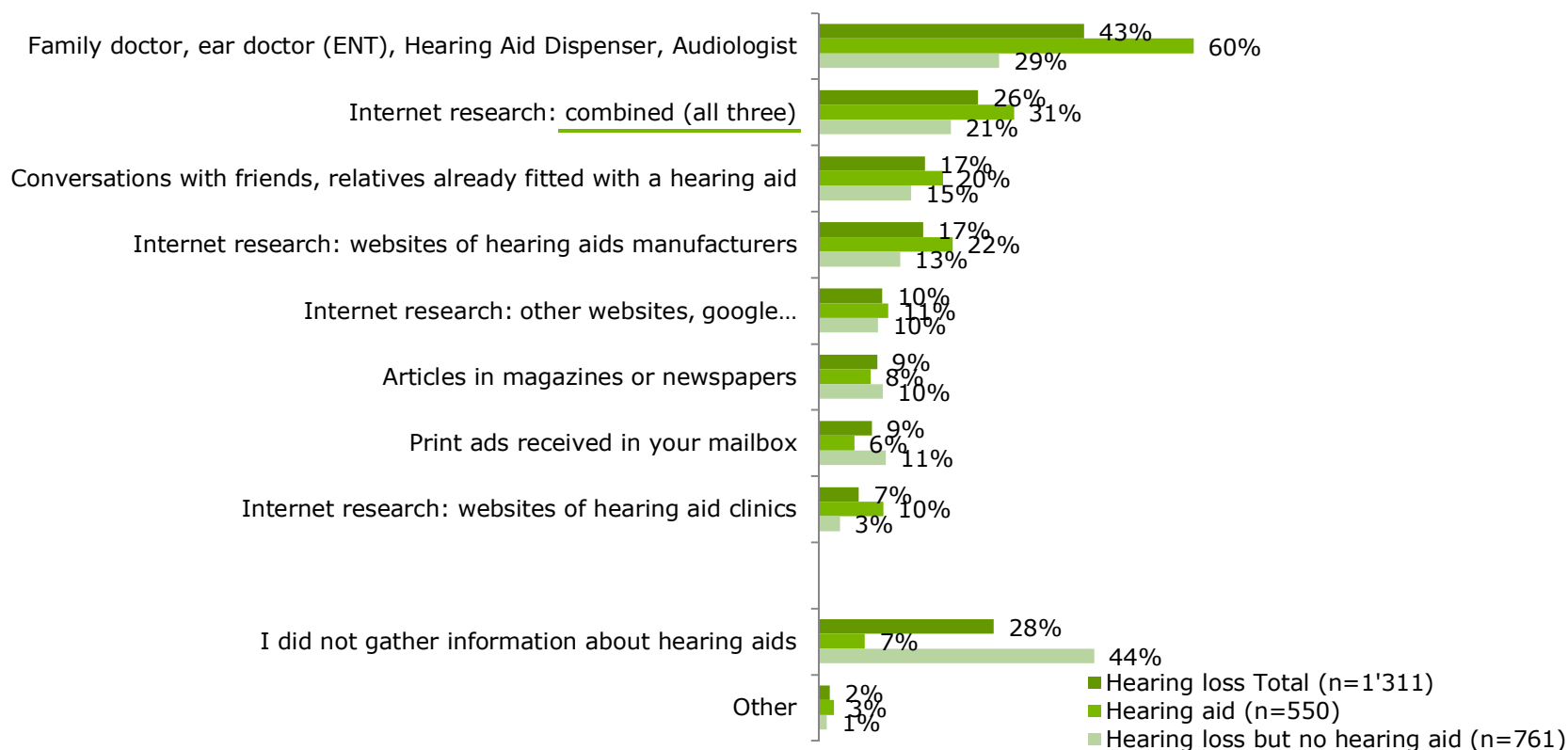
Base= 4'520

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

Doctors and hearing care professionals are the most important sources of information and therefore the major gatekeepers – followed by internet research and other people with hearing aids.

Where did you gather information about hearing aids?

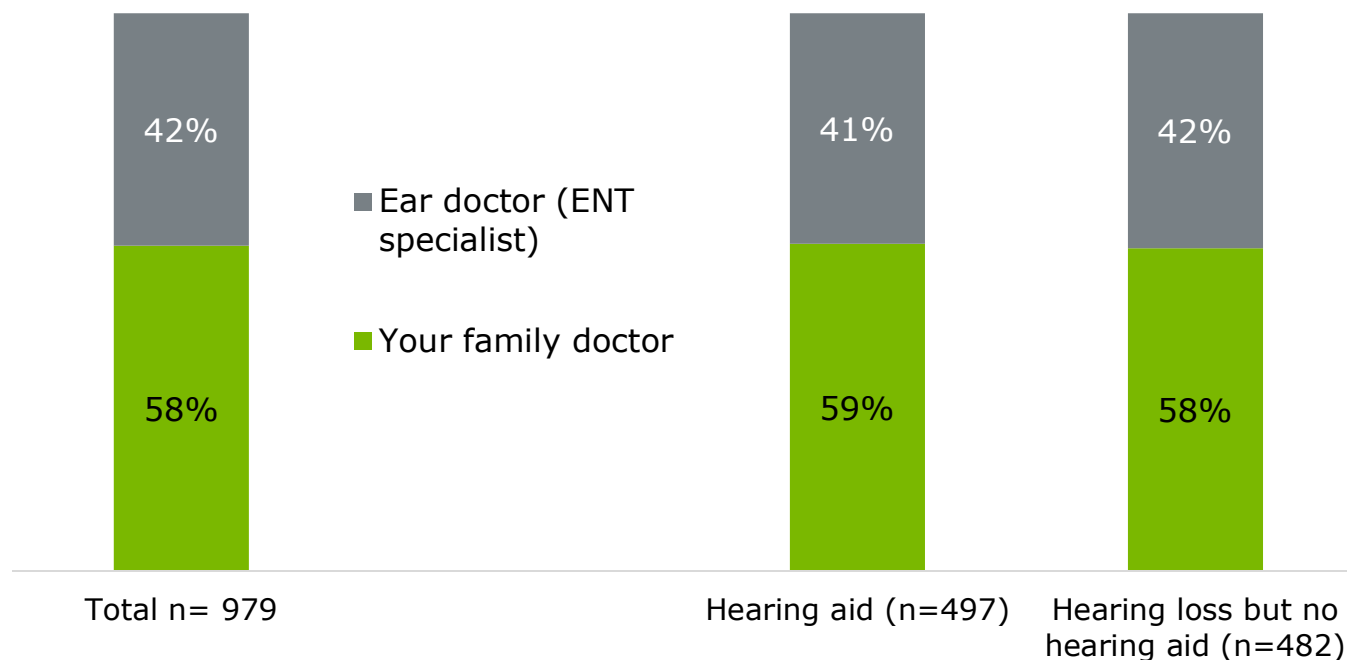
Please check all that apply.



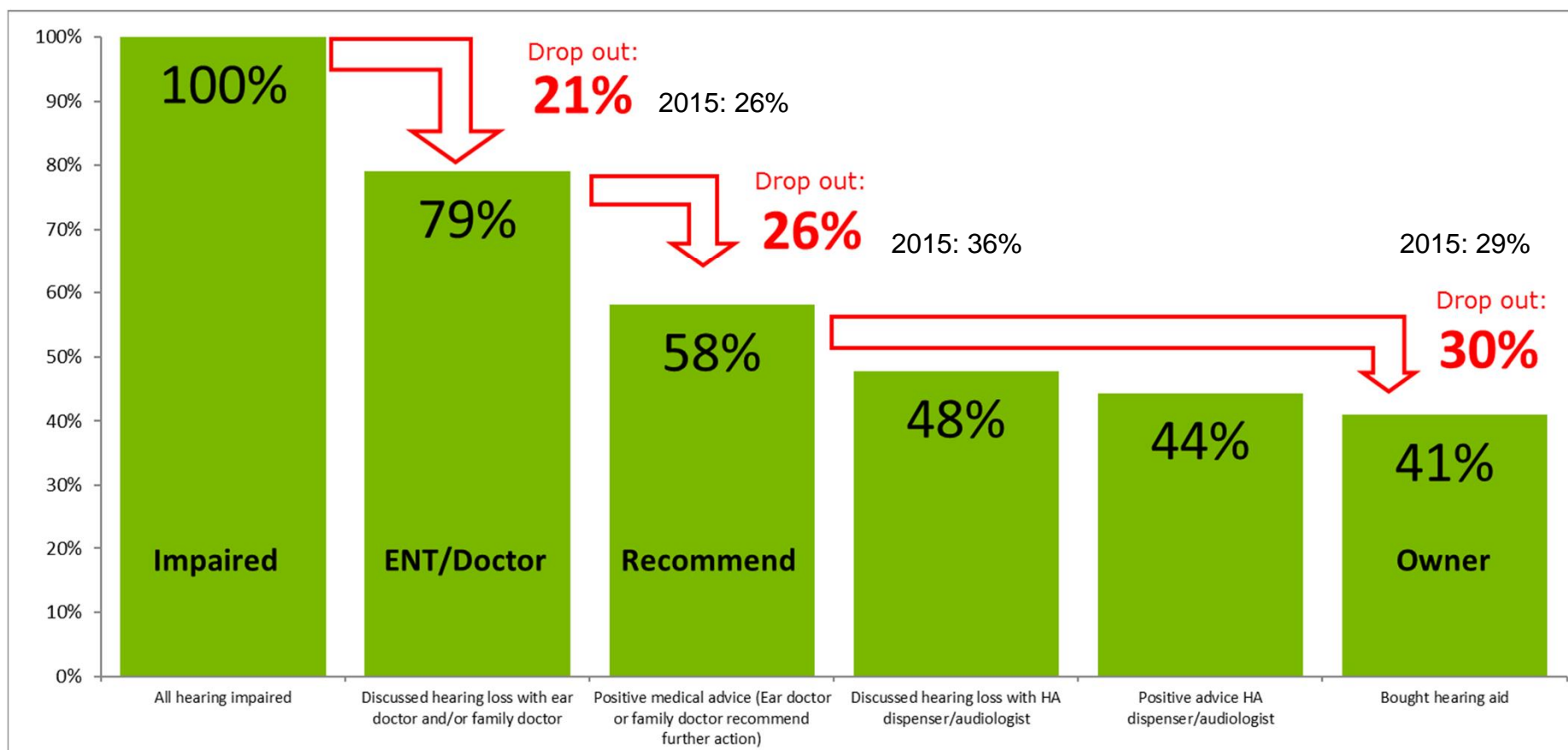
Of those who discussed the hearing loss with a doctor, 42% talked to an ENT first and 58% talked to the family doctor first

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?



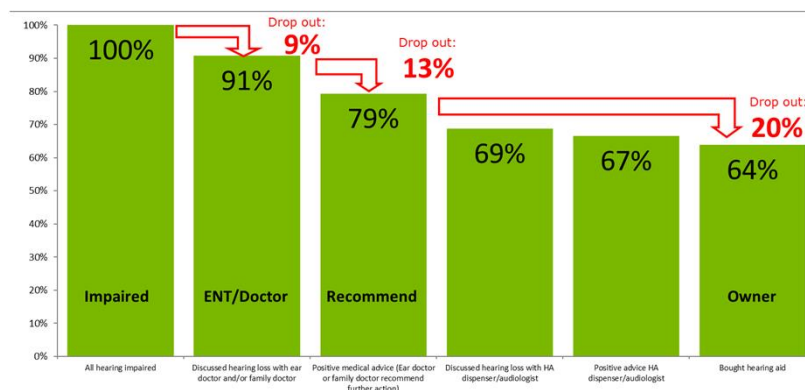
The route to the hearing aid: Compared to 2015 drop out 1 & 2 were reduced



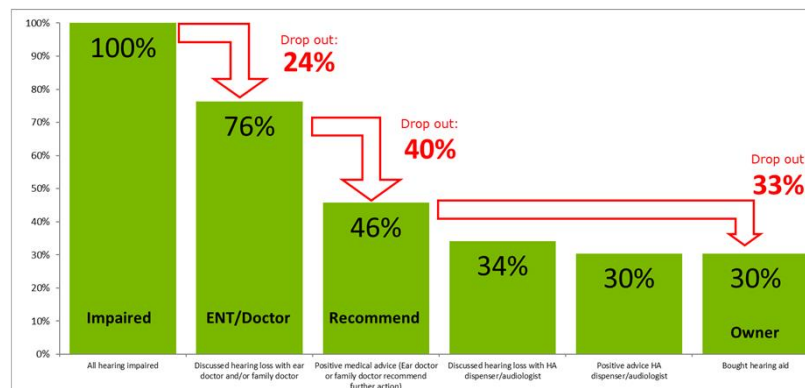
Base: n=1'311

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

Top 50% hearing loss*



Low 50% hearing loss*



Base: n=1'311

* 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:

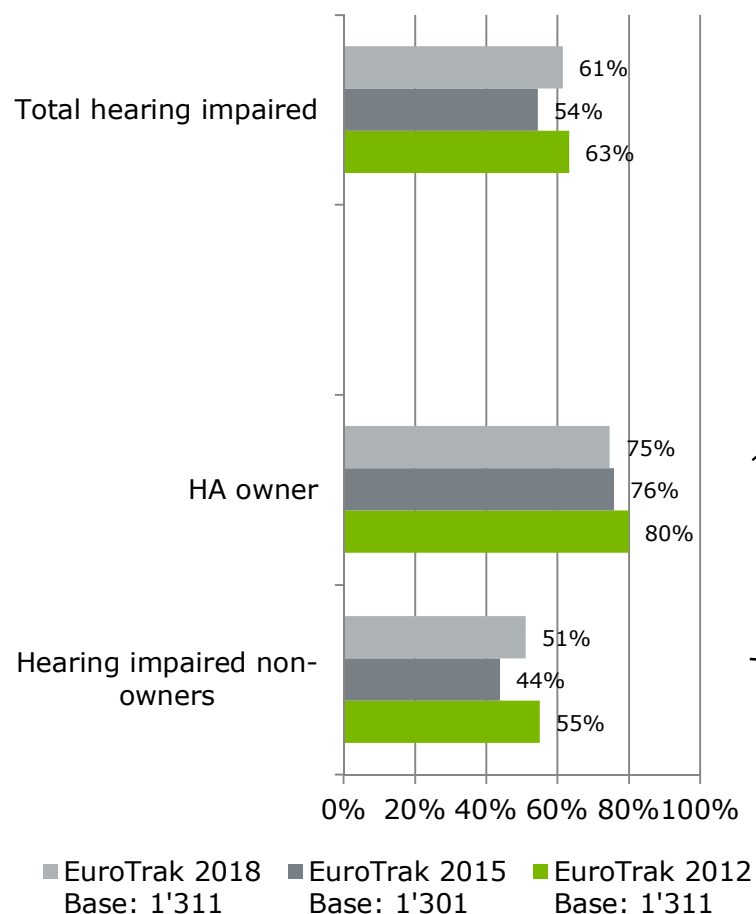
- Number of ears impaired (one or two)
- Stated hearing loss (Mild to Profound)
- Scores on 6 APHAB-EC – like questions (Scaled 1-5)
- When NOT using a hearing aid, how difficult is it for you to follow conversations in the presence of noise

→ 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

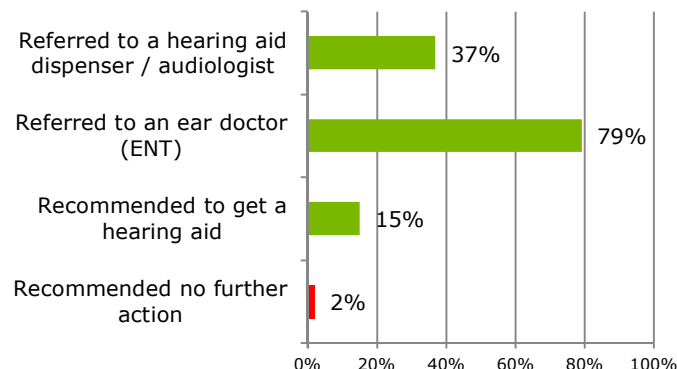
Have you discussed your hearing problem with your family doctor?

