







# The role of social factors in the association between health literacy and health behaviors among older adults

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#### Background

- Low health literacy is associated with various negative health outcomes among older adults.
- This may partially be explained by associations between health literacy and general health behaviors.
- Social factors (e.g. loneliness, social support, social contacts) might moderate these associations.

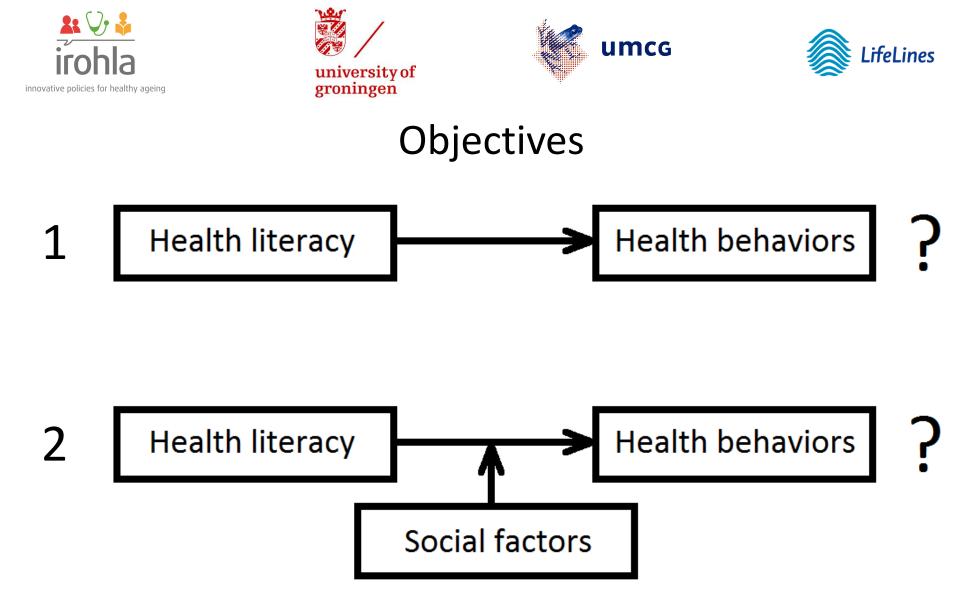






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Methods (1)



- LifeLines is a Dutch prospective population based cohort study (n=167,729). Data collected in three waves (so far).
- Data of 3,241 participants were used (51.4% male, mean baseline age = 68.9 years).
- Data collection: Health literacy, health behaviors, social factors













#### Methods (2)

#### Health behaviors

**Physical activity** 

Fruit consumption

Vegetable consumption

Smoking behavior

**Breakfast habits** 

Alcohol use

BMI





Social factors
Loneliness
Social support
Engaging in social activities
Having many social contacts
Living alone













## Methods (3)

- Health literacy measured by three validated questions (Chew, 2004). Added up to a 3-15 scale, dichotomized to high (13 or higher, 66.6%) vs. low (34%).
- Health behaviors assessed with self-report questions and dichotomized based on international standards.
- Social factors measured with various self-report measures.
- Logistic regression used, adjusted for age and sex.
  Interaction effects were assessed to study potential moderation.













## Results (1)

- Low health literacy was associated with low physical activity, low fruit and vegetable consumption, poor breakfast habits, and more obesity (OR's>1.31, p-values<.003)
- Health literacy was positively associated with alcohol use (OR=0.81, p=.013).
- No association between health literacy and smoking behavior was found (p=.26).













## Results (2)

- Association between health literacy and smoking was significantly moderated by number of social contacts (p<.05).
- Many contacts: Low HL -> More smoking (OR=1.38, p=.055)
  Few contacts: Low HL -> Less smoking (OR=0.35, p=.068)



• 34 other tested moderations were not significant.













#### **Conclusion & Implications**

- Low health literacy is associated with a range of unhealthy behaviors among older adults. This may partially explain the association between low health literacy and poor health outcomes in this group.
- The negative impacts of health literacy on health behaviors are mostly not restricted to lonely people and neither buffered by social participation.







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#### innovative policies for healthy ageing

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