

Objectives

The present ongoing study aims primarily to investigate the sensitivity of the new developed and validated "Hearing Loss Quality of Life" questionnaire (HL-QoL), to detect changes in QoL due to CI treatment in CI recipients (pre-OP versus post-OP). Secondary objectives include describing explorative holistic effects of possible problems at work, self-esteem, and loneliness. The aim of this first results is to assess loneliness (AL), self-worth (SW) and quality of life (QoL) in hearing loss before the first cochlear implantation (CI) in adult patients.

Methodes and Materials

- Study period: 11/2023- 3/2024 Inclusion criteria: Age 18 - 80 years 1st CI operation
- Ability to complete questionnaires independently
- Questionnaires:
 - Hearing Loss- Quality of Life questionnaire [1]
 - Rosenberg Self-Esteem Scale (RB SWS) [2], [3]
 - UCLA Loneliness Scale (UCLA EKS) [4]
- Of 150 implantations during the study period, n= 45 completed the questionnaires in total (Table 1)
- Conducted using the Castor online survey tool
- Descriptive statistics with IBM SPSS Statistics

Table 1: demographics	quantity (%)
female/ male	28 (62.2%)/ 17 (37.7%)
bilateral/ unilateral hearing loss	32 (71.1%)/ 13 (28.8%)
cause of hearing loss	
• unknown	23 (51.1%)
• sudden hearing loss	14 (31.1%)
• other	8 (17.7%)
time of hearing loss	
• postlingual	41 (91.1%)
• other	4 (8.8%)
group 1 (G1) < 50 years	11 (24.4%)
group 2 (G2) 50 - 70 years	20 (44.4%)
group 3 (G3) > 70 years	14 (31.1%)
	mean (SD; min-max)
age at implantation	59,71 (13.49; 28 - 80)

References

- [1] Illg A, Amann E, Koinig K. A., Anderson I, Lenarz T, Billinger-Finke M (2023). A holistic perspective on hearing loss: first quality-of-life questionnaire (HL-QoL) for people with hearing loss based on the international classification of functioning, disability, and health. *Frontiers in Audiology and Otology*
- [2] v. Collani & Herzberg. (2003). Eine revidierte Fassung der deutschsprachigen Skala zum Selbstwertgefühl von Rosenberg (Kurzbeitrag). *Zeitschrift für Differentielle und Diagnostische Psychologie*, 24, 3-7
- [3] Rosenberg, M. (1965). *Society and the adolescent selfimage*. Princeton, NJ: Princeton University Press.
- [4] Nazzari, F. I., Cruz, O., & Neto, F. (2018). Psychometric Analysis of the Short-Form UCLA Loneliness Scale (ULS-6) Among Palestinian University Students. *Interpersona: An International Journal on Personal Relationships*, 11(2), 113-125.
- [5] Bucher, A.A. (2023). Messung und Ausmaß von Einsamkeit. In: *Einsamkeit – Qual und Segen*. Springer, Berlin, Heidelberg.

