



GAMES FOR HEALTH EUROPE
2025

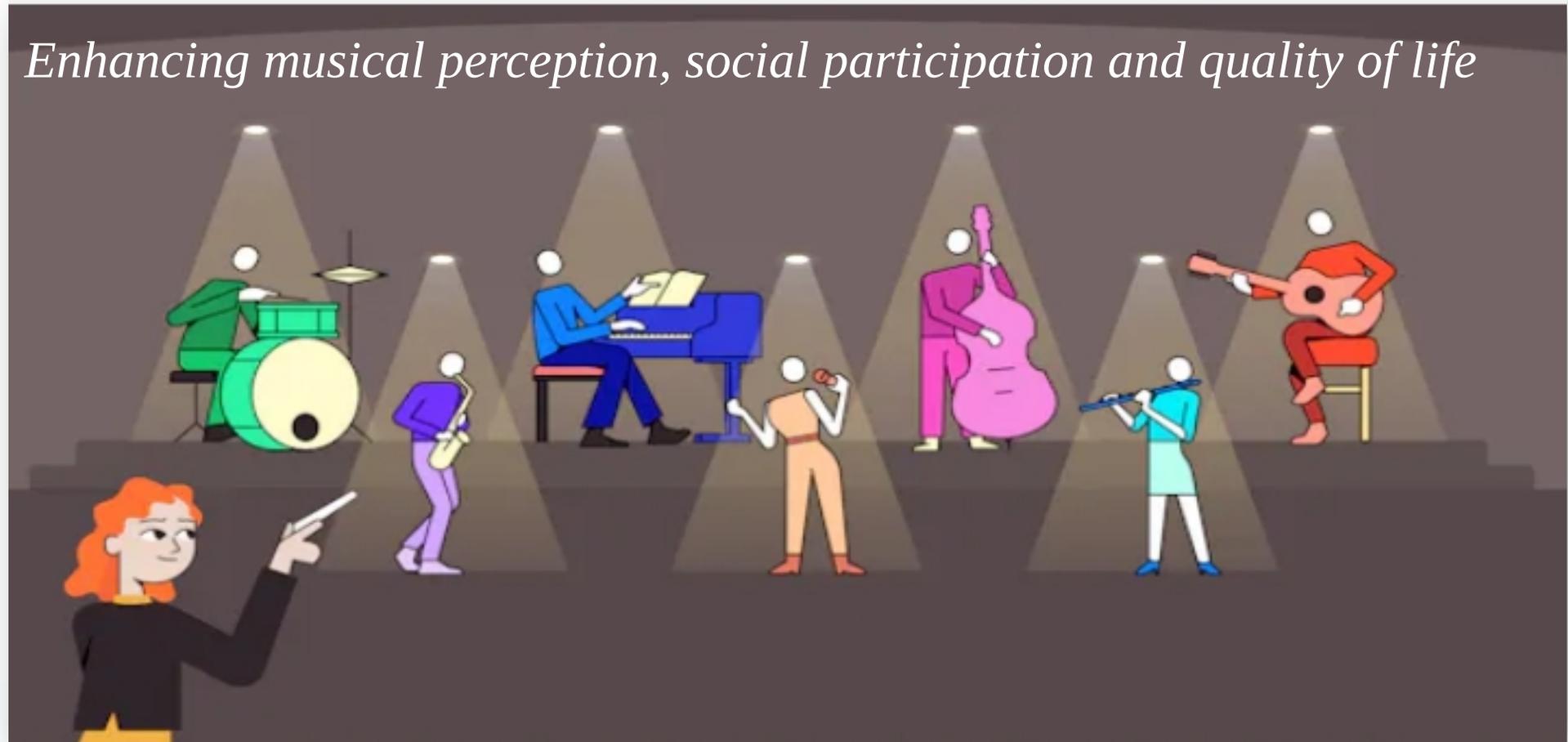
DISCLOSURE SLIDE
for presentations at the

GAMES FOR HEALTH EUROPE 2025 CONFERENCE

I herewith confirm that there is not any conflict of interest with the conference organization or any of its sponsors.

