

# Yesterday's Tradition, Tomorrow's Future – Studying Subjective Hearing Loss in Older Adults Measured by Speech, Spatial, and Quality of Hearing Scale within the Framework of the ICF Core Set for Hearing Loss

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March 30, 2022

## Abstract

**Objective:** The utilization of the International Classification of Functioning, Disability and Health (ICF) Brief Core Set for Hearing Loss (BCS-HL) seems to be a promising tool to assess the factors underlying SHL. This study aimed to assess categories underlying SHL in older adults using the ICF-BCS-HL tool. **Design:** A cross-sectional study. One-hundred and thirty-one independent-living older adults (Mage=72.32, SD=6.83), who completed the speech, spatial, and quality of hearing (SSQ) scale and a set of clinically accepted outcome measurements linked with selected categories listed in the ICF BCS-HL. **Results:** A linear regression analysis model was fitted with the outcome measurements after controlling for age, sex, education, multimorbidity, and hearing aid use. The model showed 5 significant predictors underlying the SSQ-total score: HL, dizziness handicap, cognitive decline, multimorbidity, and individuals' ability to accept the noise level. Predictors varied across the SSQ-subscale scores, however. While predictors underlying the SSQ-Quality subscale scores were like the SSQ-total score, individuals' ability to accept noise level was not one of the predictors underlying the SSQ-Speech subscale scores. Whereas PTA, dizziness handicap and multimorbidity were the predictors underlying the SSQ-Spatial subscale scores. **Conclusion:** SHL, measured by SSQ, in older adults is a multi-layer structure in nature and is associated with a range of adverse health outcomes. A link of SHL with HL, cognitive deficits, reduced ability to accept background noise level, and multimorbidity, collectively or individually, were well-established. So far, little attention has been paid to the impact of dizziness handicap of elderly patients when evaluating their SHL.

## Title

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### Ethical Considerations

The study was part of the author doctoral dissertation and was carried out at the University of Florida. The authors declare that they have no conflicts of interest.

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