

# Self-tracking devices and sustainable labour participation of older workers

Professorship Labourparticipation





# Self-tracking devices and sustainable labour participation

Hilbrand Oldenhuis (Professorship Labour Participation)

Martijn de Groot (Quantified Self Institute)

Louis Polstra (Professorship Labour Participation)

Hugo Velthuisen (Professorship New Business and ICT)



# Self-tracking devices and sustainable labour participation

## Context:

- Retirement age is increasing
- (Working) population is getting older





# Self-tracking devices and sustainable labour participation

## Context:

- Sustainable labour participation: the degree to which individuals are able and willing to perform their current and future work in a healthy, valued way (van Vuuren, 2011; van der Klink e.a., 2010)

# Self-tracking devices and sustainable labour participation

## Sustainable labour participation:

- **Vitality:** high levels of energy, vigour, and resilience while working and the willingness to keep investing energy in the job during trying circumstances
- **Employability:** the ability to keep on performing the different tasks and positions in the current and in future organizations and sectors
- **Workability:** the degree to which an individual is mentally, physically, and socially capable of working



# Self-tracking devices and sustainable labour participation

Healthy older workers may suffer especially from insecurity about their employability:

‘For how long will I be able to keep on performing my tasks? And will there be enough opportunities for me to adapt my working environment to my needs as an older worker?’

As a result, vitality and workability may also diminish



# Self-tracking devices and sustainable labour participation

Possible solution:

Self-tracking devices can be used to increase self efficacy/empowerment and alter behaviors if necessary  
(Sundar, Bella & Jia, 2012)



# Self-tracking devices and sustainable labour participation

Self-determination theory (e.g. Ryan & Deci, 2000):

Facilitation of intrinsically motivated behavior when three basic needs are fulfilled:

1. relatedness: feeling secure, appreciated
2. competence: self-efficacy, self esteem, self confidence
3. autonomy: is the behavior in line with personal goals?





# Self-tracking devices and sustainable labour participation

Self-tracking devices can be used to alter behaviors and increase self efficacy/empowerment (Sundar, Bella & Jia, 2012)

When (see self-determination theory, Ryan & Deci, 2000):

- (Basic demand: device is easy to use and understand)
- Goals are self-chosen (autonomy)
- Feedback is based on and directed to personal goals (autonomy, competence)
- Feedback is available when actor needs it (autonomy, competence)
- Help and support from others is available (relatedness)



# Self-tracking devices and sustainable labour participation

- Self-tracking devices to measure and provide feedback on important physical or social parameters that meet the demands of SDT
- Result:
  - more self efficacy concerning employability
  - behavioral change in important (health) domains
  - more empowerment of older workers
  - higher level of sustainable labour participation



# Self-tracking devices and sustainable labour participation

Aim of this project:

Increasing sustainable labour participation of older workers by using self-tracking devices

In a broader context (EU-goals):

- (early) prevention of drop-out of older workers
- contributing to healthier lifestyle of (older) workers, while workers themselves are the main 'actors'



# Self-tracking devices and sustainable labour participation

Global overview of the project:

Small number of older workers choose one of 5 domains to be measured ('big five for healthy life', QSI):

1. Daily physical activity
2. Food and nutrition
3. Sleep
4. Stress
5. Social interaction

# Self-tracking devices and sustainable labour participation

Global overview of the project:

- Preparation phase (Oct. 2013 – March 2014):
  - Selection of participants
  - Choice of self-tracking devices, adapting devices if necessary
  - Design of execution activities (additional self-report measures, how to integrate SDT-principles, etc.)
  - First measurement of relevant variables

# Self-tracking devices and sustainable labour participation

Global overview of the project:

- Execution phase (April 2014 – June 2014):
  - Participants use and test the selected self-tracking devices
  - Monitoring the results; adapting the devices/data-display if necessary
  - Final measurement of relevant variables



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Global overview of the project:

- Evaluation phase (July 2014 – Oct. 2014):
  - Evaluation of the results
  - Writing-up the final report

# Self-tracking devices and sustainable labour participation

Participating company: 'Museumtechnische werken'







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Participating company: 'Museumtechnische werken'

'Museum-technical products':

- Small company
- Supporting management
- Protected working environment
- Intensive supervision of employees



# Self-tracking devices and sustainable labour participation

End product:

- Description of (some) basic principles for self-tracking devices (and their implementation) if they are intended to contribute to the increase of the sustainable labour participation of older workers.

# Thank you!

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