

Assessing Drivers of Motivation for Hearing Impaired People Using mHealth Tool ALICE

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About Me



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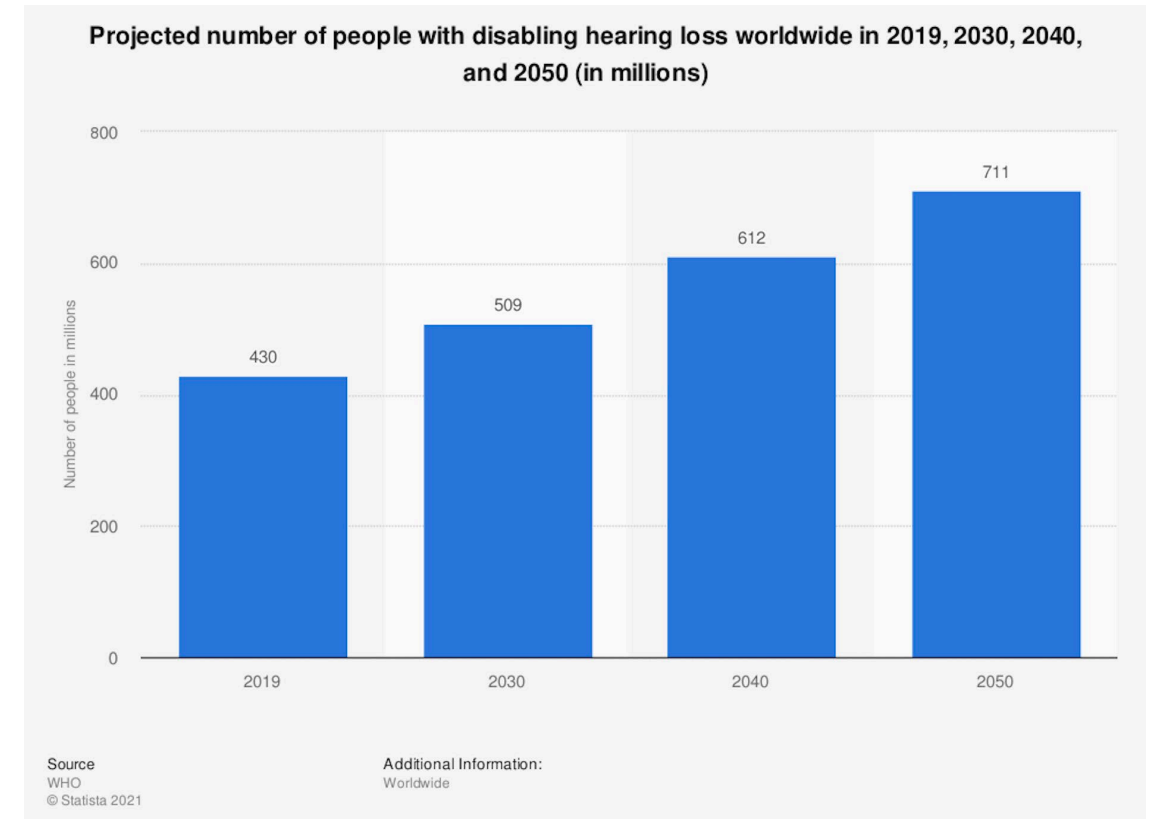


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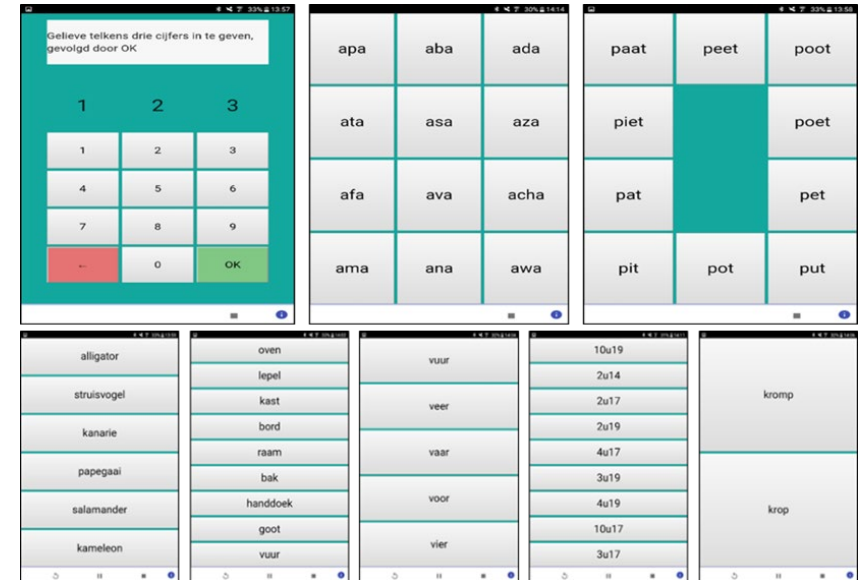
Hearing-Impairment (HI) and Hearing Loss

- Affects over 430 million people or 5% of the current population
- Estimated to grow to affect over 700 million people by 2050 → 1 in 10 people
- Impacts how people communicate and their psychological state of being
- Managed by hearing aids, cochlear implants, middle ear implants, and now audiological rehabilitation (AR)



