

eHealth Coaching to Support Parents in Developing Effective Routines for Hearing Aid Management

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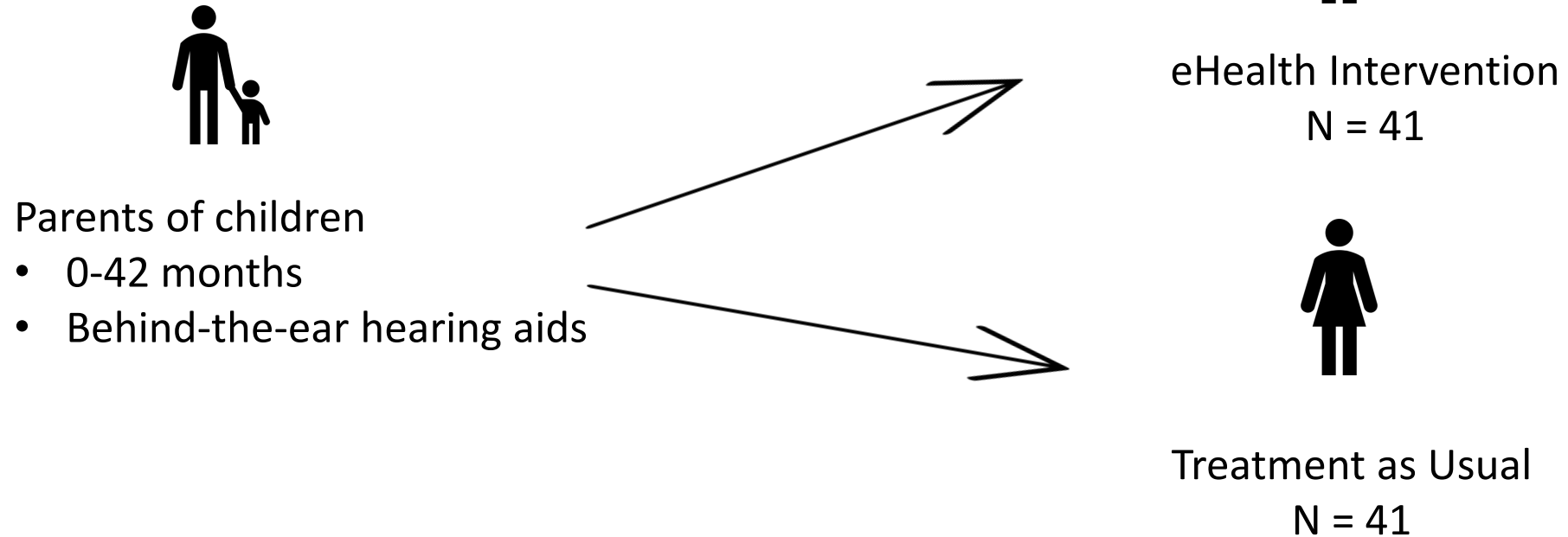
Disclosures

- The research was funded by a Utah State University grant

We will talk about...

- Parent challenges with hearing aid management
- Clinician communication strategies
- Clinical implications

