

Erasmus MC
Universitair Medisch Centrum Rotterdam



Subjective health expectations and lifestyle

Job van Exel

Erasmus University / Erasmus MC

iBMG / iMTA

Living longer in good health, December 4, 2008

Introduction

- Health decisions / behaviours / lifestyle
 - ⇒ Long-term consequences
 - What do you think your future will look like? (*expectations*)
 - How important are future relative to present outcomes? (*discounting*)

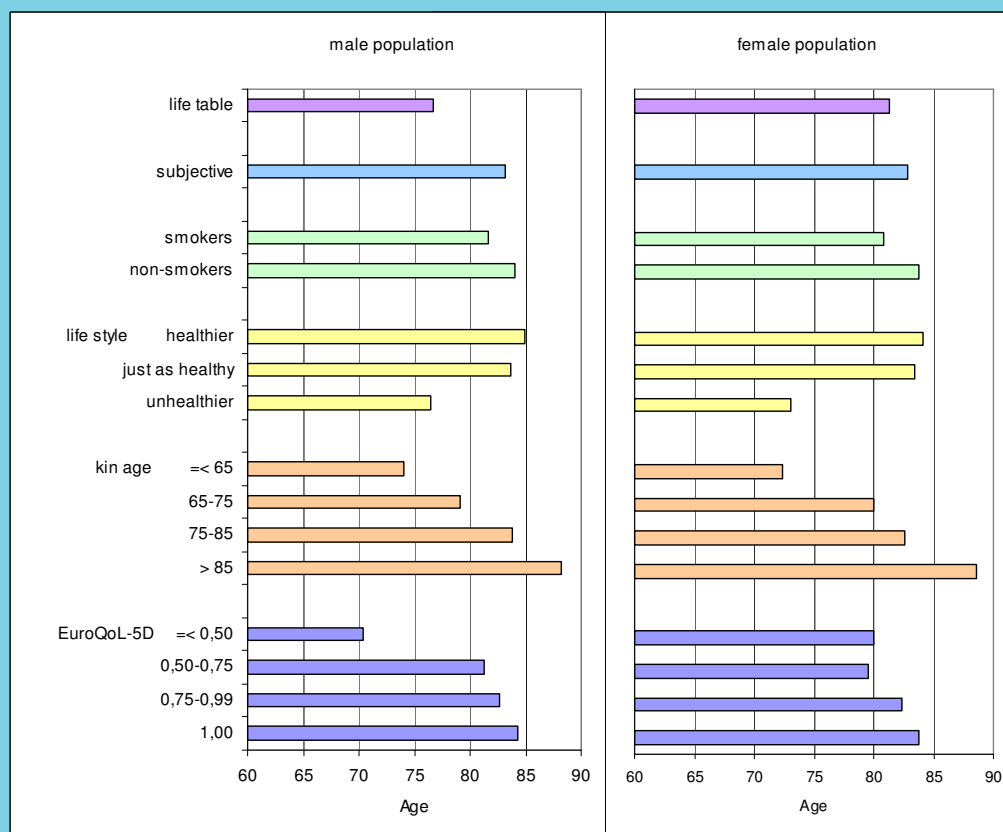
- Three studies

- Netspar project 6: incentives for investing in a long and healthy life

Study 1: Expectations about length and health related quality of life (SSM 2005)