MELODY GAME, music training for CI users

Enhancing musical perception, social participation and quality of life





Melody Game, music training for CI users

Joke Veltman

MA, pianist and CI user, Musi-CI trainer

PhD candidate IQ Health & KNO Radboudumc

Games for Health Europe Conference 2025

Topics

Cochlear Implant
&
Musi-CI training

Melody Game
Development

Functionality

Melody Game Test
&
Outcomes

Topics

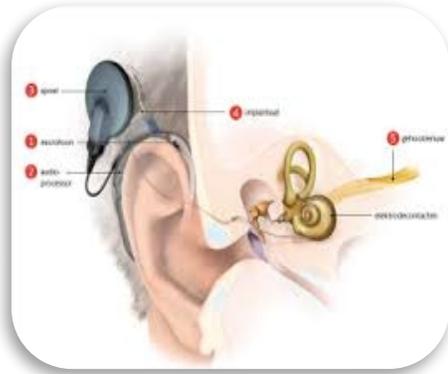
Cochlear Implant
&
Musi-CI training

Melody Game
Development

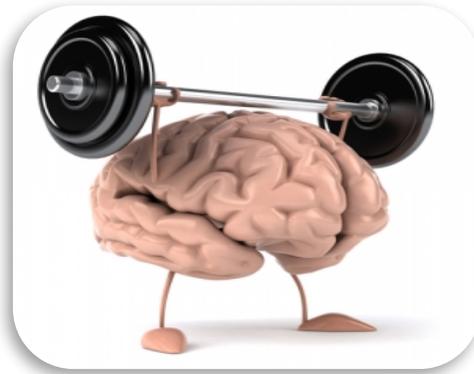
Functionality

Melody Game Test
&
Outcomes

Cochlear Implant (CI)



