

Aldring og hørseltap

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Dr.avhandling i Tromsø 2004

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Hearing in the elderly

ISO 7029 (2000)

- Screenet materiale
- Otologisk normale (?)
- Referanse-materiale fra 1959-76
- Alder 18-70 år

Otologisk normal person

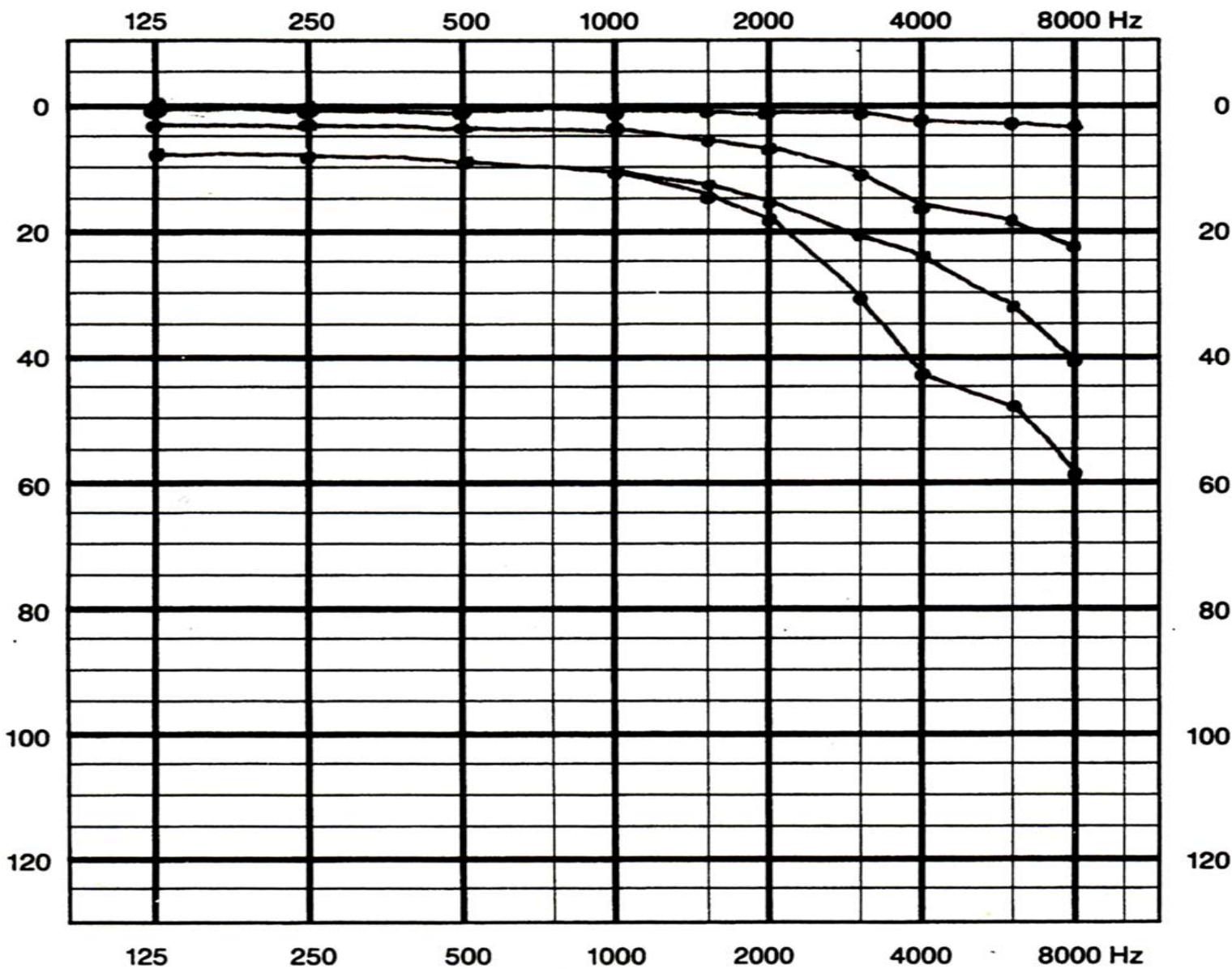
Person med normal helsetilstand som er fri for alle tegn eller symptomer på øresykdom og fri for okkluderende ørevoks og som har negativ historie vedr. overdrevet eksponering for støy, eksponering for potensielt ototoksiske medikamenter eller arvelig hørseltap

ISO 7029 (2000)

empirisk formel:

$$H_{\text{md}} = \alpha (Y-18)^2$$

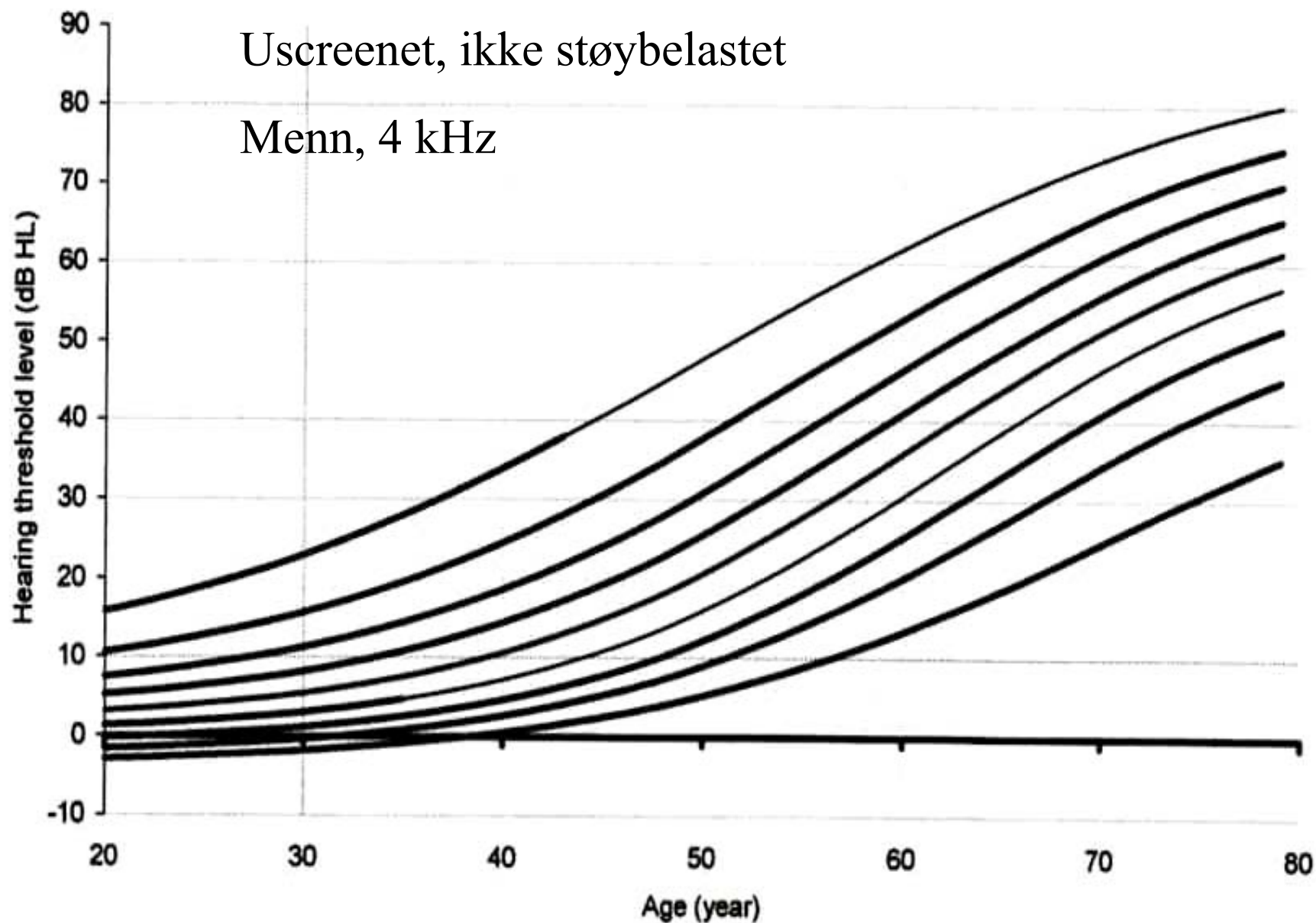
statistisk fordeling



♂ 30
♂ 50
♀ 70
♂ 70
years

Uscreenet, ikke støybelastet

Menn, 4 kHz



Burén, Solem & Laukli

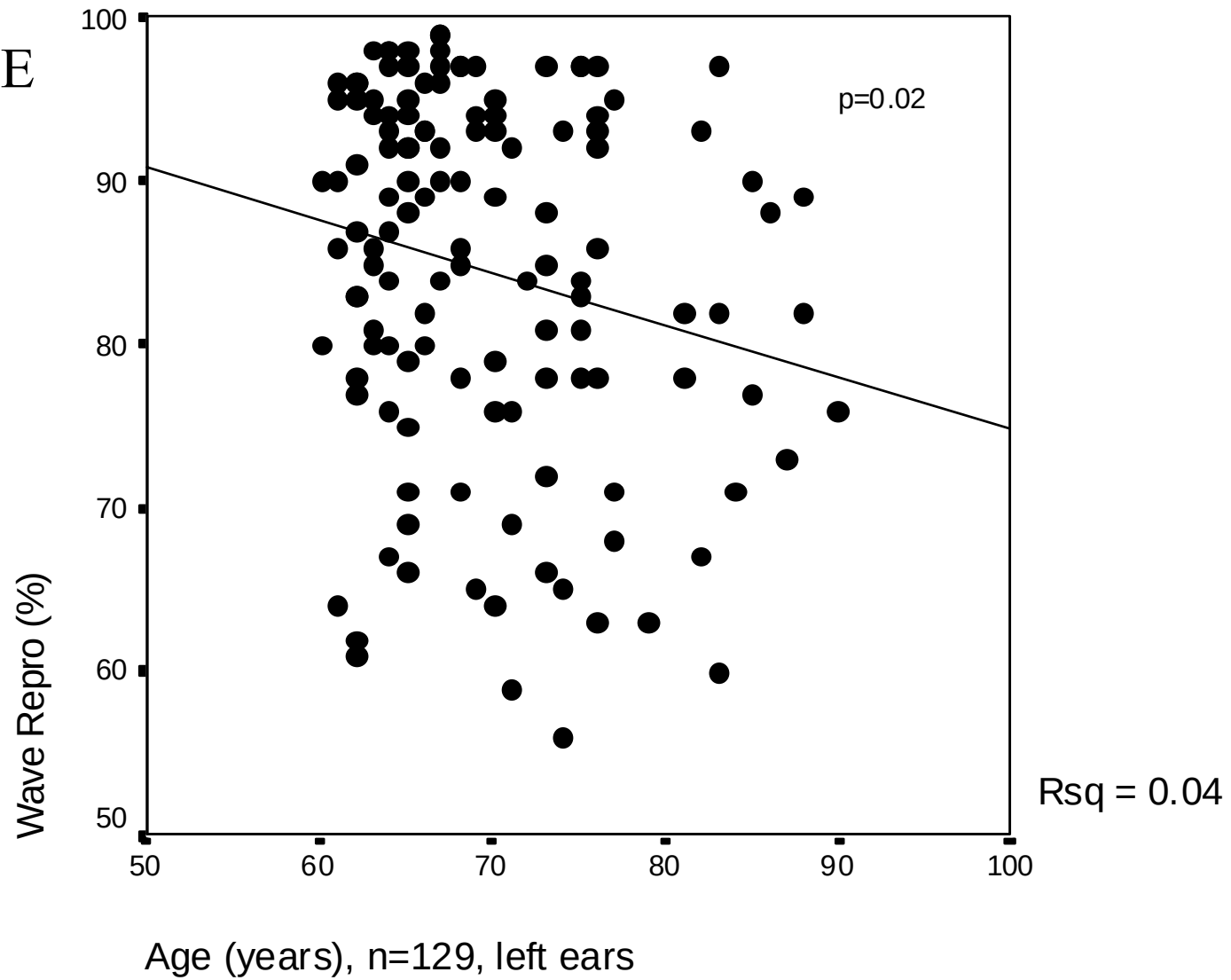
Br J Audiol 1992

over 14 kHz:

14-åringer har signifikant høyere
terskel enn 10-åringer

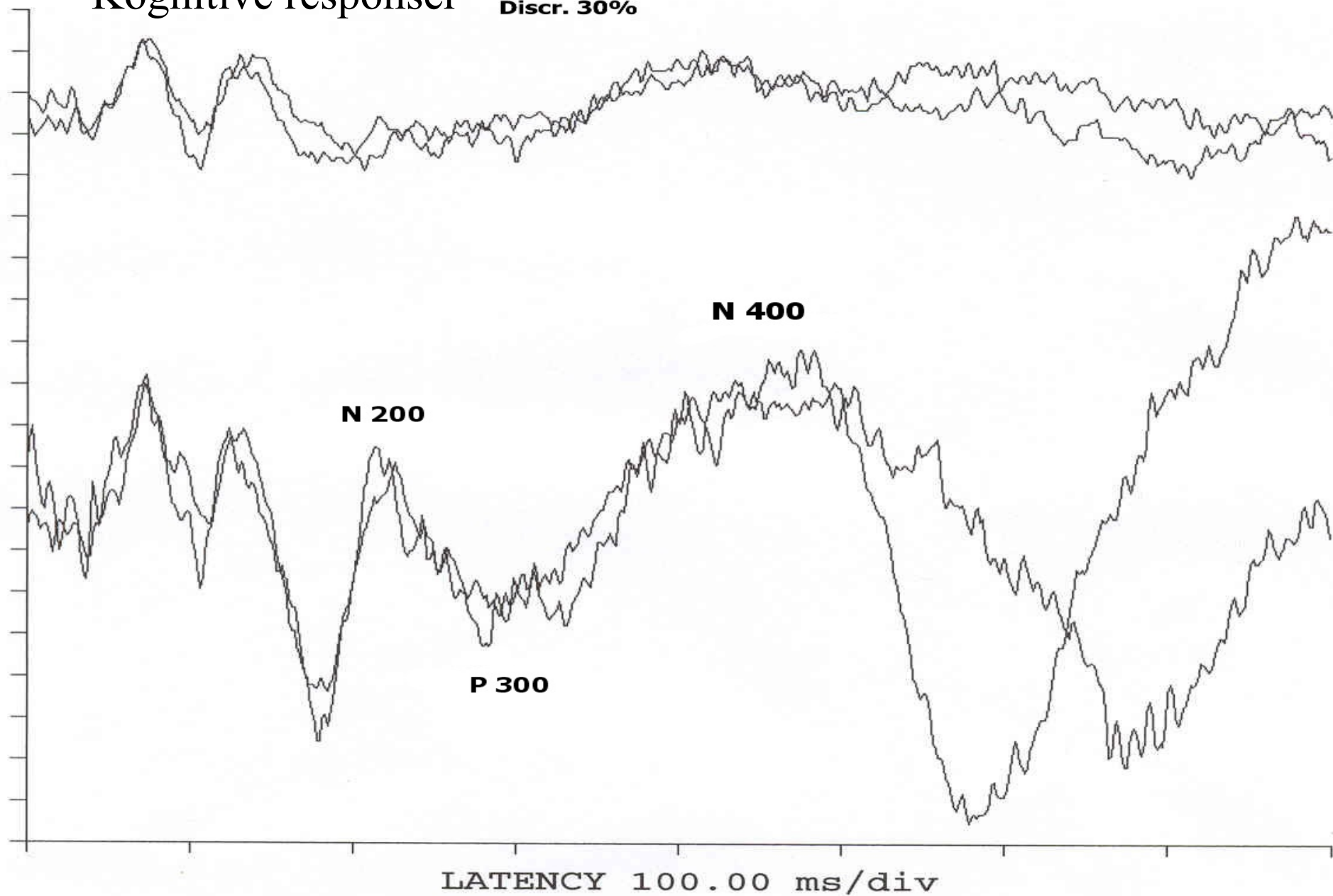
18-åringer har signifikant høyere
terskel enn 14- og 10-åringer