% Discussed with GP

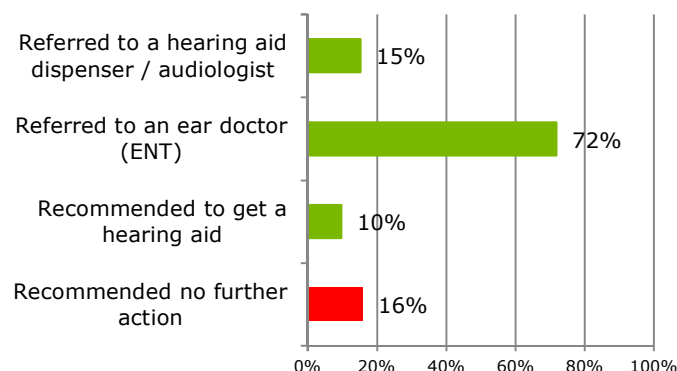


What did he/she recommend ?

HA owner (Base: 379)



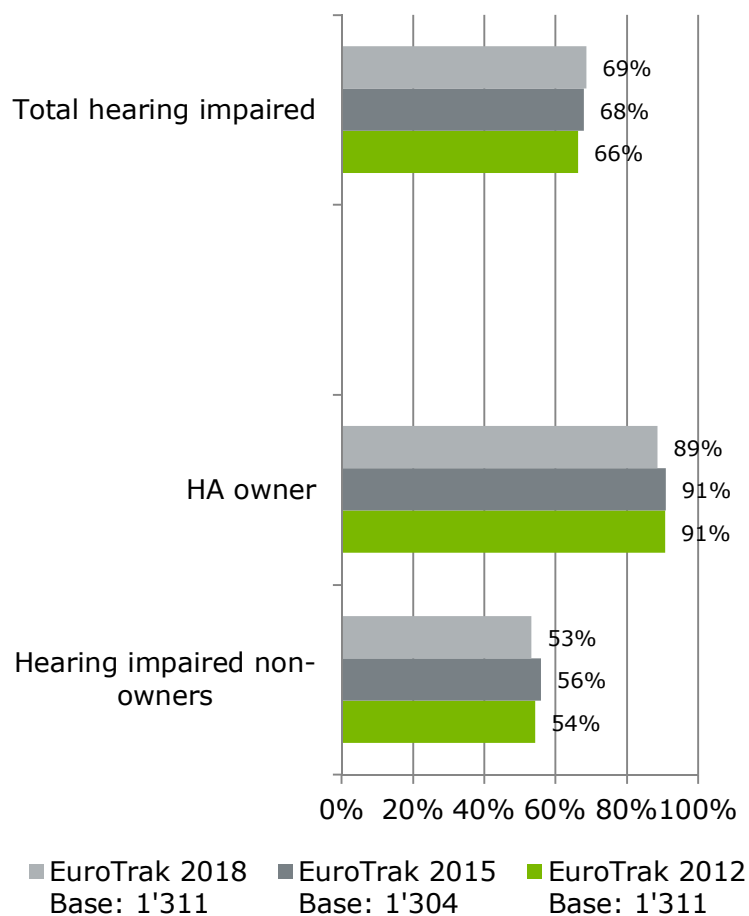
Impaired non-owner (Base: 333)



The route to the hearing aid: ENT

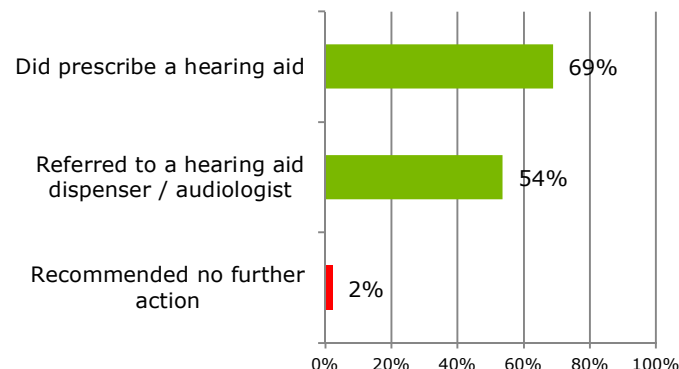
Have you discussed your hearing problem with an ear doctor (ENT)?

% Discussed with ENT

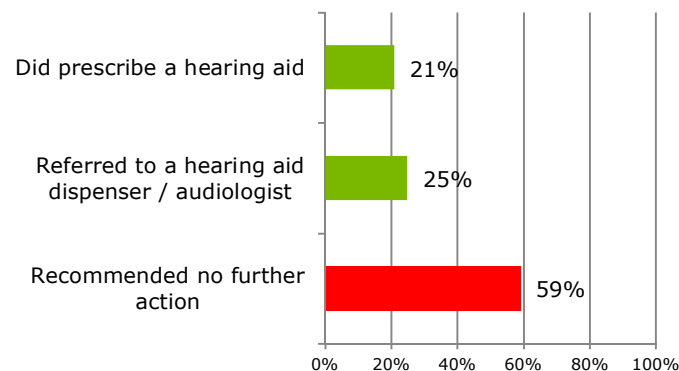


What did he/she recommend ?

HA owner (Base: 448)



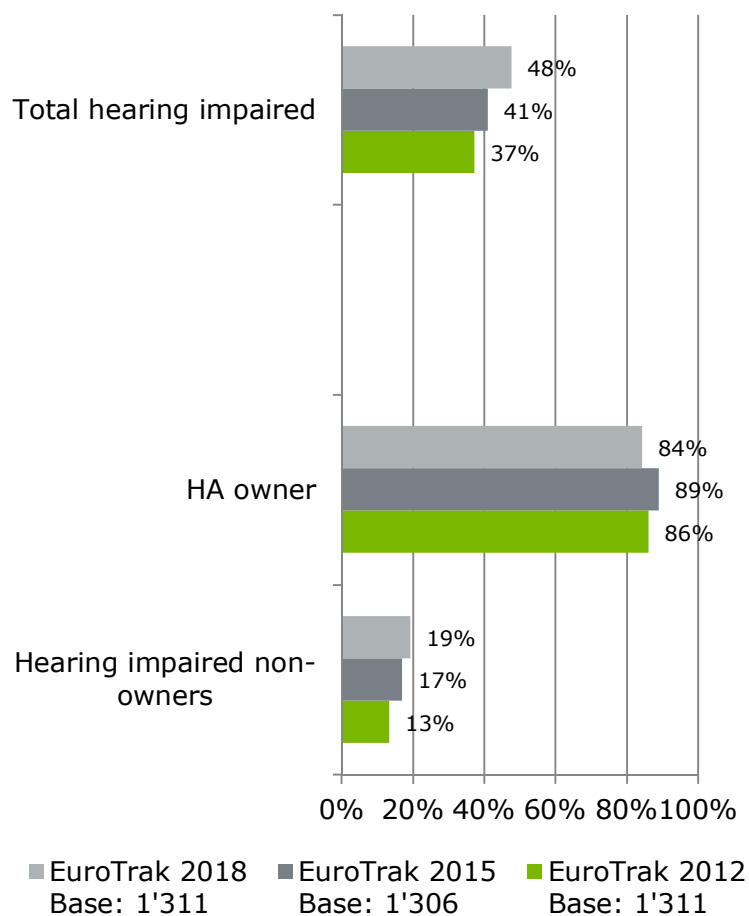
Impaired non-owner (Base: 349)



The route to the hearing aid: HA dispenser

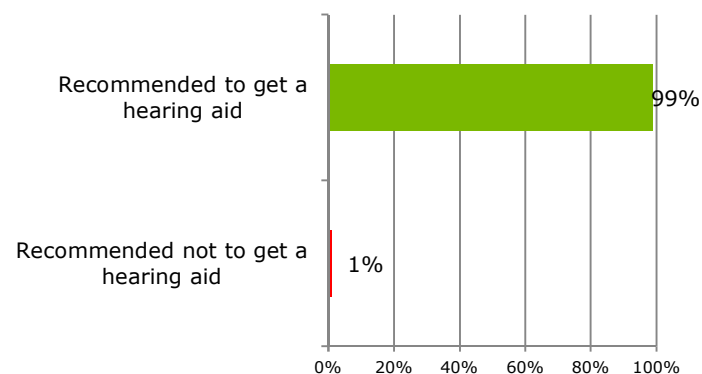
Have you discussed your hearing problem with a Hearing Aid Dispenser/Audiologist?

% Discussed with Audiologist

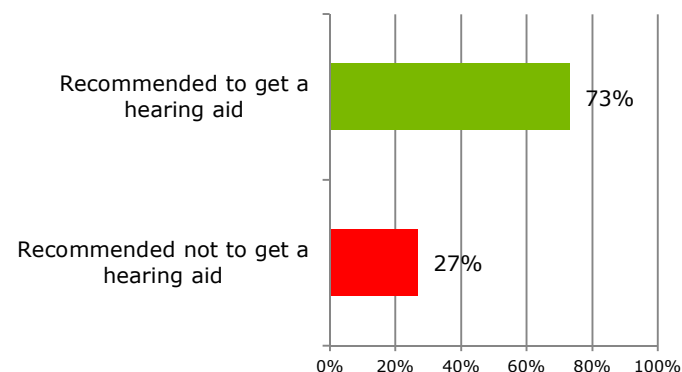


What did he/she recommend ?

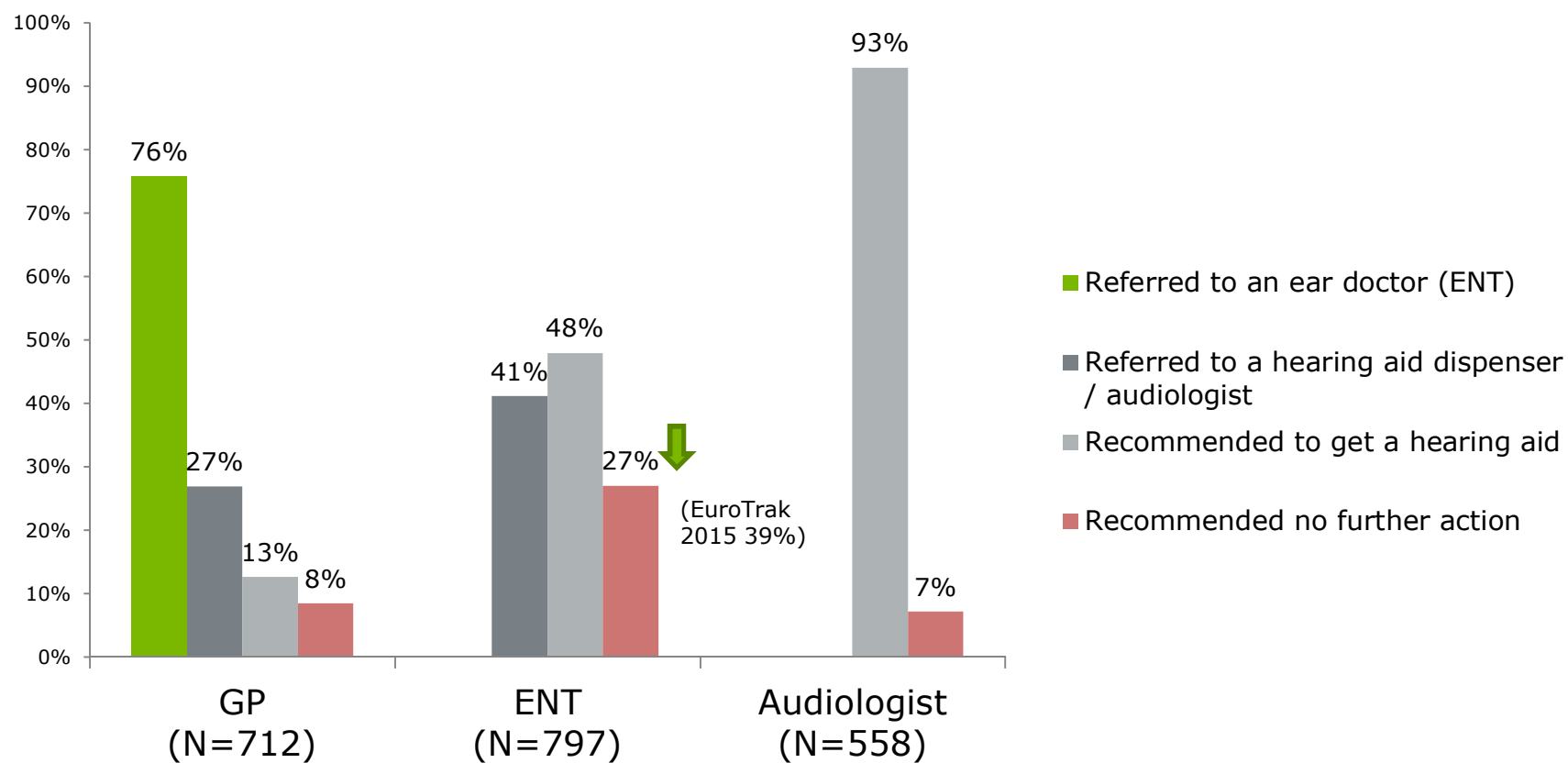
HA owner (Base: 436)



Impaired non-owner (Base: 122)