Cochlear
Implant



Speech
training

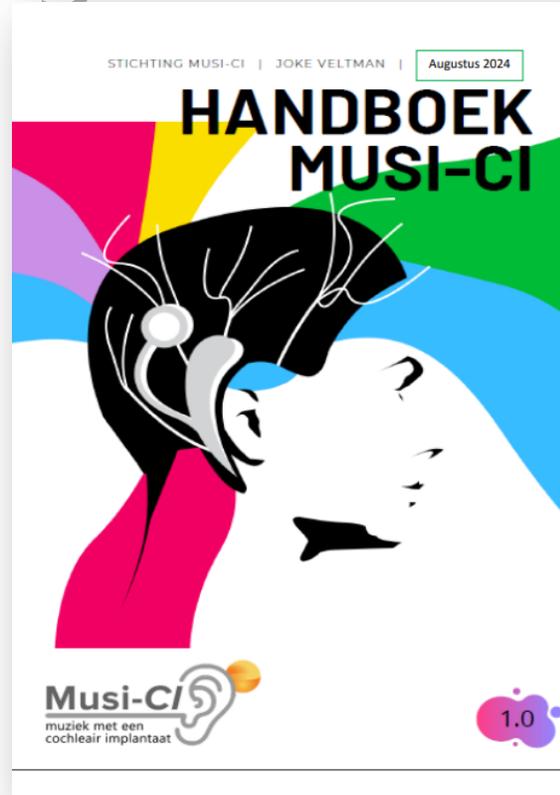


Music
listening

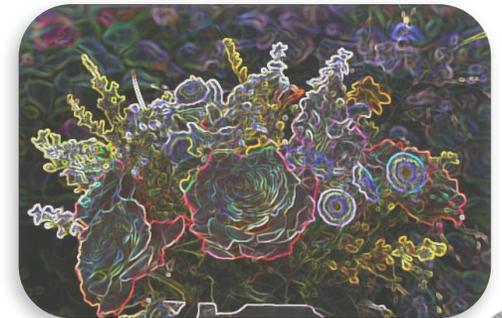
Musi-CI training



Music listening



Musi-CI training



Topics

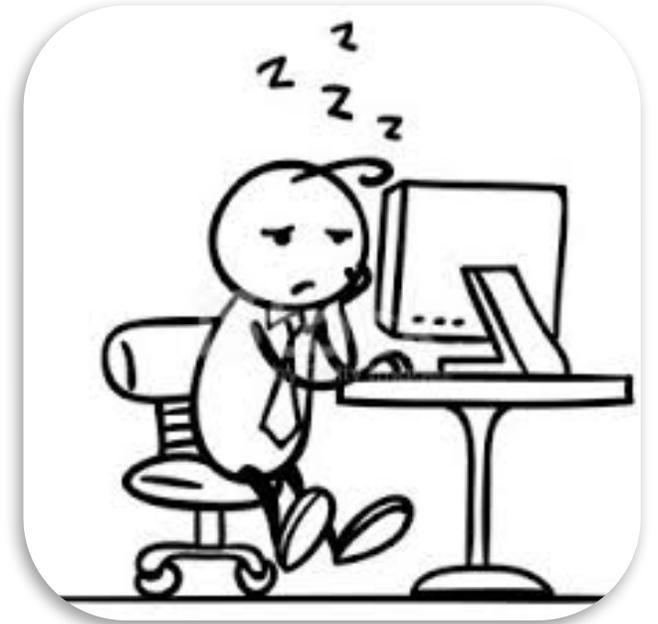
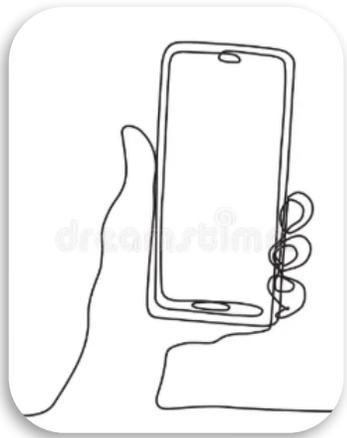
Cochlear Implant
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Development

