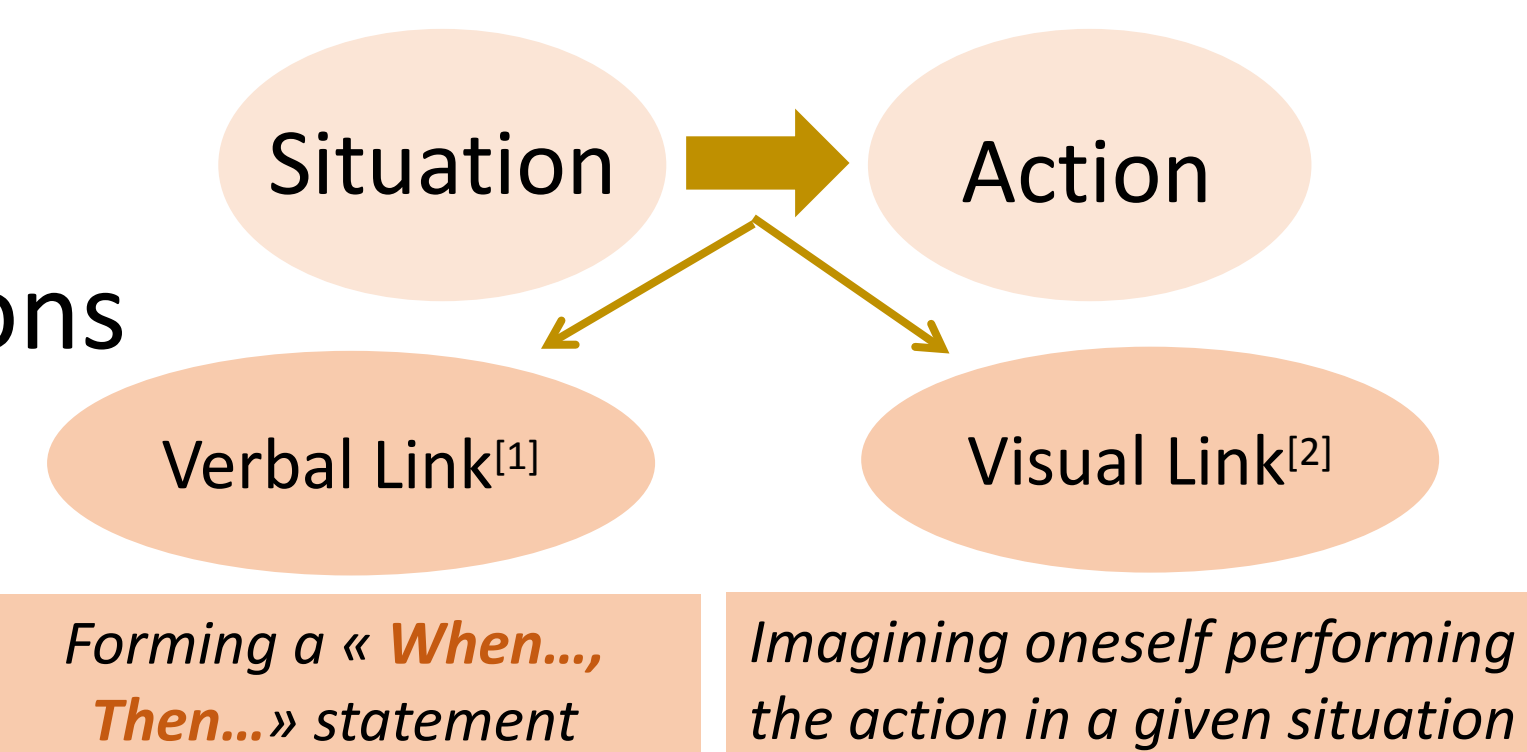


# Impact of a digital program to learn implementation intentions (II) on daily-life goal-directed-behaviours, prospective memory (PM) and well-being in older adults: a pilot study

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## Introduction



- Implementation intentions (II)
- Increases older adults'
  - ✓ Everyday Prospective Memory (PM)<sup>[3]</sup>
  - ✓ Everyday health related behaviours<sup>[4]</sup>
  - ✓ Inhibition<sup>[5]</sup>
- Burkard et al. (2014)<sup>[6]</sup> designed a program teaching elderly with PM impairments to flexibly form and apply II to daily-life situations:
  - ✓ Participants successful learnt the strategy
  - ✓ Worries about PM in daily life decreased
  - ✓ Promotion of goal-directed behaviours (GDB)
- **Objectives of the present study:**
  - ✓ Adapting the program to a self-administered digital tool for healthy elderly
  - ✓ Assess older adults' acceptance of such a digital tool
  - ✓ Effects of the program on everyday PM and well-being

## Method

### Adapting the program to a digital gamified self-help format:

- 6 levels: each containing 1 psycho-education video + 12 MCQ
  - ✓ 2 levels to learn the verbal component of II
  - ✓ 2 levels to learn how to form a visual link between a situation and the action
  - ✓ 2 levels to train II automation and application to emotional regulation, action initiation and action inhibition)



### Combining quantitative and qualitative data collection:

- Everyday PM and GDB achievement (a 5-day phone diary protocol)
- Well being scales (EMMBEP; SHDS)
- Semi-structured interviews:
  - ✓ (PM and GDB in daily-life, wellbeing + feedback on the program in itself)