Background on our study



The intervention was 6 weeks

Phone coaching call



Weeks 1 - 6

Instructional videos

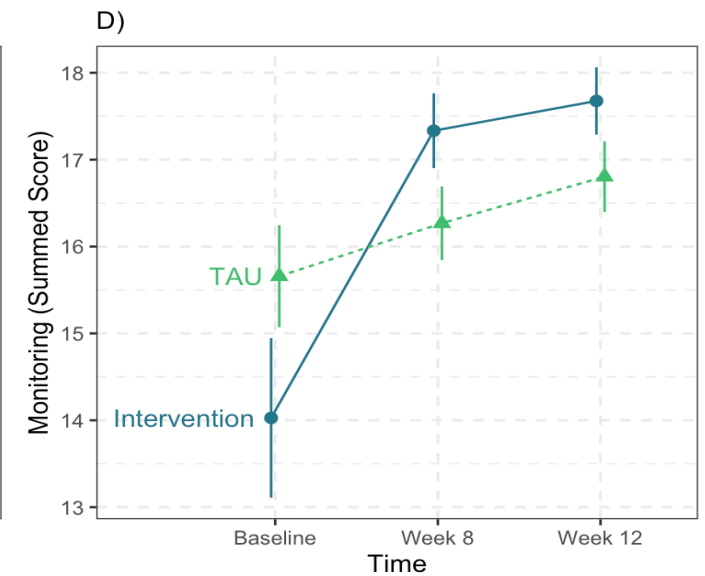
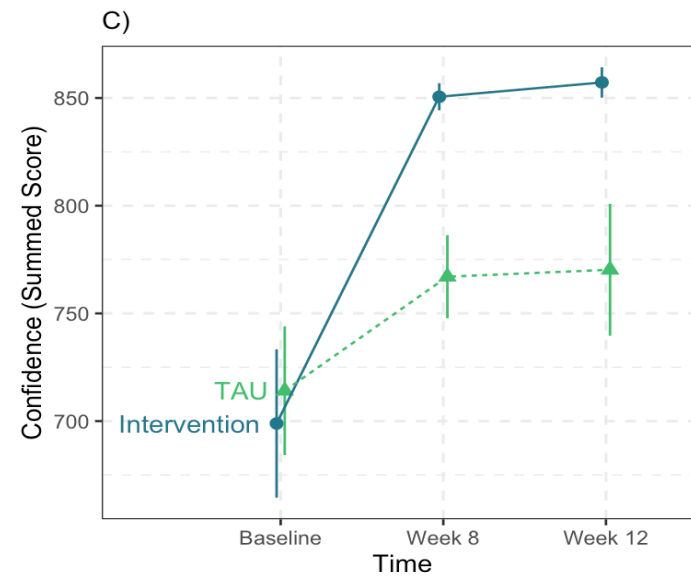
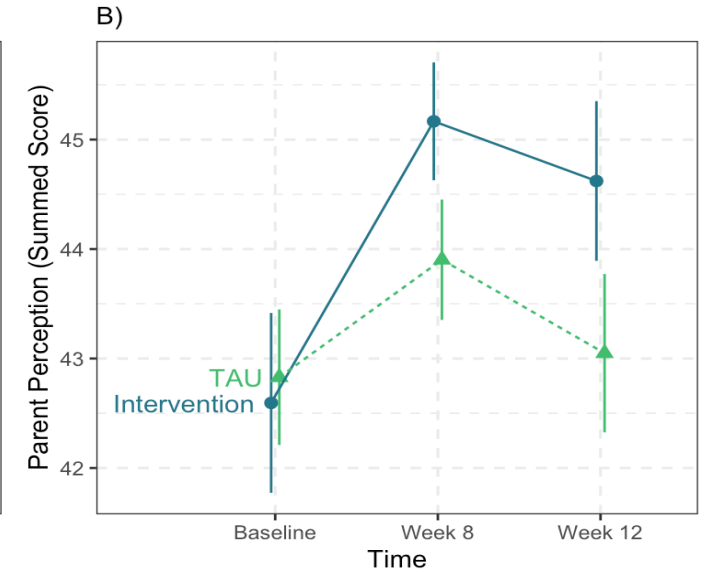
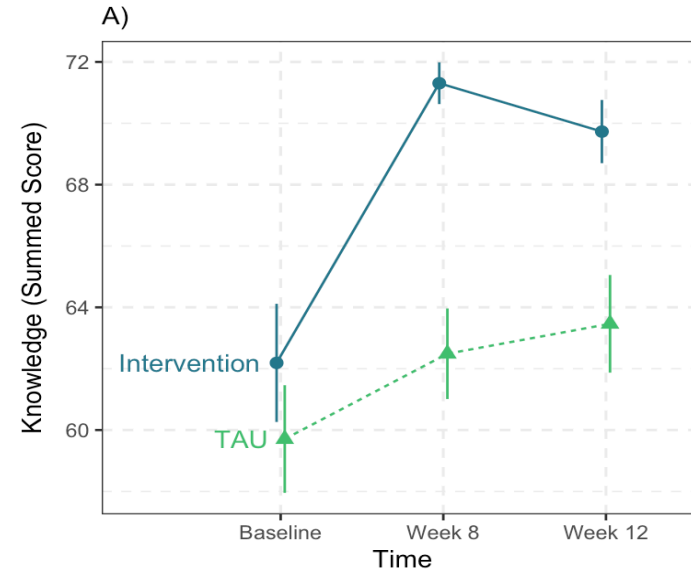


Weeks 2 - 5

We compared parent outcomes

Differential change over time

- Knowledge: $p = .008$
- Parent perceptions: $p = 0.65$
- Confidence: $p = .004$
- Monitoring: $p = .004$



We analyzed the coaching phone calls...