Results

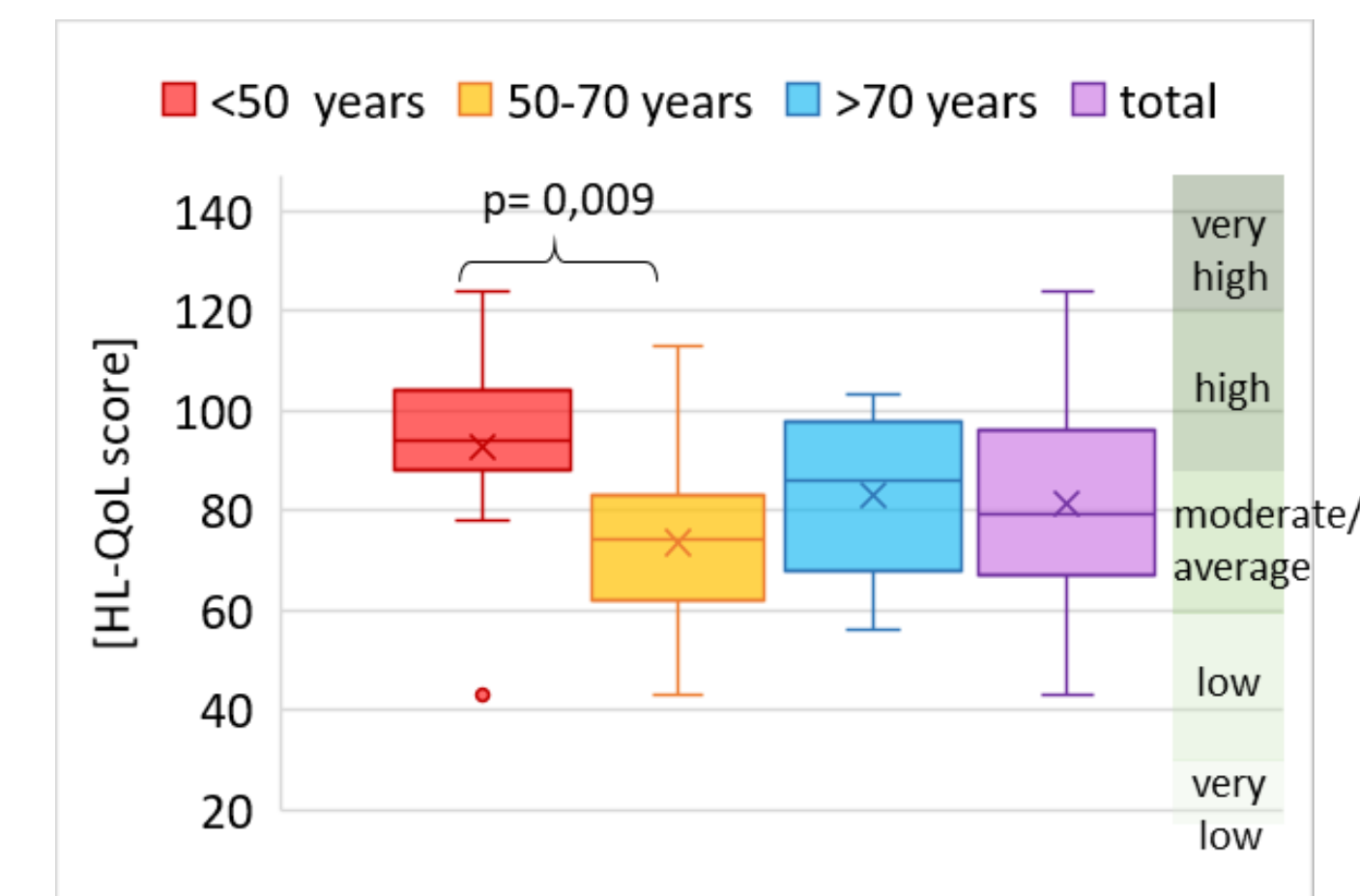


Fig. 1: Results of HL-QoL score for all CI recipients and stratified for the three age groups