Musi-CI Melody Game

Leren om toonhoogtes te horen

Aanmelden met uw Musi-CI account

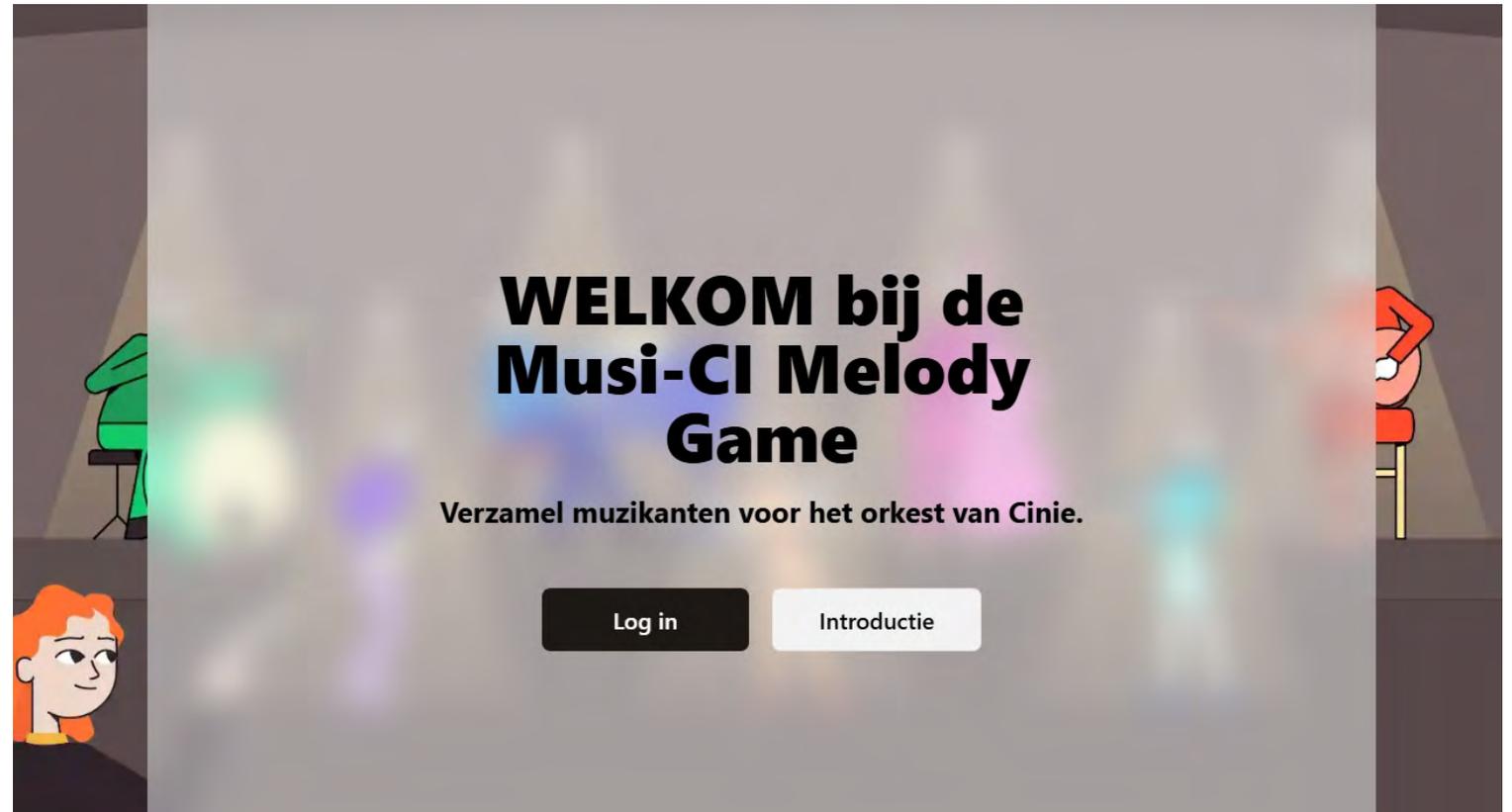
Uw documentnummer

Documentnummer

Wachtwoord

Wachtwoord

Aanmelden



Voortgang Musi-CI

- 1A. ANDERS - GELUK**
Hier hoor je 2 tonen die hetzelfde (gelijk) klinken of verschillend
score: 50000
- 1B. ANDERS - GELUK**
2 tonen, kleinere stappen
score: 70000
- 1C. ANDERS - GELUK**
2 tonen, kleine stappen + hoger tempo
score: 90000
- 2A. HOGER - LAGER - GELUK**
2 tonen die hetzelfde (gelijk) klinken of verschillend. In het 2e niveau 3 plaatsjes.
score: 110000
- 2B. HOGER - LAGER - GELUK**
2 tonen, kleinere stappen
score: 127000
- 2C. HOGER - LAGER - GELUK**
2 tonen, kleine stappen + hoger tempo
score: 144000
- 2D. HOGER - LAGER - GELUK**
2 tonen, grote stappen + hoger tempo
score: 161000
- 3A. OMHOOG, OMLAAG, GELUK**
Hier hoor je 3 tonen van 3 tonen, die omhoog of omlaaggaan of gelijk blijven. Grote stappen, rustig tempo.
score: 200000
- 3B. OMHOOG, OMLAAG, GELUK**
19 ton van 5 tonen, grote stappen, sneller tempo
score: 300000
- 3C. OMHOOG, OMLAAG, GELUK**
19 ton van 5 tonen, kleine stappen, rustig tempo
score: 180700
- 3D. OMHOOG, OMLAAG, GELUK**
alle tonen van 5 tonen, kleine stappen + sneller tempo