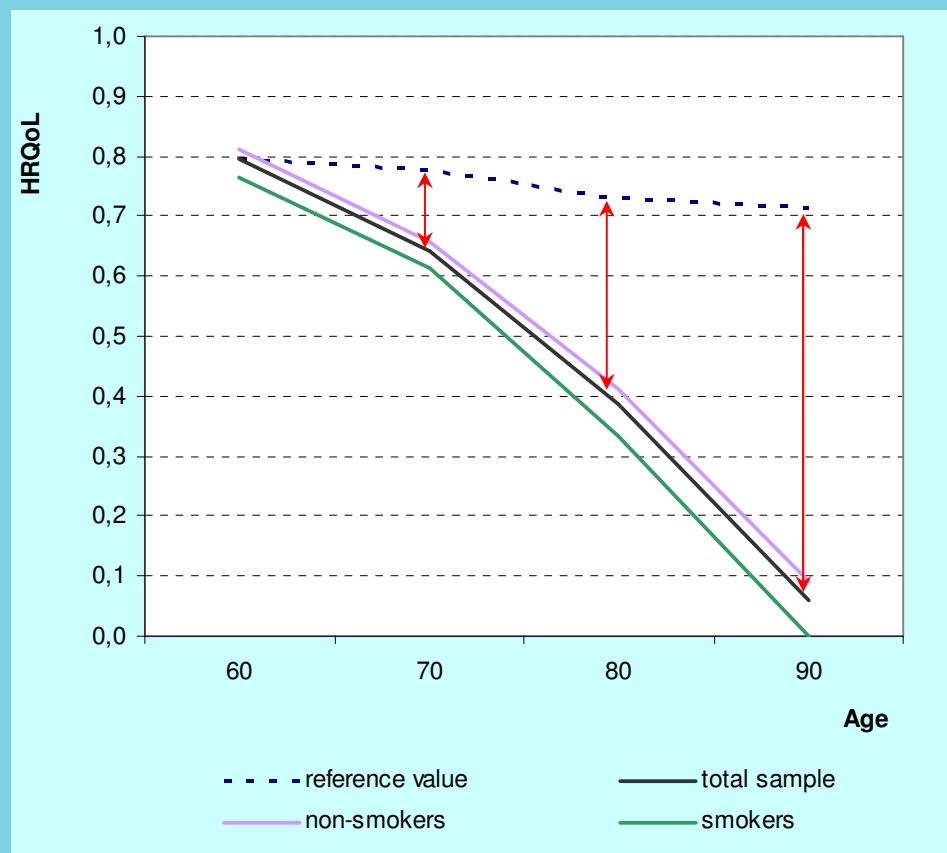
- Convenience sample (n=672)
- Objective was to explore:
 - Life expectancy ('What age do you expect to reach?')
 - Self-estimated health related quality of life at ages 60, 70, 80 and 90 using the EuroQoL-5D descriptive system
 - Differences between life table/reference values and expectations
 - Associations with personal characteristics and health behaviours

Expectations about length of life



- On average people overestimate their life expectancy by 4 years
- Males overestimate more strongly than females
- Clear associations with current health, kin age, self-assessed health lifestyle, and smoking status.

Expectations about health related quality of life



- Fairly accurate expectations regarding quality of life at the age of 60.
- From the age of 70 people substantial underestimation of quality of life at older age.
- Expectations are associated with current health and smoking status.

Study 2: Exploring quality of life expectations

- Expectations of young people aged 18 to 35 about length and quality of life at older ages
- Small pilot study, convenience sample (n=145)
- Objective:
 - Explore association between expectations and
 - a range of individual traits (e.g. personality, optimism, risk attitude)
 - willingness-to-invest in future health (in terms of effort, time, money)
 - Test new method to elicit QoL expectations

