

# Senior Citizens Science Literacy and Health Self-Efficacy Beliefs

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# A major demographic shift

- Changes in the age distributions:
  - From 2013 to 2050 the number of people aged 60 years and older will more than double worldwide
  - In Western countries, from 11% of the population in 2006 to 22% in 2050
- Extremely important for their well-being and independence to be actively involved in health promotional interventions – through life-long learning
- The communication of scientific knowledge about health related issues, and the enhancement of science literacy has been generally recognized as an important factor in relation to lifelong learning about health

# Media and Health Information Literacy - MHIL

➤ Media and information literacy: “...access, retrieve, understand, evaluate and use, create, as well as share information and media content in all formats...” (UNESCO, 2014)

➤ Health literacy: „the cognitive and social skills which determine the motivation and ability of individuals to gain access to, understand and use information in ways which promote and maintain good health” (WHO, 1998)

**MHIL is important as a tool for lifelong learning, which provides people with better opportunities to fight age discrimination and make informed decisions**

# Science literacy

Four interrelated aspects:

- 1) Context, which refers to a person's ability to identify life situations that involve science;
- 2) Knowledge, an understanding based on both scientific knowledge and knowledge about science itself;
- 3) Competencies, being able to identify scientific issues, explain it and use scientific evidence;
- 4) Attitudes, referring to a person's interest in science, support for scientific enquiry and the motivation to act responsibly (OECD: PISA, 2012)

**Those who possess science literacy are motivated and able to engage in seeking information, construct new knowledge and use it to control their health related behaviour**

# Perceived self-efficacy

- People's judgements about whether or not they will be able to carry out a certain behaviour - and if so - how successful they will be
  - Perceived self-efficacy - expectations concerning the ability to perform specific behaviours in a situation
  - Outcome expectation - judgement of the likely consequence of the performances

**Individuals that believe that they have the necessary skills and will be able to perform well at a task are considered likely to be more strongly motivated, to set themselves higher goals and to have the strength to carry out the act than those who are low on self-efficacy beliefs**