Kies een level



LEVEL 1



LEVEL 2



LEVEL 3



LEVEL 4



LEVEL 5



LEVEL 6



LEVEL 7

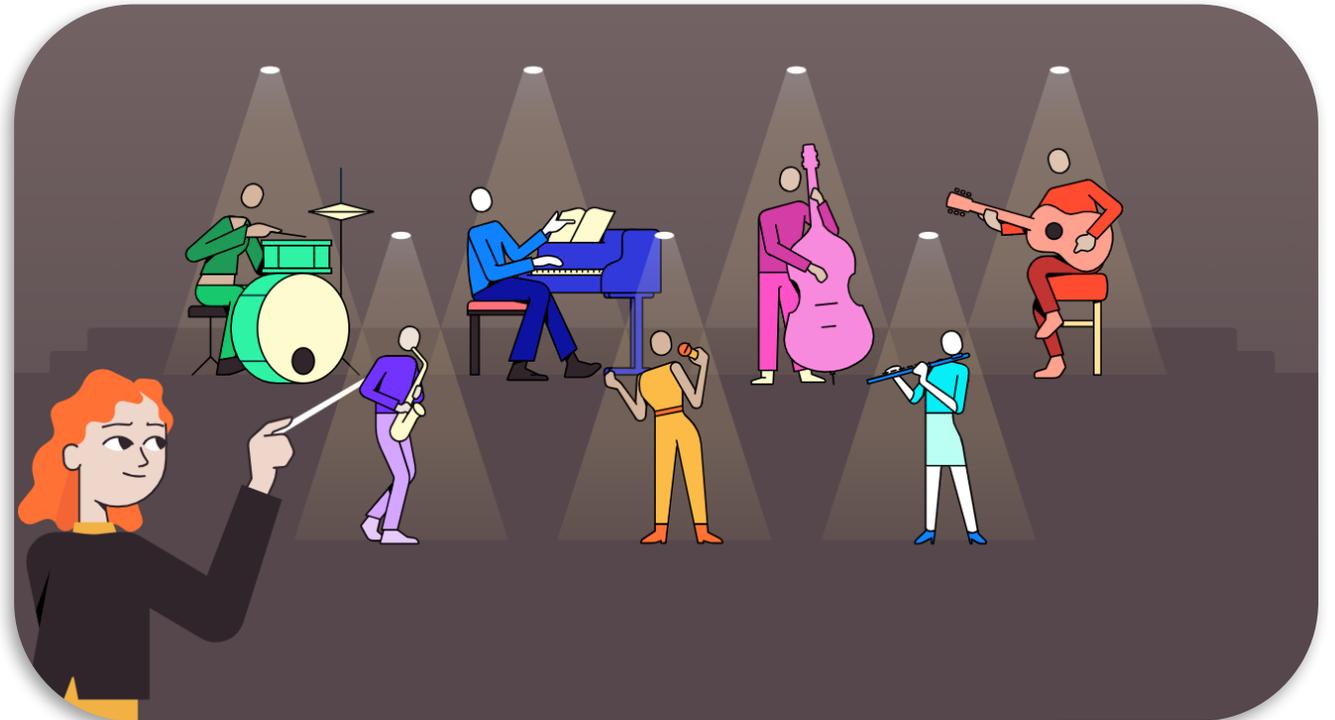
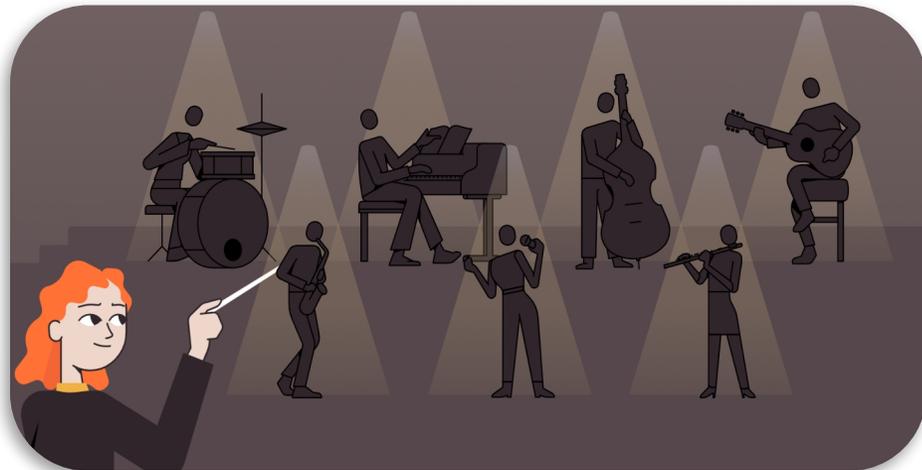
TEST



Development

Cinie,
conductor
without band

Instrumen
ts



Cochlear Implant
&
Musi-CI training

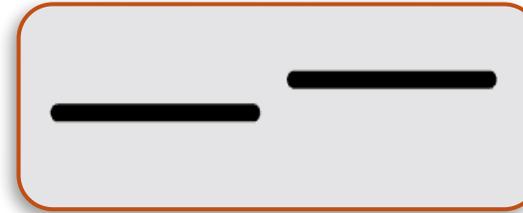
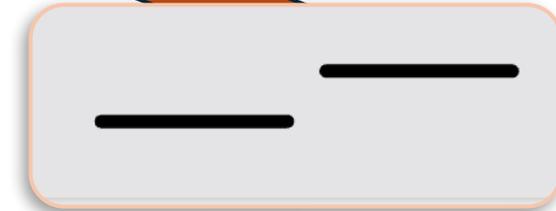
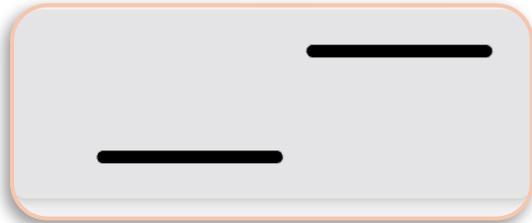
Melody Game
Development