Audiological Rehabilitation (AR) and mHealth

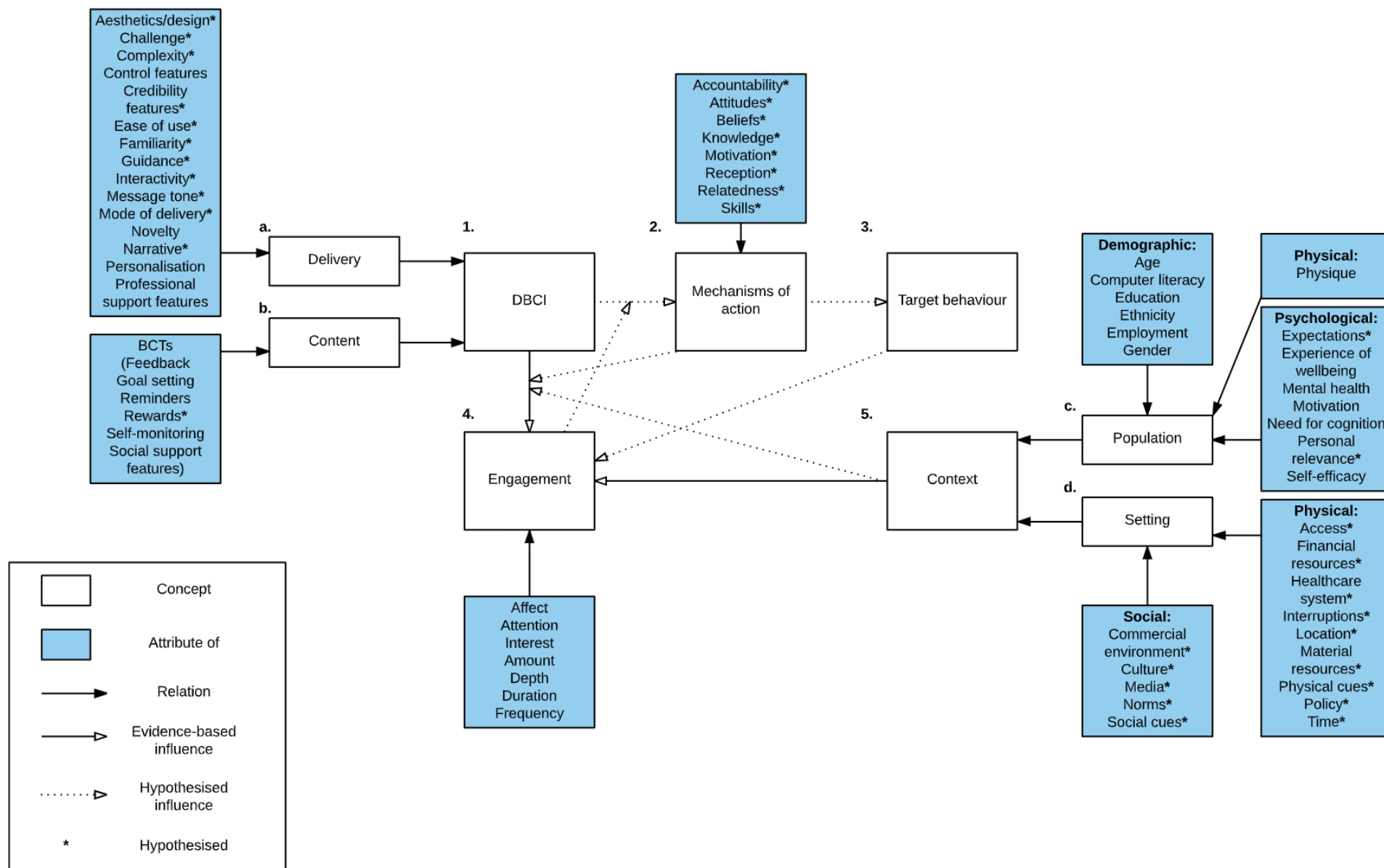
- mHealth refers to the use of mobile technology for healthcare
 - A form to deliver AR for the HI community
 - Includes:
 - hearing screening/auditory training
- AR is all encompassing for the HI population
 - Includes:
 - counselling
 - Hearing training
 - sensory management
 - Holistic approach that now focuses on individualization (person centered care)



Research Topic

1. What drives motivation and how can this be used within the mHealth tool ALICE for hearing impaired people?
2. How can we achieve effective engagement with adherence to the mHealth training app ALICE for the hearing-impaired population?

Digital Behavior Change Intervention Perski Model



Factors Affecting Motivation

Goal-Setting

- Increases adherence
- allows people with HI to hold themselves accountable
- creates better understanding between HI and AR teams

Rewards

- encourages continuation of AR tasks
- Causes HI user to have a trigger
- Creates engagement

Competition

- Achieves extrinsic values
- relatedness or reception due to society

Personalization

- Leaves the power in the hands of the user (PCC)
- Emphasizes user's intrinsic values
- Allows sense of identity within the app

Testimonials

- creates community for HI population
- can reiterate app success
- causes users to believe in the training methods

Possible Future Directions

- Obtain testimonials from hearing impaired population about common situations that are difficult
- Have users define end goals upfront
- Have rewards integrated
- Obtain data about continued use and display via an easy to understand infographic about the benefits of continued use
- Emphasize that hearing aids don't "fix" but app can → learned behavior
- Mini tests/check points of what has been learned for mastery
- Possible leaderboard to increase competition

ALICE (Assistant for Listening and Communication Enhancement) Application

- Tool for hearing impaired (HI) people or those with listening difficulties
- Has two softwares
 - ALICE-Client: provides remote training, counselling, and monitoring
 - ALICE-Pro: provides audiologists and those in the audiological rehabilitation (AR) process with data of clients
- Monitoring consists of phoneme discrimination tests and speech level understanding tests
- Listening consists of training exercises about vowels, consonants, voice recognition, and cognition
- Counselling consists of 3 questions every other day to inventory their daily experiences with listening difficulties