Parent

Nichols et al., in press

- Goals
- Questions
- Challenges

Clinician communication

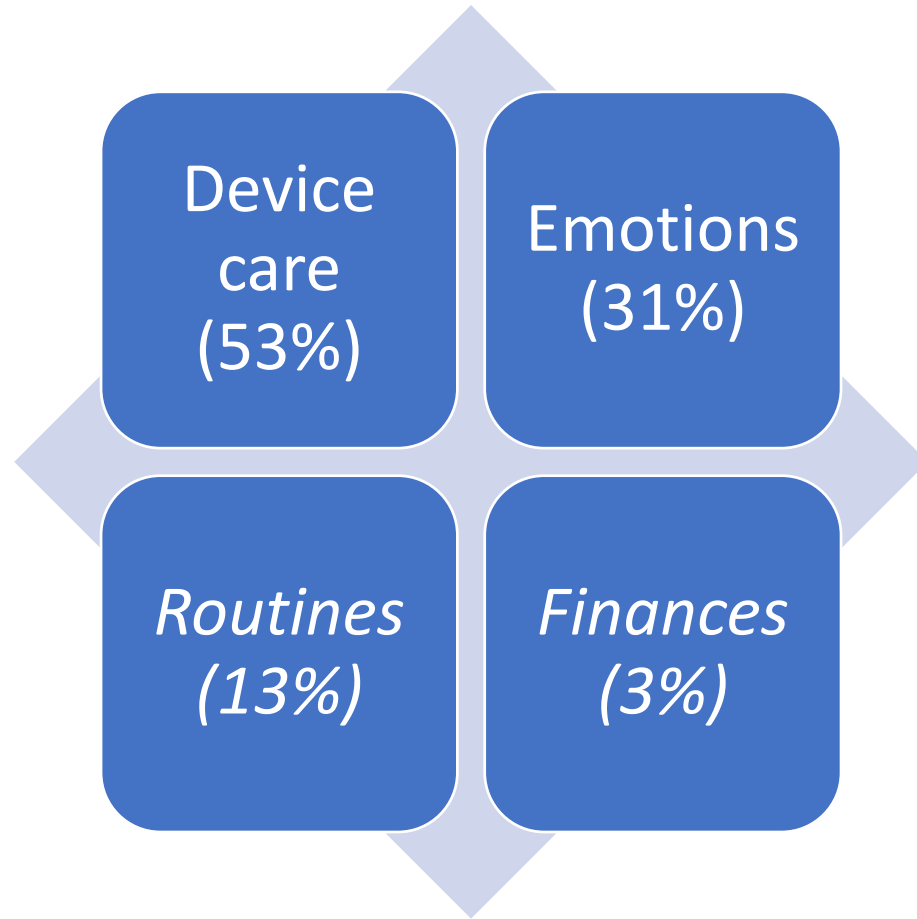
- Question asking
- Responding to emotion
- Shared process

Parent Challenges

- 53% Effect on the parent
- 33% Related to audiologist
- 10% Child factors
- 4% Anticipated



Effect on the parent



“it’s just so overwhelming... I always describe it as drowning... I remember her [audiologist] talking and... shaking my head like ‘you have to pay attention this is important’. There was just so much information at one time”

Related to audiologist

Parental lack of knowledge
(61%)

Time restraints/scheduling
(12%)

COVID (12%)

Access to pediatric audiologist
(9%)

Negative relationship (6%)

“The audiologist probably should have gone over all of that stuff. Like... testing the hearing aids to see if they’re working... it was our speech therapist actually that encouraged me to start doing it [listening checks] more regularly... our audiologist has never asked if I check them”

Related to child

Development (37%)

Behavior (35%)

Environment factors
(18%)

Multiply involved
(10%)

“he’ll [child] at least tell us... he’ll sign like, ‘fix it, fix it, fix it’... especially when the behind the ear piece... comes forward... he doesn’t quite have the dexterity to like push it back behind his ear”

Clinician Communication

Asking questions

59% Closed

41% Open

Missed opportunities

Asked closed question

“Any other questions?”

When an open could
facilitate discussion

“What else would you like to
ask?”

Responses to emotion

79%	Encourager
14%	Empathy
5%	Reflection
2%	Encouragement

Missed opportunities

Responding to technical aspect

P: "...[she] pulls it out [hearing aid] ...that's been really frustrating."