Functionality

Melody Game Test
&
Outcomes

Functionality

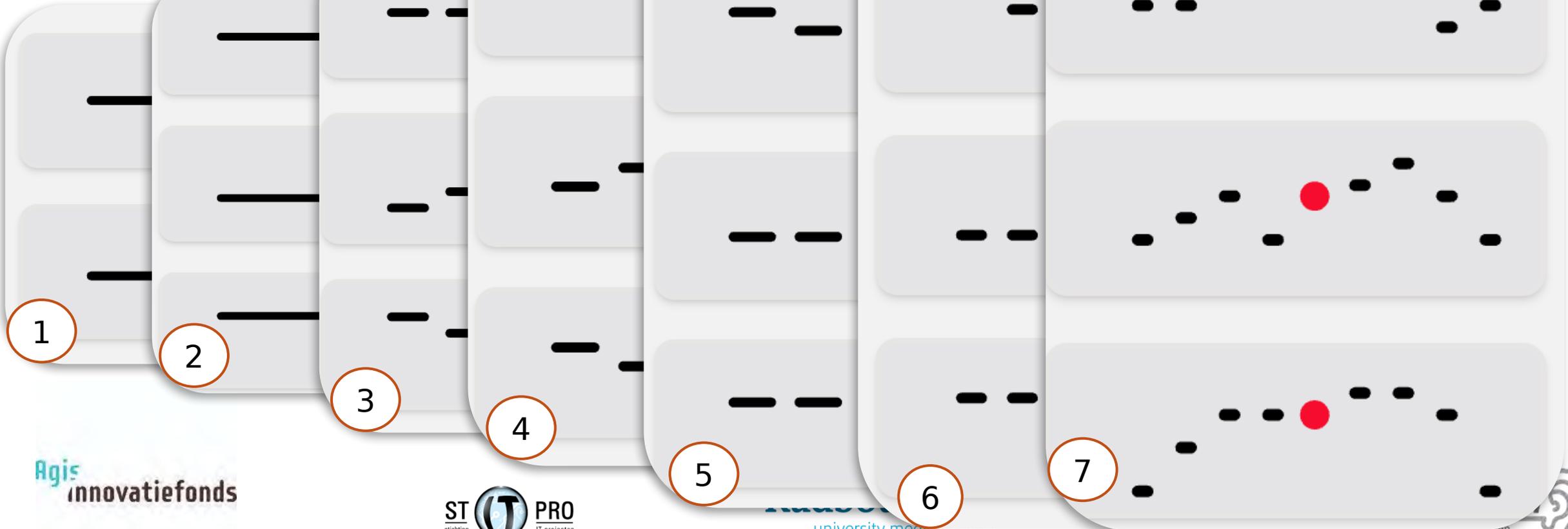
4 tone steps:
9 - 4 - 2 - 1
semitones



Increasing
difficulty

Functionality

7
levels



Functionaliteit

3 modi:

Listen /
Play

Challenge

Training:
Repeat &
exercise

The screenshot displays the application interface for 'Sublevel 1B'. At the top, there are three mode buttons: 'Luisteren' (highlighted in black), 'Spelen', and 'Uitdaging'. Below the mode buttons, there are three sub-levels, each with a different colored border: green, red, and red. Each sub-level contains two horizontal bars representing musical notes. The 'Luisteren' mode is active, showing a 'Luister en klik' (Listen and click) interface with two horizontal bars and a red dot indicating the current position. At the bottom, there are 'Volgende' (Next) and 'Stop' buttons.

Cochlear Implant
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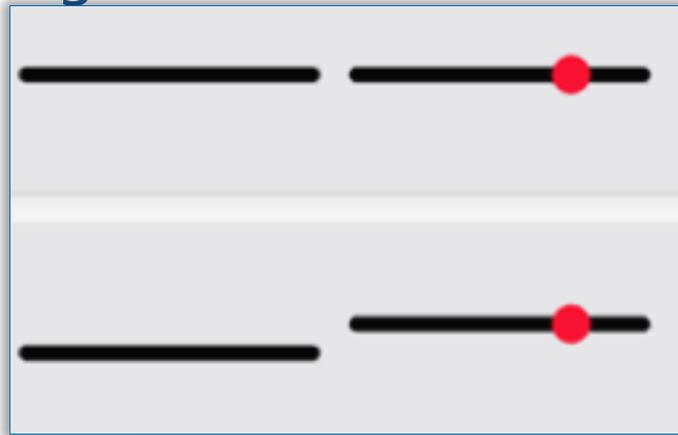
Melody Game – test