TEOAE

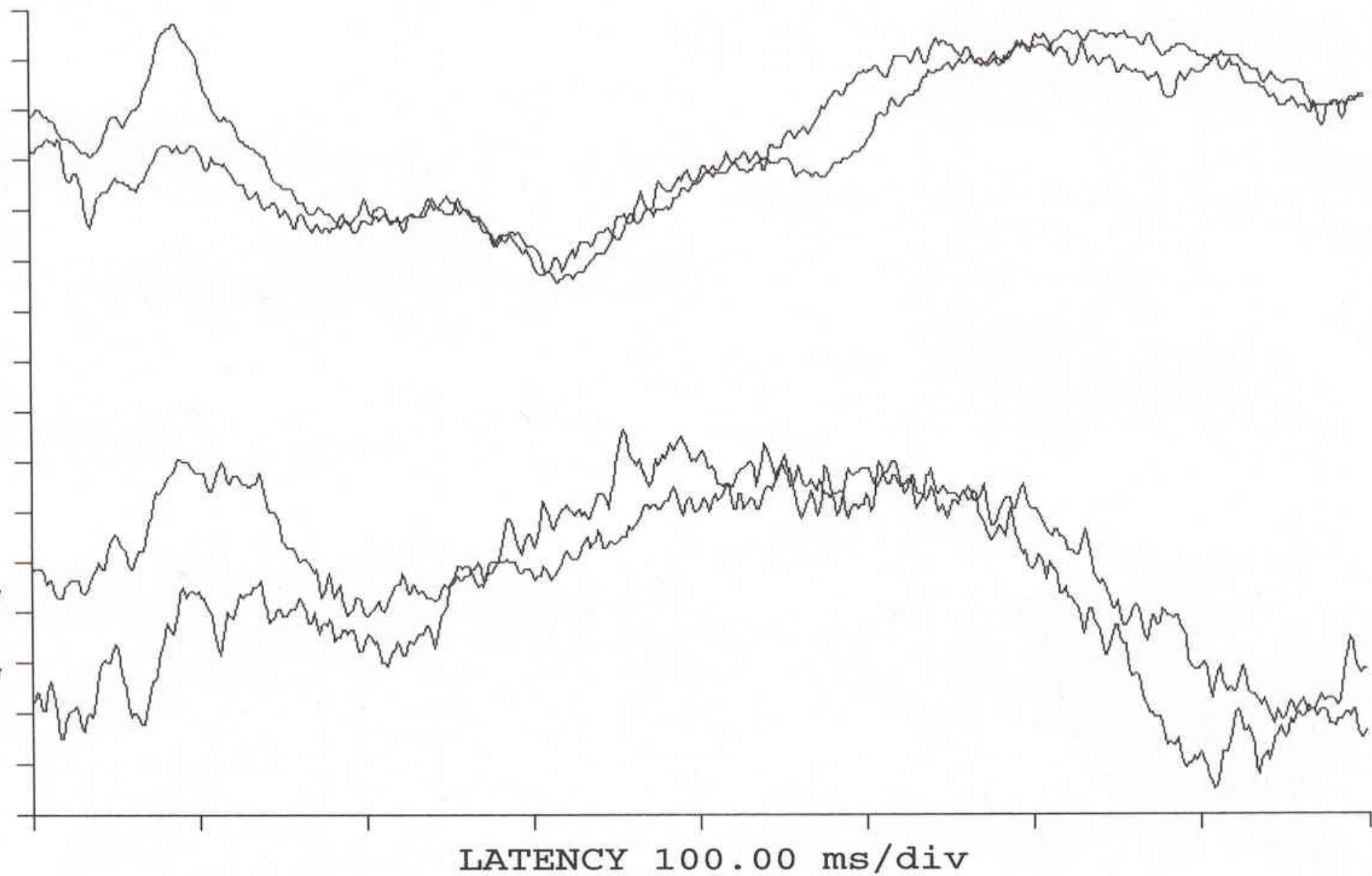


Kognitive responser

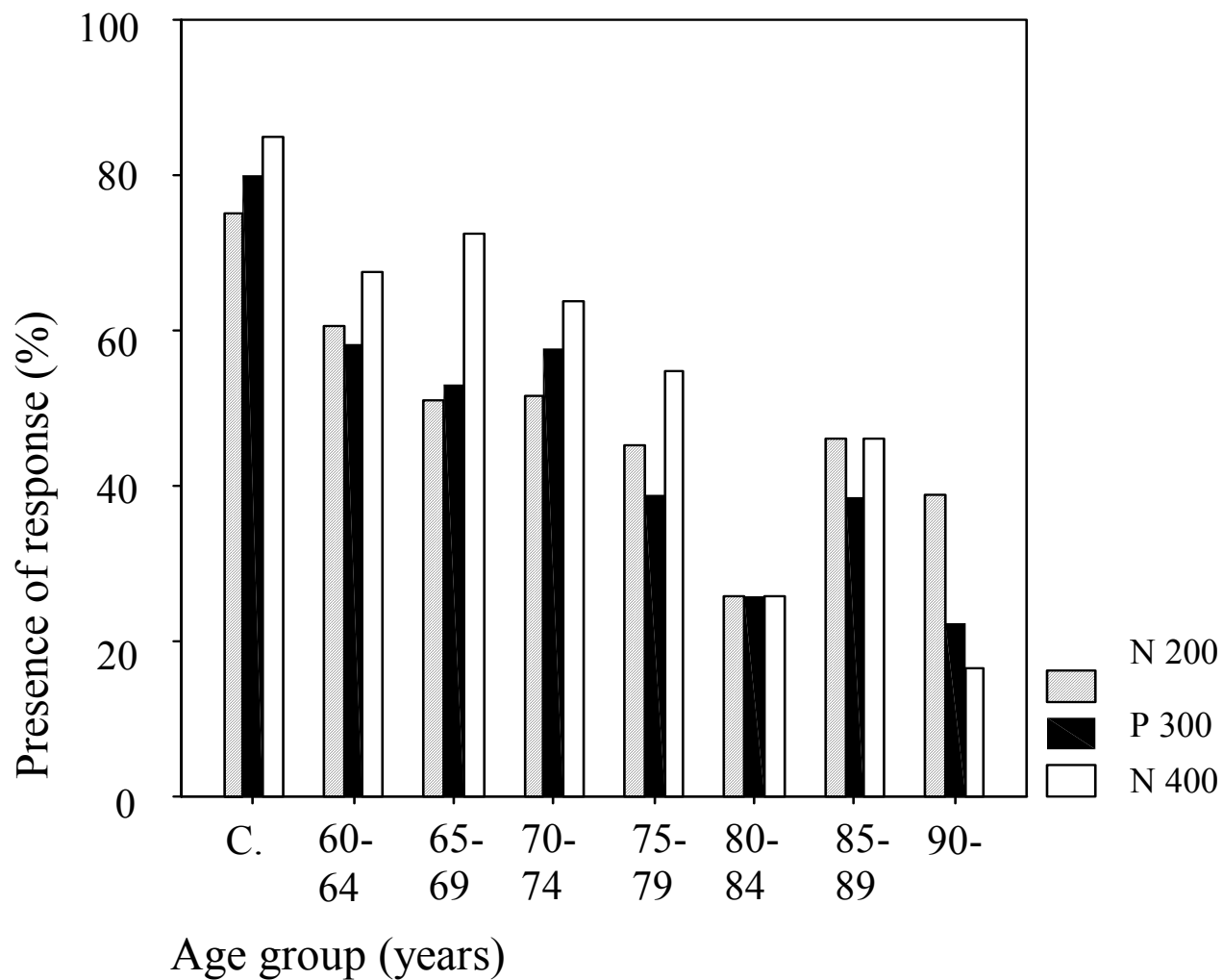
Male 73 years
Pure-tone 2 kHz 60 dBHL
Discr. 30%



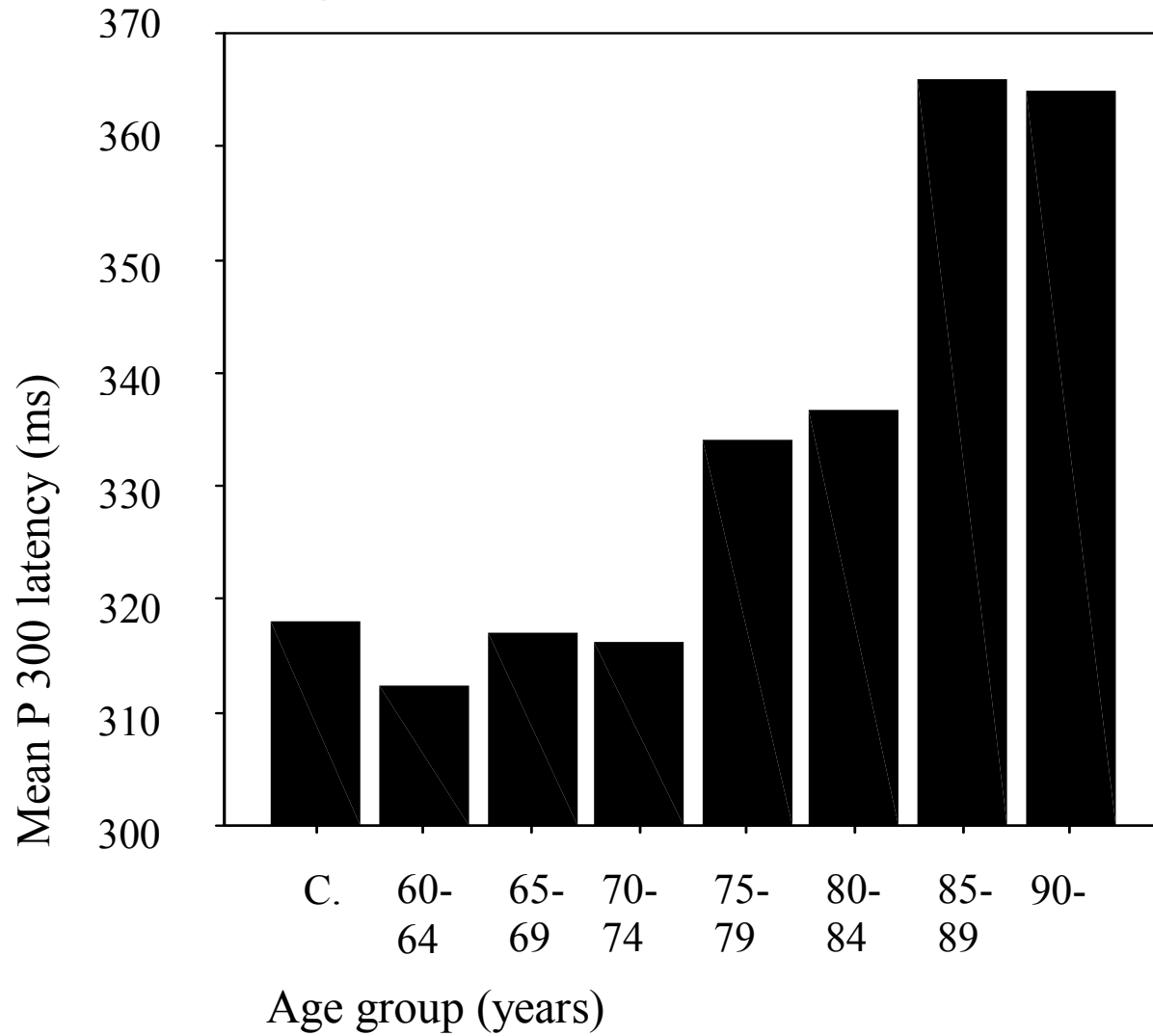
Male 93 years
Pure-tone 2 kHz 25 dBHL
Discr. 100%