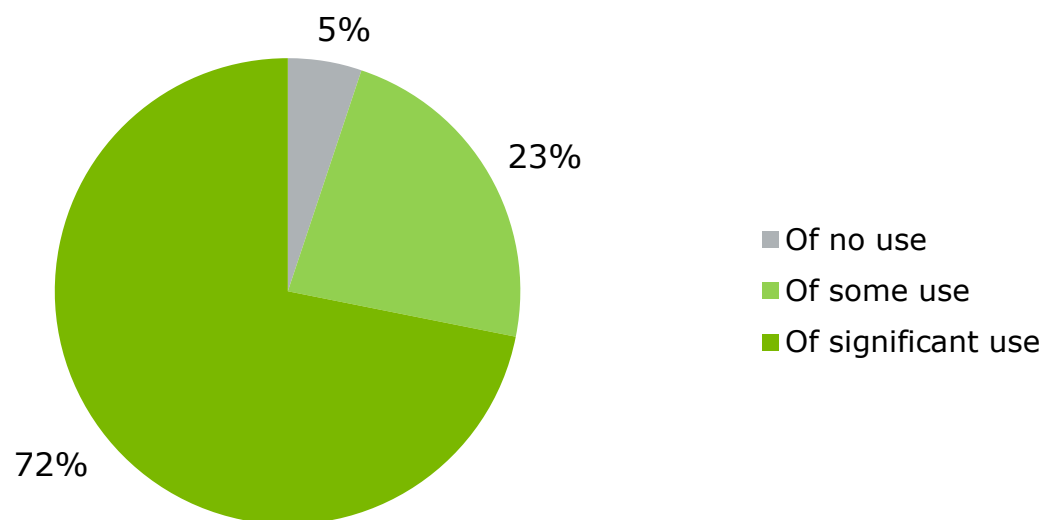
Recommendations by profession



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

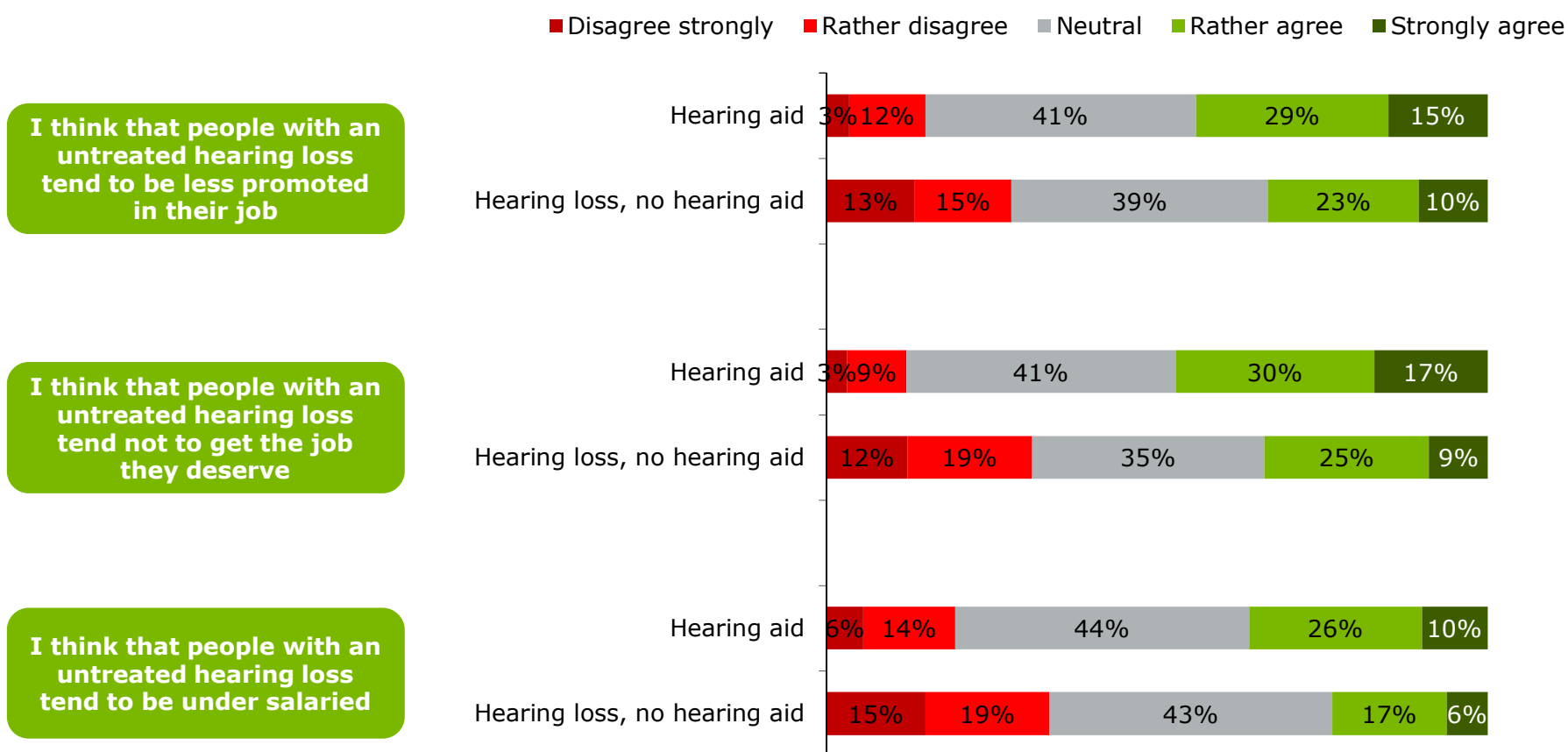
Work competitiveness: 95% of the working hearing aid owners state their hearing aid(s) are useful on their job.

How useful are your hearing aids on your job?



Base: N=272

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.



Base: Hearing loss, no hearing aid =615/ hearing aid n=475

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

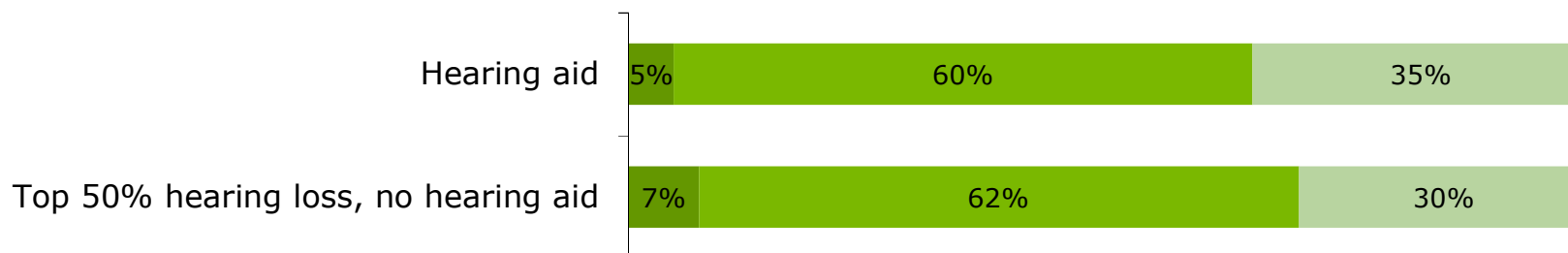
“ Feeling down, depressed, hopeless

Probability of major depressive disorder

■ very high

■ medium

■ very low

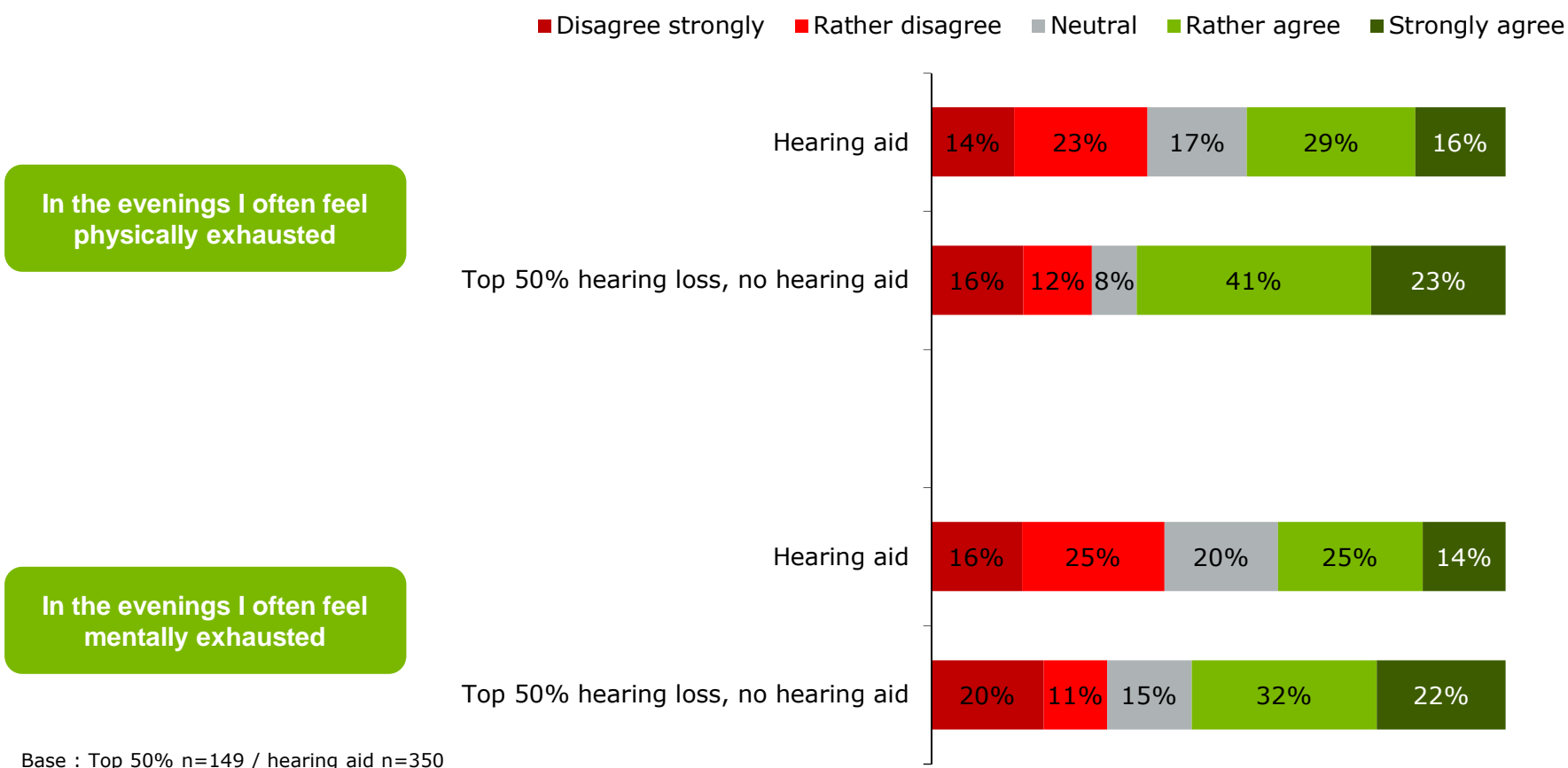


Base: hearing aid n=359 / no hearing aid =150

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

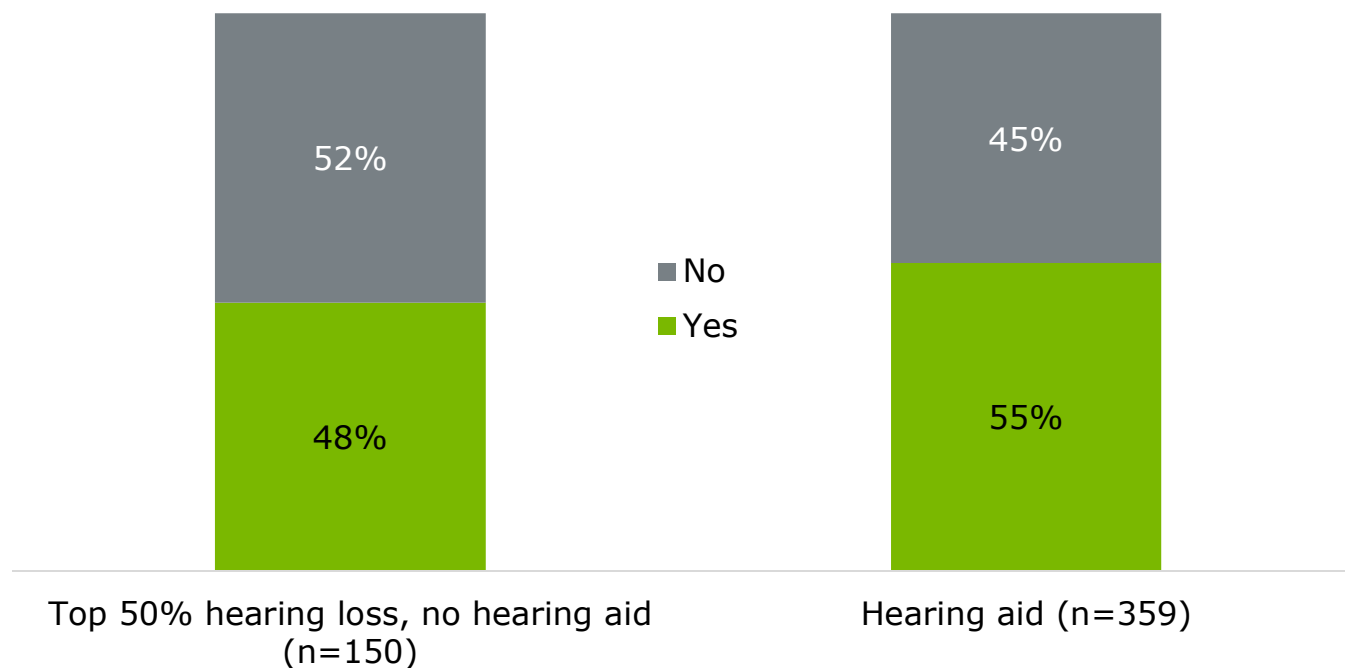


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- Number of ears impaired (one or two)
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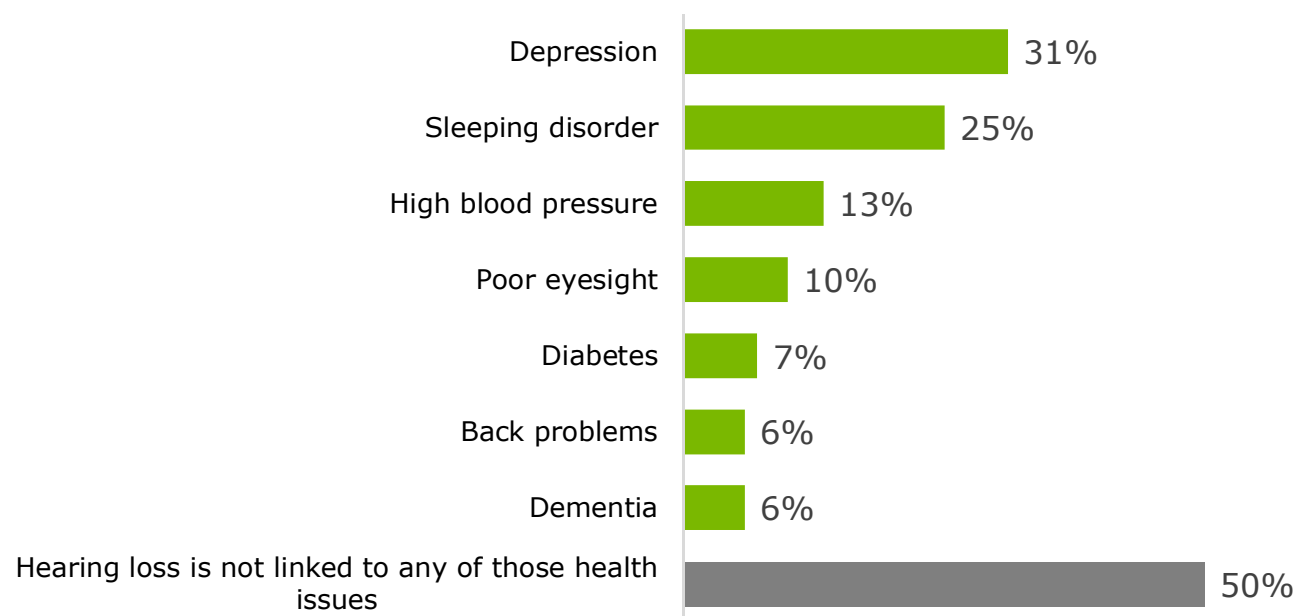
General health problems: Quality of sleep seems to improve if hearing impaired use hearing aids

Are you generally satisfied with the quality of your sleep?



31% of all hearing impaired think that hearing loss could be linked to depression.

