THE ROLE OF COMMUNICATION IN HEARING CARE FOR ADULTS

LORIENNE JENSTAD, UNIVERSITY OF BRITISH COLUMBIA

CAA 2022, Thurs Oct 13, 10:30-11:25 am

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UBC Faculty of Medicine

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Unitron Hearing

Phonak/ Sonova AG

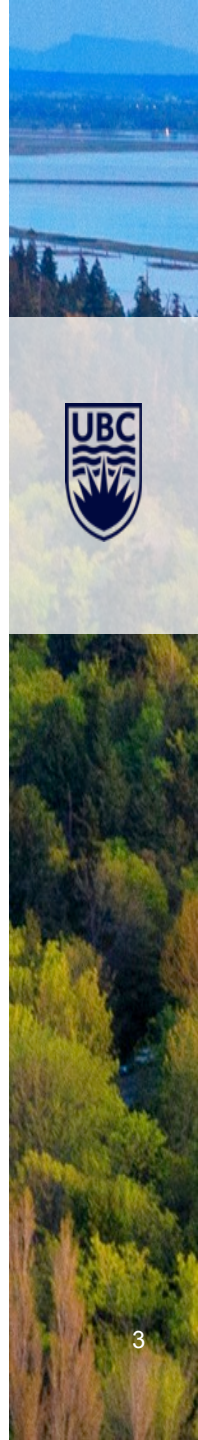
Audioscan

Michael Smith Health Research BC

CONFLICT OF INTEREST DISCLOSURE

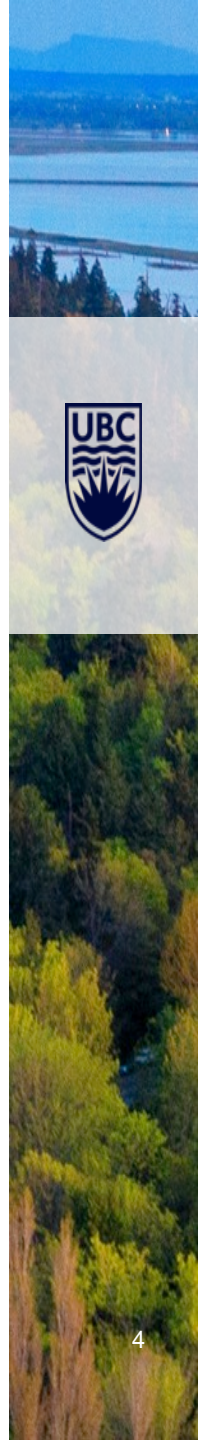
Relationships with commercial interests:

- Grants/Research Support: One of the projects I will discuss was supported in part by Audioscan Inc
- Other: I will mention a specific product in this presentation



MANAGING POTENTIAL BIAS

1) The project received independent peer review as part of the condition of the Audioscan funding.
2) The researchers retained the right to publish the data.
3) This presentation has been developed independently from the industrial partner.
4) The product is part of the research project and knowledge translation.



AGENDA

1. How is patient-provider communication linked to health outcomes?
2. Influence of audiologist on hearing health uptake
3. Best practices in communication, particularly for those who are communicatively vulnerable
4. Informational counseling during hearing aid verification

PATIENT-PROVIDER COMMUNICATION

Effective listening, engaging patients in care decisions, and providing explanations → ↑health outcomes

(e.g., Currie et al., 2015; Fisher et al., 2016; Pincus et al., 2013).

- Fewer patient concerns
- Improved adherence / commitment
- Better self-management

PATIENT-PROVIDER COMMUNICATION

Costs of poor communication →

- Psychosocial distress
- Unnecessary treatment
- Provider burnout
- Adverse events *(Bartlett et al., 2008; Thorne et al., 2005)*

PATIENT-PROVIDER COMMUNICATION

Communication is most effective when patients/caregivers have an active role in the decision-making process *(e.g., Street et al., 2009)*.

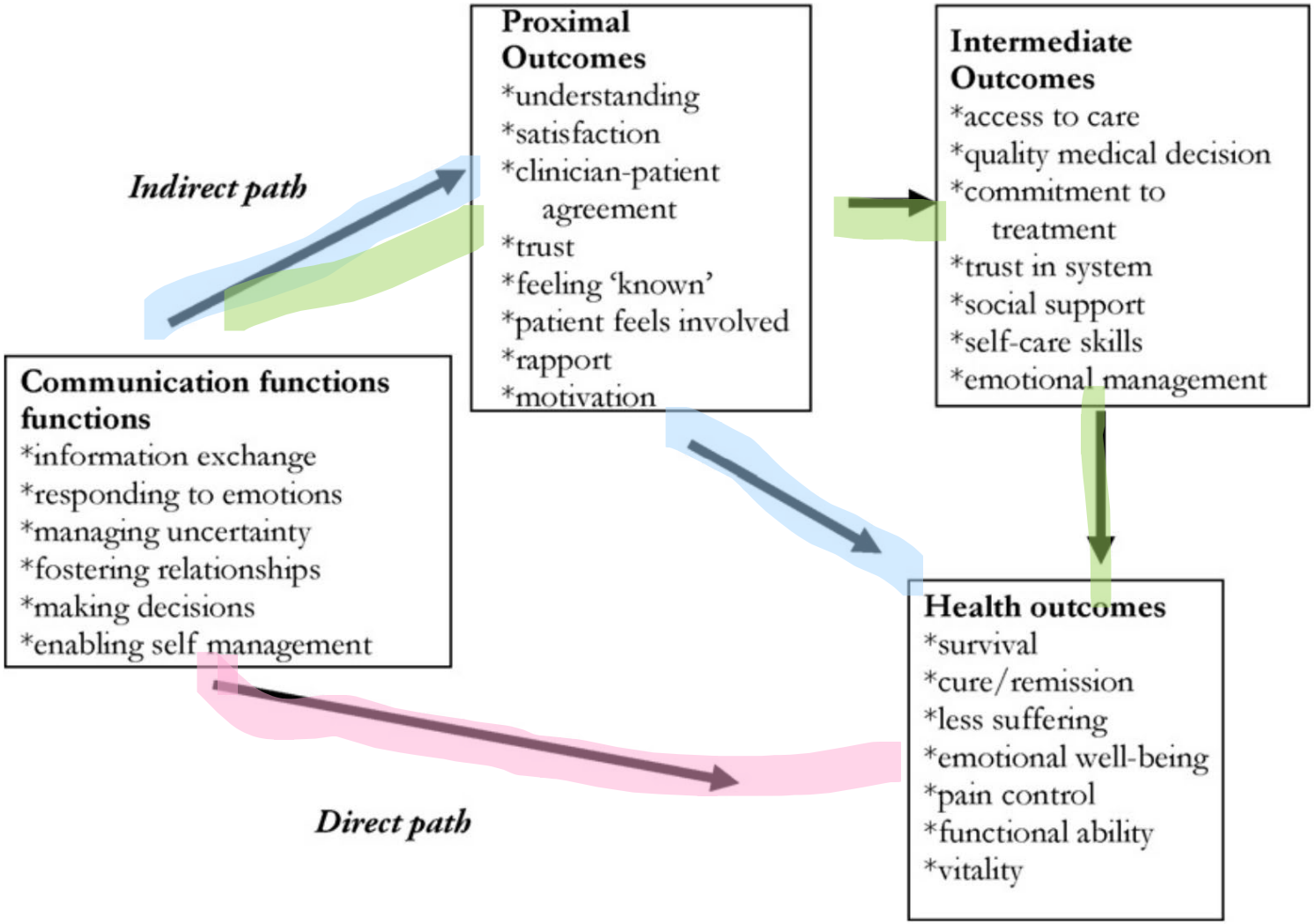


Fig. 1. Direct and indirect pathways from communication to health outcomes.

