Special track on Technology Enhanced Relearning Global Health 2021

Editorial

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Systems developer program Gothenburg University 1984 – 1987
Working on the business side 1986 – 2011
- Programmer systems developer, project management, development manager (R&D ERP systems and distribution and logistics of pharmaceutical)
- Own business Open Innovation
- ODI node Gothenburg 2011 - 2021

Project Management Chalmers 1998 - 1999
IT management Gothenburg University 2008 – 2011
Visiting researcher and instructor at Michigan State University 2014 – 2016
PhD at Mid Sweden University 2020, “The benefits of Digital Technical Information”
Post Doc Karlstad University focusing on e-health

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Our group focuses on e-health in various perspectives. The foundation is that the context has a health approach combined, whether it is on a general level, like this study, or more specific, such as stroke rehabilitation. The health approach is always combined with digitalization in some ways, whether it is software or hardware, like an information system or communication sensors. Added to this can be systematic processes, such as stakeholders' value.

We are always interested in further networking, please approach us on karin.ahlin@miun.se

Technology Enhanced Re-learning

Traditional relearning systems require a large number of clinical staff and are difficult to deploy because of high running costs. One solution is the design of Technology Enhanced Systems (TES), which have been recognized as highly useful for several treatment types when the TES are based on relearning approaches focused on adults with chronic diseases.

Recent studies highlight that different types of TES can be useful for relearning, combining various categories of technologies, such as: tele-relearning based on audio and videoconferencing, Internet-based therapy, serious game-based therapy and Virtual Reality based therapy.

Recent research studies have found that most adults prefer to rehabilitate in place, and that policy makers similarly favour this idea, but also that contextual and psychosocial factors must be carefully explored if TES can result in a beneficial impact.

Technology Enhanced Systems (TES)

The global population is increasing significantly and therefore more medical and social services will soon be needed, designed to support adults. Traditional relearning systems require a large number of clinical staff and are difficult to deploy because of high running costs.

One solution is the design of Technology Enhanced Systems (TES), which have been recognized as highly useful for several treatment types when the TES are based on relearning approaches focused on adults.

Some TES have been repurposed learning systems designed for children; these are typically less useful. Effective approaches cannot be based on learning principles for children but must be based on andragogy (adult learning theory), which can be refocused for relearning and training.

Adult learning and re-learning

Based on andragogy, which means the method and practice of teaching adult learners.

The fundamentals for adult learning are:

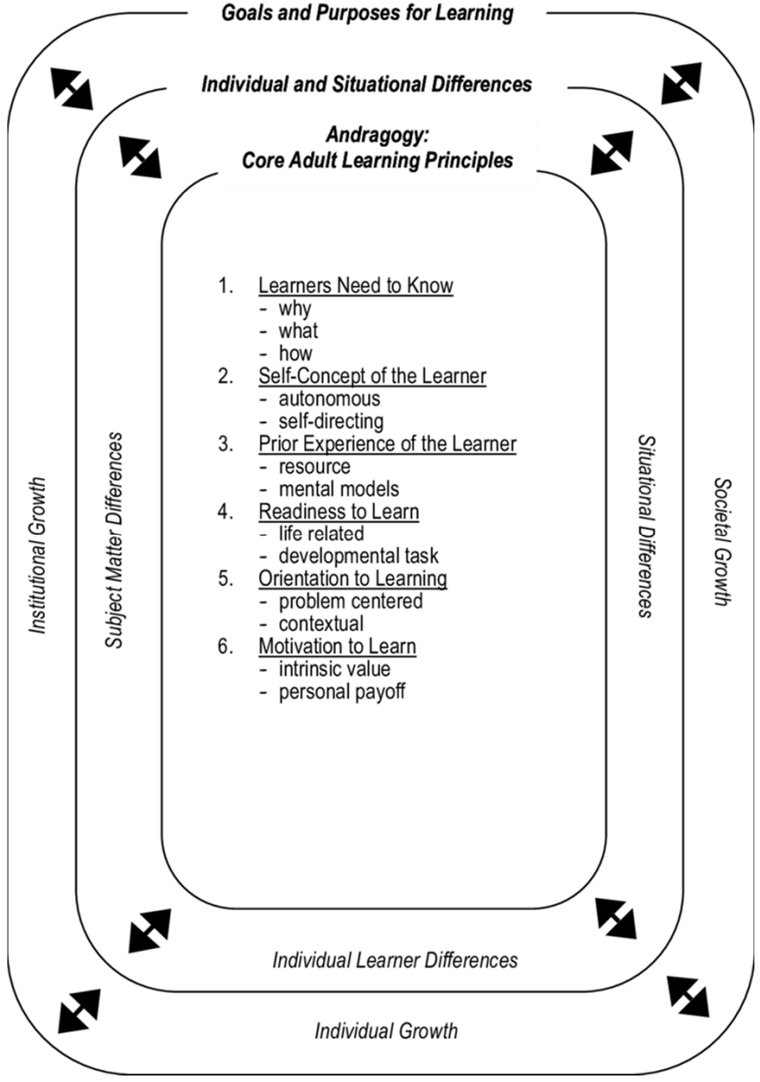
1. The adults need to know
2. Self-concept
3. Learning from experiences
4. Readiness to learn
5. Orientation to learning
6. Internal motivation

Knowles’ Adult learning theory

The adult learning theory (andragogy) highlights that adults tend to learn differently than traditional children's education that is usually referred to as pedagogy (Knowles et al., 2014).

Knowles suggested that adults should actively participate in the planning, development, and implementation of the learning process (Knowles et al., 2014).

Andragogy in practice Model



Source: Knowles et al. (2014). The adult learner: The definitive classic in adult education and human resource development, page 80. Routledge

Requirements for TES at re-learning

Individualized learning plan
Consider users' previous practices and knowledge
Involvements of relatives and friends
Individualized technical requirements
Usability of graphical interface
Personal integrity
Technical stability

Papers

Technology acceptance of an online speech and language assessment application for stroke patients - the medical caregivers' viewpoints Authors: Awais Ahmad, Karin Ahlin, and Peter Mozelius Contact: awais.ahmad@miun.se

Internet of medical things for independent living and re-learning Authors: Ali Hassan Sodhro, Awais Ahmad, Karin Ahlin, and Peter Mozelius Contact: alihassan.sodhro@miun.se

A transition towards digital home visits in social care and home health care during the corona pandemic Authors: Karin Ahlin, Magnus Zingmark, and Thomas Persson Slumpi karin.ahlin@miun.se