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

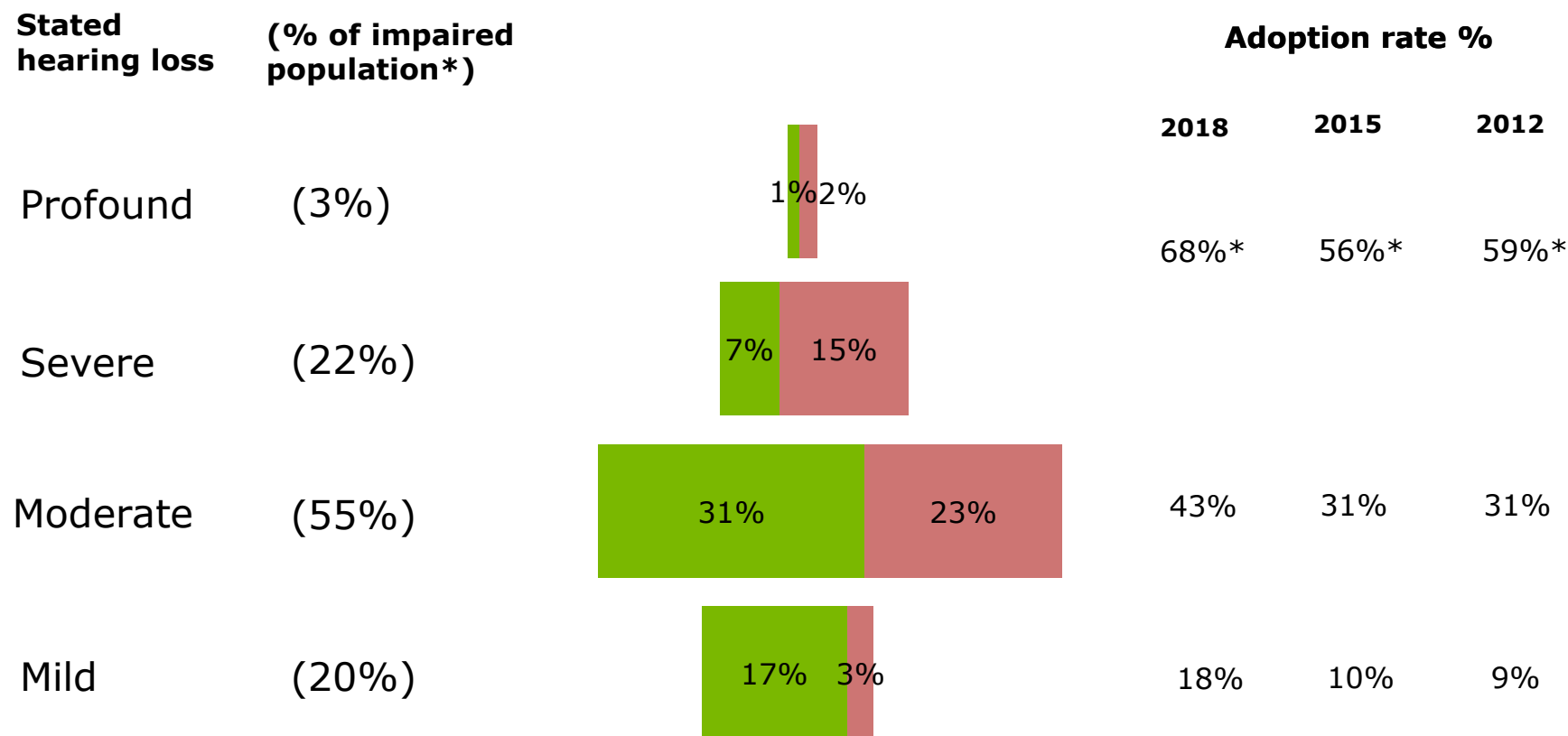


Hearing impaired, N=1'178

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



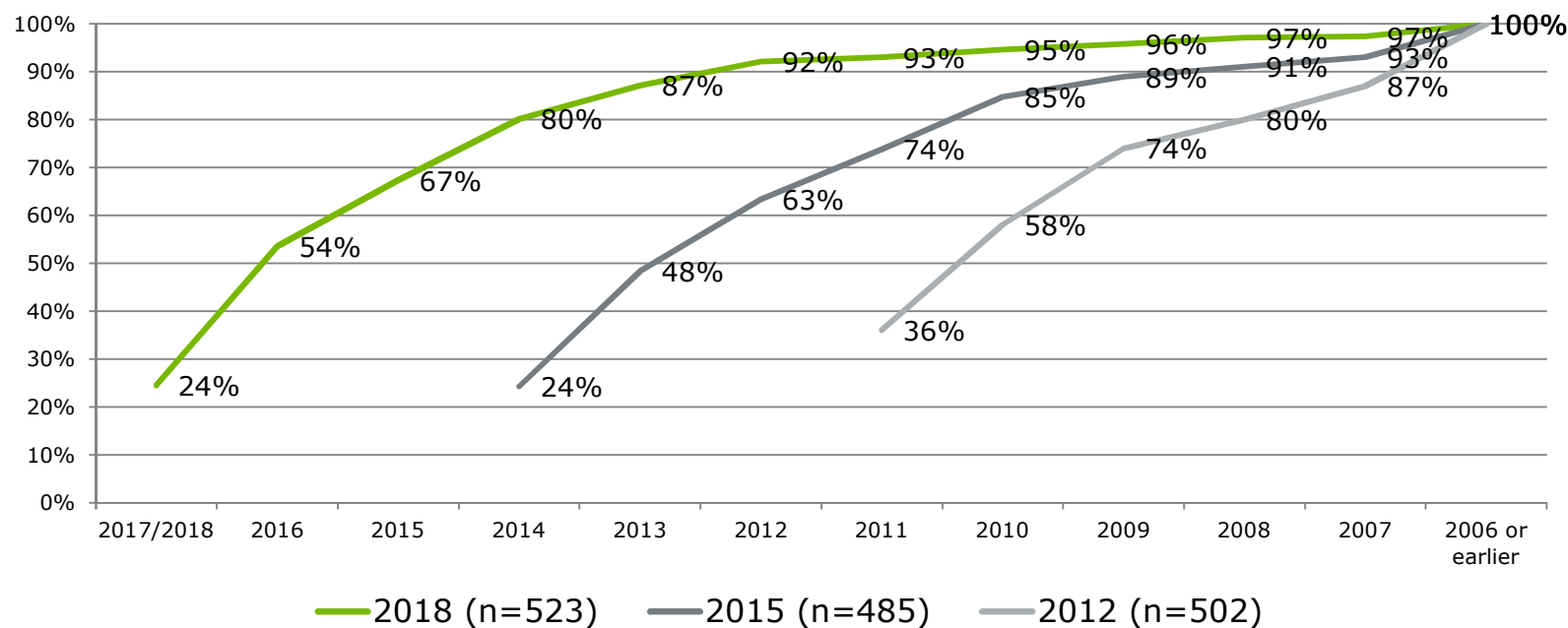
Base: n=1'311

Sums can differ from 100% due to rounding

* combined %severe+ and %profound+ because n is too small

54% of the currently owned HAs were fitted in 2016 or later

Year of purchase



Age of currently owned HAs (Mean):

2018: 2.5 years

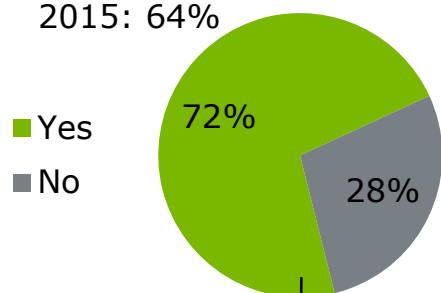
2015: 2.9 years

2012: 2.5 years

On average 3 years pass between becoming aware of the hearing loss and the purchase of hearing aids. Hearing aids are used for 6 years before they are being replaced.

Current HAs = first HAs?

2015: 64%



HA-owner, n=550

How many years did you own your previous HAs?



■ 1-3 years ■ 4-6 years ■ 7-10 years ■ 11 years or longer

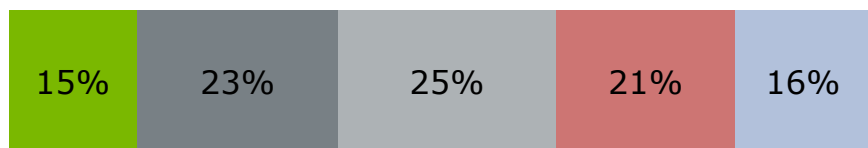
Base: n=122

Age of HA before it has been replaced:

2018: 6 years (median)

2015: 6 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?

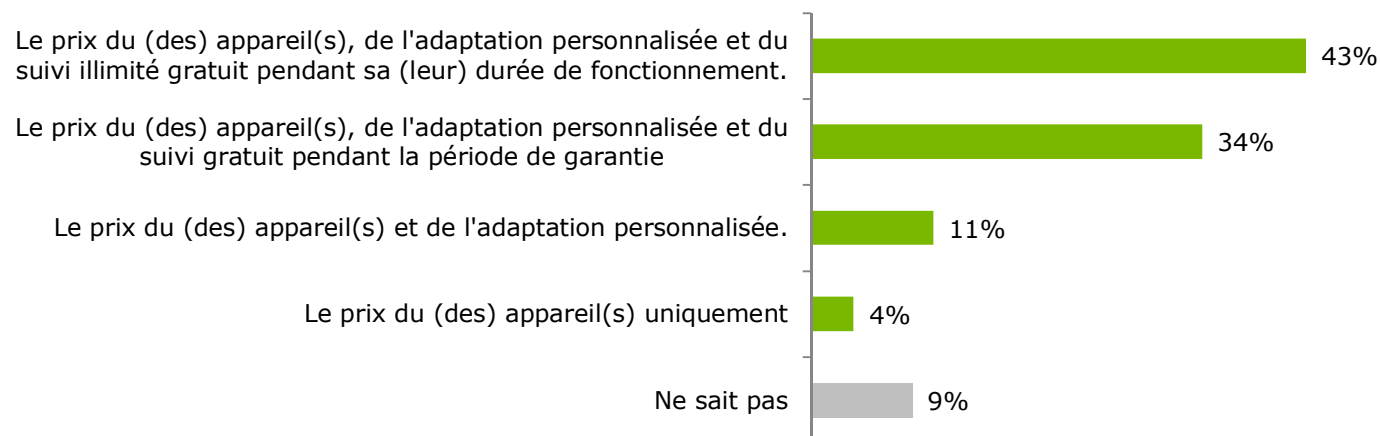


■ 1 year ■ 2 years ■ 3 years ■ 4-6 years ■ more than 6 years

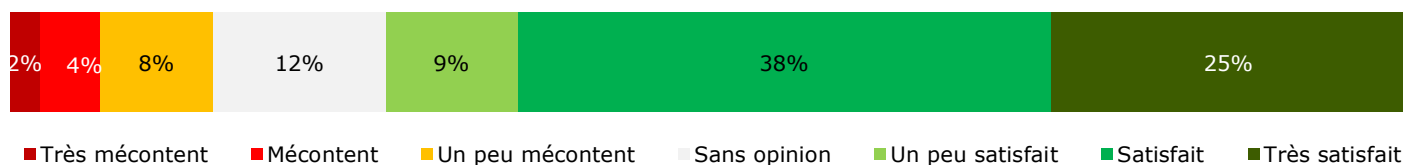
Base: n=387

Most hearing aid owners know that fitting and after sales services are included in the overall costs, but only 43% are aware that this counts throughout the lifetime of the hearing aid(s).

A votre avis, que comprend le prix que vous avez payé pour votre (vos) appareil(s) auditifs(s) ?

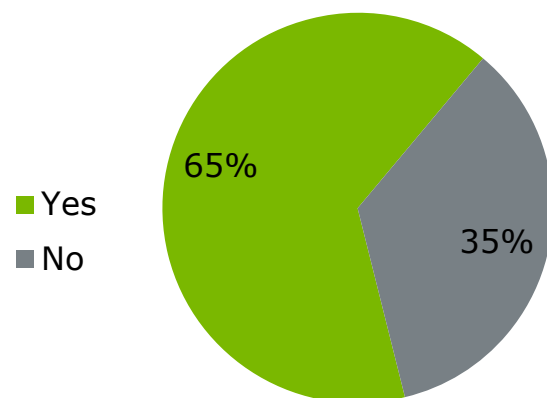


Le prix de votre/vos appareil(s) auditif(s) inclus un nombre illimité de visites de réglage chez votre Audioprothésiste durant sa (leur) durée de fonctionnement. Quelle est votre degré de satisfaction en regard de ce mode de tarification « forfaitaire » ?



65% 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?

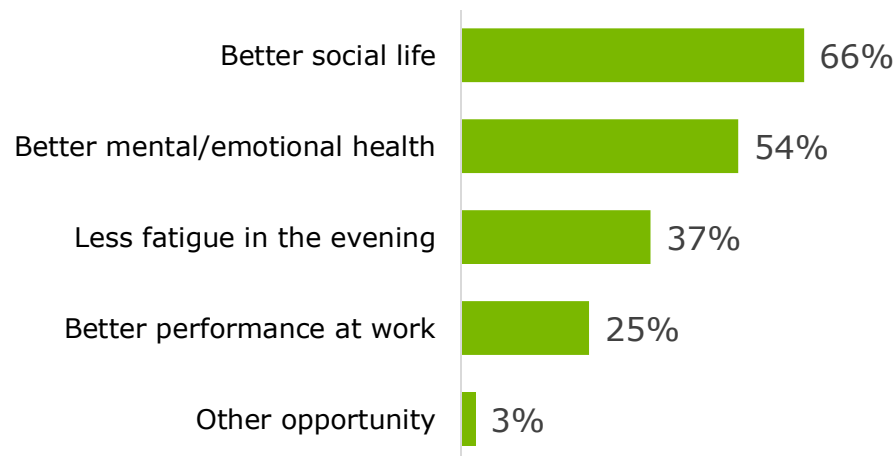


HA-owner, n=550

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?

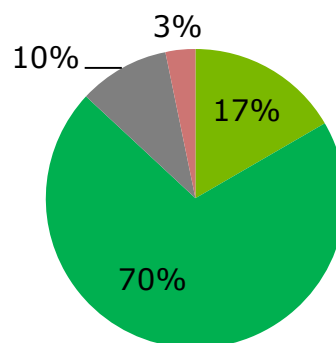
Please tick all that apply



Base: n=335

87% of the hearing aid owners received some kind of 3rd party reimbursement – knowledge about third party payments among non owners is still relatively low, but has increased since 2015.

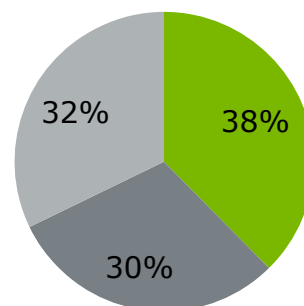
Owners: Was any part or all of your hearing aid(s) paid for by a third party ? (Insurance, Government, ...)



HA-owner, n=550

- Yes, completely (2015:12%)
- Yes, partly (2015: 69%)
- No (2015: 17%)
- don't know (2015:2%)

Non-owners: Based on your current knowledge, would any part or all of your hearing aid(s) be paid for by a third party? (Insurance, Government, ...)



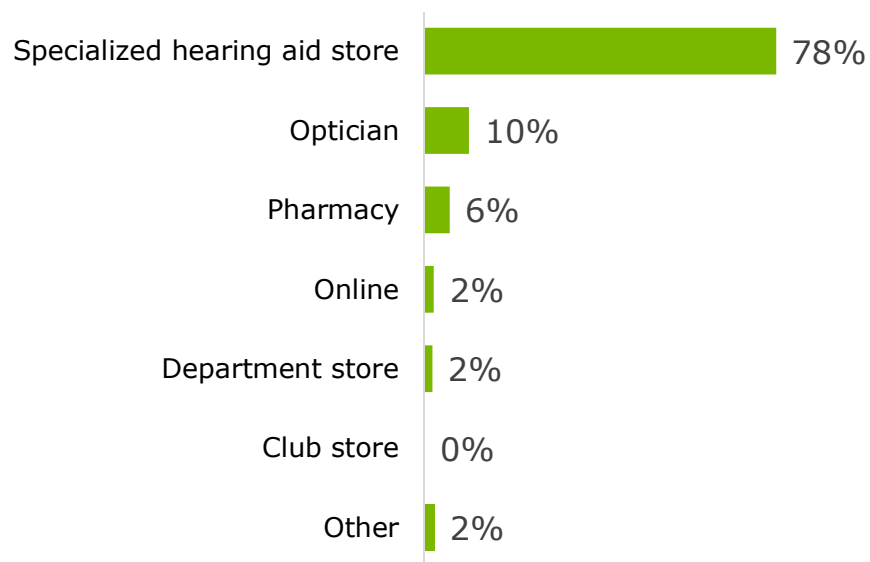
HA-non-owners, n=761

- Yes (2015: 30%)
- No (2015: 32%)
- don't know (2015:37%)

Specialized hearing aid store is by far the preferred place for obtaining hearing aids (both for owners and non owners).

OWNERS:

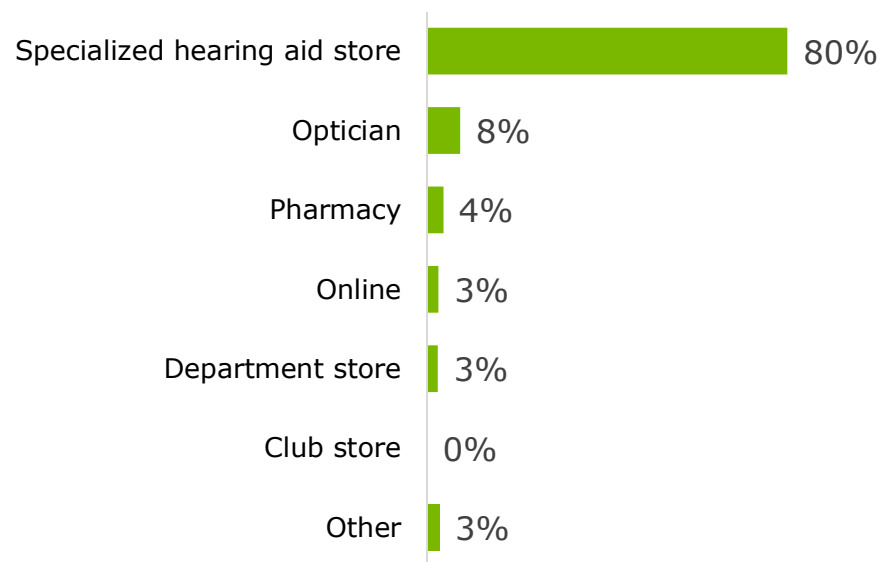
Where was your most current hearing aid obtained?