C: "right, have you done anything that helps with the pulling out?"

Shared process

62% Sharing information

Missed opportunities for joint planning

19% Joint planning

P (final call): *"I still think routines need to be better established because that would be-I think once we do that it'll be kind of like-like once you get up for naps sometimes, I put them in and sometimes I don't. Like I need to get it put in. Um, it's just kind of getting a routine that we do that."*

11% Progress monitoring

9% Summarizing

Joint planning for routines did not occur with this parent

Clinical Implications

BETTER LANGUAGE OUTCOMES WITH 10+ HOURS OF HEARING
AID USE PER DAY
(TOMBLIN ET AL., 2015)



BUT...MULTIPLE FACTORS CAN INTERFERE
WITH AUDIBILITY



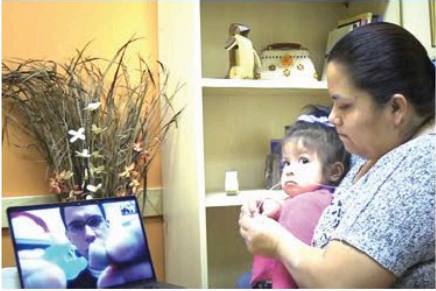
YOUNG CHILDREN
NEED HELP FROM
THEIR PARENTS
TO ACCESS
SOUND



Supporting
audibility takes
teamwork



1. Provider Guide



2. Coping and Planning



3. Developing New Routines



4. Hearing Aid Use



5. Hearing Aid Care Guide



GETTING STARTED WITH HEARING AIDS: A REMOTE PARENT EDUCATION AND SUPPORT PROGRAM



Partnering with parents: supplement in-person care

Muñoz, 2021



Related infographic resources

HEAR to LEARN
Resources for Parents of Children Who are Deaf or Hard of Hearing
<http://www.heartolearn.org>

HELP CHILDREN USE AND CARE FOR HEARING DEVICES

Practice these tasks together until you are confident your child can:

Task	Age
Let you know when devices aren't working	2
Reposition hearing devices if needed	3
Store the hearing devices in a safe place	4
Put devices on and take off without reminders	5
Check and change batteries	6
Clean and care for devices	7
Identify problems with devices	8
Connect to technology with hearing device	9

Not all children may be ready to do these skills by the ages listed in this guideline. Talk to your child's audiologist for ideas on how to teach your child to independently care for their hearing devices.

Ambrose, S., et al. (2019). Effects of intervention designed to increase toddlers' hearing aid use. *Journal of Deaf Studies and Deaf Education*.
Klein et al. (2019). Effects of grade and school services on children's responsibility for hearing aid care. *American Journal of Audiology*.

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HEAR to LEARN
<http://www.heartolearn.org>

Wearing Hearing Aids improves language skills IF WORN 10 HOURS OR MORE EACH DAY.

Put hearing aids on

- When awake
- In the car
- At play

Every day

- ✓ Sunday
- ✓ Monday
- ✓ Tuesday
- ✓ Wednesday
- ✓ Thursday
- ✓ Friday
- ✓ Saturday

Talk to your audiologist about how best to meet the needs of your family

Reference: Tomblin, J.B., Hirrison, M., Ambrose, S.E., Walker, E.A., Oleson, J.J., & Moeller, M.P. (2015). Language outcomes in young children with mild to severe hearing loss. *Ear and Hearing*, 36, 76S-91S. doi: 10.1097/AUD.0000000000000219

Questions?



References

- Muñoz, K., San Miguel, G., Barrett, T.S., Kasin, C., Baughman, K., Reynolds, B., Ritter, C., Larsen, M., Whicker, J.J., & Twohig, M.P. (2021). eHealth Parent Education for Hearing Aid Management: A Pilot Randomized Controlled Trial. *International Journal of Audiology*, 60(S1), S42-S48. <https://doi.org/10.1080/14992027.2021.1886354>
- Muñoz, K. (September 2021). Partnering with parents in pediatric hearing aid management. *The Hearing Journal*
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- Tomblin, J.B., Harrison, M., Ambrose, S.E., Walker, E.A., Oleson, J.J., & Moeller, M.P. (2015). Language outcomes in young children with mild to severe hearing loss. *Ear and Hearing* 36(1), 76s-91s. <https://doi.org/10.1097/AUD.0000000000000219>