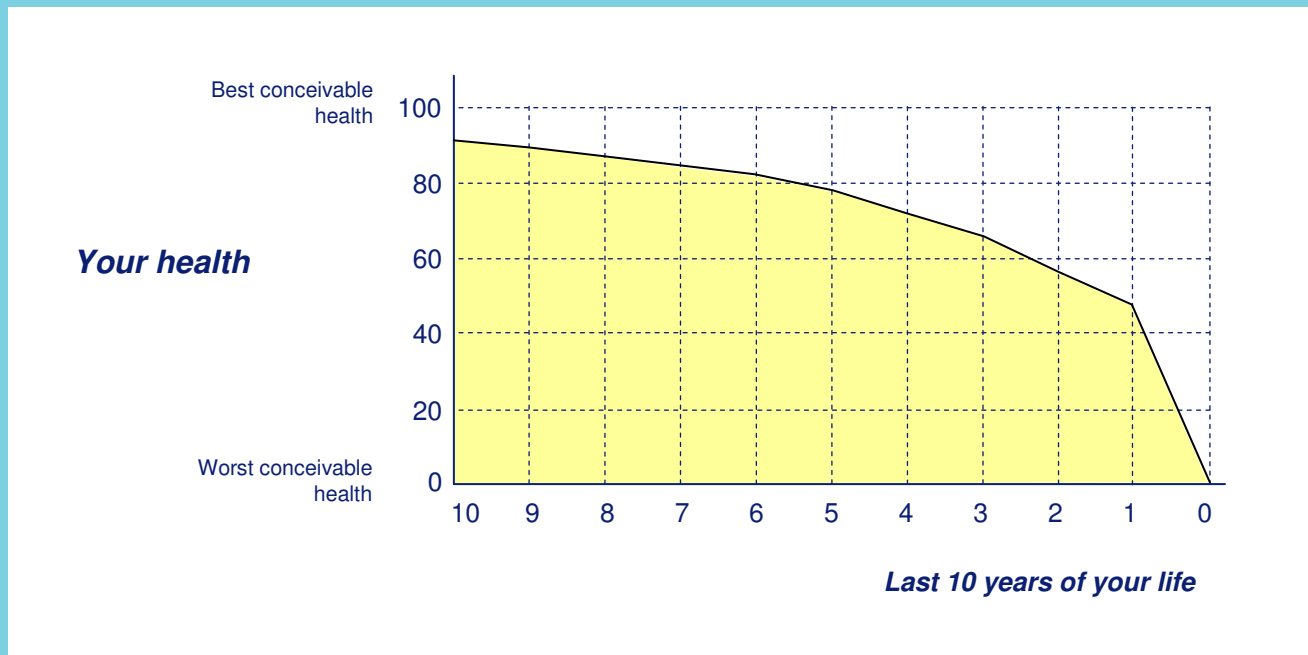
Life expectancy

		N	Mean	Difference with life table
Kinage	<65 years	3	75,0	-4,8
	65-75 years	31	76,8	-3,0
	76-85 years	81	81,8	0,9
	86-95 years	28	85,4	5,4
	>95 years	2	97,0	14,6
Lifestyle	Less healthy than others	22	73,5	-6,1
	As healthy as others	69	82,7	2,3
	More healthy than others	52	83,0	2,2
	Much more healthy	2	87,5	5,1
Smoking	No	121	82,1	1,5
	Yes, now and then	11	82,5	2,3
	Yes, daily	13	74,5	-4,5
Total		145	81,5	1,0