Kognitive responser



Kognitive responser



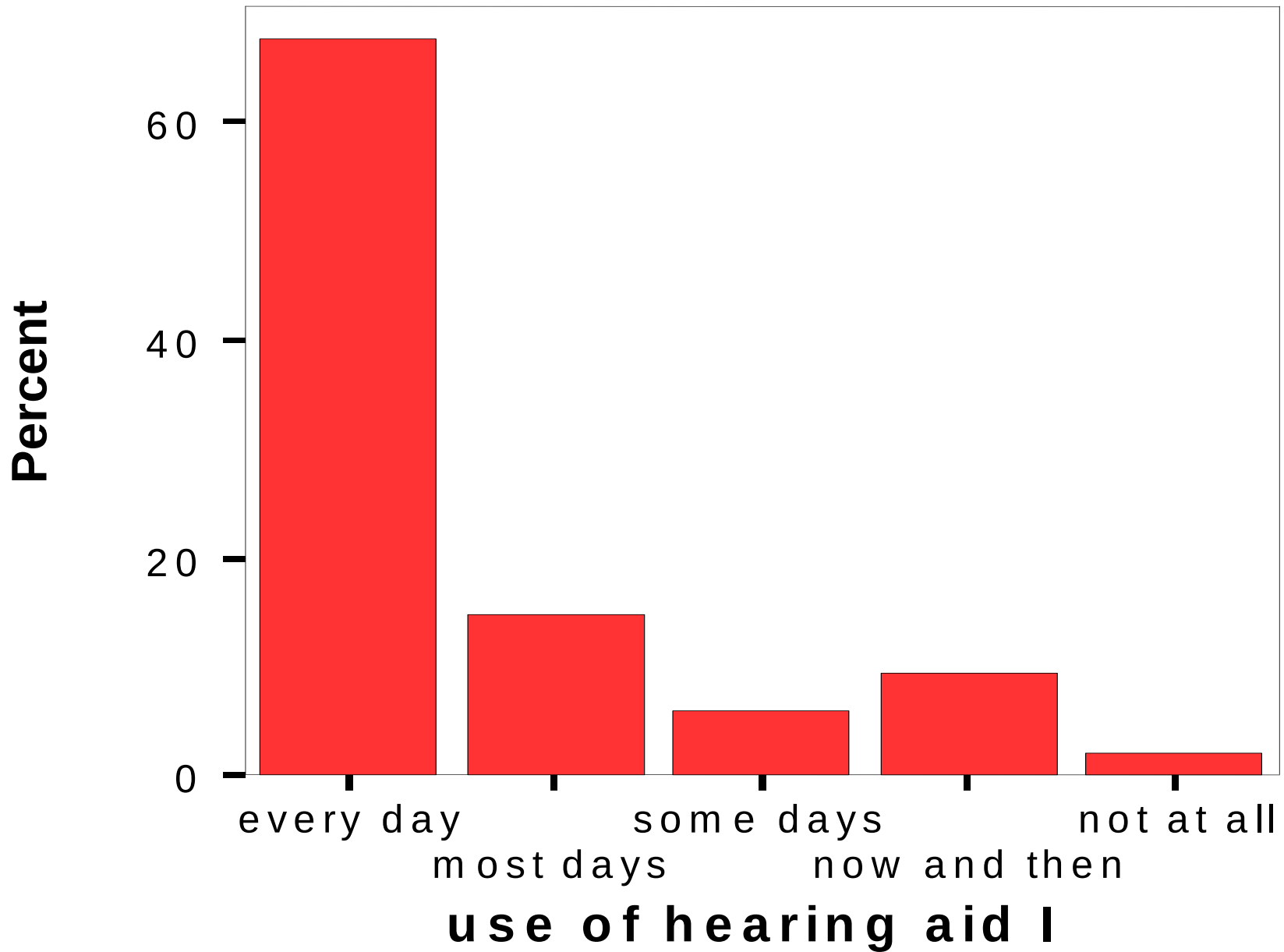
Hørseltap i en uscreenet populasjon fra 6 europeiske land (gj.sn. 0.5-1-2-4 kHz)

Alder	Prosent		
	≥ 45 dB	≥ 35 dB	≥ 25 dB
0-17	0,1	0,1	0,1
18-30	0,3	0,3	1,2
31-40	0,5	0,7	2,5
41-50	0,9	2,6	6,6
51-60	2,8	6,4	17,5
61-70	6,4	16,6	42,5
71-80	20,6	41,4	66,3
81-90	43,8	69,8	89,9
91-	50,5	75,8	90,0
alle	4,7	9,0	16,6

