

Mid-term conference

Handbooks in Digital Rehabilitation
19.09.2024

jamk | University of Applied Sciences

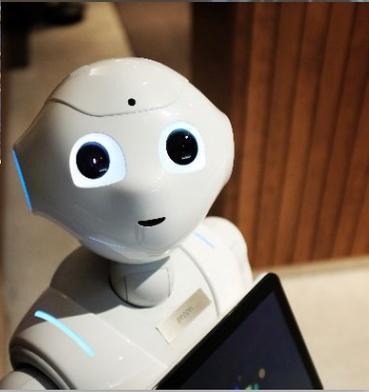
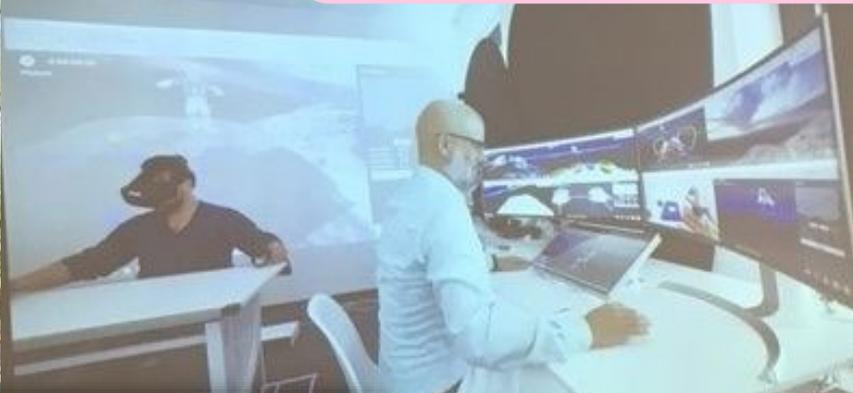


RADIC



Funded by
the European Union

Digital Rehabilitation



Definition Digital Rehabilitation

- Digital Rehabilitation (DR) is the **use of digital technologies** (by rehabilitation professionals or self-driven service users) **as part of the rehabilitation process** in its different phases (assessment, goal setting, intervention, reassessment, secondary prevention).
- Digital Rehabilitation aims to **optimize functioning and reduce disability** of individuals in interaction with their environment.
- Therefore, Digital Rehabilitation has a strong link with the **empowerment** of individuals and communities.

(DRIENE-consortium, adapted by WHO, 2023)

Background

- Objective WP03: Enhanced pedagogical competence and skills of teachers and increased knowledge of teachers and students related to Digital Rehabilitation.
- In WP03 two handbooks have been developed.