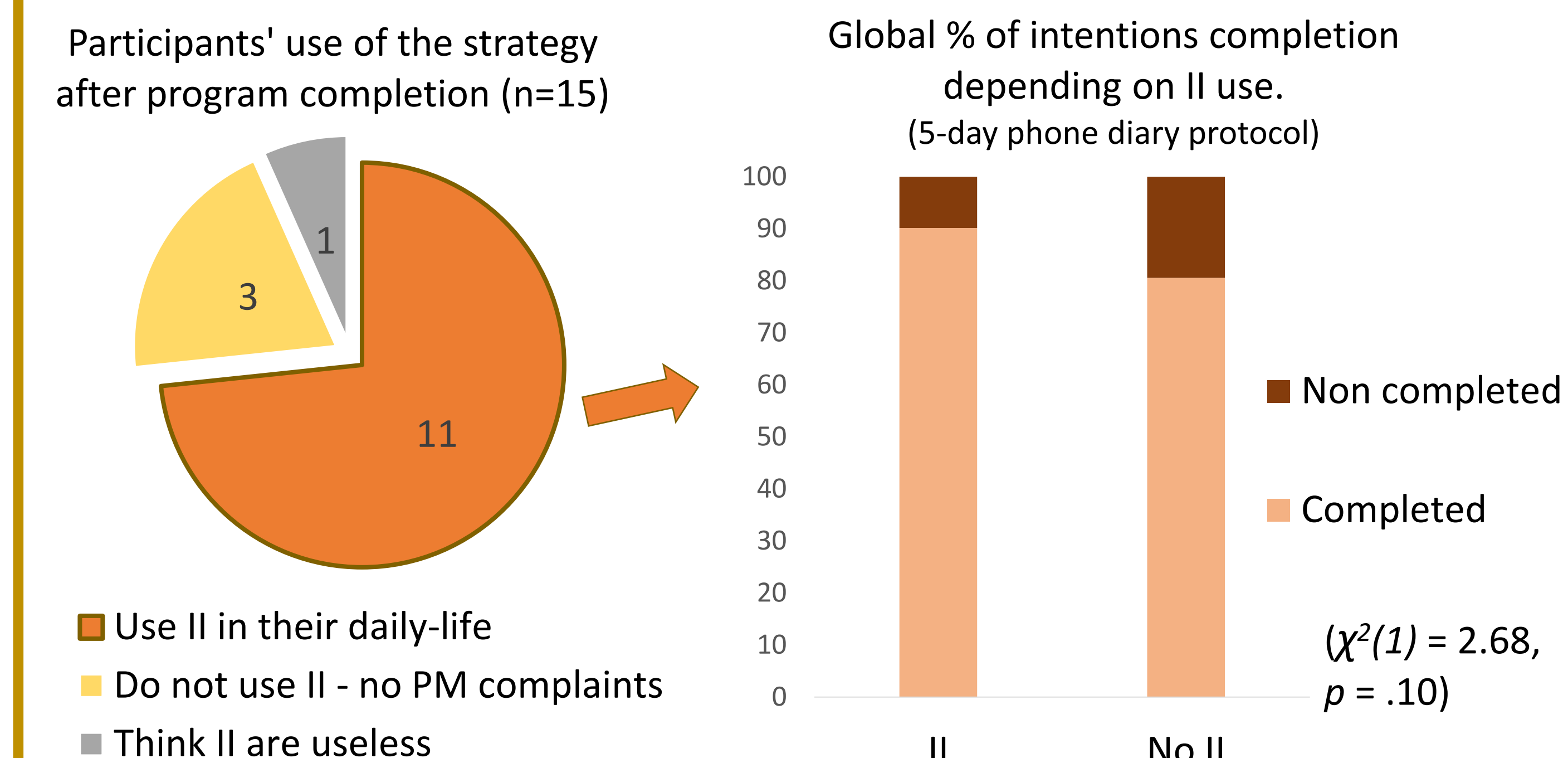
### Longitudinal design with 3 groups (N = 30)

- 2 experimental groups (learning the program at home vs. at our facility)
- 1 control group



## Preliminary results

### • Data collection is still ongoing !



- Ceiling effects on both wellbeing scales (EMMBEP and SHDS)
- First qualitative results for experimental groups:
  - ✓ Good acceptance of the digital self-help format
  - ✓ Using II ↗ participants' confidence in their ability to complete their daily-life intentions
- Multilevel logistic regression will be performed on complete sample to account for subject, use of II and importance of the intention effects.

## First conclusions

- The clinical protocol<sup>[6]</sup> was successfully adapted into a self-help digital format
- This format is well received by older adults
- The program can be completed at home (minimum knowledge of computers required)
- Preliminary results at post-test:
  - ✓ On our partial sample, using II showed a trend ( $p = .10$ ) to increase intentions completion rates
  - ✓ Qualitative results: ↗ in goal achievement and PM-related self-efficacy among participants who used II.

## Know-how: From a clinical to a digital program

- Keep it quick and easy: short levels, incremental difficulty (users shouldn't fail at any time)
- Gamification: Making it fun, giving rewards and monitoring one's progression keeps users motivated and committed
- Make sure to sum-up critical information before starting a new level
- Future perspectives: participants didn't generalize II use to new situations → add levels for meta-cognitive abilities training!

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