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Role of the Audiologist

2. Role of Communicator:
Audiologists facilitate the therapeutic relationship and exchanges that occur before, during and after each encounter. The competencies of this role are essential for establishing rapport and trust, sharing information, developing a mutual understanding and facilitating a shared plan of client-centred care.

Essential Competencies	Sub-Competencies
a. Communicate respectfully and effectively using appropriate modalities.	i. Use language appropriate to the client and context, taking into account age, culture, linguistic abilities, education level, cognitive abilities and emotional state. ii. Employ environmental and communication strategies to minimize barriers to successful communication, including the use of appropriate modes of communication (e.g., oral, non-verbal, written, electronic). iii. Mitigate language barriers by using translators/interpreters, as required. iv. Recognize and respond to the client's verbal and non-verbal communication. v. Use strategies to facilitate a mutual understanding of shared information. vi. Participate respectfully in challenging conversations.
b. Maintain client documentation.	i. Accurately document services provided and their outcomes. ii. Document informed consent. iii. Complete and disseminate documentation in a timely manner. iv. Comply with regulatory and legislative requirements related to documentation.

The National Audiology and Speech-Language Pathology Competency Profiles, The Canadian Alliance of Audiology and Speech-Language Pathology Regulators (CAASPR), May 2018

AJA

Research Article

Addressing Patients' Psychosocial Concerns Regarding Hearing Aids Within Audiology Appointments for Older Adults

Katie Ekberg,[a] Caitlin Grenness,[b,c] and Louise Hickson[a,b]

Main finding: If patients raise psychosocial concerns and the audiologist does not acknowledge the concerns, patients often leave the appointment with committing to a treatment plan

Research Article

Exploring Audiologists' Language and Hearing Aid Uptake in Initial Rehabilitation Appointments

Anna Sciacca,[a] Carly Meyer,[a,b] Katie Ekberg,[a]
Caitlin Barr,[c] and Louise Hickson[a,b]

Main finding

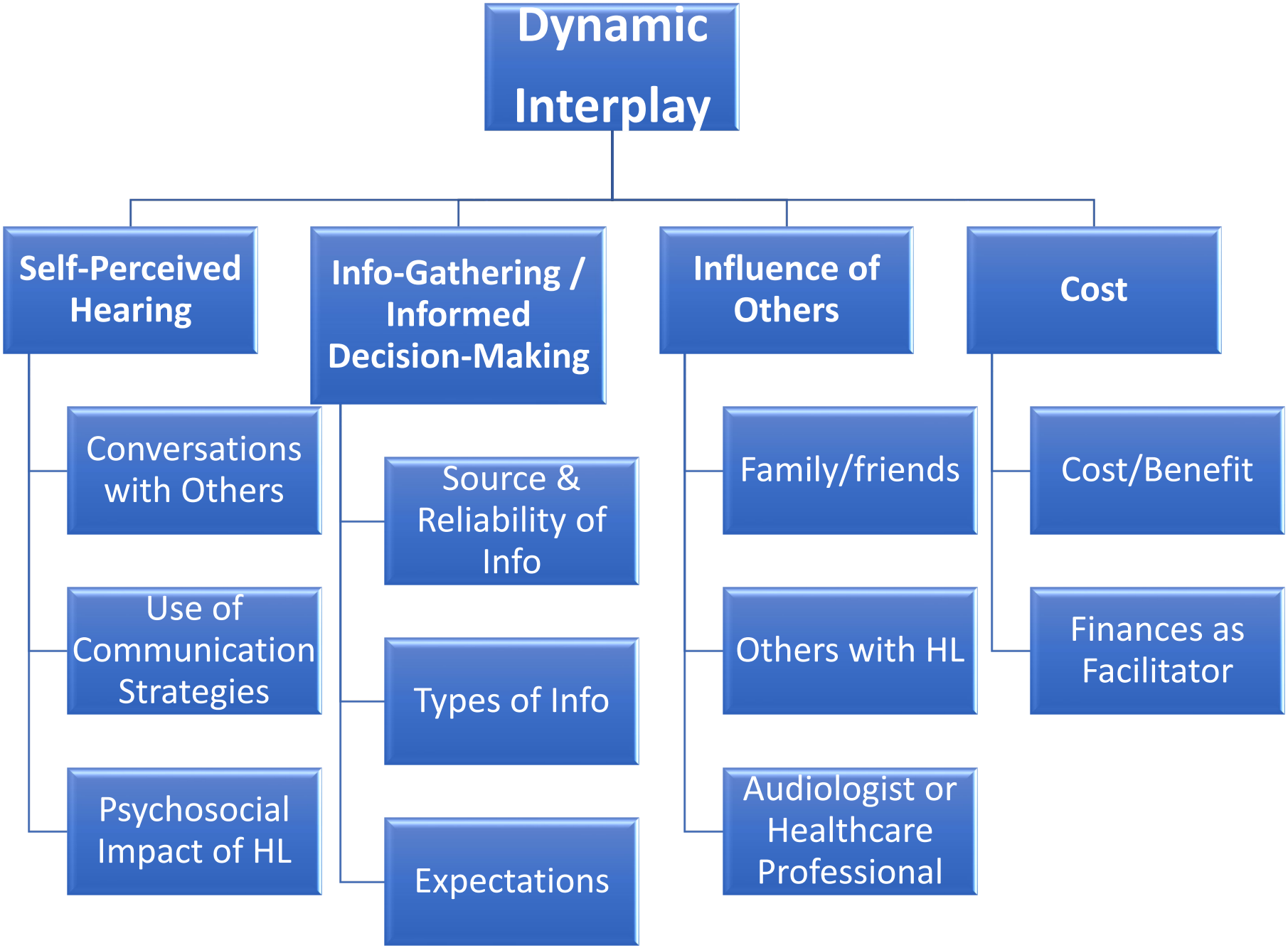
- **Complex language → reduced hearing aid uptake**

Hearing Aid Uptake – What do clients say?