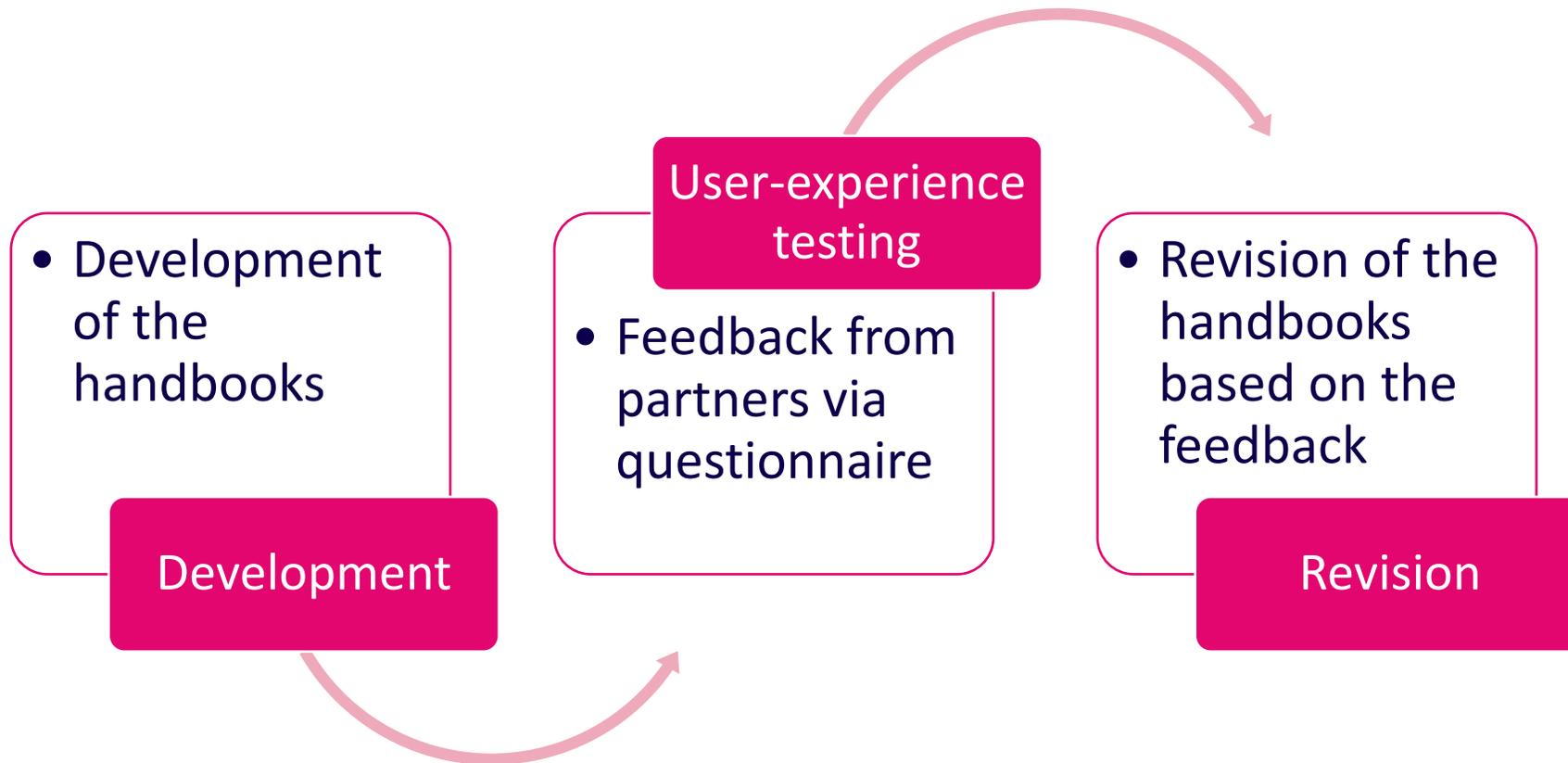


General handbook of Digital Rehabilitation



Educational handbook in Digital Rehabilitation

Development of handbooks



Background

- Objective WP03: Enhanced pedagogical competence and skills of teachers and increased knowledge of teachers and students related to Digital Rehabilitation.
- In WP03 two handbooks have been developed.



General handbook of Digital Rehabilitation



Educational handbook in Digital Rehabilitation



Handbook of Digital Rehabilitation

User Guide

1. Introduction

- Scope
- History
- Definitions
- Potentials
- Application in sub-Saharan Africa
- Prerequisites for application

2. Best practices

- Best practices of Uganda, Zambia and Ethiopia
- Important points for applications

3. Competencies

- Competency Framework
- Approaches to evaluate competencies
- Current skills of healthcare professionals

4. Accessibility

- Importance
- Challenges
- Guidance on digital accessibility

5. Barriers

- Barriers and potential strategies to overcome the barriers

6. Technologies

- Definition
- Overview of technologies
- Requirements to facilitate

7. Ethics, security, regulative framework

- Ethics in digital environment
- Policies and regulations
- Cybersecurity and data protection



Handbook of Digital Rehabilitation

User Guide

1. Introduction

- Scope
- History
- Definitions
- Potentials
- Application in sub-Saharan Africa
- Prerequisites for application

2. Best practices

- **Best practices of Uganda, Zambia and Ethiopia**
- Important points for applications

3. Competencies

- Competency Framework
- Approaches to evaluate competencies
- Current skills of healthcare professionals