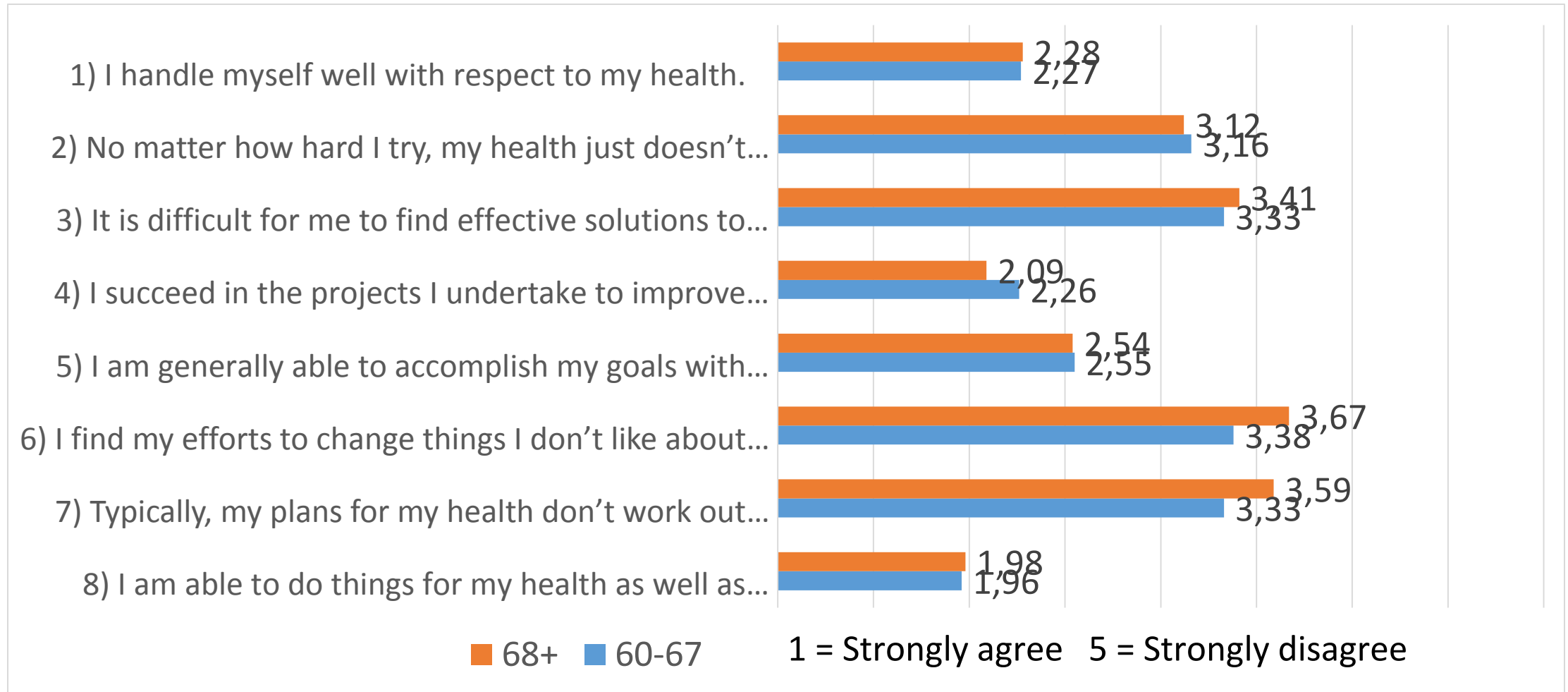
# The study – Data collection

- The aim: examine the health self-efficacy of people at the age 60+
- Research questions:
  - How do senior citizens perceive their health self-efficacy?
  - How does the perceived health self-efficacy relate to the senior citizens age groups, sex and education?
- Random sample 1.200 people, aged 18 years and older, from the whole country
- Responce rate: 58,4%
  - Participants 60+ in the sample is 27.5% - In the population 60+ is 18.7%
- A total of 176 people who are 60 years and older
  - 86 women and 90 men
  - 87 were 60-67 years old – 89 were 68 years or older

# Methods

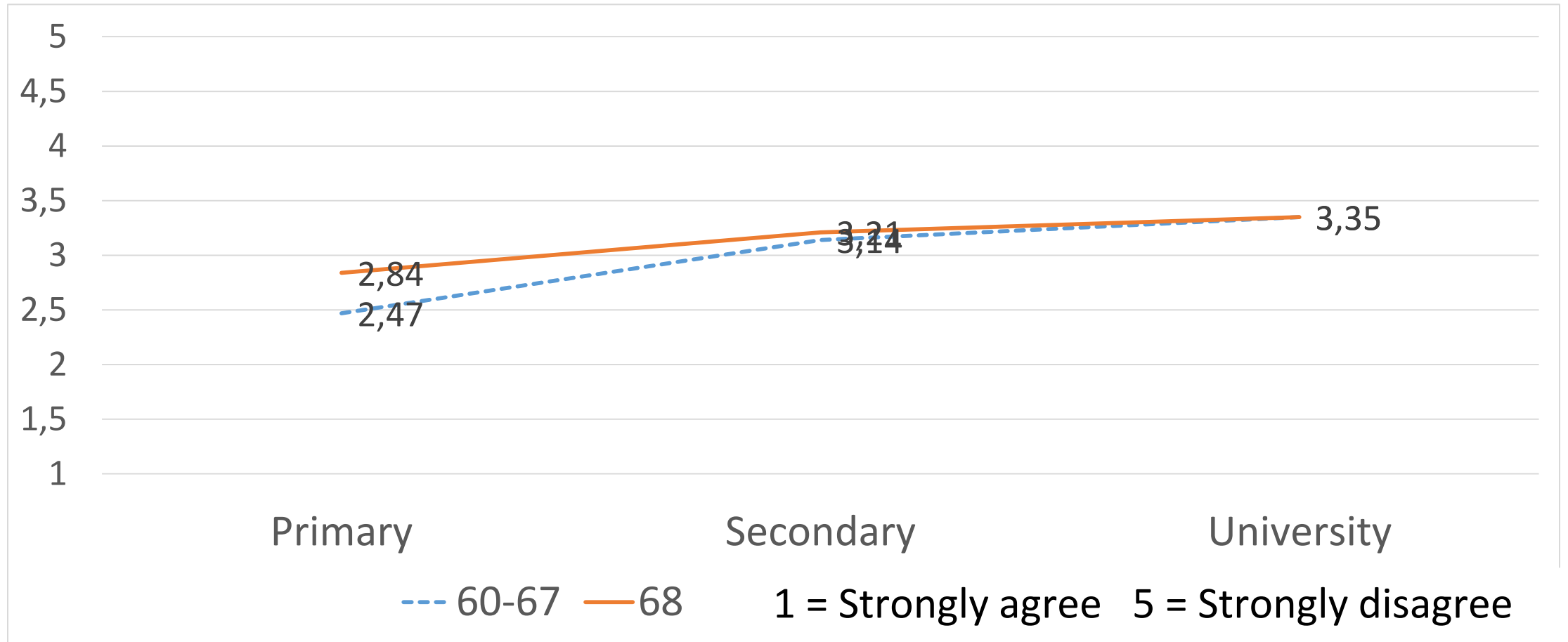
- Age groups: 60 to 67 years - 68 years and older
- Socio-demographic: Sex – Education (primary, secondary, university)
- The Perceived Health Competence Scale (PHCS): respondents' beliefs in their abilities to control their health
  - An 8-item scale - both outcome expectancies and behavioural expectancies.
  - 5-point response scale (1 = Strongly agree – 5 = Strongly disagree).
  - Half of the statements are negatively worded and half of them are positively worded
- Difference across age groups for each statement = ANOVA (one-way)
- Interaction of sex and education on the age groups self-efficacy = factorial analysis of variance (FANOVA)