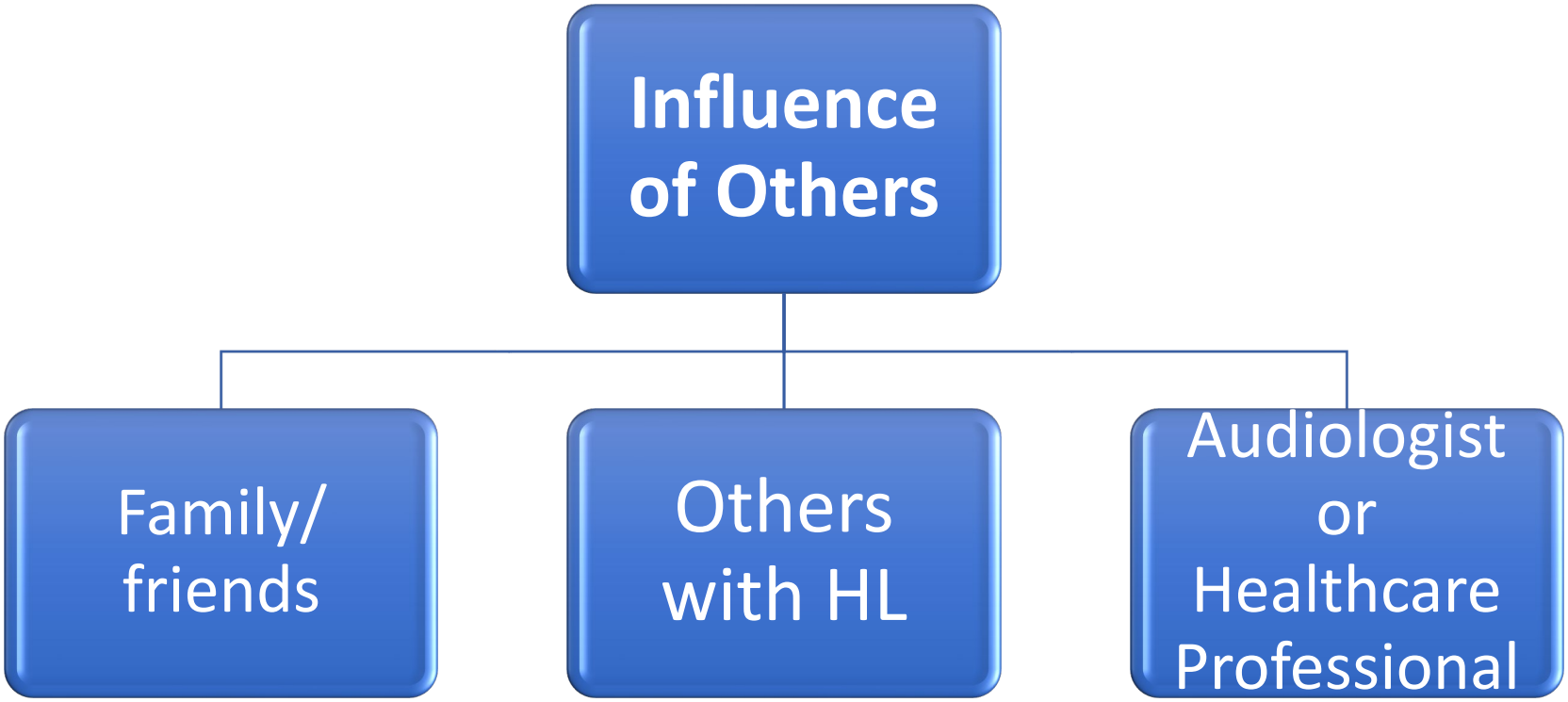
Jenstad, Winsor, Sims-Gould, Purves

Participants

- 9 females; 60 to 75 years of age
  - Previously told they would benefit from amplification
    - 5 had made decision to obtain hearing aids/ current hearing aid users
    - 4 had decided not to obtain hearing aids or were undecided
- 40-60 min. semi-structured interview


Dynamic Interplay
Self-Perceived Hearing
Info-Gathering / Informed Decision-Making
Influence of Others
Cost
Conversations with Others
Use of Communication Strategies
Psychosocial Impact of HL
Source & Reliability of Info
Types of Info
Expectations
Family/friends
Others with HL
Audiologist or Healthcare Professional
Cost/Benefit
Finances as Facilitator

Influence of others



Influence of others – Audiologist or hearing healthcare professional

"When I first had my testing done at [the hospital], the audiologist there told me, she said, 'well, you're kind of borderline, you might benefit from it but,' she said, 'if you go to a place that dispenses hearing aids,' she said, 'they're going to want to sell you a hearing aid, so bear that in mind.' So I just, I didn't do anything at that point." - Patricia, 68 yrs, no hearing aids

"For a real good professional, it's somebody that yes, education is very important, but so are a lot of other things. In terms of behaviour and values and you know, commitment, compassion, understanding." - Carol, 67 yrs, fitting appointment has been booked

"I think it was mainly trust." - Judith, 67 yrs, owns 2 hearing aids

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Communicatively vulnerable

- All individuals with inherent or circumstantial factors that create a "diminished capacity… to speak, hear, understand, read, remember, or write" *(Blackstone, 2005, p. 13).*
- *E.g.:*

Individuals with hearing loss or aphasia

Temporary situations; e.g., being treated in a hospital in a foreign country; post-surgical delirium

UBC LanguageSciences
@UBCLangScis

A 'review of reviews' looks to identify gaps in academic literature regarding how communication between a healthcare provider affects the health of a patient, focusing on vulnerable populations.

Read more about the HOLa project: bit.ly/3eD2cI5
@UBC_Sass @cenesubc

12:00 PM · Jul 16, 2020 · TweetDeck

Best practices (HOLa)

CIHR IRSC
Canadian Institutes of Health Research
Instituts de recherche en santé du Canada

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PUBLISHED IN JAAA, FEB 2021

Research Article

Counseling during Real Ear Measurements: The Clients' Perspective

Angela Ryall, MSc[1] Lorienne M. Jenstad, PhD[1,2] John Pumford, AuD[3] Tami Howe, PhD[1] Garnet Grosjean, EdD[4]

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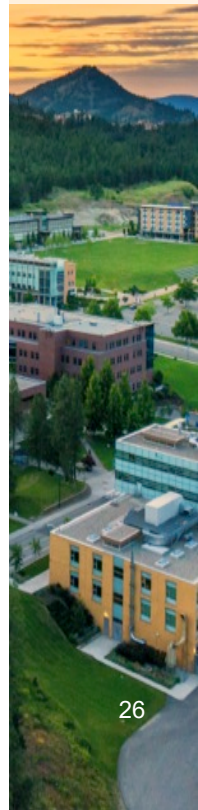
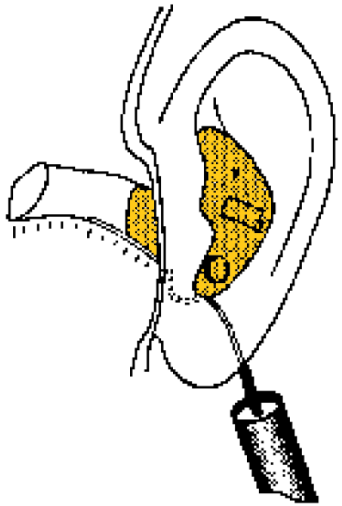
J Am Acad Audiol



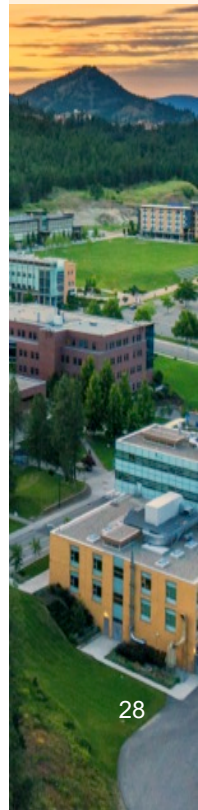
INTRODUCTION: ADVANTAGES OF REM

- Current knowledge of advantage of REM when matching to targets
  - Better phoneme recognition in quiet and sentences in noise (Leavitt & Flexer, 2012; Valente et al., 2017)
  - Increased self-reported benefit (Abrams, Chisolm, McManus, & McArdle, 2012)
  - Fewer client-initiated appointments (Kochkin, 2011)
  - Higher self-perceived value, satisfaction with clinician, and willingness to pay (Amlani, Pumford, & Gessling, 2016)