15 adult CI users, 17 more adult CI users May '25

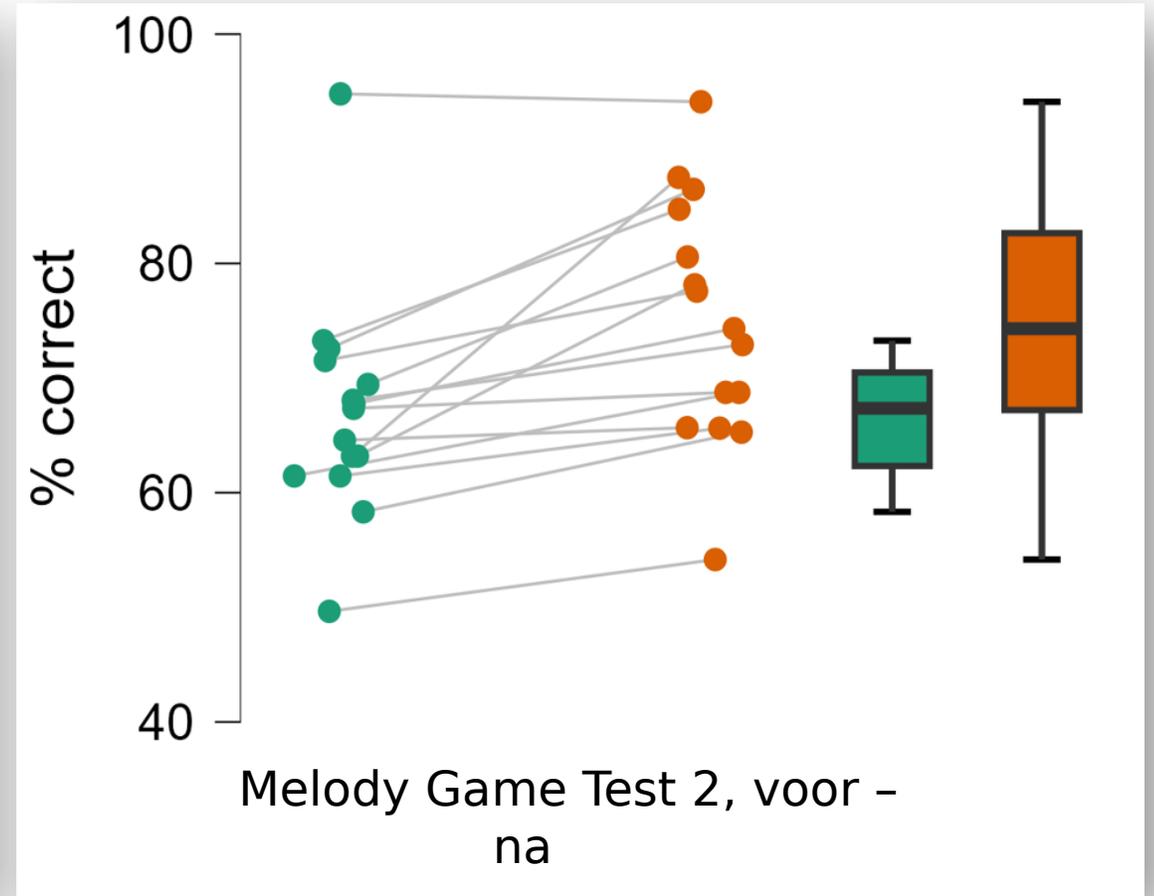
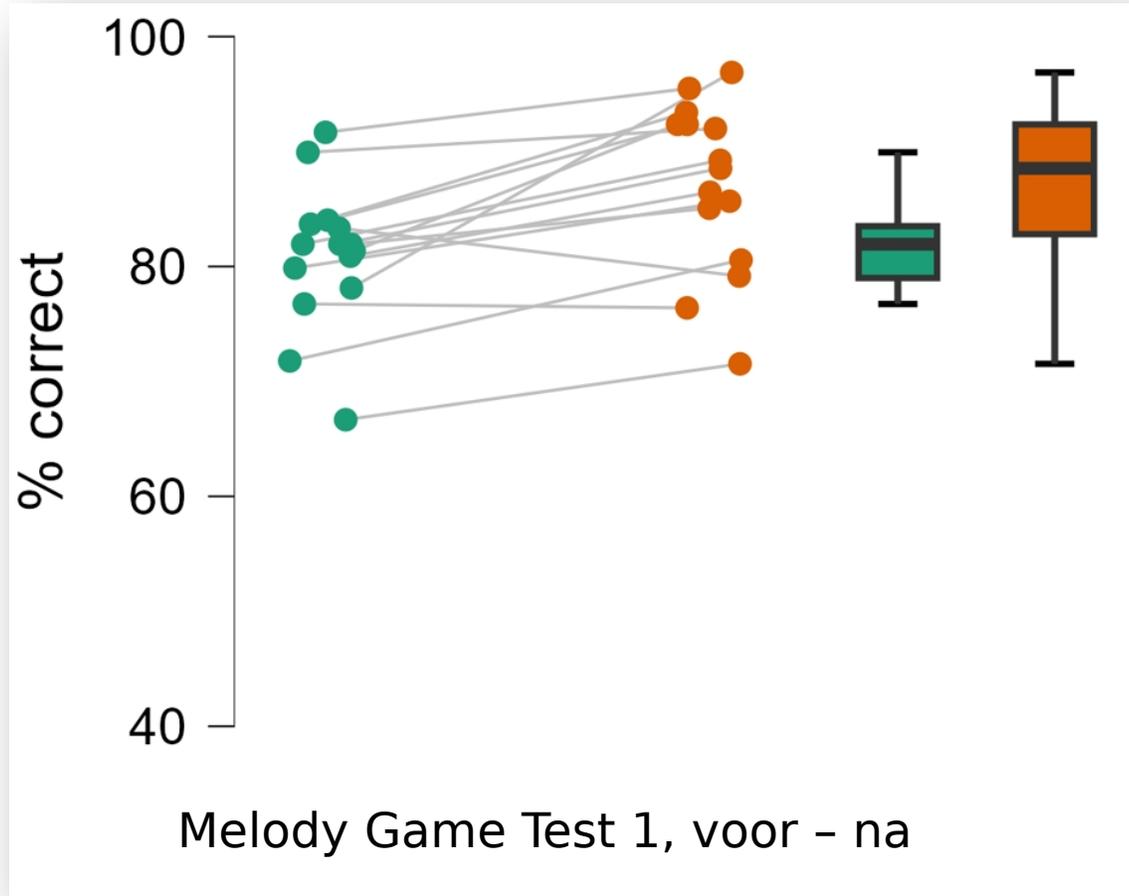
Test 1 and Test 2: 288 questions each

