

**ABSTRACT:** Currently there are few rehabilitation resources available to older adults with hearing loss. Aural rehabilitation techniques are not always offered upon diagnosis by an audiologist or hearing aid practitioner, and the few programs that are in existence are not consistently available or well known. Aural rehabilitation programs fall under the scope of practice of both Audiologists and Speech-Language Pathologists; both professions are suited to deliver educational programming on this topic. Older adults residing in supportive-living facilities were consulted to discover what aural rehabilitation information would be valuable to them. Out of these discussions and an analysis of literature, an aural rehabilitation program (consisting of five modules) was developed. The purpose of this program is to facilitate discussion and encourage peer learning with the goal of improving the quality of life, especially for older adults who live in supportive or extended-care residences.

## Purpose

This project was created to fill a need within the area of aural rehabilitation, which is within the scope of practice of both Audiologists and Speech-Language Pathologists. Aural rehabilitation includes tools and strategies to assist individuals with hearing loss to maximize their communication potential. In Edmonton, very few rehabilitation resources exist for older adults with diagnosed hearing loss who are seeking to improve their communicative abilities. Additionally, very few information resources, apart from sales agencies, exist for older adults with diagnosed or suspected hearing loss. Moreover, there exists a lacuna within the literature concerning the creation and implementation of aural rehabilitation programs.

Through the designing of a module-based aural rehabilitation program, our goal was to develop a way for older adults to access learning about suspected or diagnosed hearing loss in a relevant and meaningful way. It is hoped that by discussion and peer learning about hearing loss, older adults will better understand their communicative deficits and strengths in order to improve their quality of life.

## Methods

Initially we conducted a literature review to locate relevant literature on adult-learning principles. From this literature review we compiled a list of teaching styles and learning environments that have been shown to facilitate adult learning. Our findings are summarized in Figure 1. Key factors from the literature included: discussion rather than direct teaching, small groups with peer learning, active participation, and short session times.

Following the literature review, we consulted older adults residing in two supportive-living facilities in Edmonton. From these meetings, we identified core qualitative themes about how our target population prefers to learn and topics they would like to learn about. Our findings are summarized in Figure 2. Key factors from the consultations included: topics focused on stigmas, biology, hearing aids, technology and strategies. In general, key themes about learning provided by our consultants reflected those found in the literature.

After comparing and combining information from both sources, we created a series of modules that can be delivered individually or as elements within a program.