ANOTHER POSSIBLE, UNEXPLORED ADVANTAGE OF REM

- Informational Counselling
  - Learn about hearing aid (HA) processing
  - Increase health literacy
  - Incorporates attributes of client-centered care



Brief tangent

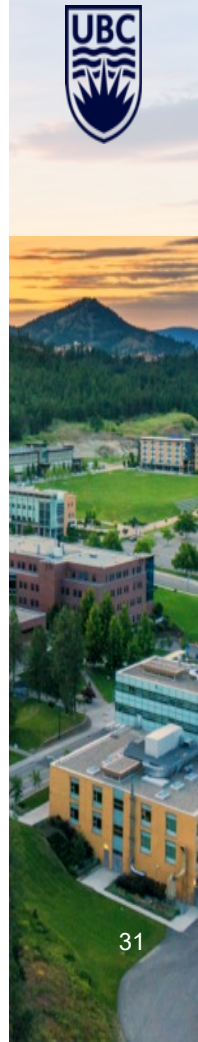
HEALTH LITERACY AND HEARING HEALTHCARE

Barbara E. Weinstein, Ph.D.
Jennifer Gilligan, B.A.
Samantha Morgan, B.A
Deborah von Hapsburg, Ph.D.

IDA institute / tools / university course

PURPOSE

- Purpose: to identify the perspective of first-time hearing aid users with respect to the ***content*** and ***format*** of informational counselling during REMs

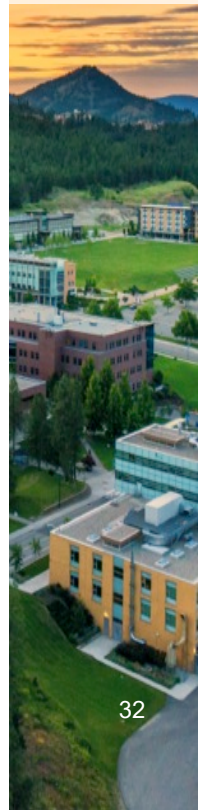


METHODS

Qualitative research methods using focus groups and content analysis

- Participants:
  - 16 adults (12 female, 4 male)
  - Age (19-89 yrs; most were 60+ yrs old)
  - All first-time hearing aid users
  - All remembered having REM verification during their own HA fitting

- 4 focus groups completed
  - 3-6 people per group



METHODS: PROCEDURE

- On the day of the session:
  - Participants saw demonstration of best-practice REM with informational counselling
  - Group discussion facilitated by experienced moderator
  - Elicited thoughts on: terminology, overall explanation, and visual format
- All focus group sessions were audio-recorded and transcribed verbatim

What did you like that was said?	What didn't you like that was said?
What about visuals did you like?	What about visuals didn't you like?
What are some other thoughts that haven't been discussed?	

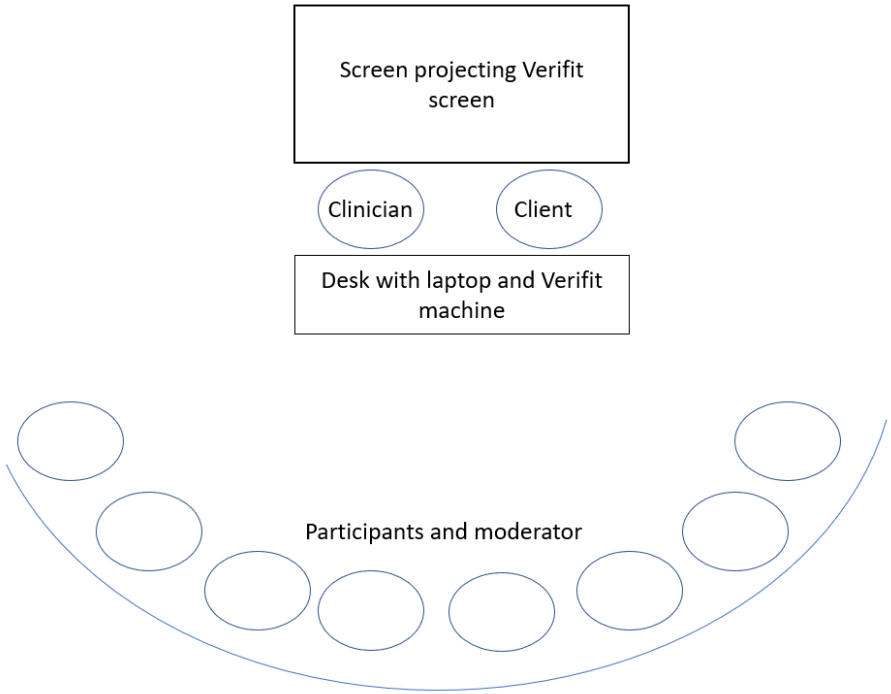
METHODS: DEMONSTRATION

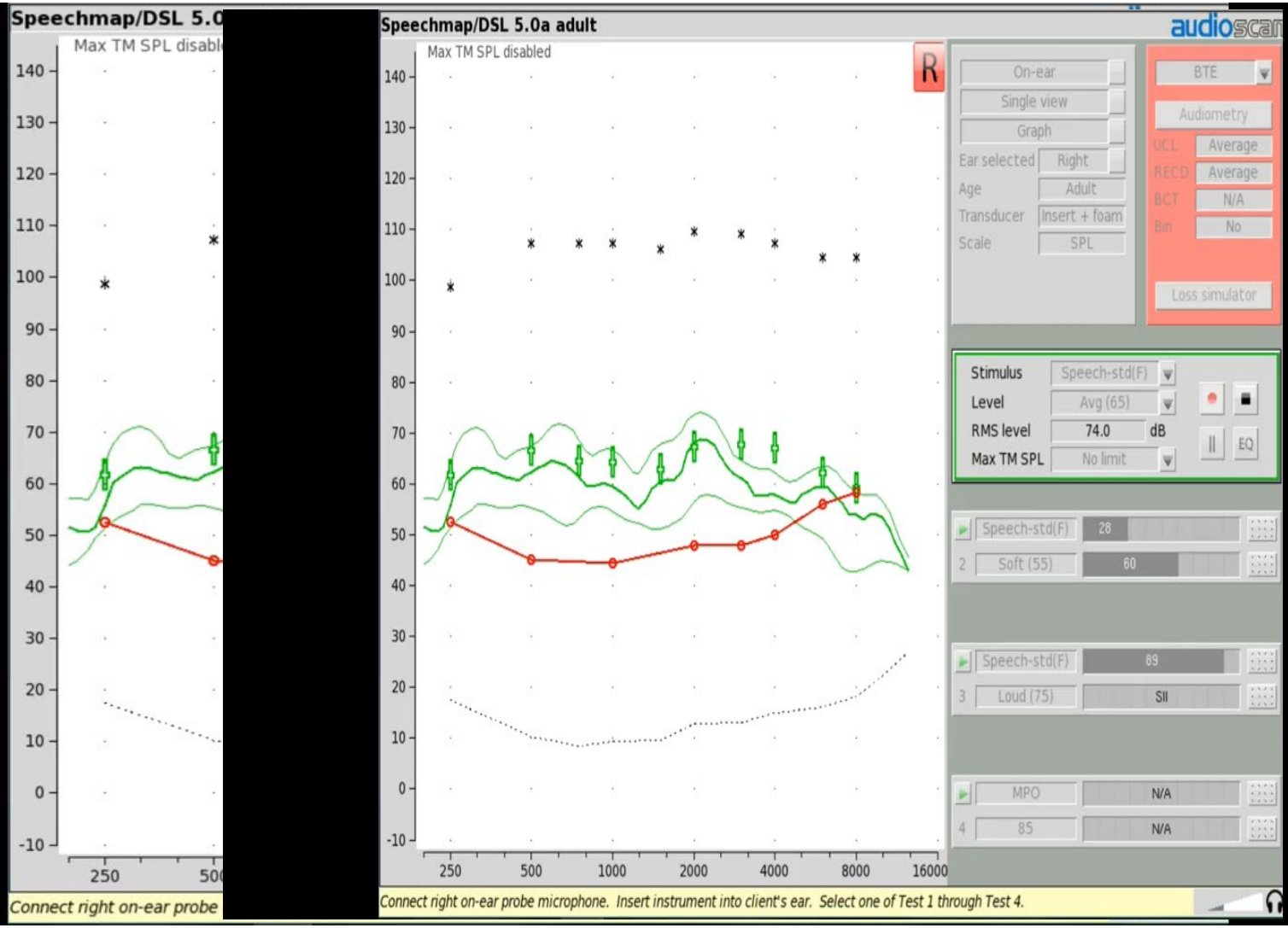
1**) Live action**: actor-clinician and actor-client