TEST 1: discriminate between 2 identical or 2 different tones

TEST 2: discriminate between 2 identical tones or 2 tones stepping up or stepping down



Melody Game Test, *outcomes after 3-month training*



Discussion

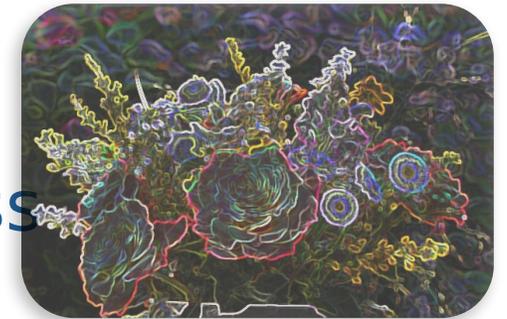
- Improved music enjoyment, social participation and quality of life

MELODY GAME & DATA OUTPUT

- Valuable contribution and insights into the training process

MELODY GAME TESTS

- Insights into outcomes of the training process



PARTICIPANT:

“The Melody Game is hard work and sometimes frustrating, but it brought me from ‘grey, dull music’ to better perception of melodic lines

Future perspectives

Continued development of

- Melody Game
- New online apps to exercise with timbre of voices and/or instrument sounds
- Embedding of Melody Game and new apps into CI rehabilitation
- Promotion of blended learning
- Obtaining adequate funding and sustainable implementation

Thanks & contacts

Joke Veltman, IQ Health & KNO Radboudumc
joke.veltman@radboudumc.nl

info@musi-ci.nl

www.musi-ci.nl





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