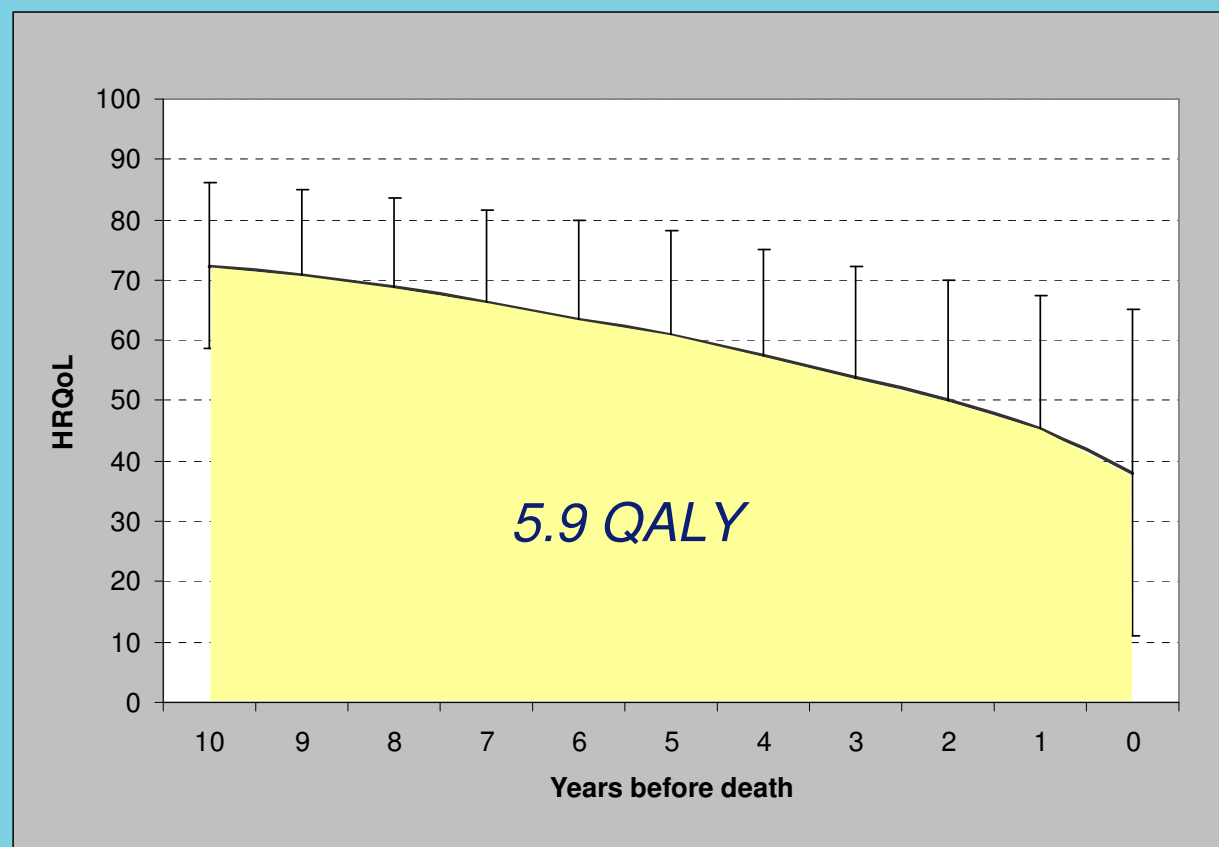
Quality of life expectations using EuroQoL-5D descriptive system

Age	N	Mean	Difference with reference value
60	145	0,83	0,03
70	138	0,71	-0,05
80	102	0,51	-0,20

An alternative method for eliciting QoL expectations



QoL expectations



- Higher for:
 - Females
 - Partner (yes)
 - Education level
 - Non-smokers
 - Exercising
 - Healthier lifestyle
- No clear association with willingness to invest in future health

Study 3: SHARE database

- SHARE

- Survey of Health, Ageing and Retirement in Europe

“What are the chances that you will live to be age T or more?”

- Survey of Health, Ageing and Retirement in Europe
- Objective: develop understanding about health and retirement of Europeans aged 50 and over

- First wave: 2004
- Second wave: 2005/6

- Objective: develop understanding about health and retirement of Europeans aged 50 and over in the diverse cultural setting of Europe

- Subjective survival probabilities

- Individual's subjective assessment of their chances of surviving to a certain age
- Question: “What are the chances that you will live to be age T or more?”

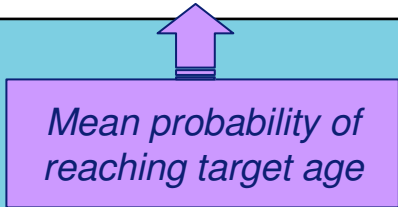
Age class of the respondent	Target age
51 to 55	75
56 to 60	75
61 to 65	75
66 to 70	80
71 to 75	85
76 to 80	90
81 to 85	95
86 to 91	100
96 to 100	105
101 to 105	110
106 and older	120