# Perceived health self-efficacy beliefs by age groups

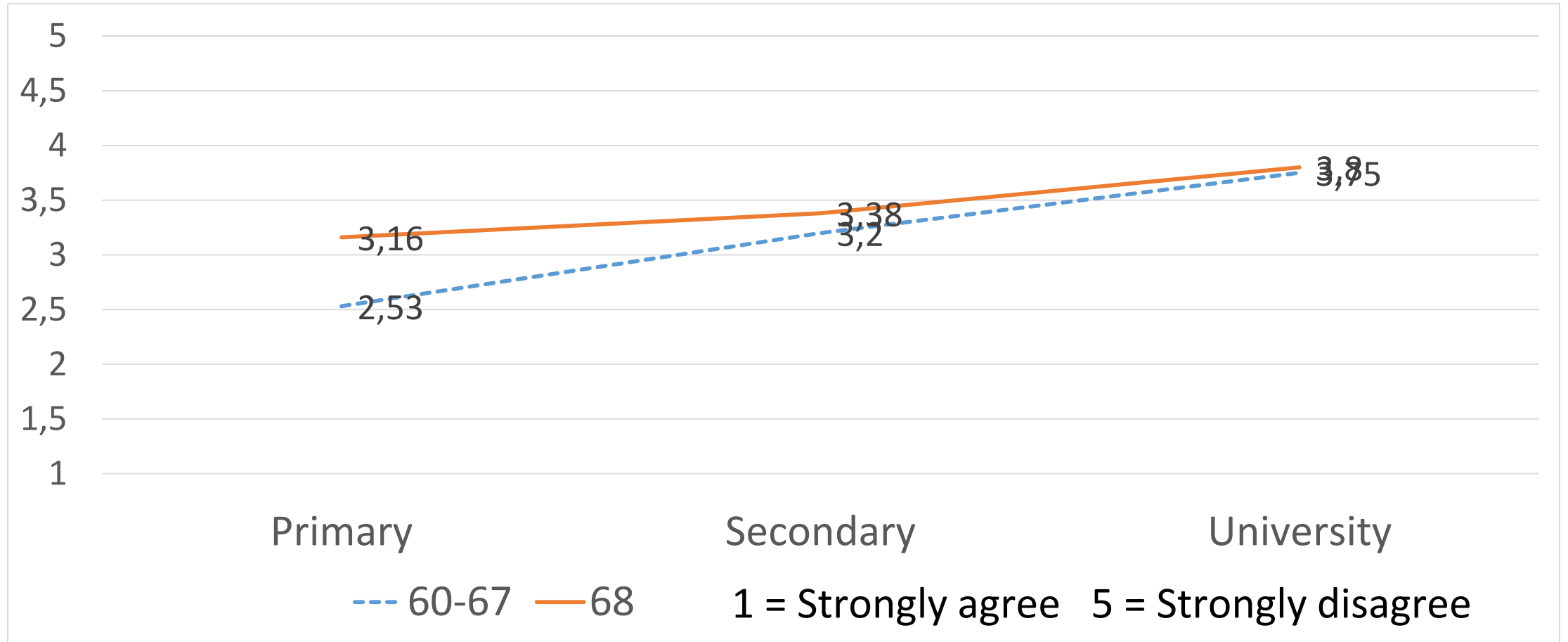




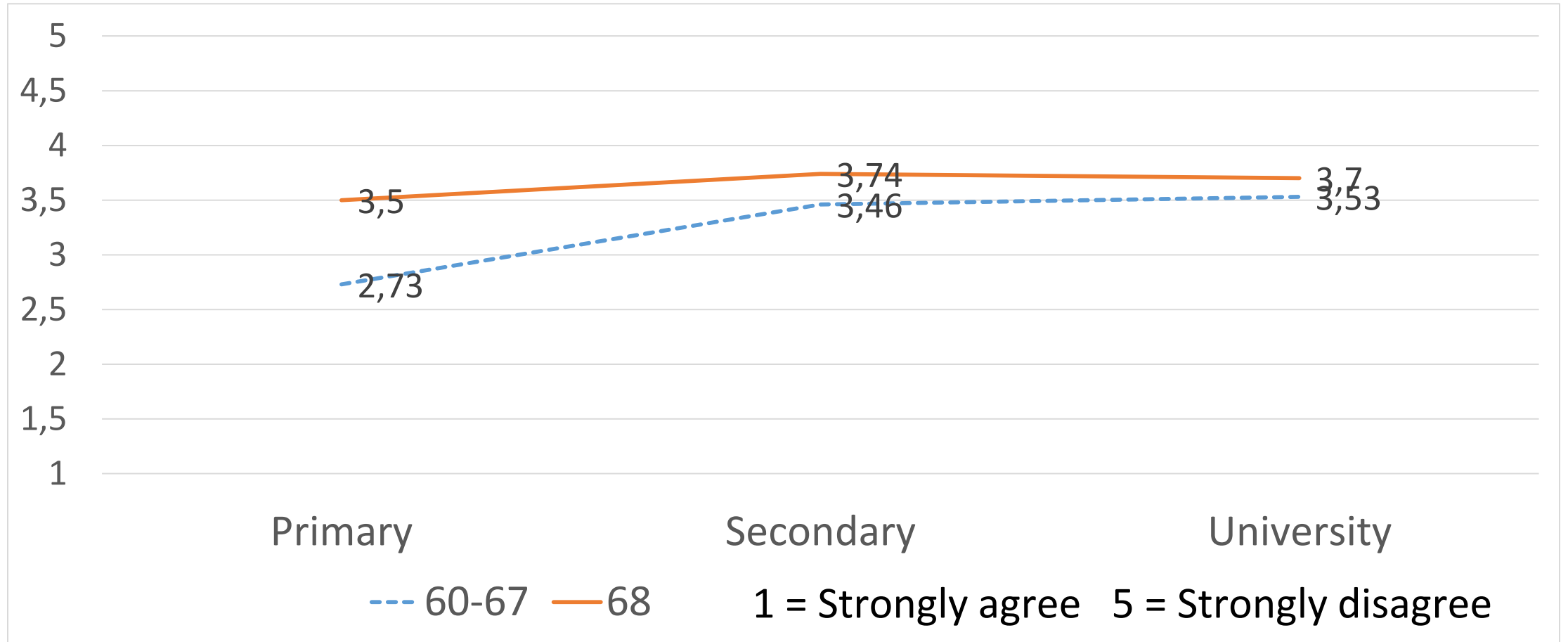
# No matter how hard I try, my health just doesn't turn out the way I would like