- Semi-structured script developed and reviewed by audiologists
- Demonstration of: otoscopy, probe tube placement, HA insertion, and speech stimuli testing

2) **Video**: Verifit 2 screen projected onto screen for participants

- Participants given print outs of Verifit 2 screen to make notes




Speechmap/DSL 5.0
Max TM SPL disabl
Connect right on-ear probe
Speechmap/DSL 5.0a adult
audioscan
Max TM SPL disabled
R
140
130
120
110
100
90
80
70
60
50
40
30
20
10
0
-10
250
500
1000
2000
4000
8000
16000
On-ear
Single view
Graph
Ear selected
Right
Age
Adult
Transducer
Insert + foam
Scale
SPL
BTE
Audiometry
UCL
Average
RECD
Average
BCT
N/A
Bin
No
Loss simulator
Stimulus
Speech-std(F)
Level
Avg (65)
RMS level
74.0
dB
Max TM SPL
No limit
EQ
Speech-std(F)
28
2
Soft (55)
60
Speech-std(F)
89
3
Loud (75)
SII
MPO
N/A
4
85
N/A
Connect right on-ear probe microphone. Insert instrument into client's ear. Select one of Test 1 through Test 4.

METHODS: SCRIPTS

Sample demonstration script:

"This line is the hearing aid response in your ear through that tube. The targets are based on a prescription for your hearing. We can see that we need to make some adjustments for the line to match more closely. These sounds are above your hearing thresholds (this line) so you can hear it, but it is not loud enough for you to get full benefit. I am going to increase the volume at these frequencies."

METHODS: SCRIPTS

Sample focus group questions:

What did you like about the information that the clinician said?

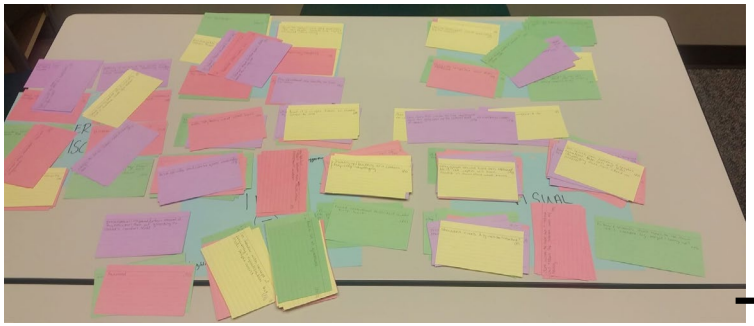
- What information do you think was helpful for you to understand the procedure?
- Now think about someone else, maybe someone going through it for the first time, what are some things you think they should hear from the audiologist?

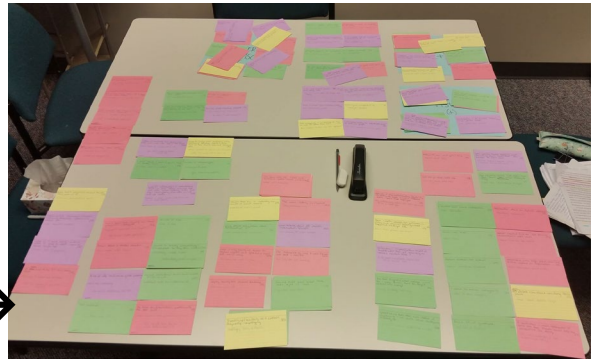
METHODS: DATA ANALYSIS

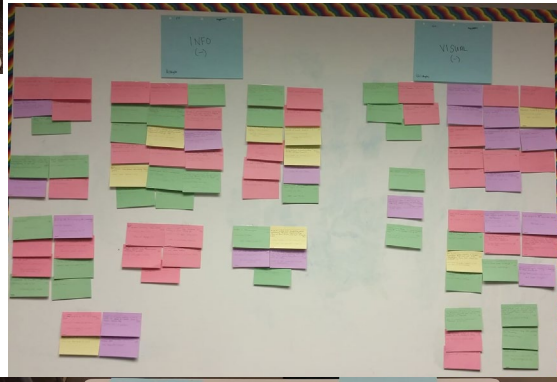
2 independent researchers

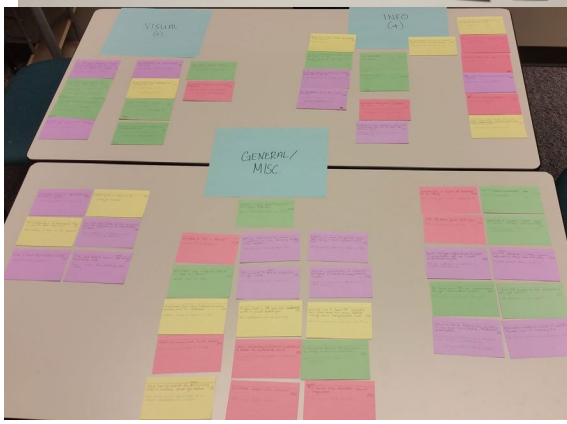
Meaning unit:	**P1:**It's too busy cause after the second line goes on (pause) then you lose what all the lines mean- **M:**-Mmhmm- **P1:**-Like you can't remember what the green line was the where it should be. Um you almost need a colour chart- **M:**-Mmhmm- **P1:**-To look at it
Condensed meaning unit:	1. Get too busy with all the lines so lose what lines mean 2. Need colour chart
Code:	1. Visuals unclear and confusing 2. Need a legend
Category:	1. Visual information- Negative aspects 2. Visual information- Suggested changes