HA-owner, n=550

NON OWNERS:

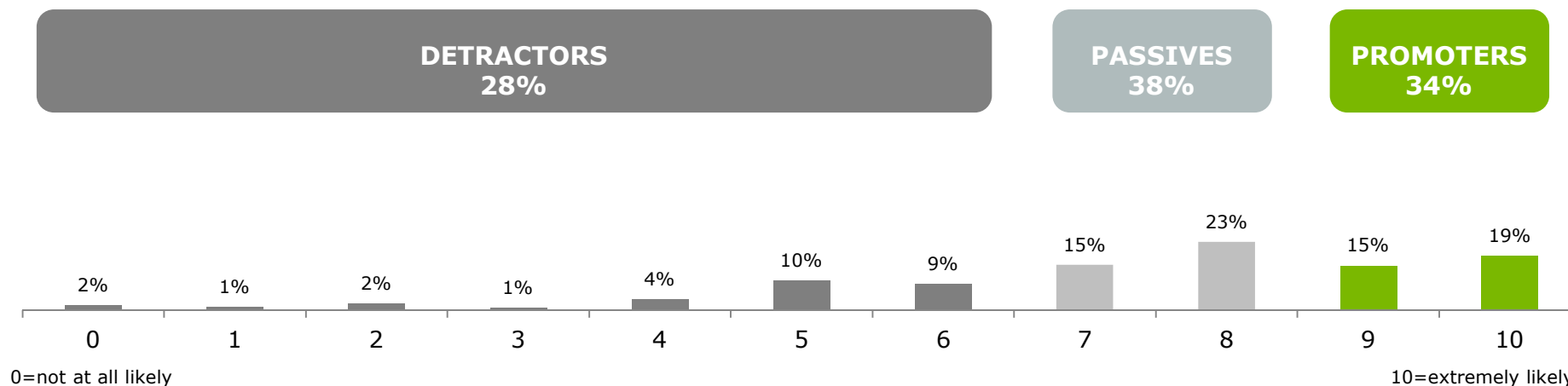
If you were to get hearing aids, where would you go?



HA-non-owner, n=761

Recommendation intention of the place where the hearing aid(s) have been obtained is okay, with a barely positive NPS score of 6.

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

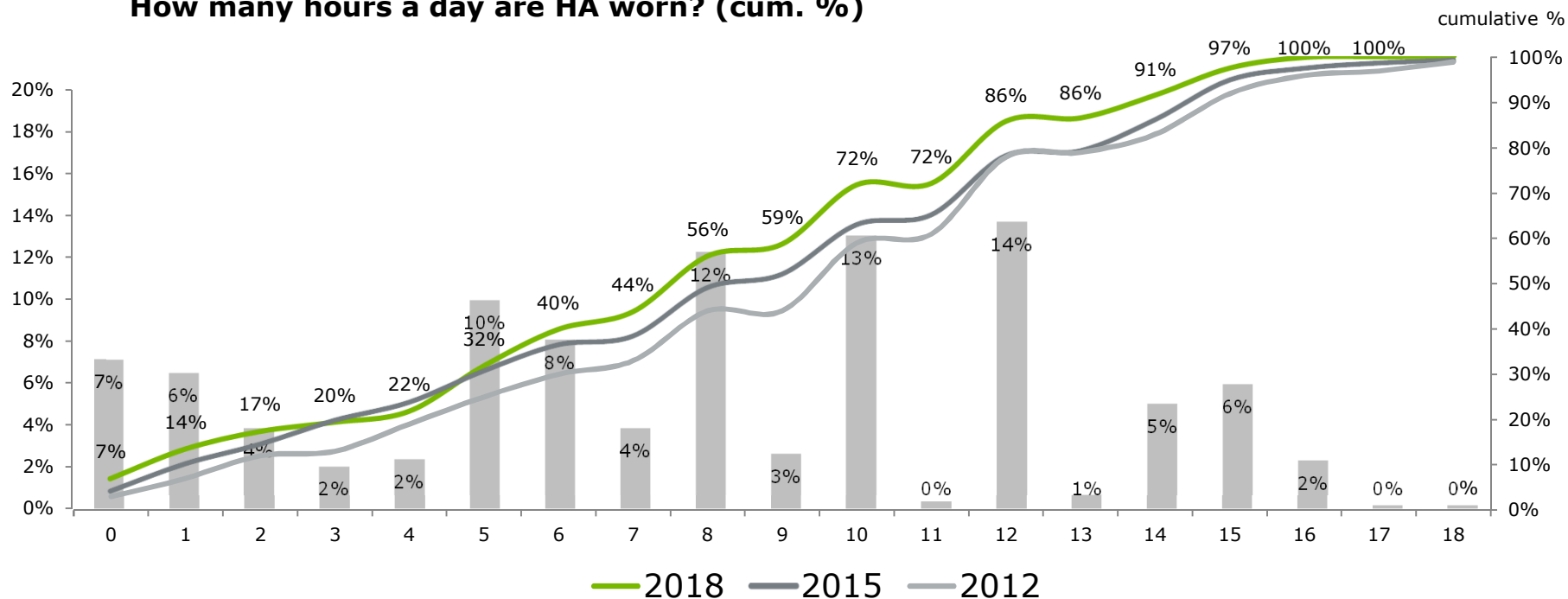


NPS = PROMOTERS – DETRACTORS = 6

HA-owner, n=550

On average, HAs are worn 7.9 hours a day

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

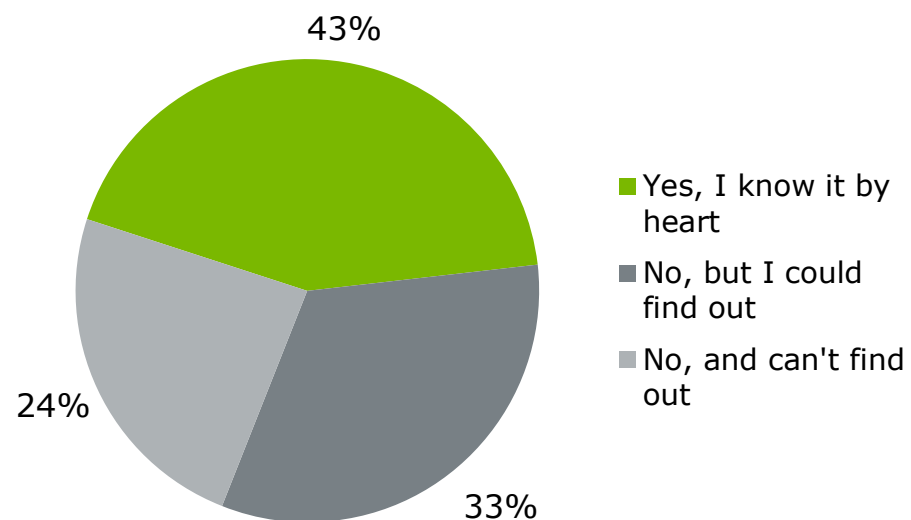


HA-owner:
2018: n=550
2015: n=501
2012: n=502

HA worn:
2018 Mean: 7.9 hours/day
2015 Mean: 8.6 hours/day
2012 Mean: 9.2 hours/day

Only 43% of today's hearing aid owners are aware of their hearing aid brand.

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



Base: N=550

18% of the HA owners use an accessory for their hearing aids.
68% 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=550)



Do you personally use accessories for your hearing aids (TV-Streamer/ Apps / Remote Control / etc.) ? (HA owners, n= 550)



IF ACCESSORIES USED (n=119):

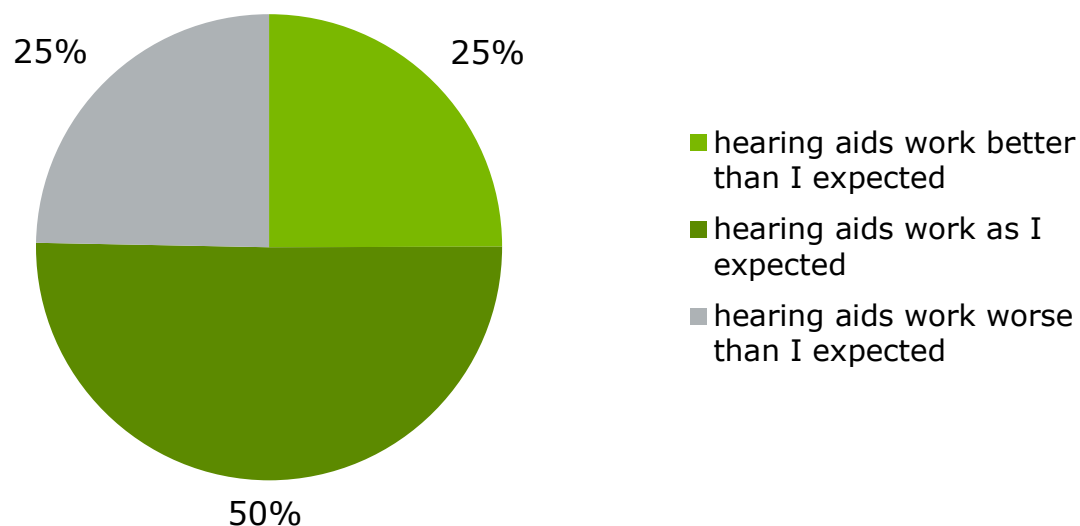
Overall, how satisfied with the performance of your accessorie(s)?



Satisfaction with hearing aids and drivers

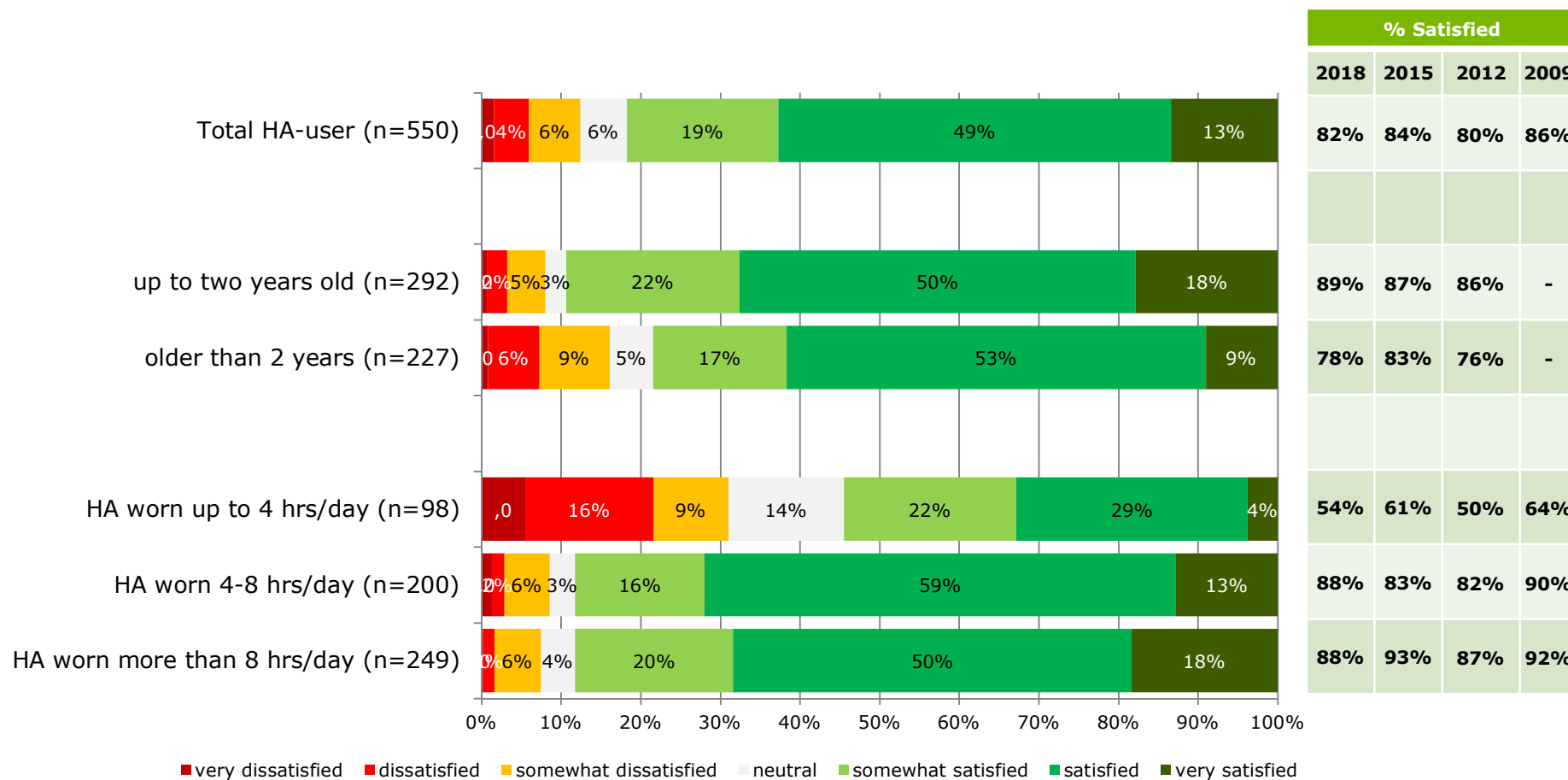
75% of the hearing aid owners say their hearing aid works better than or as expected

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



Base: N=550

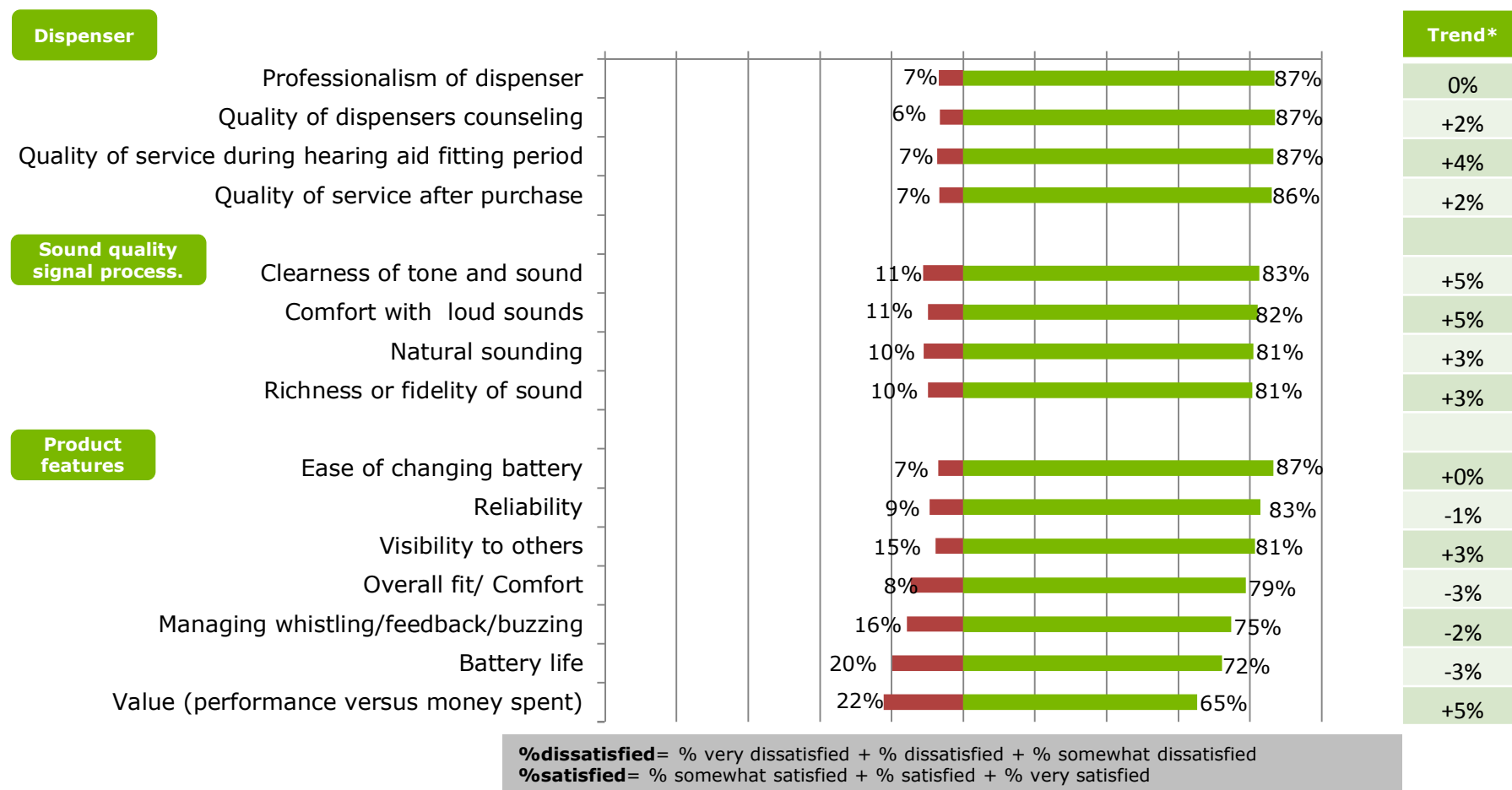
Overall satisfaction with HA stays on a high level with 82% of the users being satisfied