← TIME HORIZON 9-14 years

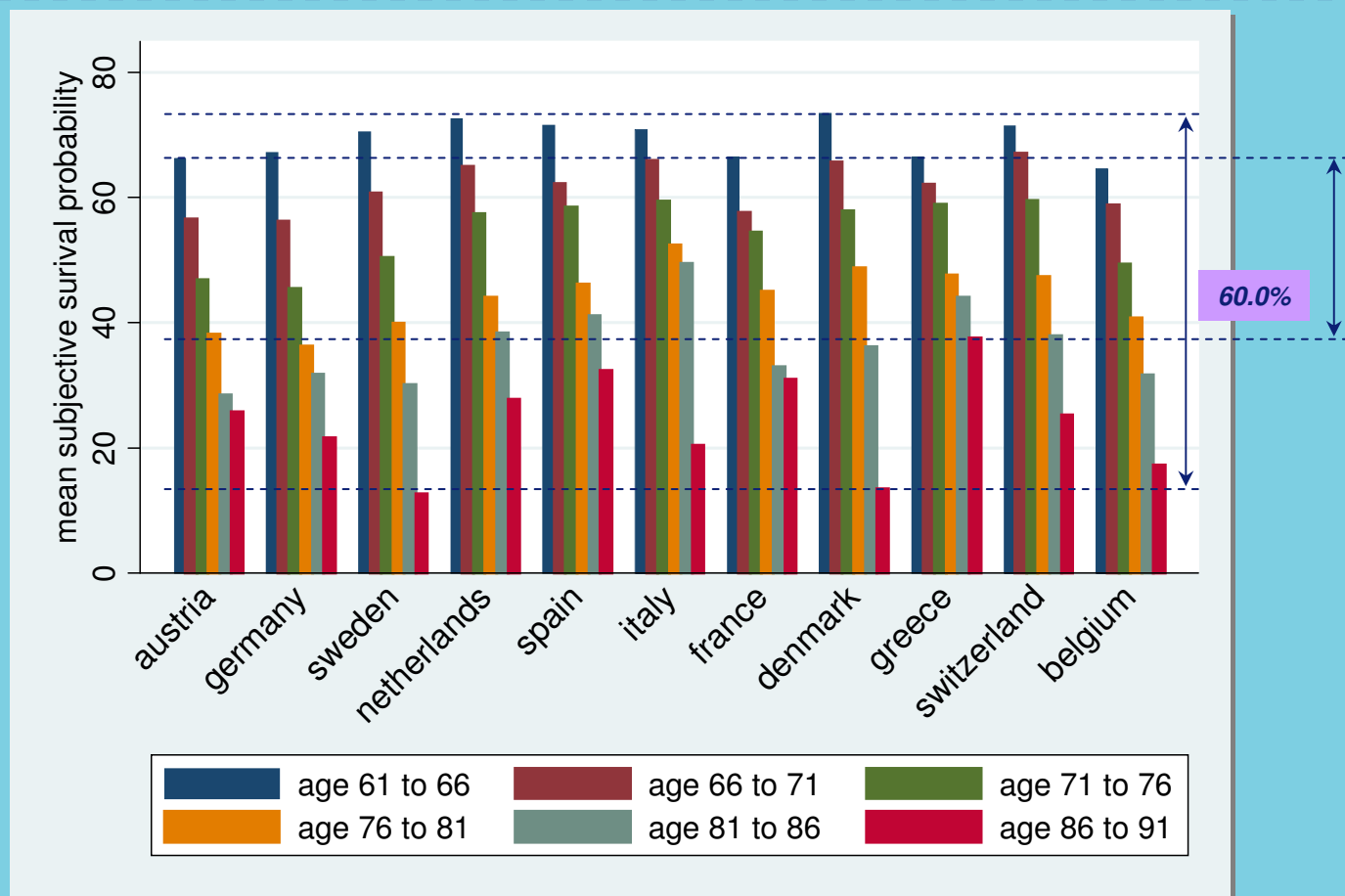
Subjective survival probability of Europeans aged 61 to 91

Age group	Frequency	Percentage	Mean time horizon	Mean subjective survival probability
age 61 to 66	4,168	29.5	11.55	68.87
age 66 to 71	3,584	25.4	11.58	60.92
age 71 to 76	2,798	19.8	11.62	53.81
age 76 to 81	2,026	14.4	11.67	43.37
age 81 to 86	1,129	8.0	11.87	35.61
age 86 to 91	403	2.9	11.85	23.46
Total	14,108	100.0	11.62	56.24