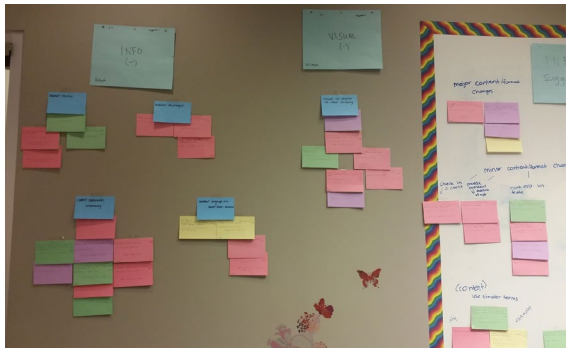
Iterative process

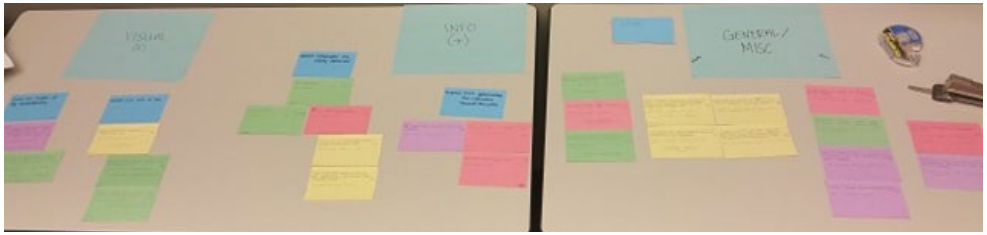







VISUAL (-)
INFO (+)
GENERAL / MISC

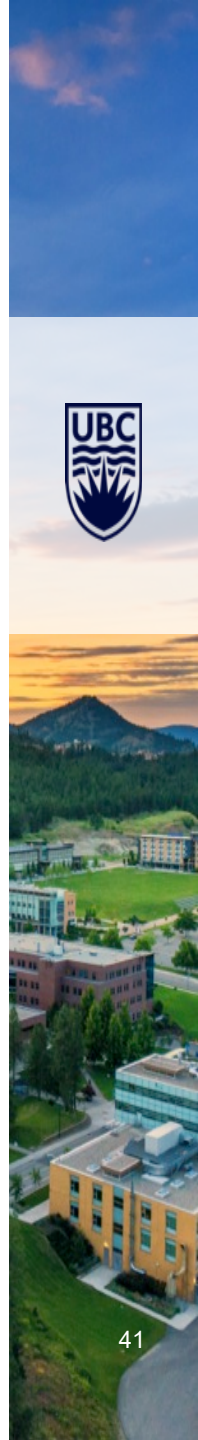

INFO (-)
VISUAL (-)

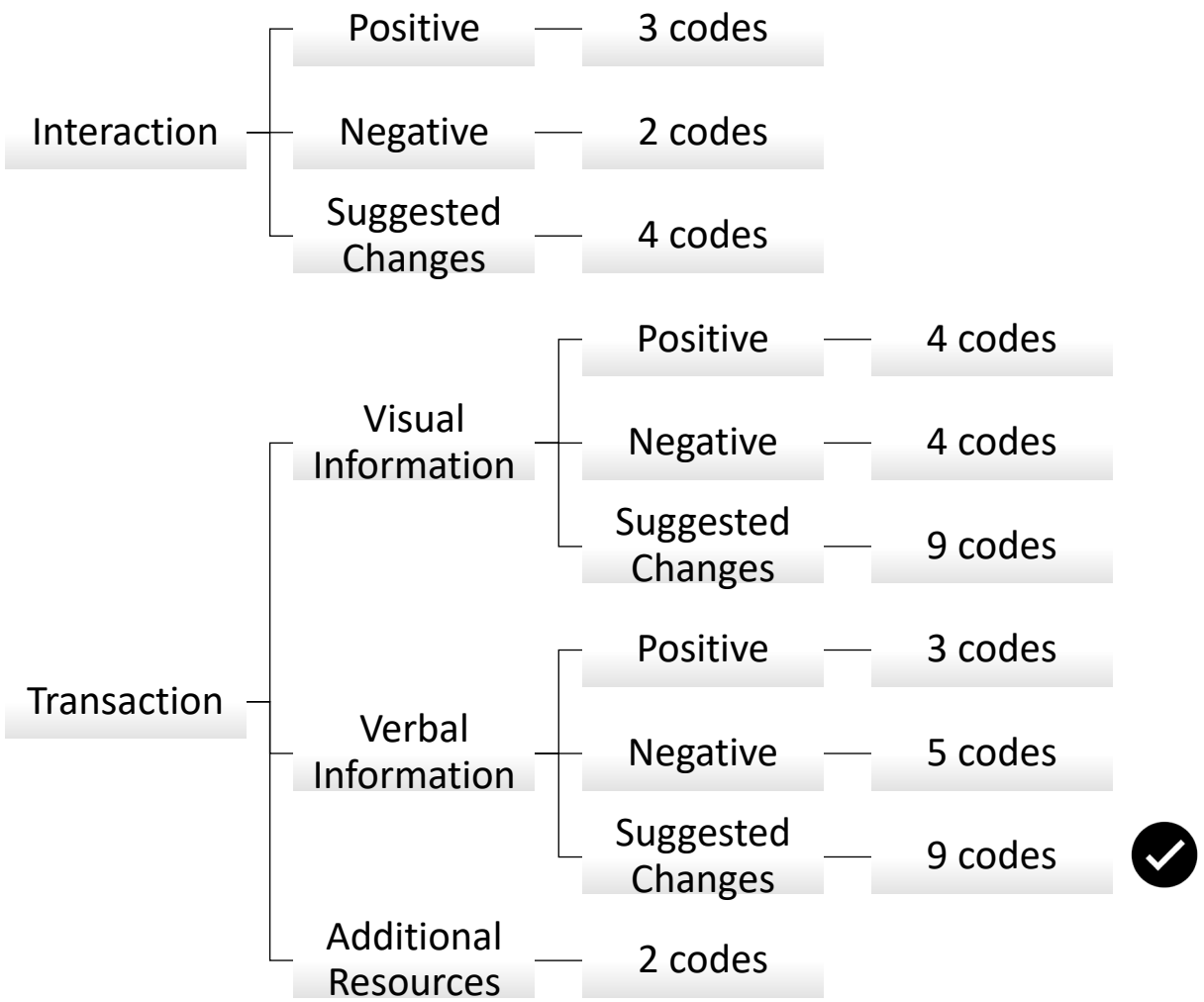

VISUAL (-)
INFO (+)
GENERAL / MISC

RESULTS

- Analysis revealed:
  - What was done well (Positive aspects)
  - Areas for improvement (Negative aspects)
  - Ideas for change (Suggested changes)

- Data fell into 2 broad categories:
  - Interaction= informal social exchange
  - Transaction= discussion used to complete clinical task




Interaction
Positive
3 codes
Negative
2 codes
Suggested Changes
4 codes
Transaction
Visual Information
Positive
4 codes
Negative
4 codes
Suggested Changes
9 codes
Verbal Information
Positive
3 codes
Negative
5 codes
Suggested Changes
9 codes
Additional Resources
2 codes