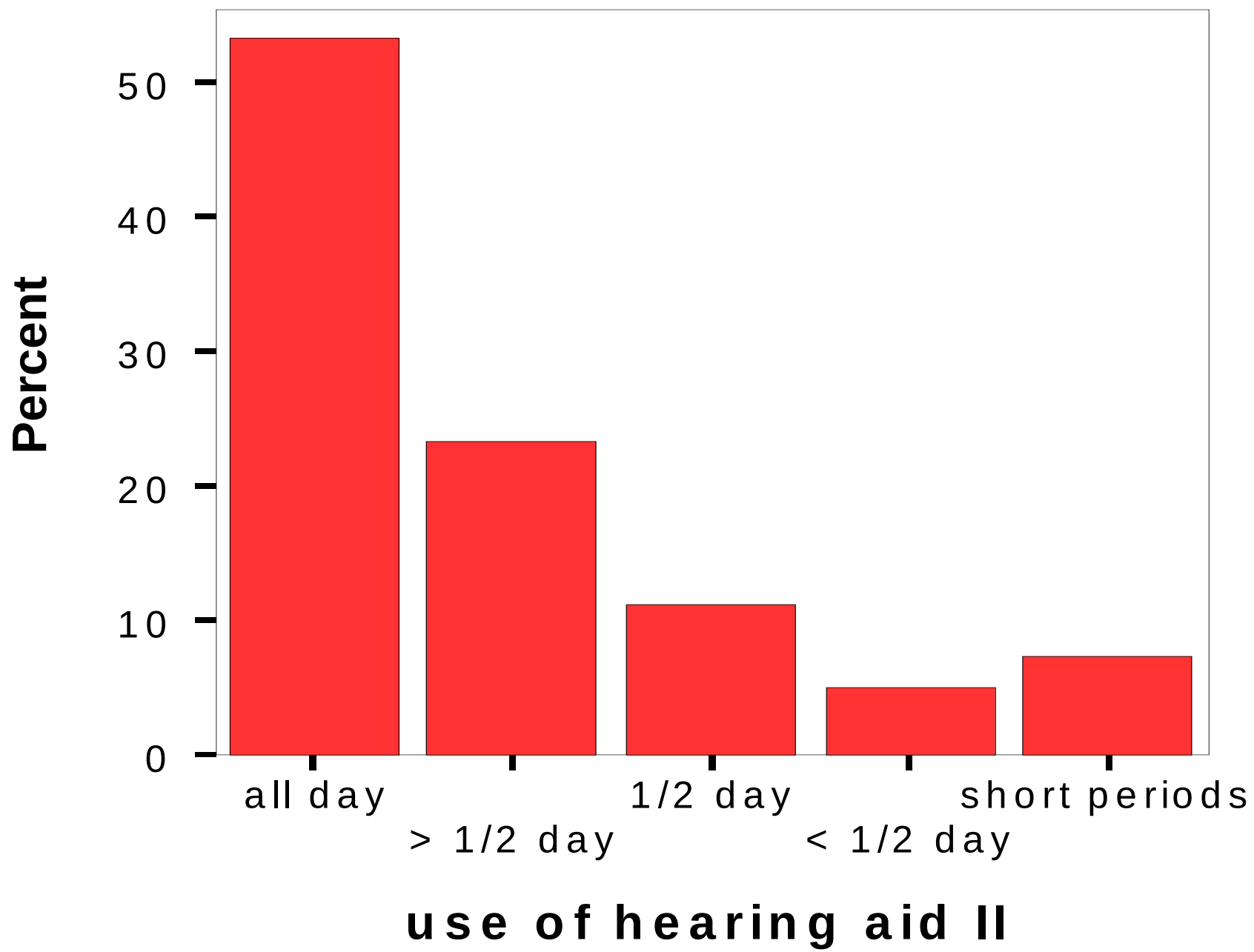
Høreapparater

- 50.000 h.app/år
- Verdi ca. 350 mill./år
- Eldre brukere dominerer

n = 665

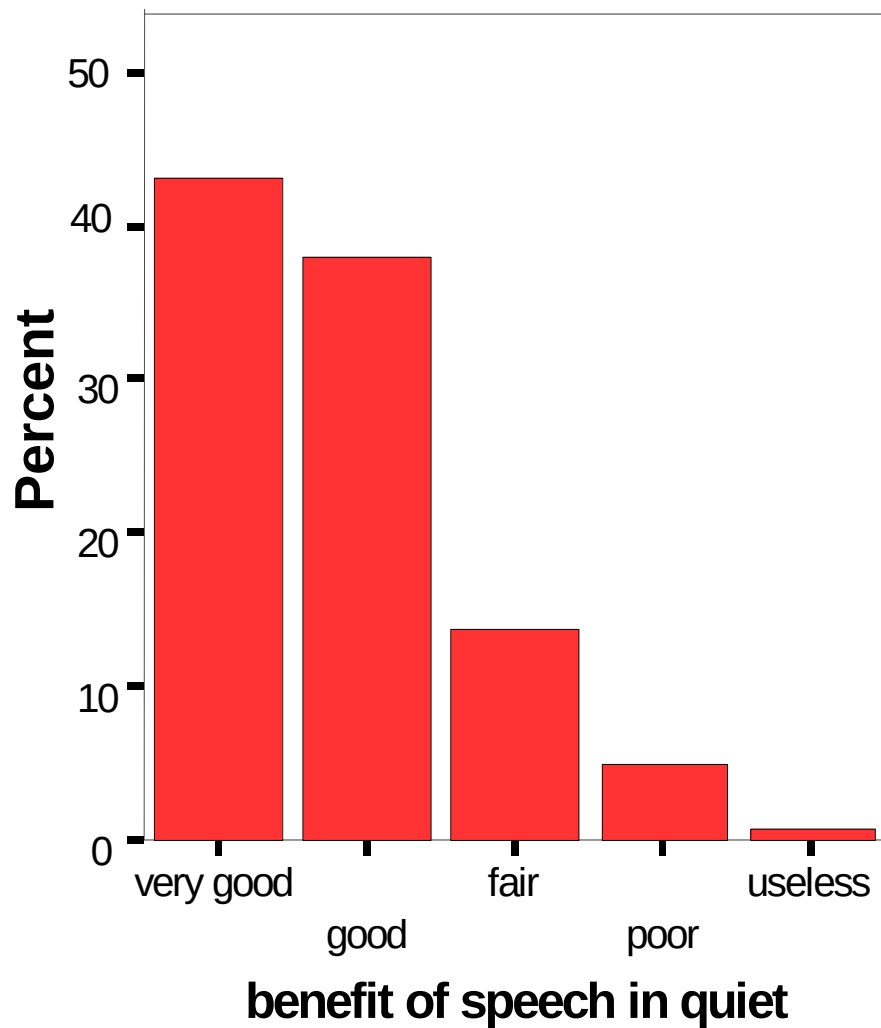


n = 651



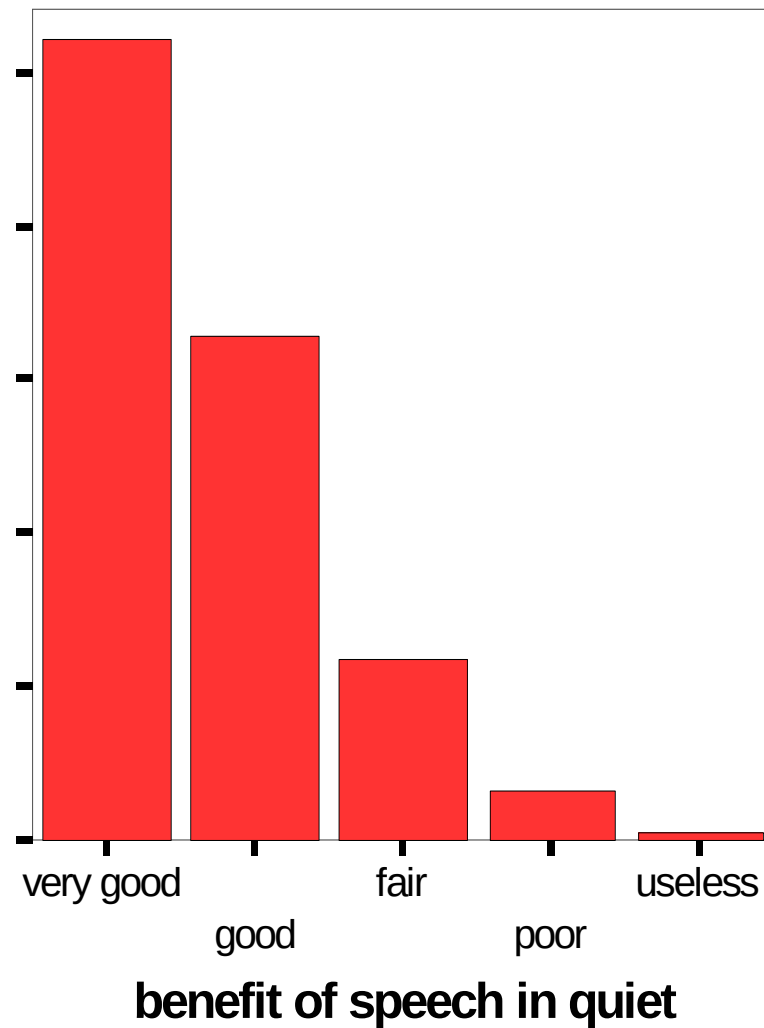
one hearing aid