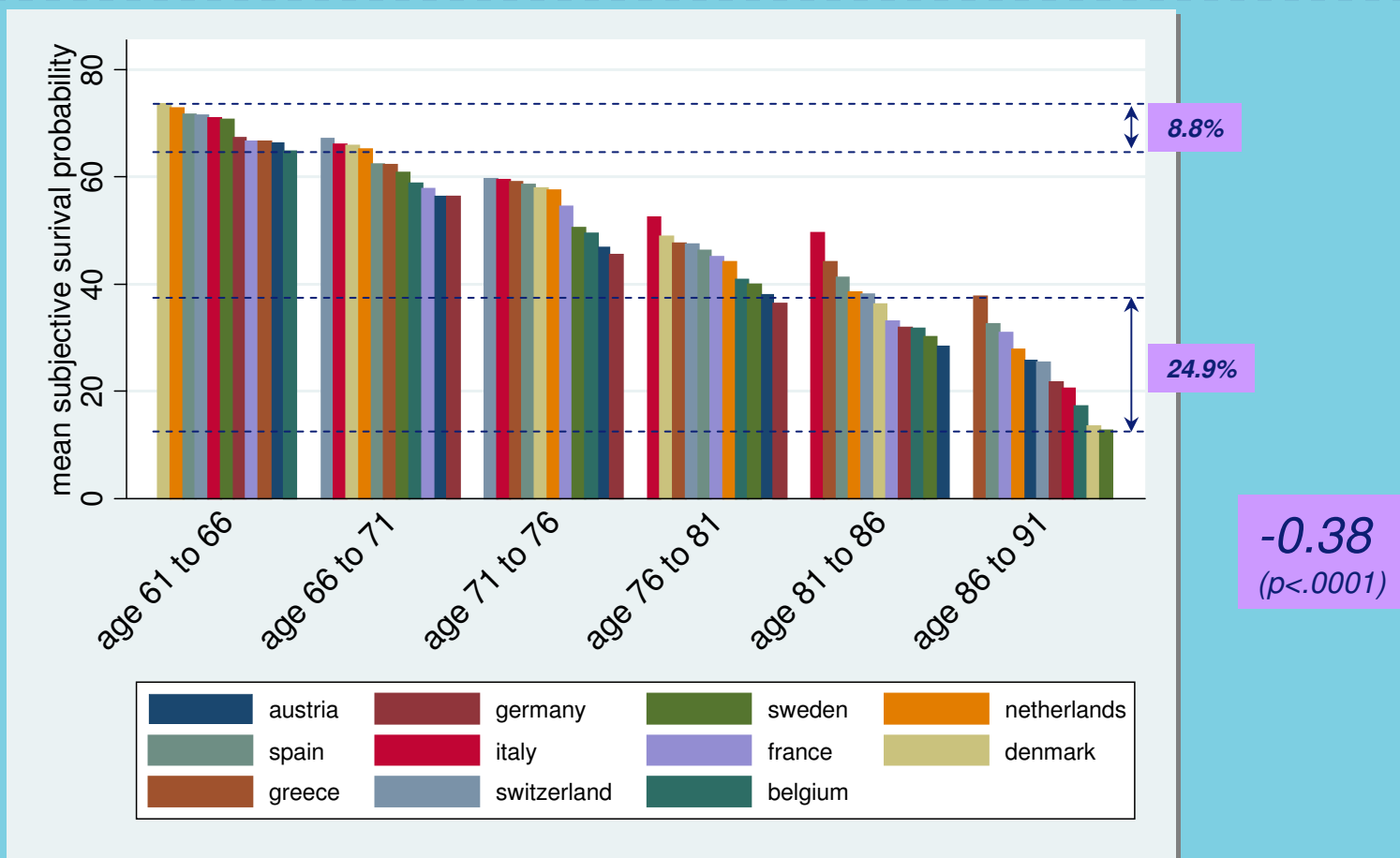
Mean probability of reaching target age