VERBAL INFORMATION: SUGGESTED CHANGES

Show test multiple times

"*I think the information should be shown twice like I said. The first time just to see it and then ….explain and then the second time show it when I have the explanation what it means*" FG3-P1

Provide additional time

"… if (clinician) could have gone slower through that and maybe even repeated it a couple of times then it would have been clearer…" FG2-P5

VERBAL INFORMATION: SUGGESTED CHANGES

Use simple terminology

"*You got to bring it down to some simple terms… everyday language*" FG4-P3

Make it meaningful

"*I think it has to be connected to yourself*" FG2-P5

Balance the amount of information

"… *you got to judge your audience*…" FG1-P2

VISUAL INFORMATION: SUGGESTED CHANGES

Make objects on screen bigger

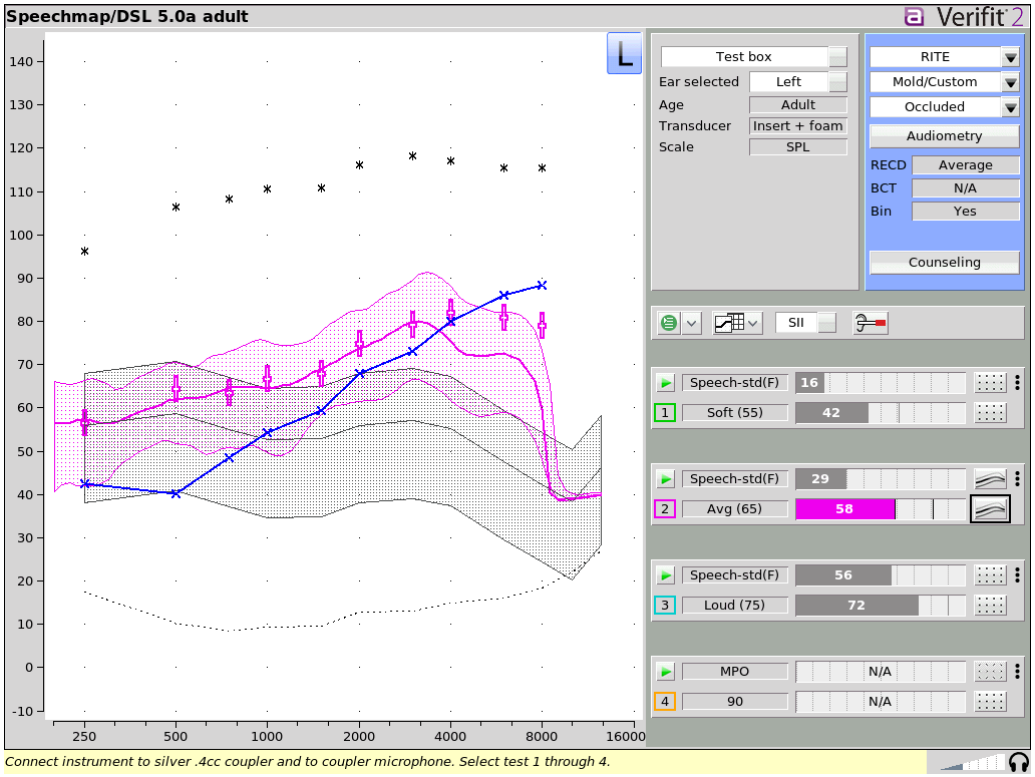
"… it should have been much bigger" FG4-P1

Have client-oriented screen

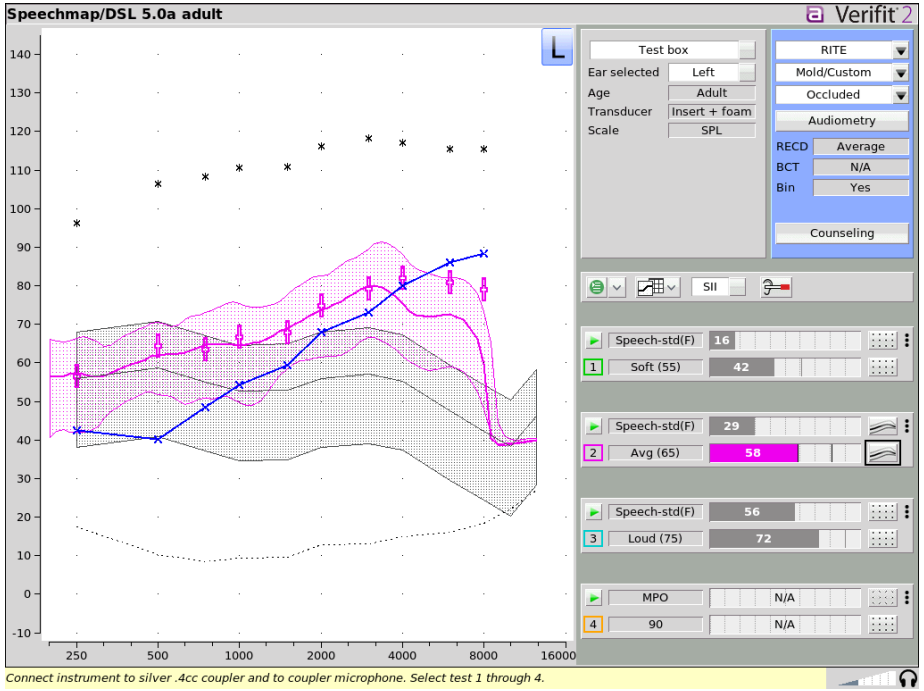
"I'm wondering what it would be like if the patient had a patient-oriented screen and the audiologist had an audiologist-directed screen." FG2-P4

Use labels

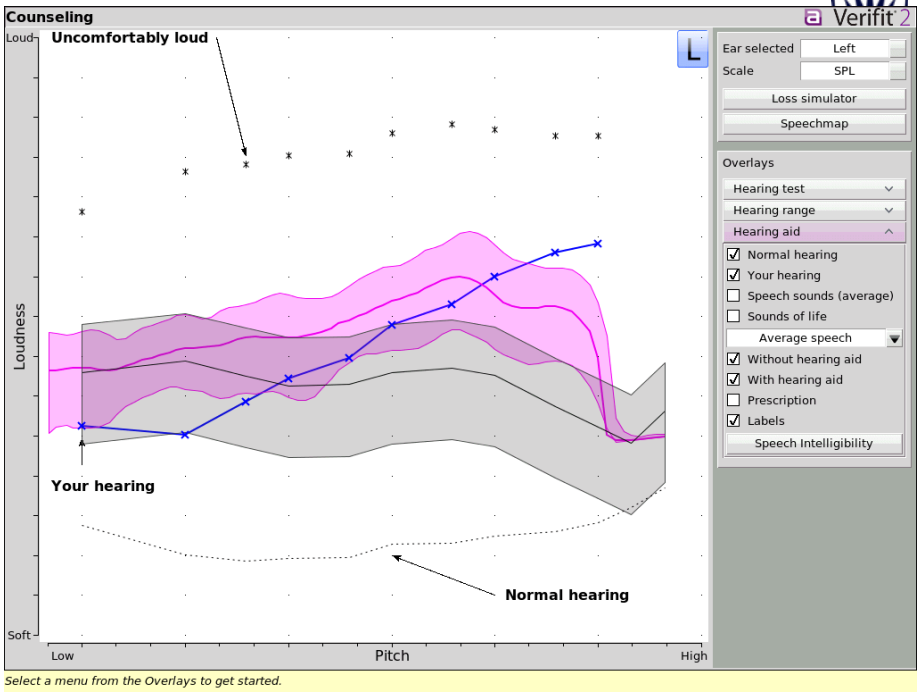
"That means nothing; should it be labeled to say what it represents?" FG1-P1