Overall Satisfaction with HA: Country comparison

| | UK | Bel- gium | Nether- lands | Poland | France | Switzer- land | Den- mark | Norway | Italy | Japan |
|---------------------------------|-----|--------------|------------------|--------|---------------|------------------|--------------|--------|-------|-------|
| Overall satisfaction 2012 | 72% | - | - | - | 80% | 84% | 70% | 72% | 70% | 36% |
| Overall satisfaction 2015/16/17 | 70% | 80% | 73% | 80% | 84% | 81% | 71% | - | 79% | 39% |
| Overall satisfaction 2018 | 74% | | | | 82% | | | | | |

Satisfaction with current hearing aids

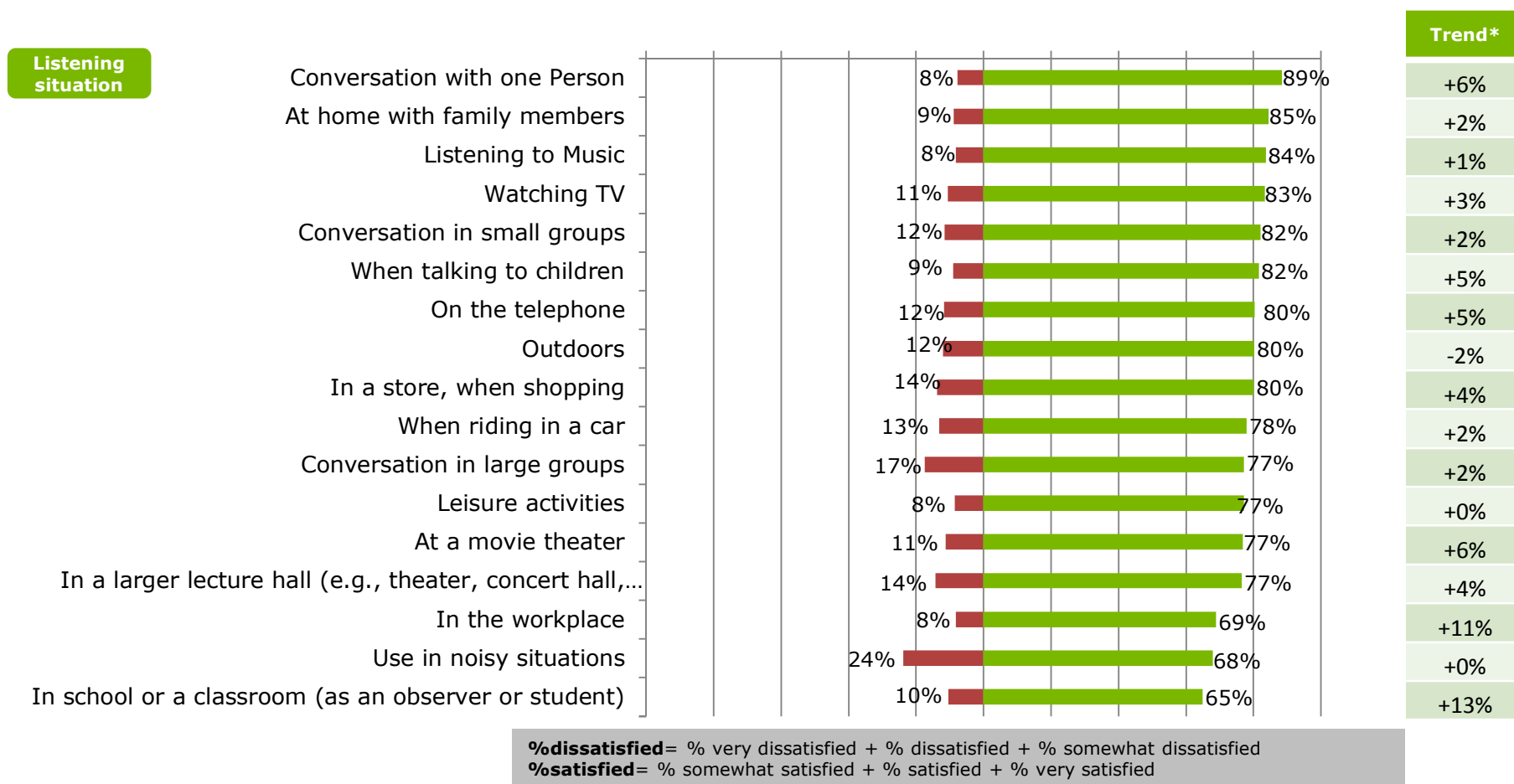


* % of satisfied HA owners compared to EuroTrak 2015

■ dissatisfied ■ satisfied

HA-owner, n=550

Satisfaction with current hearing aids


















* % of satisfied HA owners compared to EuroTrak 2015

■ dissatisfied ■ satisfied

HA-owner, n=550

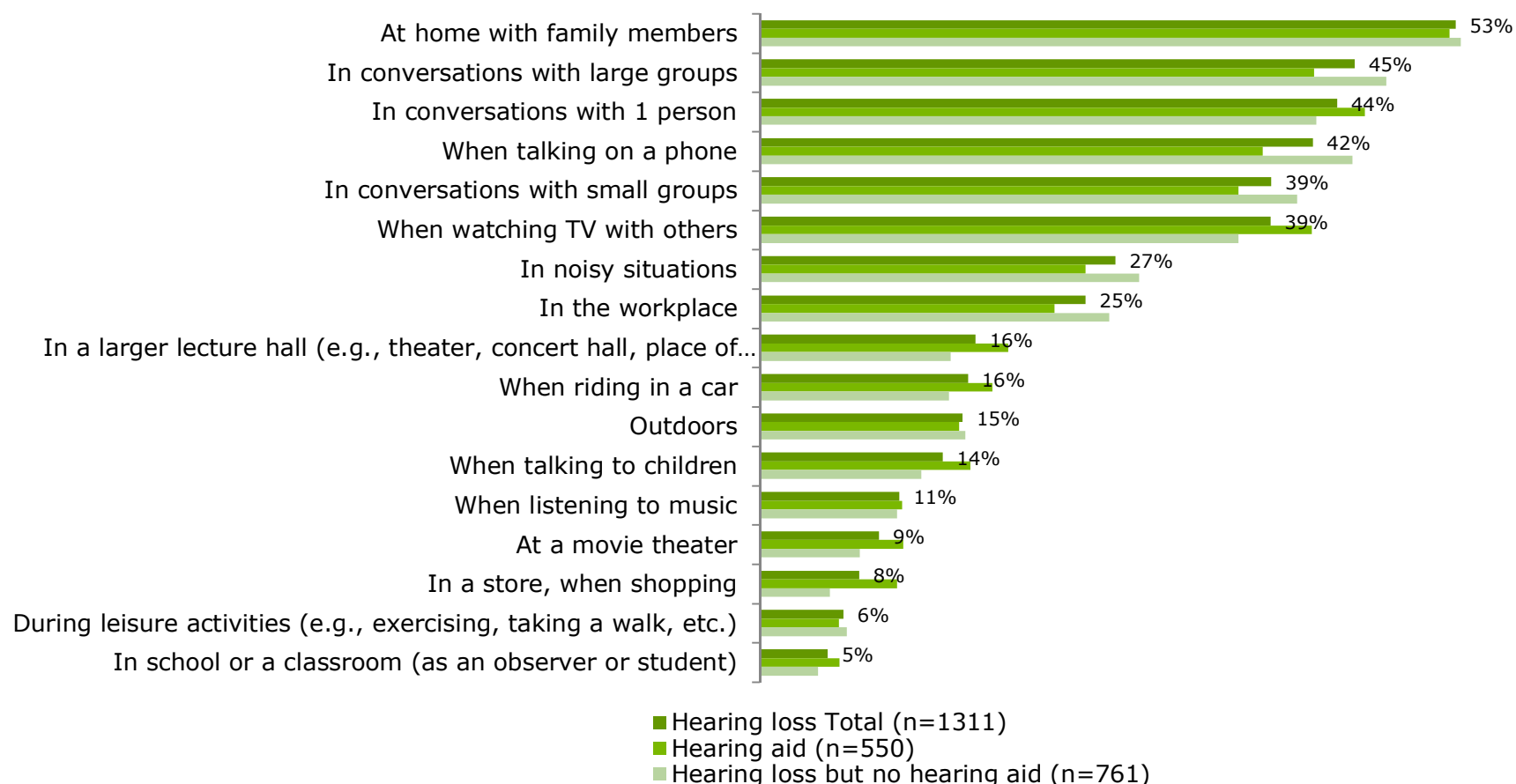
Factors influencing satisfaction with current HA: Sound quality/signal processing is most important for overall satisfaction with HA

| | | Influence on overall satisfaction with HA* | |
|-------------------------------|--|---|------|
| Dispenser | Quality of dispensers counseling |  | 0.64 |
| | Professionalism of dispenser |  | 0.63 |
| | Quality of service during hearing aid fitting period |  | 0.62 |
| | Quality of service after purchase |  | 0.61 |
| Sound quality signal process. | Clearness of tone and sound |  | 0.75 |
| | Comfort with loud sounds |  | 0.73 |
| | Natural sounding |  | 0.73 |
| | Richness or fidelity of sound |  | 0.71 |
| Product features | Reliability |  | 0.68 |
| | Overall fit/ Comfort |  | 0.68 |
| | Managing whistling/feedback/buzzing |  | 0.64 |
| | Visibility to others |  | 0.62 |
| | Value (performance versus money spent) |  | 0.60 |
| | Ease of changing battery |  | 0.59 |
| | Battery life |  | 0.55 |

*The Influence has been calculated with a correlation: 0 means no relation between a criterion and overall satisfaction ; 1 means a maximal relationship. **Read:** clearness of tone and 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)**



Positive impact of hearing aids, quality of life

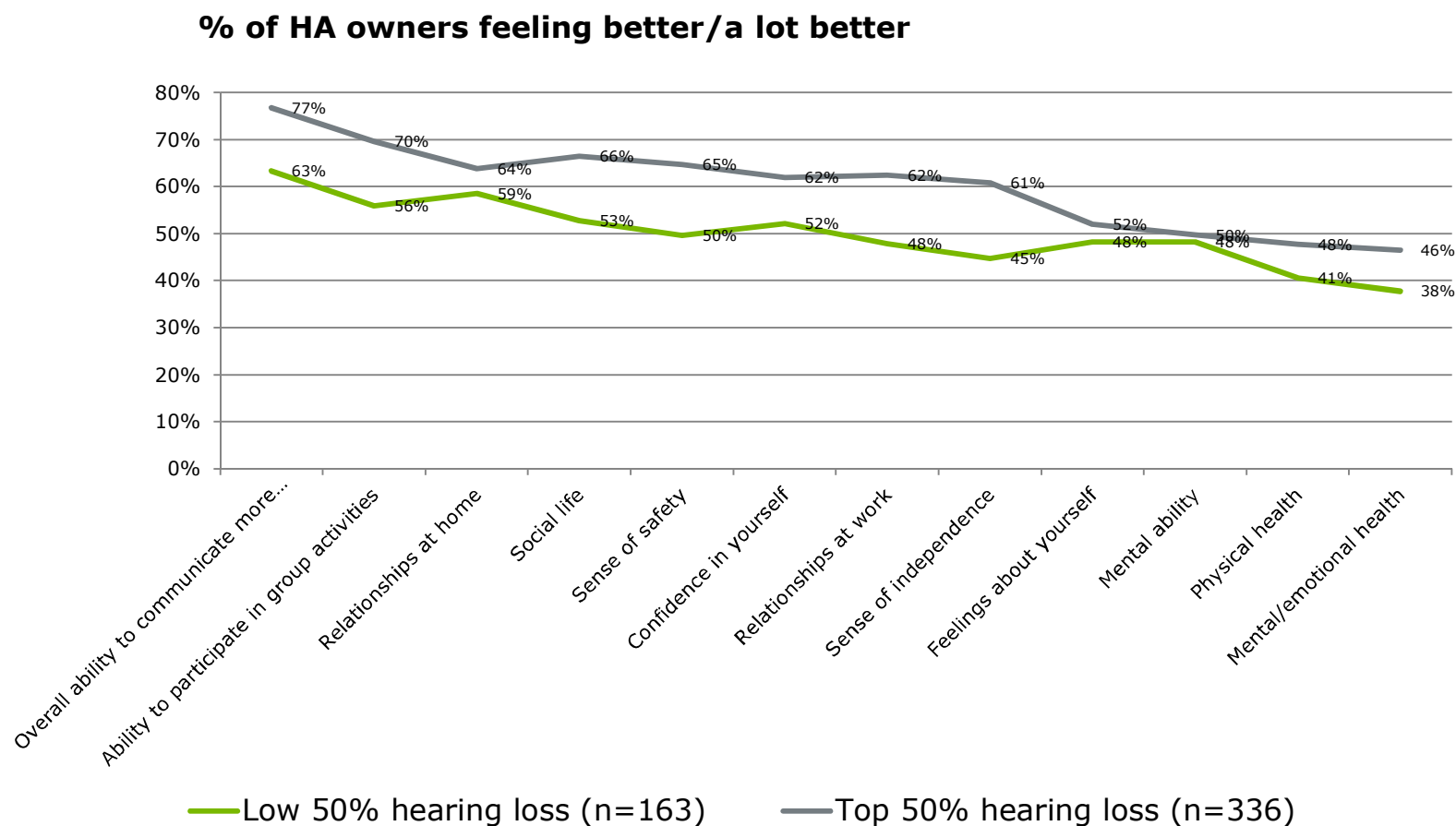
Significant positive impact of HAs on different aspects: Especially communication effectiveness, participating in group activities, relationships at home and social life improve with hearing aids.

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).



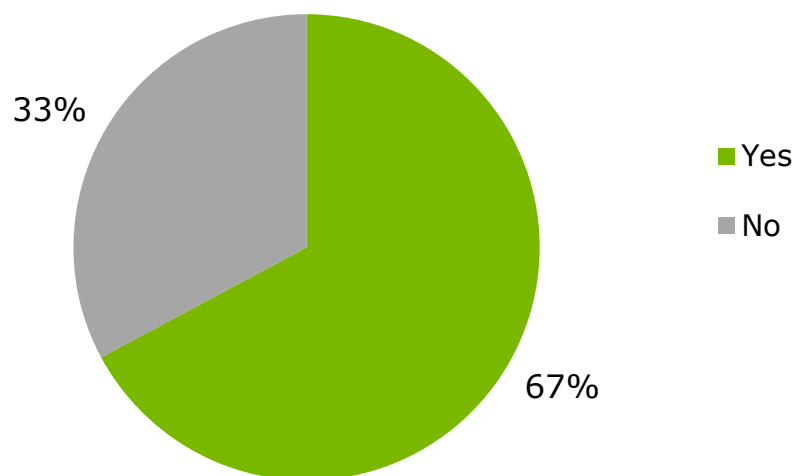
HA-owner, n=550

Impact of HAs is perceived more positive by patients with a Top 50% hearing loss in all aspects



2 out of 3 hearing aid owners feel more confident moving in a city since wearing hearing aids!