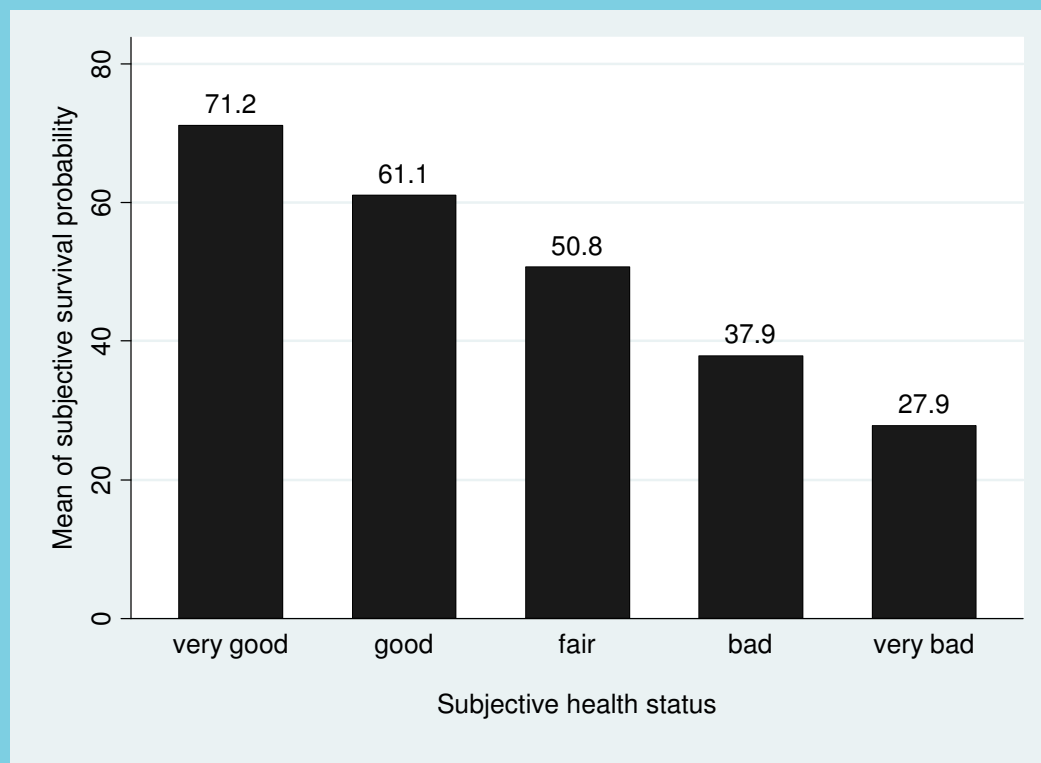
Subjective survival probability according to country



