Knowledge about physical activity among older adults: Short term effects of a neighbourhood environment Internet-based intervention

Alexandre Mouton, Jérôme Rompen & Marc Cloes

**Highlights**
- Intervention is composed of a 2 month access to a neighbourhood environment website and of 2 monthly tailored emails
- The intervention resulted in short term improvements of the knowledge about physical activity (PA) recommendations by the intervention groups
- Knowledge about the environmental opportunities for PA increased slightly during intervention but remains rather poor
- Relationships between premotivational constructs, such as PA knowledge, and motivation about PA in a long term perspective are still unclear

**Background**
- Despite multiple proven health benefits, population in Western countries meet less and less the public health recommendations for PA when they get older
- Recent studies have shown that Web-based interventions to promote PA exposed promising effects, with at least as many positive outcomes as non Web-based interventions, and at a lower cost
- Older adults are the fastest growing group of Internet users and use it for health-related purposes
- Knowledge about PA, a premotivational construct, could be increased using Internet-based interventions

**Aim**
Explore the effects of a neighbourhood environment Internet-based intervention on knowledge about PA among older adults

**Methods**
- **First group (n=46)**
- **Second group (n=41)**
- **Control**
- **Intervention**
- **Follow-up**

- 2 months → 2 months → 1 month

**Intervention**: Environmentally PA website + tailored emails

**Control**
- No significant increase during intervention in both groups (p=0.184 & p=0.259)
- Knowledge remains versatile and rather poor (1 to 3 opportunities cited per participant)

**Follow-up**
- Significant increase during intervention in group 1 (p=0.044), overall for group 2 (p=0.032)
- During follow-up, knowledge remains quite stable and increases slightly

**Results**

- Knowledge about PA recommendations (/4)

- Knowledge of local opportunities for PA (n)

**Conclusions**
- A neighbourhood environment Internet-based intervention resulted in short term improvements of the knowledge of PA recommendations by older adults
- Few improvements of the knowledge of the local opportunities for PA were observed despite the environmentally approach of the intervention
- A similar but longer (3 month) intervention with weekly tailored feedback exposed significant improvements, but higher drop out rate (30%)
- Create more “senior friendly websites” could help to extend their exposure and engagement to an Internet-based intervention
- Further research must extend relationship between premotivational constructs, such as PA knowledge, and motivation about PA in a long term perspective

**Ask references to the first author (Alexandre.Mouton@ulg.ac.be)**