n = 346



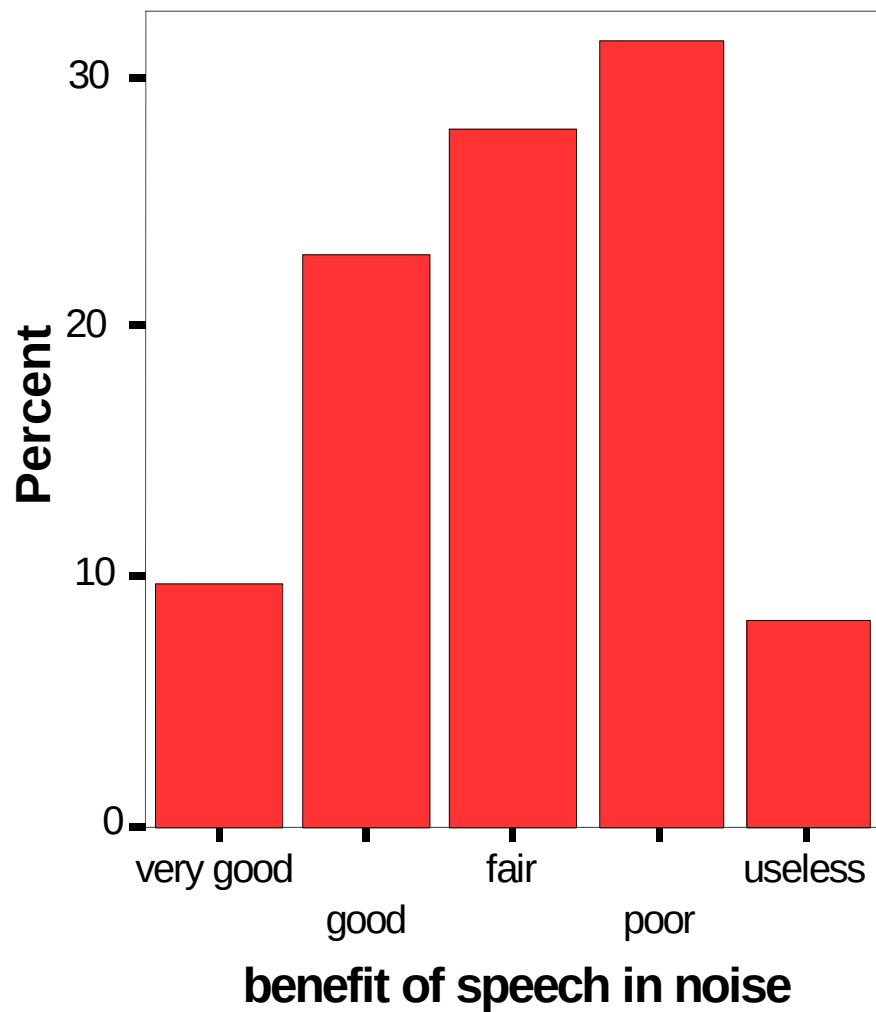
two hearing aids

n = 237



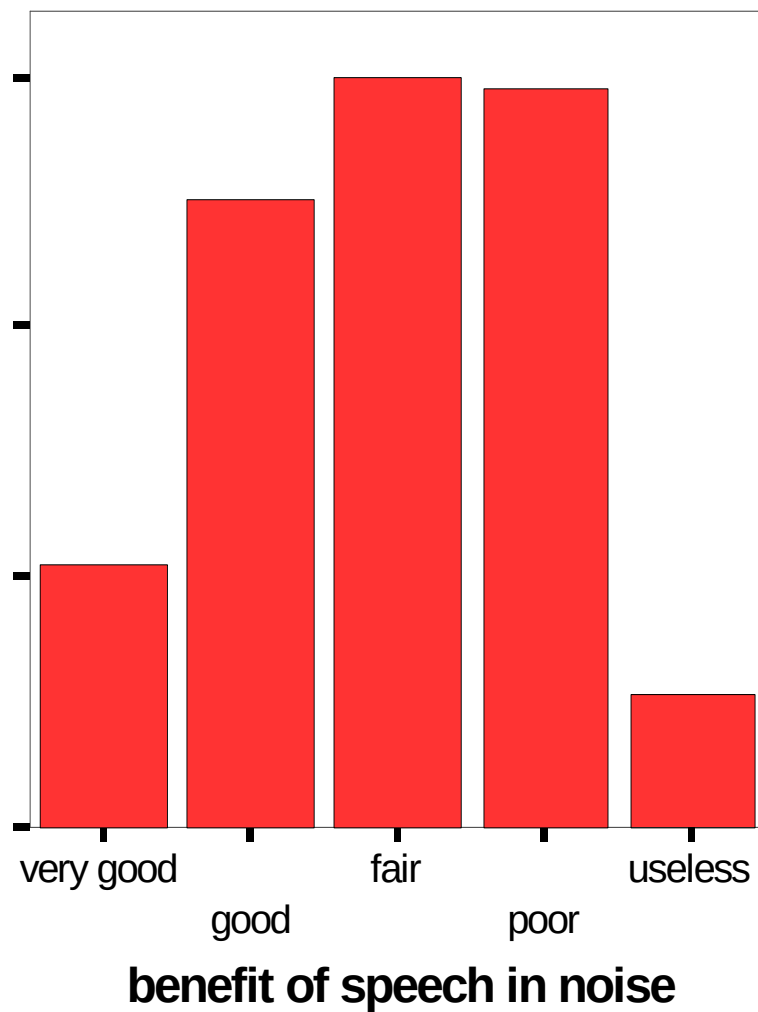
one hearing aid

n = 346

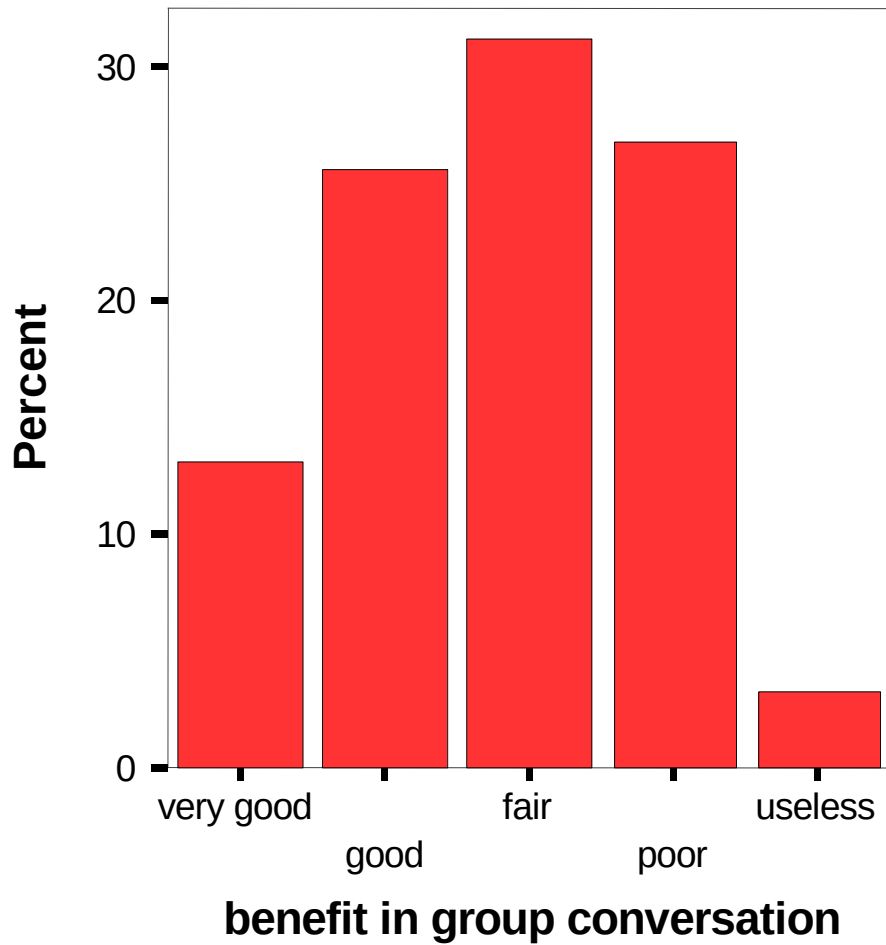


two hearing aids

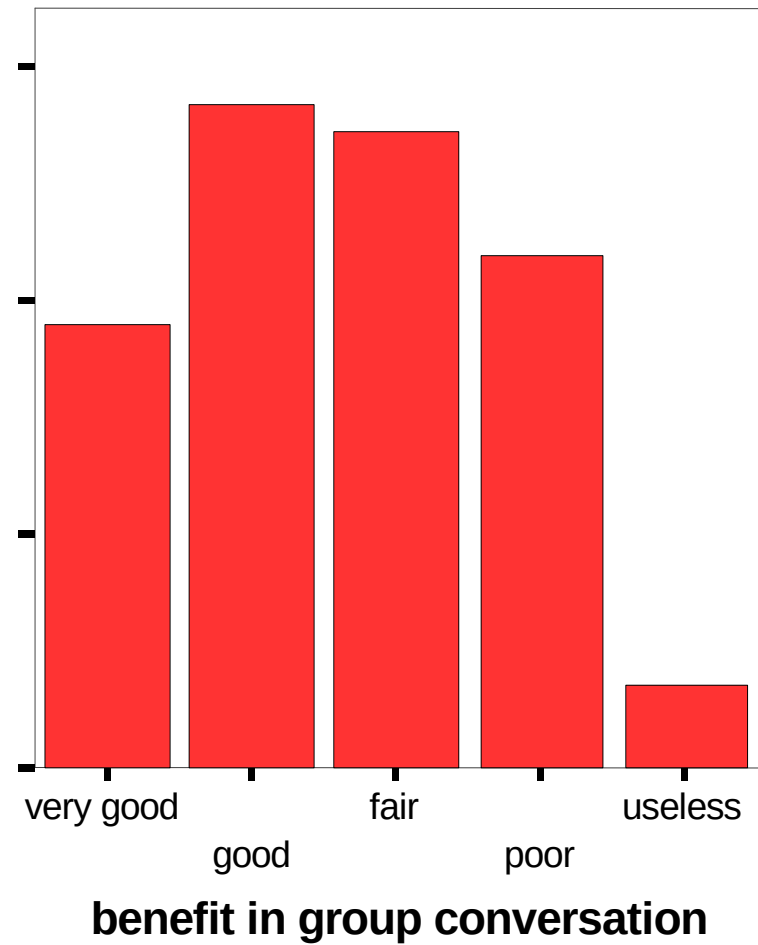