4. Accessibility

- Importance
- Challenges
- Guidance on digital accessibility

5. Barriers

- Barriers and potential strategies to overcome the barriers

6. Technologies

- Definition
- Overview of technologies
- Requirements to facilitate

7. Ethics, security, regulative framework

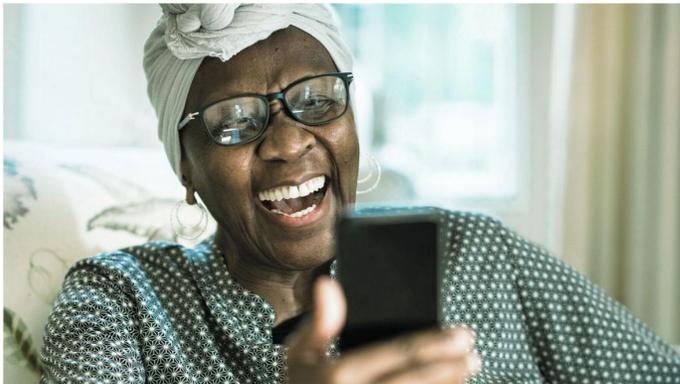
- Ethics in digital environment
- Policies and regulations
- Cybersecurity and data protection



Best Practices in Digital Rehabilitation

Project < RADIC < RADIC Handbook - 2. Best practices

RADIC Handbook - 2. Best practices



This chapter explores the successful methods and practices of Digital Rehabilitation in Sub-Saharan Africa. It highlights how organizations and professionals in the region have employed innovative technologies like mobile applications and telemedicine platforms to

Best Practice number 1:

The first best practice example is based on the publication from Teriö et al. and Kamwesiga et al. [8,9].

Mobile phone-based intervention helps to improve access to rehabilitation – A case example from Uganda

Best Practice number 2:

The second best practice is based on the publication from Simpson et al. [10].

Creating a community with **digital support groups** for adolescent pregnant women living with HIV: A best practice example from Zambia

Best practice number 3:

The third best practice example is based on the publications from Manyazewal et al. [11–13].

Digital Medication event reminder results in lower costs for health care in people with Tuberculosis: A case example from Ethiopia



Best practice from Uganda



Challenge

- The prevalence of **stroke** in Uganda is increasing
- No national strategies or programs for the prevention or treatment
- Poor infrastructure, lack of staff/transportations



Opportunity

- Digitalization is growing
- More and more mobile device users
- Urban areas are mostly covered with internet



Solution

- **F@ce intervention**



Client's profile

- Adults with stroke
- People living in rural part of Uganda
- Access and ability to use a mobile phone
- Willing family member or caregiver to support the client



Key message

- Could increase accessibility, affordability, and continuity in the rehabilitation process after stroke but there is still a lack of research in this area
- F@ce seems to be acceptable for clients and family members
- Indications that the intervention increases functioning in daily living and self-efficacy



Best practice from Uganda



Solution – Intervention

- F@ce → **F**: Face-to-face between the Occupational Therapist (OT) and the client; **@**: Assessment; **C**: Collaboration; **E**: Evaluation
- Client formulates three goals in daily activities that he/she wants to reach
- Family members were informed about the client's target activities and the planned strategies for reaching these targets
- Clients receive SMS's or phone calls as a reminder to perform the activities during the day and to score the performance of the activity
- Client visit rehab center for face-to-face sessions



Best practice from Uganda



Solution - Technology

- Client uses a usual mobile phone to receive reminders, phone calls and sending text-messages
- No high internet literacy is needed
- For the rehabilitation professional, the text-messages serves as a tool to monitor the rehabilitation and to identify performance gaps so they can help to close those gaps

Discussion on Digital Rehabilitation

- What are your experiences with Digital Rehabilitation?
- What are other examples of Digital Rehabilitation?
- What other technologies can you use for Digital Rehabilitation?



Discuss in a break-out room (10 minutes).