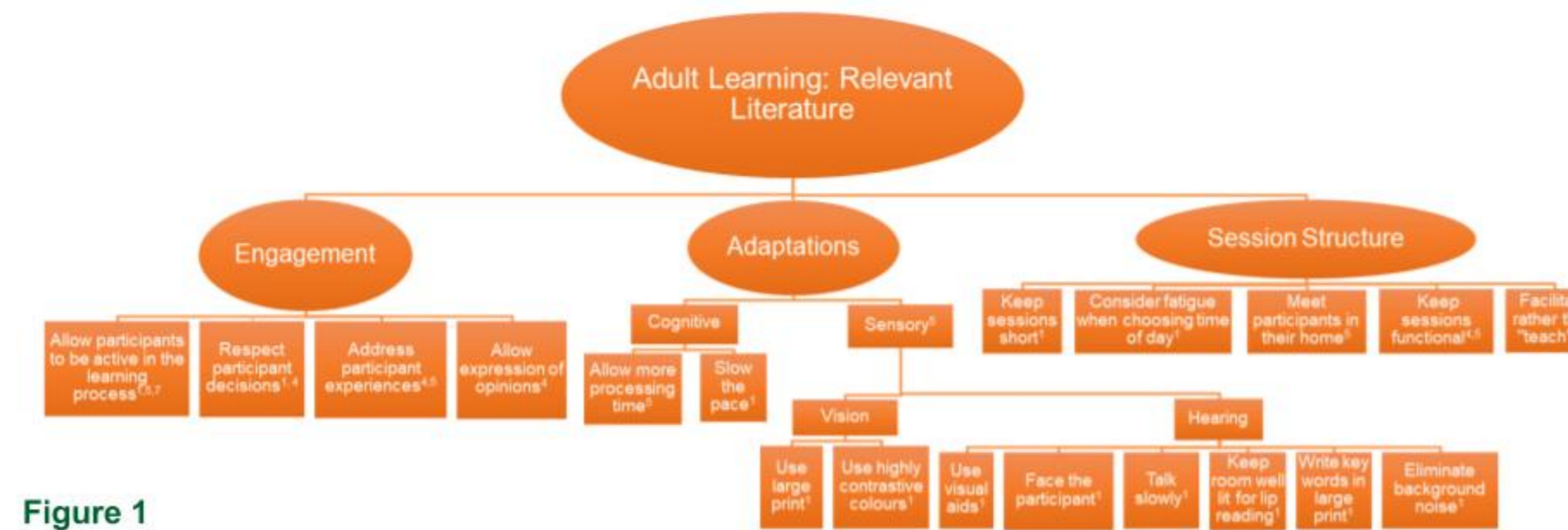


Figure 1

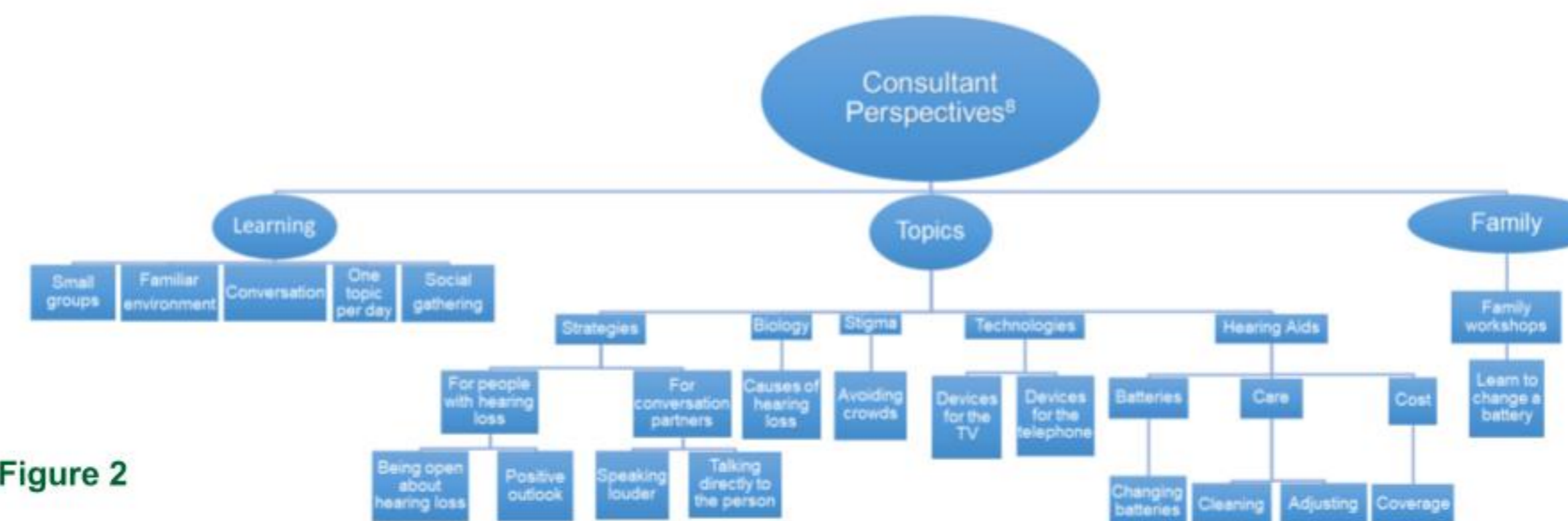


Figure 2

## Module Summaries

### Stigmas

- What is a stigma? Discuss stigmas surrounding hearing loss.
- Discuss perceptions of hearing loss before/after acquisition of hearing loss.
- How do these stigmas impact an individual's feelings about his/her hearing loss?
- How do these stigmas affect an individual's willingness to use hearing aids or admit hearing loss?
- Discuss possibility of removing stigmas about hearing loss.
- Discuss how stigmas affect hearing health.

### Biology

- What is hearing?
- Use models of the ear to demonstrate how we hear
- View a demonstration of a hearing screening
- If interested, participants may have their own hearing screened
- Brainstorm causes of hearing loss
- Discuss thoughts on hearing loss

### Hearing Aids

- Discuss the pros and cons of using hearing aids
- Discuss the types of hearing aids experienced
- Present pictures and models of other hearing aids that exist
- Discuss hearing-aid care with a focus on batteries
- Present information on funding

### Technology

- Discuss activities that hearing loss impacts in individuals' lives.
- Share knowledge about hearing technologies that individuals have already found, discussing ease of use and difference in quality of activities they provide.
- Explore different types of hearing assistive technology that can be used at home; discuss their practicality.
- Discuss assistive listening technology available specifically in the Edmonton community (e.g., The Jubilee Auditorium, Rogers Place)

### Communication Strategies

- Gain insight into the individual's communication strengths and deficits resulting from hearing loss.
- Discover how to speak to friends and family members about hearing loss and how to request communication assistance.
- Do these stigmas impact feelings about hearing loss, willingness to use hearing aids, strategies, or admission of hearing loss?
- Discuss individuals' strategies and their effectiveness.
- Directly teach additional strategies using scenarios.



## Discussion

### LIMITATIONS

The modules for this project are based on a limited amount of qualitative information obtained through consultation at two facilities in Edmonton. This means that the information gathered may not be representative of the overall older-adult population. The modules have not yet been implemented, so their effectiveness has not yet been measured.

### RELEVANCE

Hearing loss is often associated with depression<sup>2</sup>, dementia<sup>5</sup>, and social isolation<sup>2</sup> in older adults - a population that is growing as a whole. In order to empower these older adults to advocate for their own health, it is important to have programs in place that provide information in an accessible way for this population.

### FUTURE NEEDS

Future research in the area of aural rehabilitation should include family and care staff perspectives. This program should be implemented and evaluated to determine its impact on quality of life. As this program is implemented, additional modules or themes may be added to meet the needs and interests of the group.

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8. Thank you to our consultants from Gameau Hall and Queen Alexandra Place in Edmonton, Alberta.