Subjective survival probability according to country

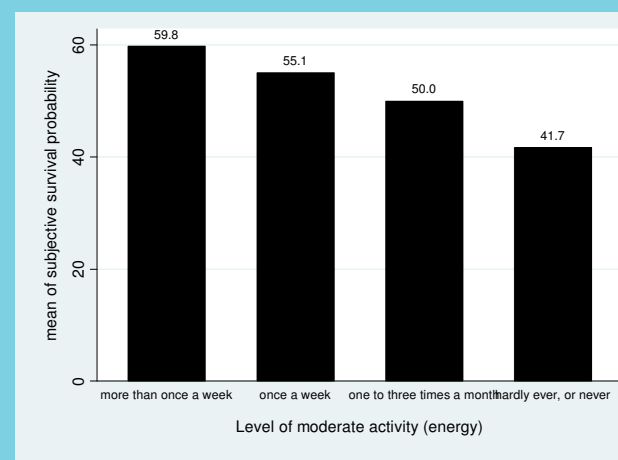
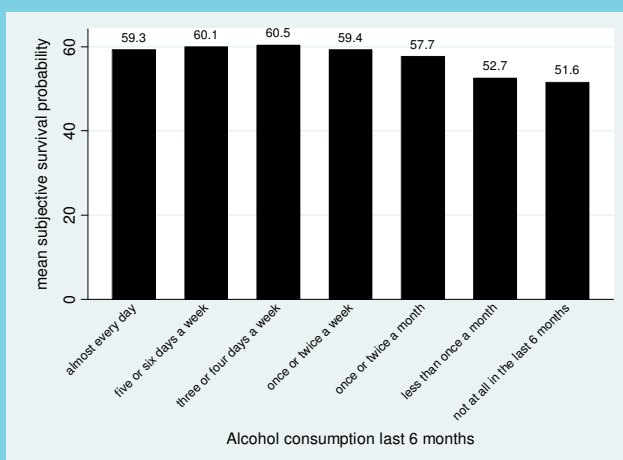
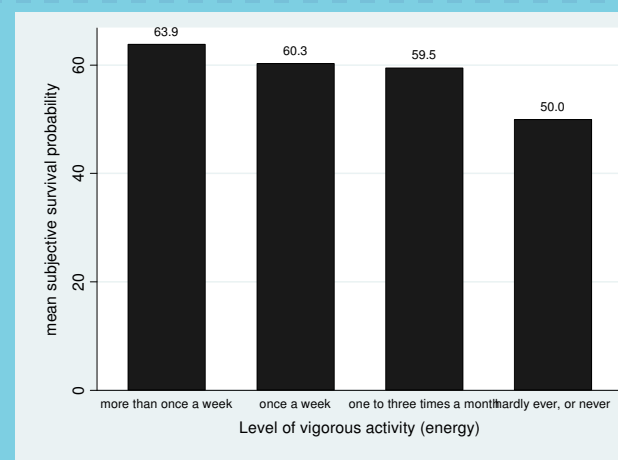
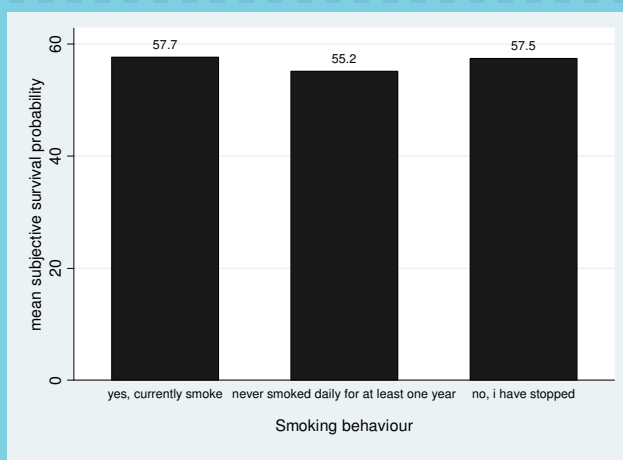


Subjective survival probability according to self-perceived health status



	very good	good	fair	bad
good	-10.2			
fair	-20.4	-10.3		
bad	-33.3	-23.1	-12.8	
very bad	-43.3	-33.1	-22.9	-10.0

Subjective survival probability according to health behaviours



Subjective survival probability according to health indicators

- 'No' / 'one or more' chronic conditions : 65.5 / 54.1
- 'No' / 'one or more' ADL limitations : 58.5 / 39.7 *
- 'No' / 'one or more' IADL limitations : 59.8 / 41.9 *
- 'No' / 'one or more' mobility problems : 63.8 / 50.4 *
- 'No' / 'yes' depression : 59.7 / 46.3 *

* Also statistically significant after correcting for age

Concluding

- There is a lot we know...
 - Heterogeneity
 - Some recurrent findings (e.g. determinants like kin age, current health)
- ... and a lot we are still learning about
 - How realistic/rational are subjective expectations?
 - What do people consider *acceptable*?
 - How should we elicit expectations for length and quality of life?
 - Intriguing associations (e.g. drinking, weight)
 - Impact on health decisions (e.g. incentives, interaction with *discounting*)
- Netspar project 6 will address some of these issues