Hearing Loss and Cognitive Decline

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2022 TILLMAN SCHOLAR
The Effects of Cognitive Decline

**THE EXPECTED**

- Memory loss
- Misplacing items
- Problems with planning and making decisions

**THE UNEXPECTED**

- Mood/behavior changes
- Change in sleep patterns
- Falling
RISK FACTORS FOR COGNITIVE DECLINE

NON-MODIFIABLE
- ADVANCED AGE
- GENETICS
- IRREGUALTION CHEMICAL
  METABOLIC MAKE-UP (e.g, STROKE, TUMOR)

MODIFIABLE
- THYROID, KIDNEY, LIVER PROBLEMS
- HIGH BLOOD PRESSURE, HIGH
  CHOLESTEROL, DIABETES, OBESITY
- NUTRITIONAL DEFICIENCIES
- VISION LOSS
- HEARING LOSS
Modifiable Risk Factors for Dementia
Outer Ear

- Helix
- Temporal muscle
- Temporal bone
- Scapha
- Trangular fossa
- Antihelix
- Concha
- Auricular lobule (Earlobe)
- External auditory meatus (Ear canal)
COGNITIVE CONSEQUENCES
OF HEARING LOSS

Associated with a 30-40% rate of accelerated cognitive decline

- Reduced cortical volume in the temporal lobe
- Brain Atrophy

Effects on cognitive load

Decreased Social Engagement

Single-sided Deafness and Unilateral Hearing Loss
How are SSD and cognition related?

Quality of Life
- Social Isolation
- Safety

Behavioral
- Frustration
- Listening Effort

Auditory
- Tinnitus
- Localization
Treatment options for SSD