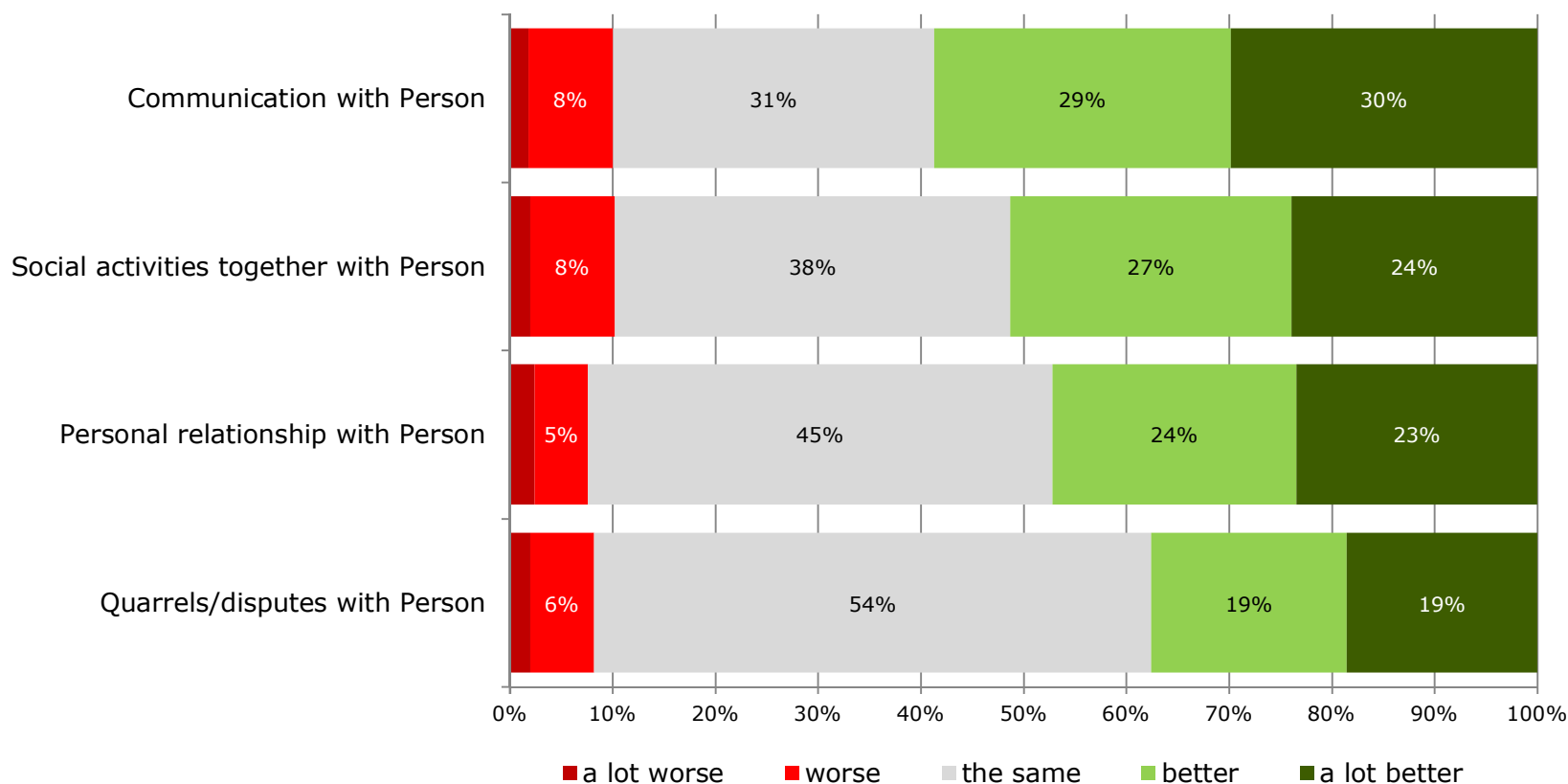
Since wearing a hearing aid, do you feel more confident moving in a city, e.g. because you hear traffic signals/vehicles approaching?



Base: N=550

Even for other people in the household/relatives, the situation improves when the person with hearing loss starts wearing hearing aids

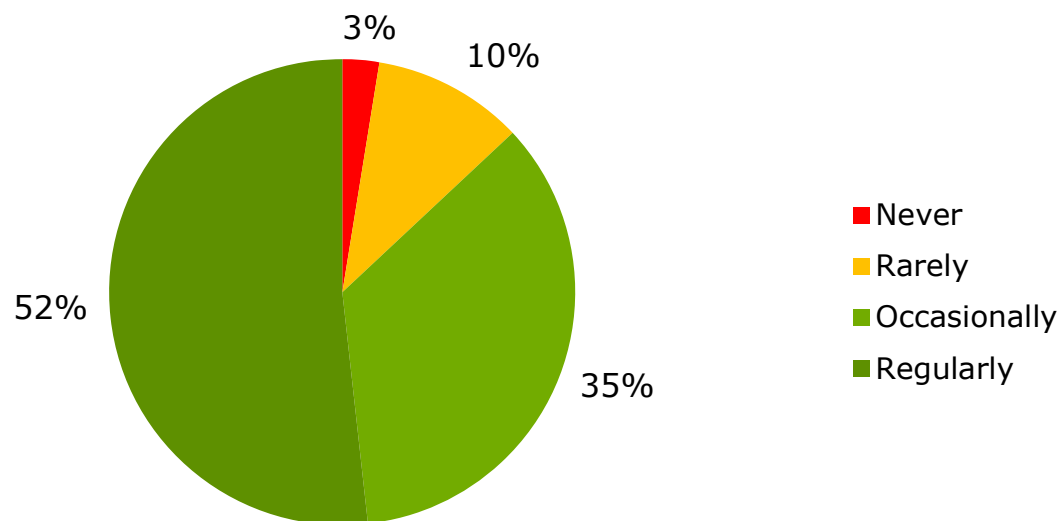
How did the following aspects change since person X is wearing hearing aids?



Someone in HH / parent has HA, n=510

97% 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?



Base: N=550

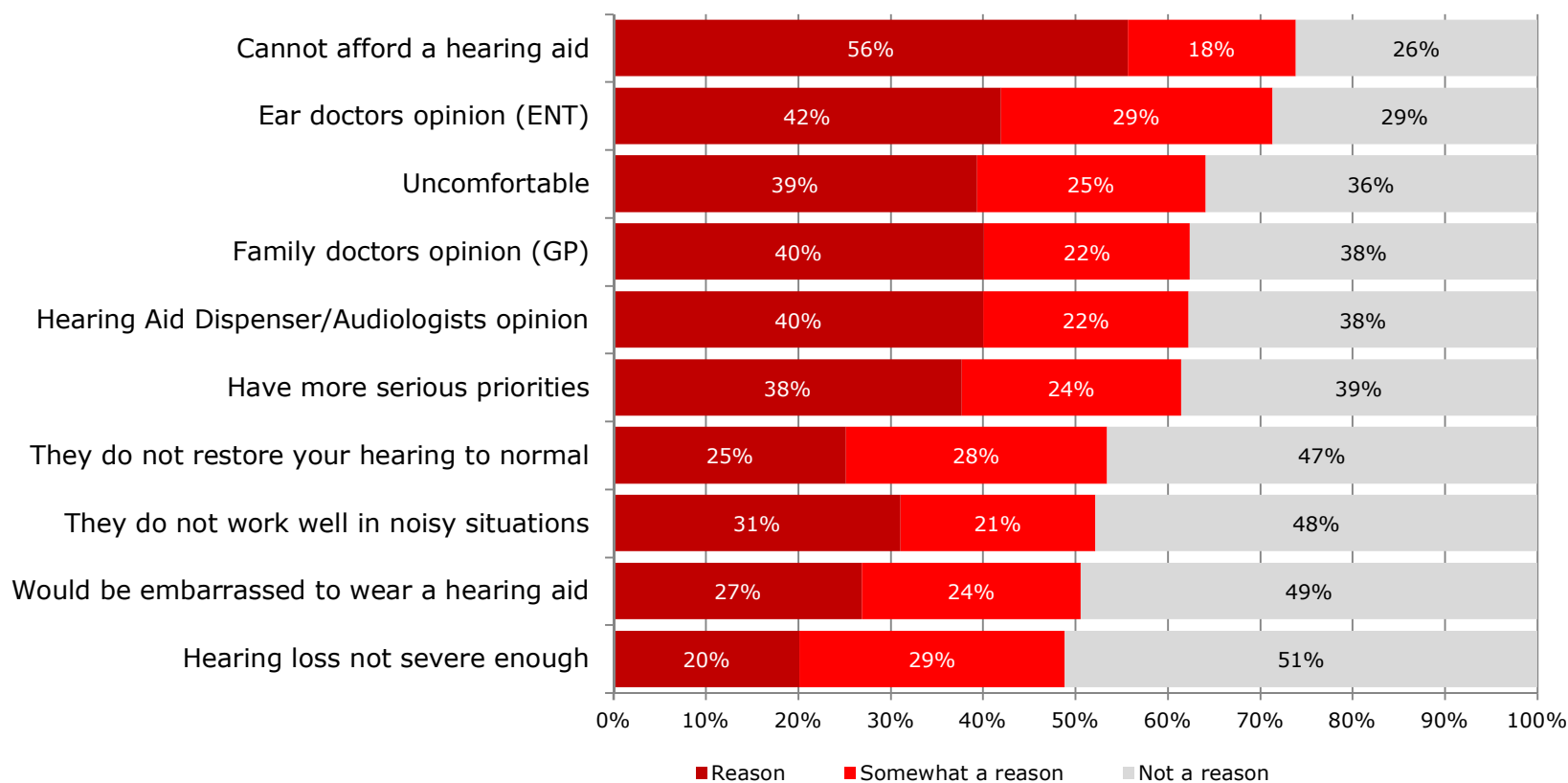
4. Analysis of hearing impaired non-owners

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

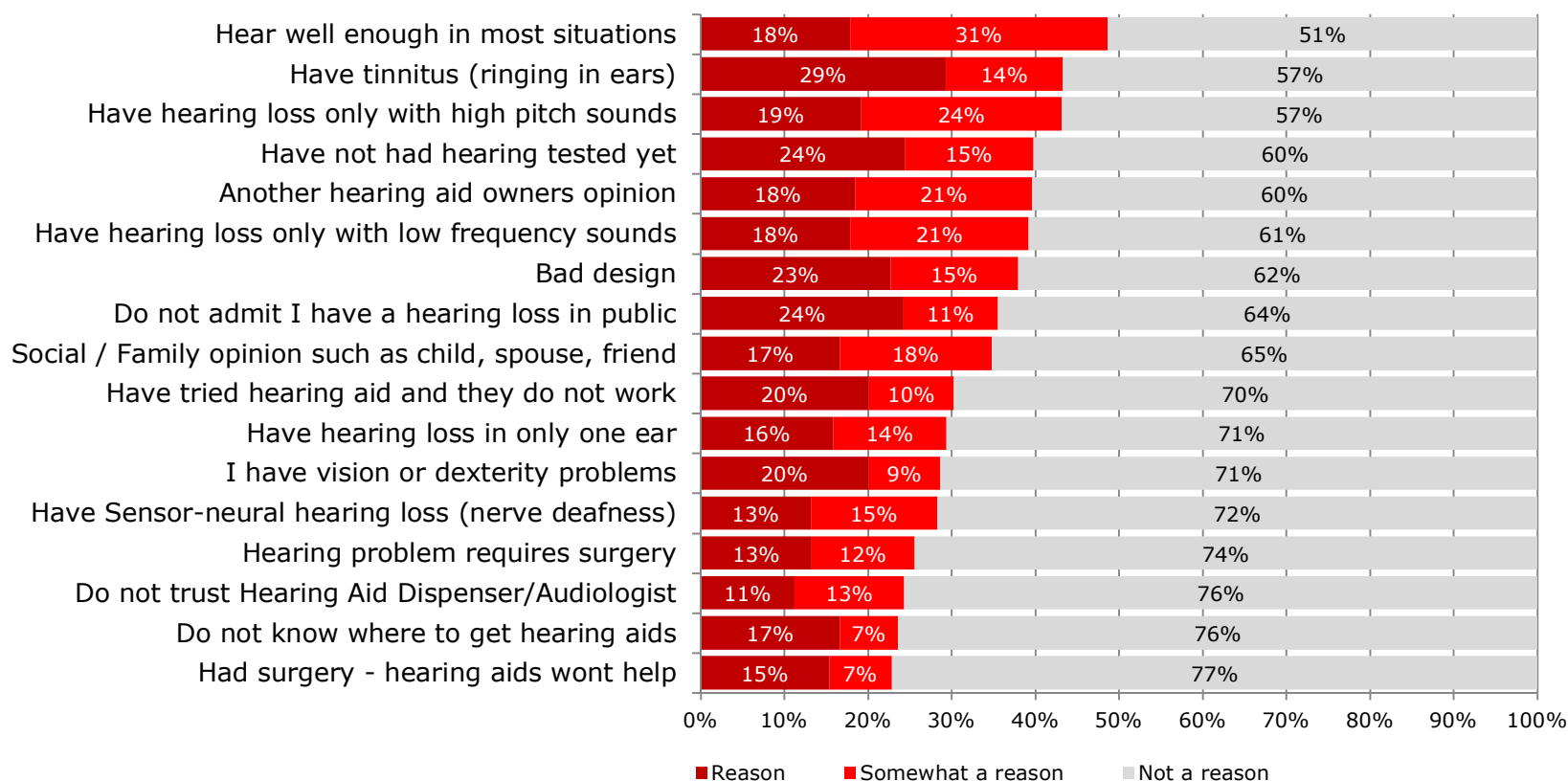
| | % HA Owner (n=550) | %HA-Non- owner Low 50% HL (n=404) | %HA-Non- owner Top 50% HL (n=201) |
|-----------------------|-----------------------|--|---|
| Ears impaired | | | |
| Unilateral loss | 26% | 54% | 24% |
| Bilateral loss | 74% | 46% | 76% |
| | | | |
| Perceived loss | | More similar hearing loss- structure | |
| Mild | 8% | 39% | 4% |
| Moderate | 53% | 54% | 60% |
| Severe | 34% | 6% | 34% |
| Profound | 5% | 1% | 2% |