Discussion on Digital Rehabilitation

Look at the handbook „Digital Rehabilitation“ via <https://www.jamk.fi/en/project/radic> at the respective chapters and discuss the following questions:

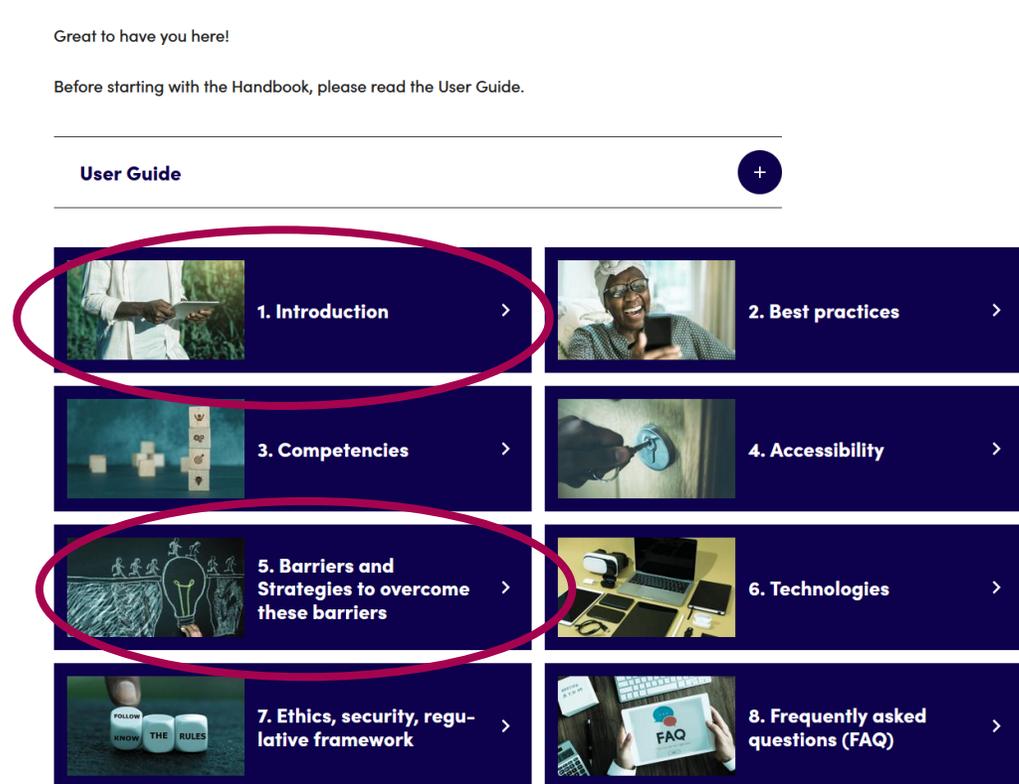
- What do you see as the potential of Digital Rehabilitation?
- What are the biggest barriers and enablers to Digital Rehabilitation in your opinion?



Discuss in a break-out room (15 minutes).

How to find the Handbook of Digital Rehabilitation (digital version)

➤ <https://www.jamk.fi/en/project/radic>



Background

- Objective WP03: Enhanced pedagogical competence and skills of teachers and increased knowledge of teachers and students related to Digital Rehabilitation.
- In WP03 two handbooks have been developed.



General handbook on Digital Rehabilitation



Educational handbook in Digital Rehabilitation



Educational Handbook of Digital Rehabilitation

1. Introduction

- Who is the target group of this handbook?
- What is the main goal of the handbook?
- What is the content of this handbook?
- How can I use the handbook?

2. Guiding principles

- Introduction to Digital Rehabilitation
- Competences for Digital Rehabilitation
- Framework for Digital Rehabilitation competences

3. Organizational and digital resources

- Infrastructure for digital learning
- Basic scenarios for virtual learning
- Structural and organizational aspects
- Managing, protecting and sharing digital resources

4. Teaching and Learning (for Digital Rehabilitation)

- Learning methods to facilitate learners digital competences
- Teaching methods
- Co-Creation methods

5. Assessments

- Formative assessments
- Summative assessments

6. Good pedagogical practices

- Good practices from the partner universities



How to find the Educational Handbook (digital and printed version)



- The digital version of the handbook is coming soon; you will find it via the project website: <https://www.jamk.fi/en/project/radic>
- You can find the handbook in a pdf format via this link: <https://hs-gesundheit.sciebo.de/s/9FOePRRIA08rFuF>

Educational Handbook of Digital Rehabilitation in Health Care for East African Countries



Thank you!

jamk | University of Applied Sciences



THE STATE UNIVERSITY OF ZANZIBAR
Catalyst for Social Changes

UNIVERSITY OF RWANDA



RADIC



Funded by
the European Union