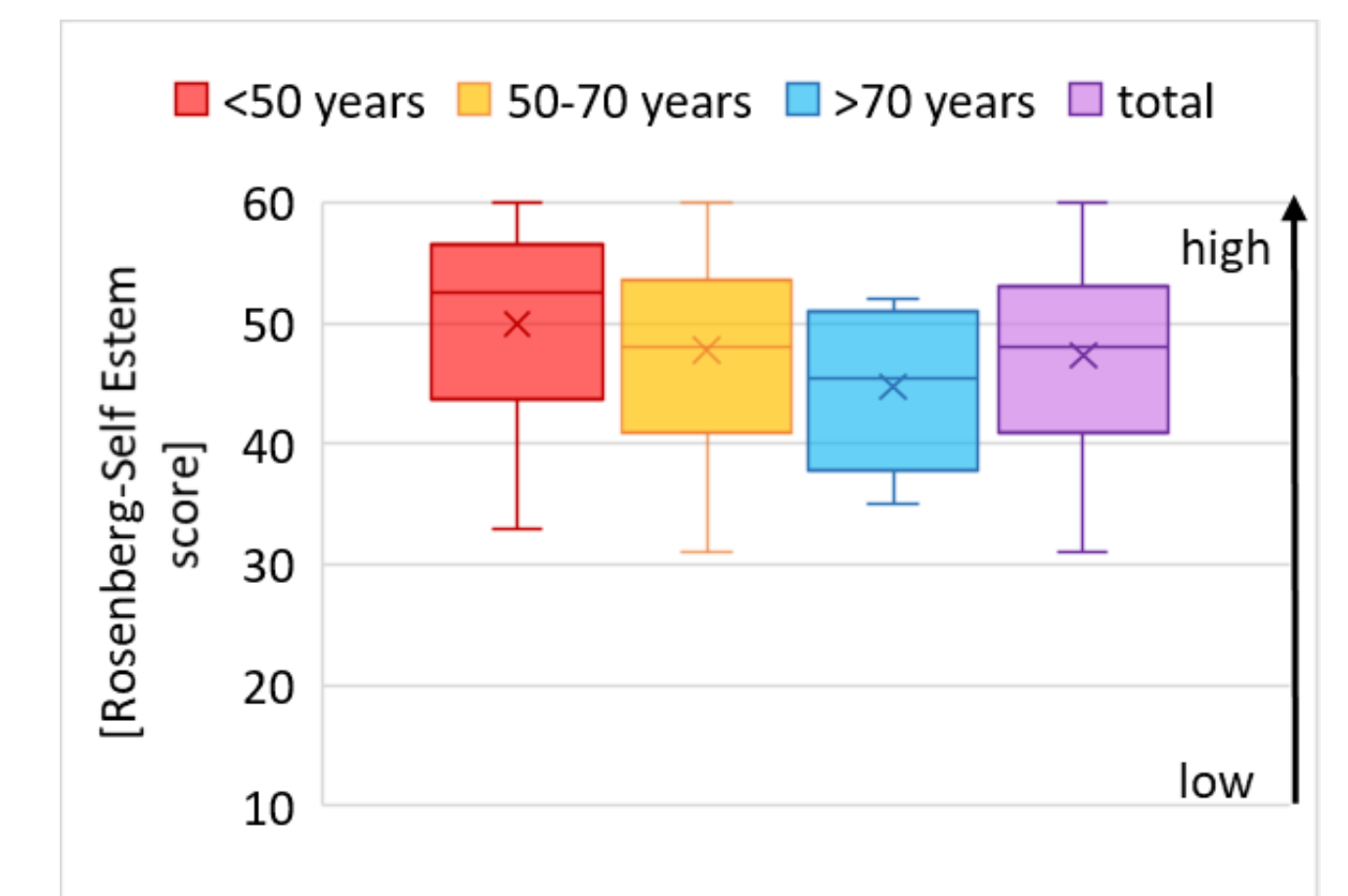


Fig. 2: Results of RB SWS score for all CI recipients and stratified for the three age groups