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



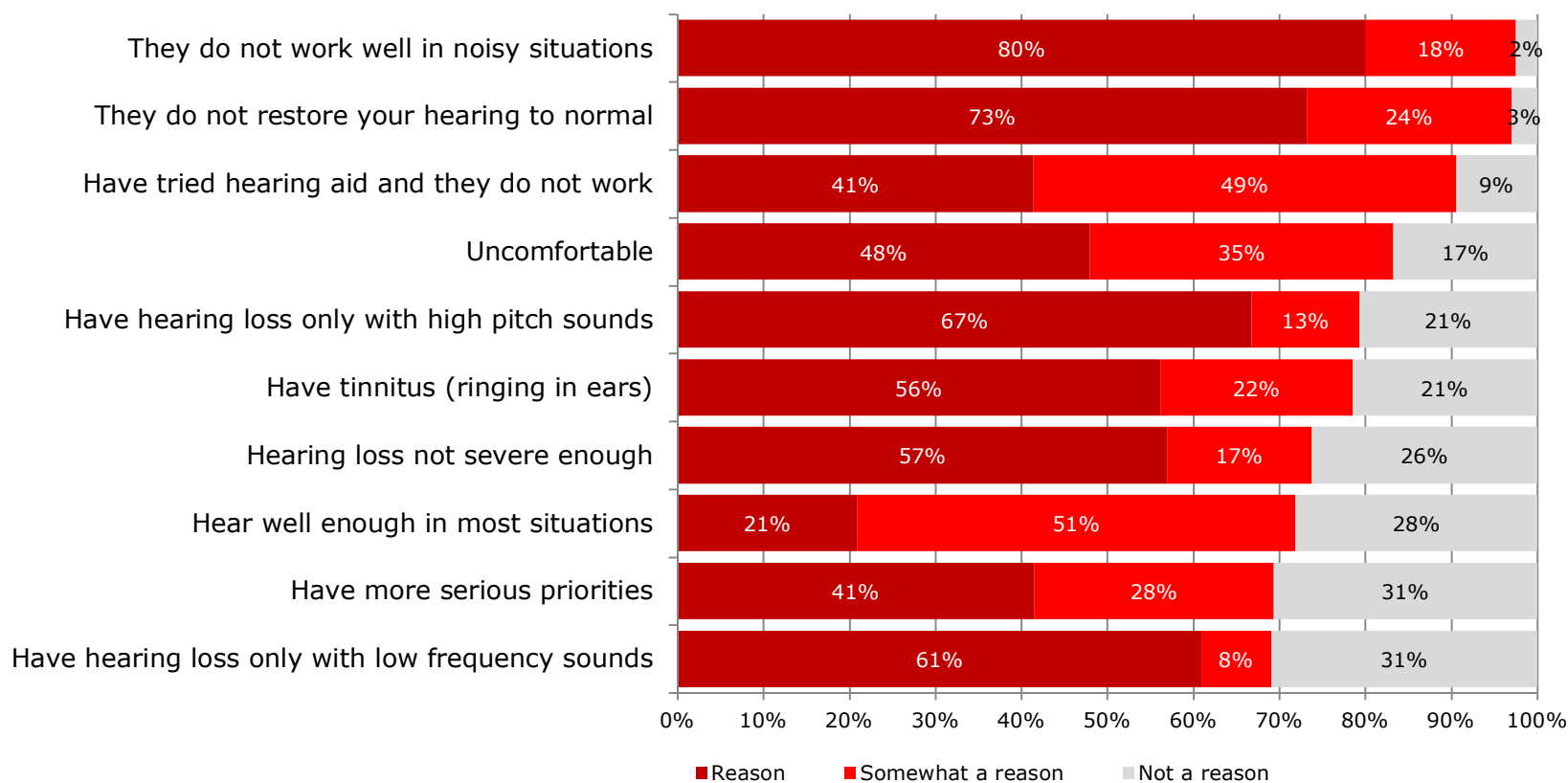
Base: non owners Top 50% HL: n=201

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



Base: non owners Top 50% HL: n=201

Top 10 reasons for HA owners NOT using them

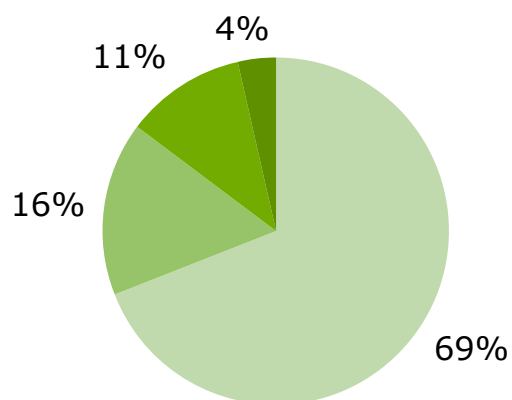


Owners who don't use, n=32

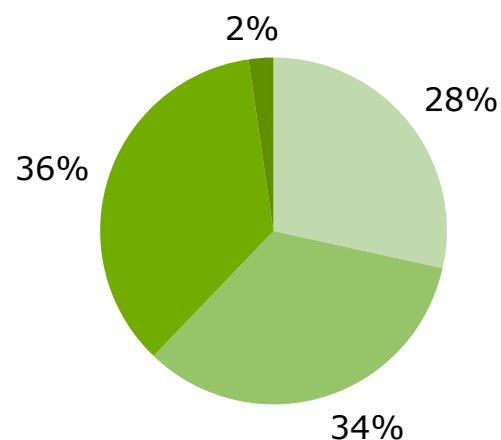
Social rejection because of hearing loss compared to the acceptance of hearing aids

69% of hearing aid owners feel that people never 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 aid.

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



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



Base: N=550

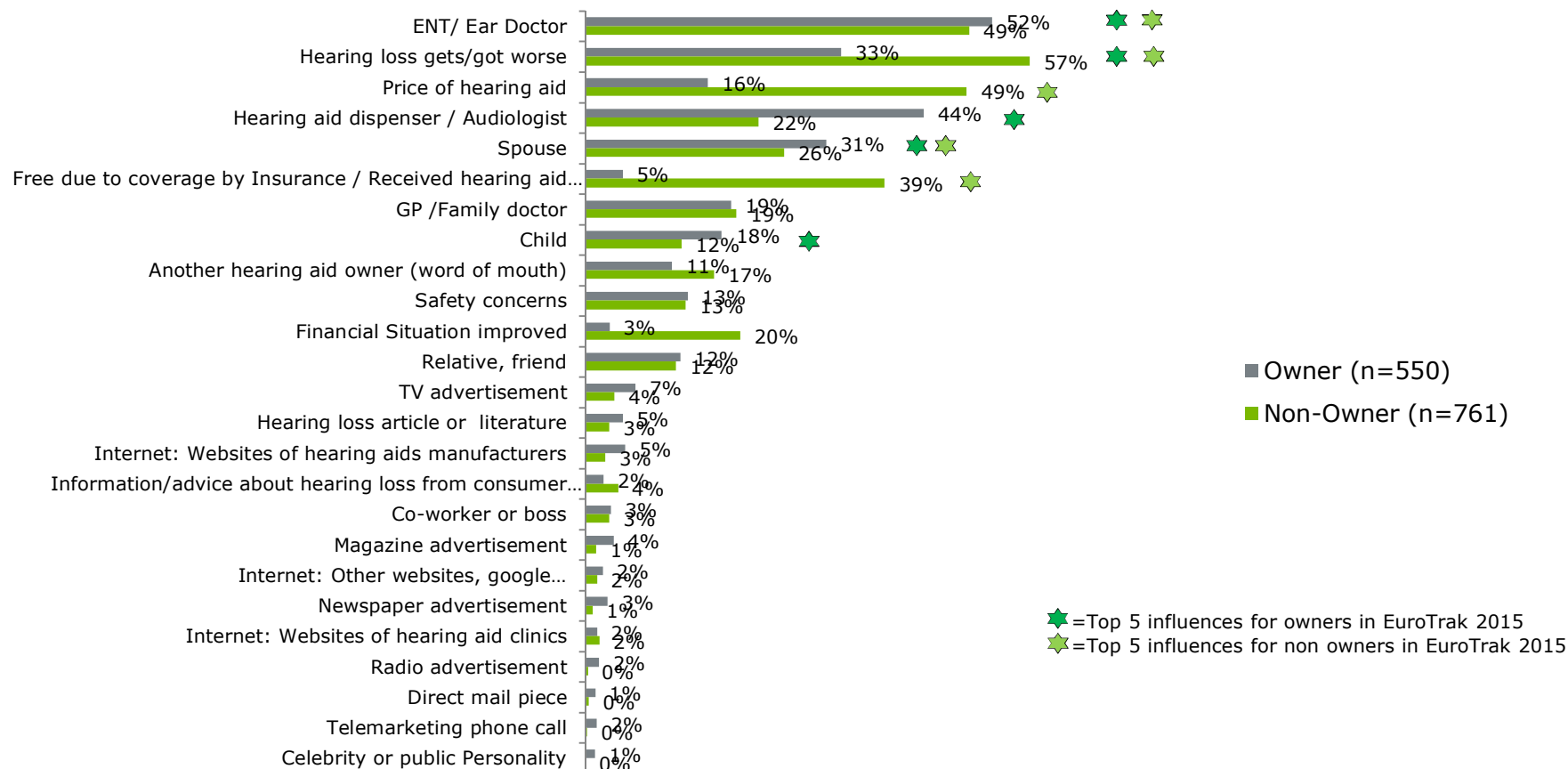
Base: Top 50% hearing loss, no hearing aid N=201

Most important triggers to buy

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

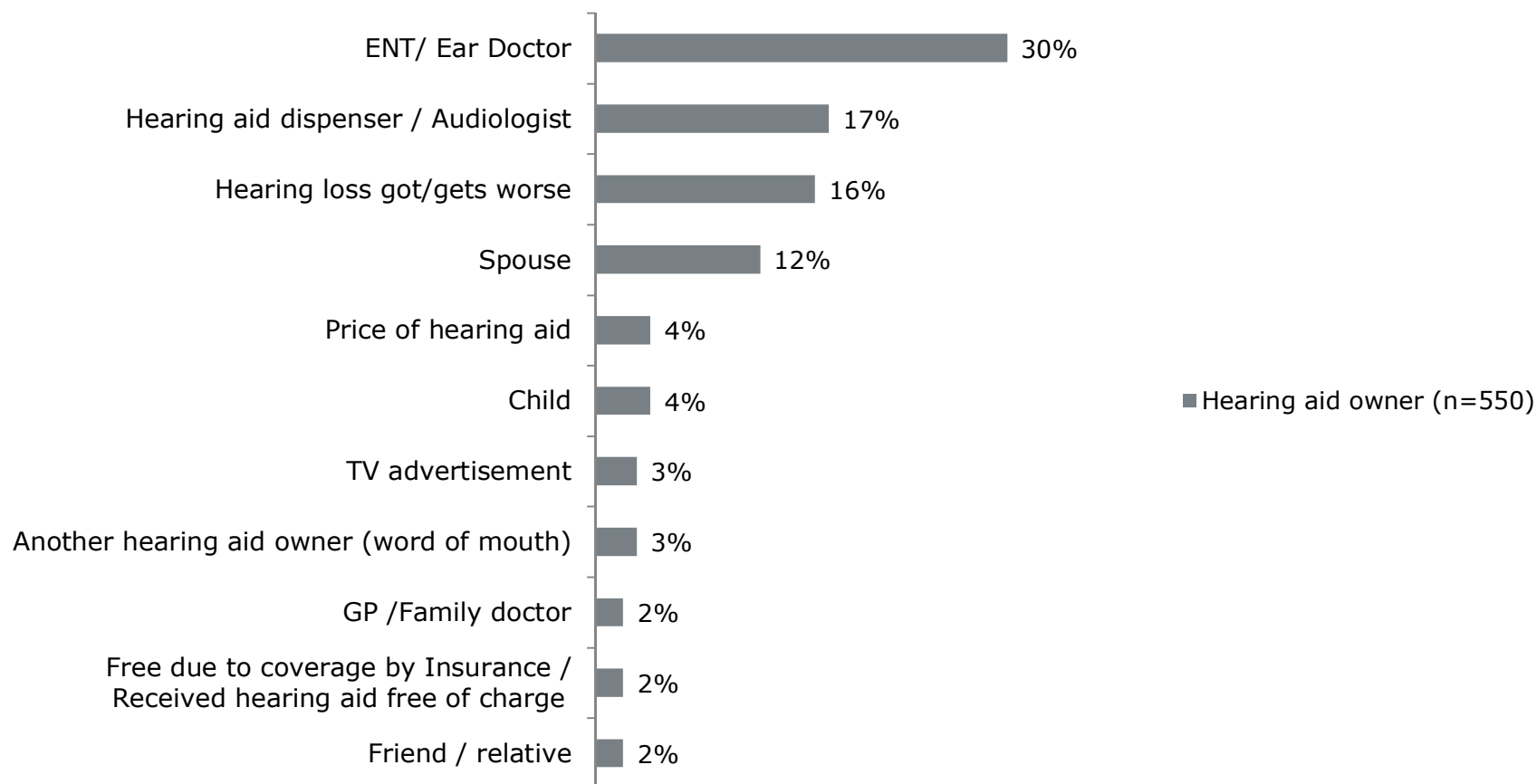
Non-owner: Think about the option to obtain / purchase a hearing aid. What do you think would influence you to obtain / purchase a hearing aid ?

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



The most important trigger to buy a hearing aid is the ENT, the audiologist and worsening hearing loss.

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





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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 | 7'374 | 10.7% | 37.6% | 48.5% | 55.7% | 48.4% |
| | Female | 7'687 | 9.2% | 44.7% | 51.5% | 44.3% | 51.6% |
| Age recoded | | | | | | | |
| | 1 - 14 | 2'783 | 1.8% | 47.4% | 20.2% | 3.0% | 3.9% |
| | 15 - 24 | 1'777 | 3.3% | 39.4% | 12.7% | 4.0% | 3.7% |
| | 25 - 34 | 1'791 | 5.2% | 36.0% | 12.5% | 6.7% | 5.4% |
| | 35 - 44 | 1'834 | 5.5% | 29.3% | 12.8% | 8.0% | 4.8% |
| | 45 - 54 | 2'020 | 8.9% | 38.1% | 13.6% | 12.6% | 11.2% |
| | 55 - 64 | 1'871 | 12.8% | 26.1% | 12.0% | 20.0% | 10.2% |
| | 65 - 74 | 1'589 | 18.7% | 43.0% | 9.5% | 19.1% | 20.7% |
| | 74+ | 1'396 | 34.6% | 51.1% | 6.7% | 26.6% | 40.1% |
| Type of household | | | | | | | |
| | single household | 1'528 | 19.2% | 43.6% | 9.1% | 18.7% | 20.8% |
| | Couple, no kids | 3'935 | 15.4% | 38.9% | 24.6% | 41.7% | 38.3% |
| | Couple with kid(s) | 7'632 | 5.6% | 40.6% | 53.2% | 28.5% | 28.1% |
| | Single mom/dad with kid(s) | 876 | 4.6% | 42.7% | 6.2% | 2.6% | 2.8% |
| | Retirement home, hospital etc. | 175 | 36.2% | 51.1% | 0.8% | 3.5% | 5.2% |
| | Other | 916 | 8.1% | 39.9% | 6.2% | 5.0% | 4.8% |

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 (alone or together with someone) | 6'870 | 15.3% | 39.8% | 42.9% | 71.2% | 67.7% |
| The spouse of the head of the household | 3'569 | 10.0% | 43.3% | 23.7% | 22.7% | 25.0% |
| Daughter/son of head of household | 4'109 | 1.7% | 43.4% | 29.8% | 4.5% | 4.9% |
| Other person | 513 | 5.6% | 50.5% | 3.6% | 1.6% | 2.4% |
| Employment | | | | | | |
| Full time employed | 5'565 | 8.3% | 36.9% | 48.0% | 33.8% | 28.9% |
| Part time employed | 727 | 8.9% | 32.3% | 6.2% | 5.1% | 3.5% |
| Unemployed / not working | 1'179 | 6.3% | 25.3% | 10.4% | 6.4% | 3.2% |
| Retired under a disability pension scheme (fully or partly) | 236 | 16.5% | 47.3% | 1.9% | 2.4% | 3.1% |
| Early retired under an early retirement benefit scheme | 292 | 20.1% | 42.3% | 2.2% | 3.9% | 4.2% |
| Retired (at the official retirement age) | 3'022 | 24.0% | 44.9% | 21.6% | 46.4% | 55.2% |
| Student / pupil / in training | 1'067 | 2.6% | 39.5% | 9.8% | 1.9% | 1.8% |
| Education | | | | | | |
| Brevet | 1'272 | 16.4% | 40.1% | 10.0% | 14.6% | 14.2% |
| CAP-BEP | 2'359 | 13.5% | 38.3% | 19.2% | 22.9% | 20.7% |
| Baccalauréats | 2'460 | 9.8% | 42.5% | 20.9% | 16.2% | 17.5% |
| BTS - DUT | 1'673 | 9.3% | 35.3% | 14.3% | 11.7% | 9.3% |
| License (BAC+3) | 1'483 | 10.4% | 40.3% | 12.5% | 10.7% | 10.6% |
| Master 1 et 2 - Diplôme d'Ingénieur | 1'669 | 10.4% | 43.1% | 14.1% | 11.4% | 12.6% |
| Doctorat | 398 | 11.7% | 68.4% | 3.3% | 1.7% | 5.4% |
| Autre | 775 | 19.2% | 38.1% | 5.9% | 10.7% | 9.6% |