Clinician-oriented



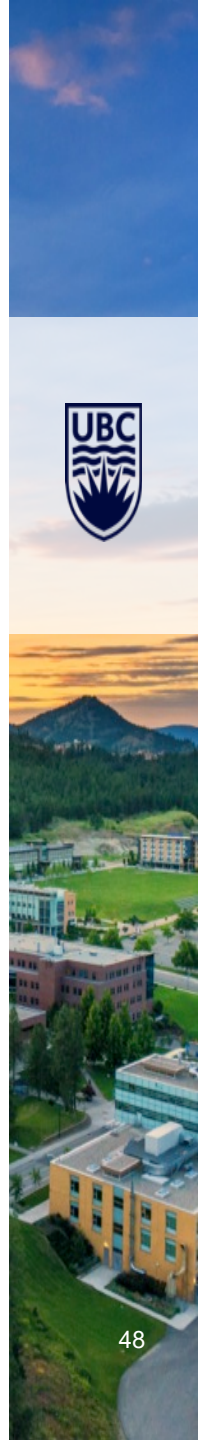
Patient-oriented with labels



DISCUSSION

- Participants had a lot of input for modifying informational counselling
- Interestingly, participants generally wanted to know more

"When you look at the price of a hearing aid… you want to know as much as possible" FG4-P2

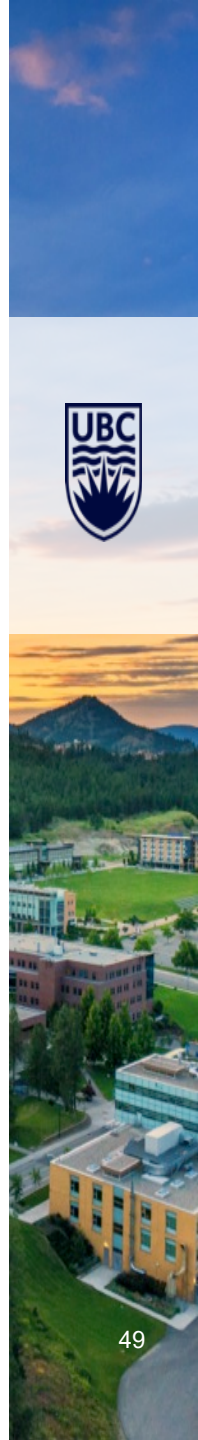


MAIN TAKEAWAYS OF THIS STUDY

With respect to identifying the perspective of first time hearing aid users on the content and format of presenting informational counselling about REMs:

- Explanation and visuals should be more simple and meaningful (client-centred care)

- **Hypotheses Suggested by the Data**
  - The more clients know about REM, the more they understand their hearing aids (health literacy)
- **Future directions**
  - Experimental research→ if we incorporate client centered informational counselling will this affect client outcomes?
  - Resource development for clinicians



REVIEW OF OUR AGENDA FOR TODAY

1. How is patient-provider communication linked to health outcomes?
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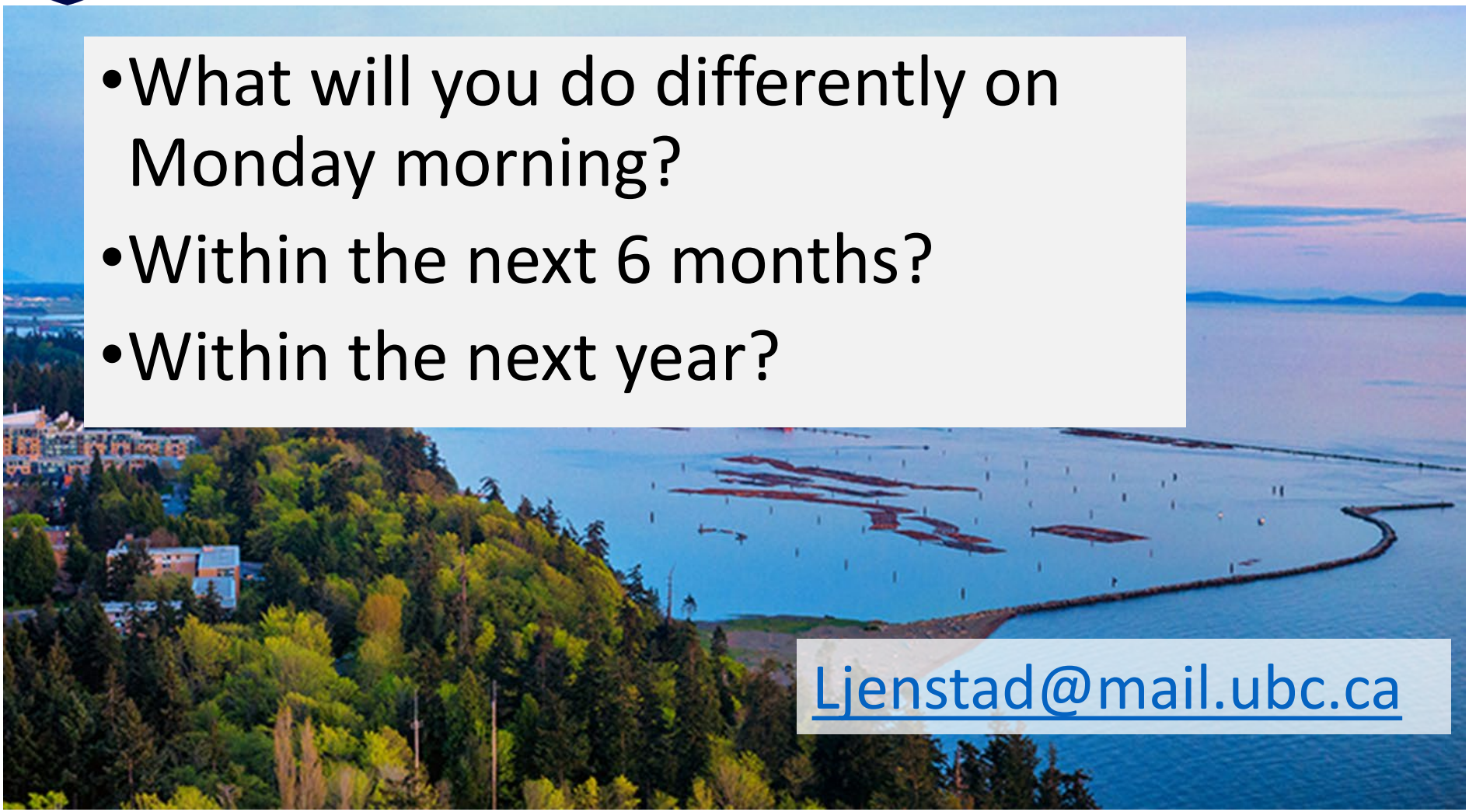
a place of mind

THE UNIVERSITY OF BRITISH COLUMBIA



- What will you do differently on Monday morning?
- Within the next 6 months?
- Within the next year?

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