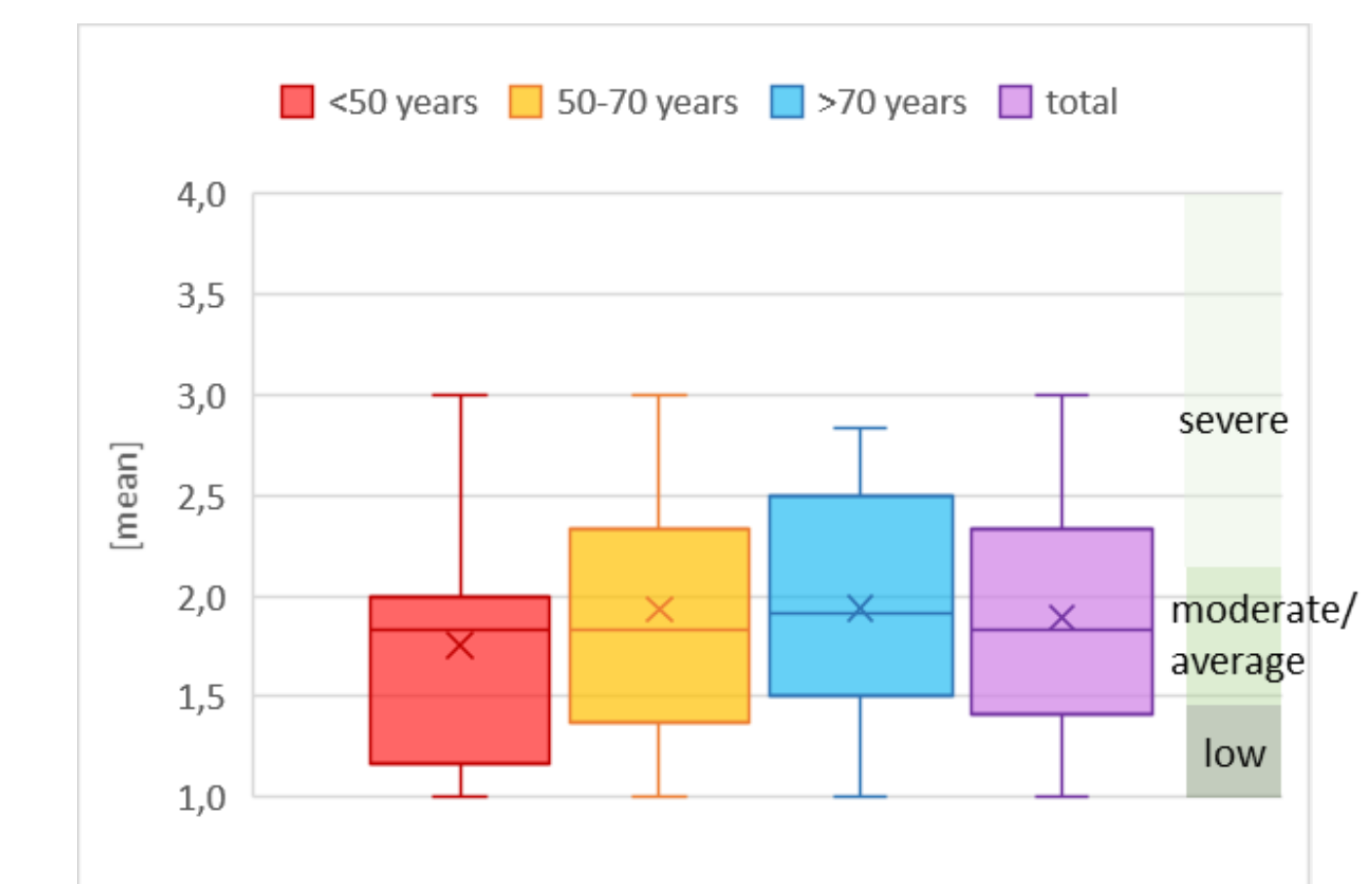


Fig. 3: Results of UCLA EKS score for all CI recipients and stratified for the three age groups

Conclusion

Generally speaking, the data of the youngest age group (<50 years) show the highest values in the HR-QoL and SW areas and the lowest on the Loneliness (AL). According to Illg et al. (2023), the QoL reported by the CI recipients represents a moderate QoL. Here, 55% of the youngest group stated a high QoL, 60% of the age group between 50-70 years a medium QoL. The results of the RB SWS show a tendency for SW to decrease with increasing age. According to Bucher (2023) [5], the assessment of personal AL is medium. Here, 24.4% of CI recipients indicated no to low AL, but 26.7% indicated high AL. The present study is an ongoing study whose research question deals with the change in QoL, AL and SW as a result of cochlear implantation.