n = 237



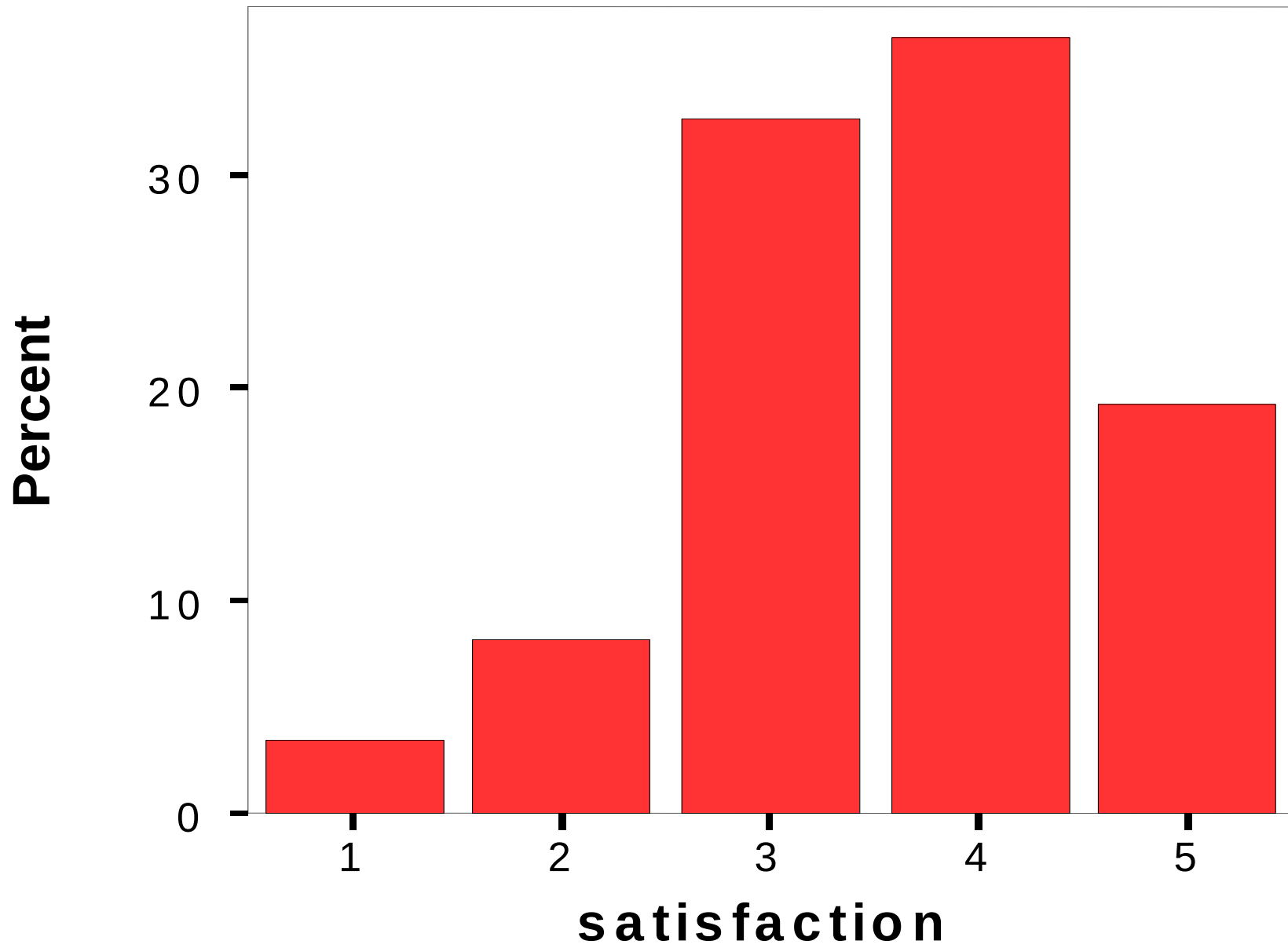
one hearing aid
n = 346



two hearing aids
n = 237



n = 607



Konklusjoner

- 80% bruker h.app hver dag og mesteparten av dagen
- Bedre nytte med binaural bruk
- Bare 13% er mindre fornøyd