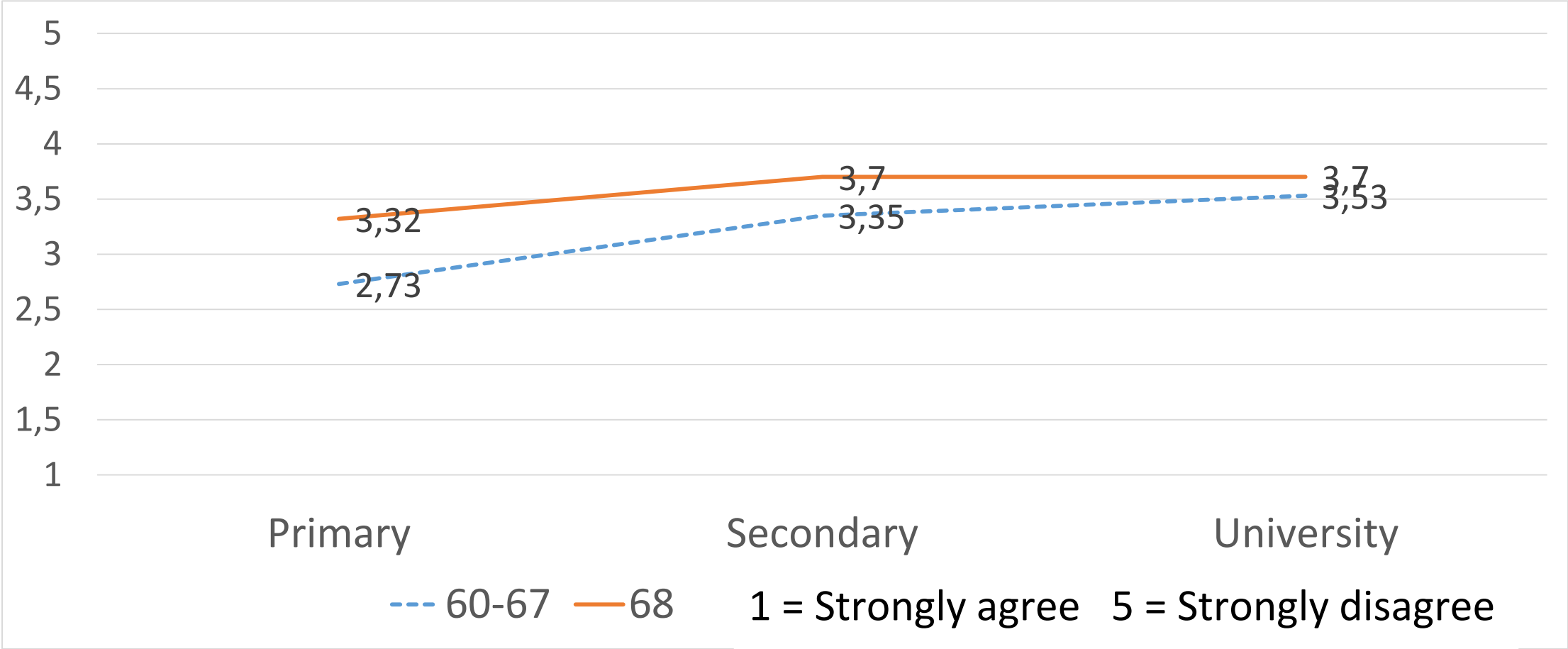
# It is difficult for me to find effective solutions to the health problems that come my way



# I find my efforts to change things I don't like about my health are ineffective



# Typically, my plans for my health don't work out well



# Conclusion

- The communication of scientific knowledge about health related issues has been recognized as an important factor in lifelong learning about healthy behaviour
- Likewise, seniors' expectations about their abilities to act on scientific knowledge are of significance
- Senior citizens with primary education believe less strongly in their capabilities to effectively managing their health than seniors with higher education
- Vital that health authorities and health professionals work together to find ways to stimulate their health competence and motivation towards healthy lifestyles – as well as the enhancing their science literacy



Thank you for the attention!

Questions?

