

Gender differences in covariates of BMI in Hungary.

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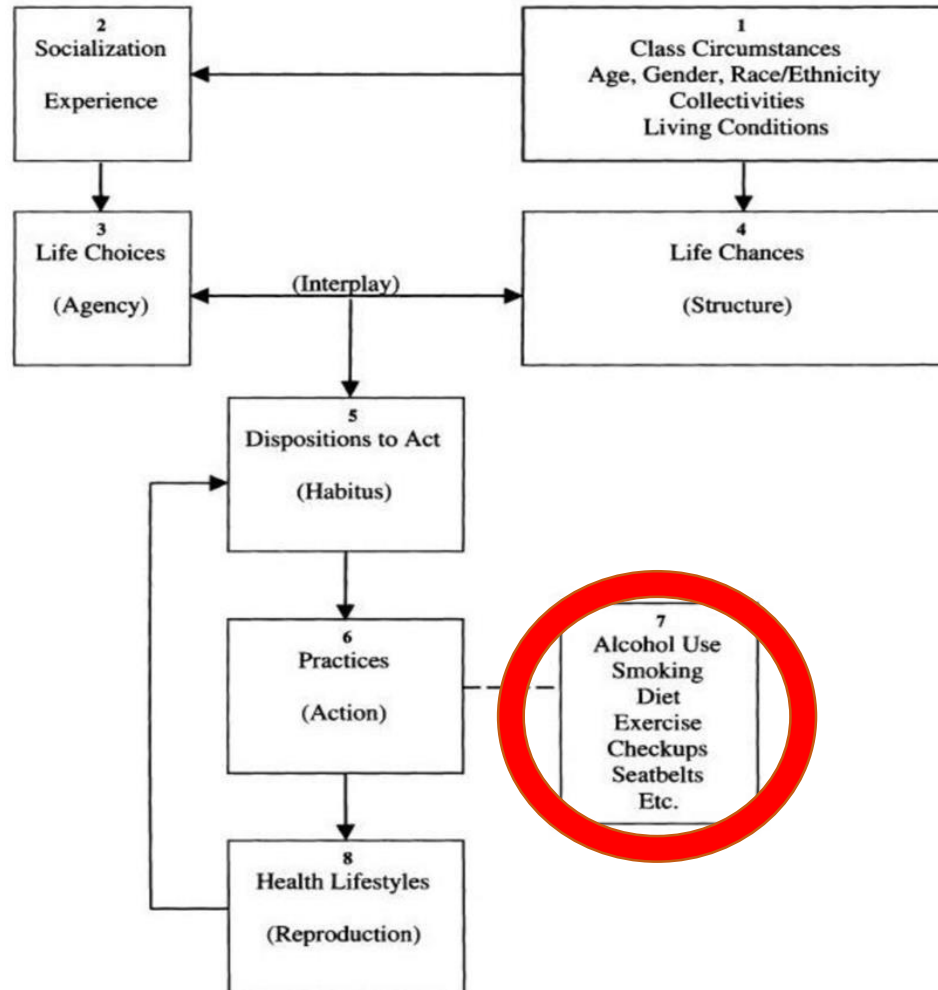
OB_S__Y

Guess what is the biggest preventable
cause of cancer after smoking.



Why Hungary?

Health lifestyle theory, Cockerham 2005



Lifestyle behaviors

- Diet and eating behaviors
- Getting adequate amount of sleep
- Being physically active
- Managing stress may be listed as ‘key weight management behaviors’
- **Smoking**
- **Alcohol use**

Structural characteristics

- Education
- Income
- Occupation
- Marital status
- Place of residence

Research questions

- What are the net effects of lifestyle behaviors on BMI?
- Do they differ by gender?
- Which of these effects are explained by socioeconomic differences?

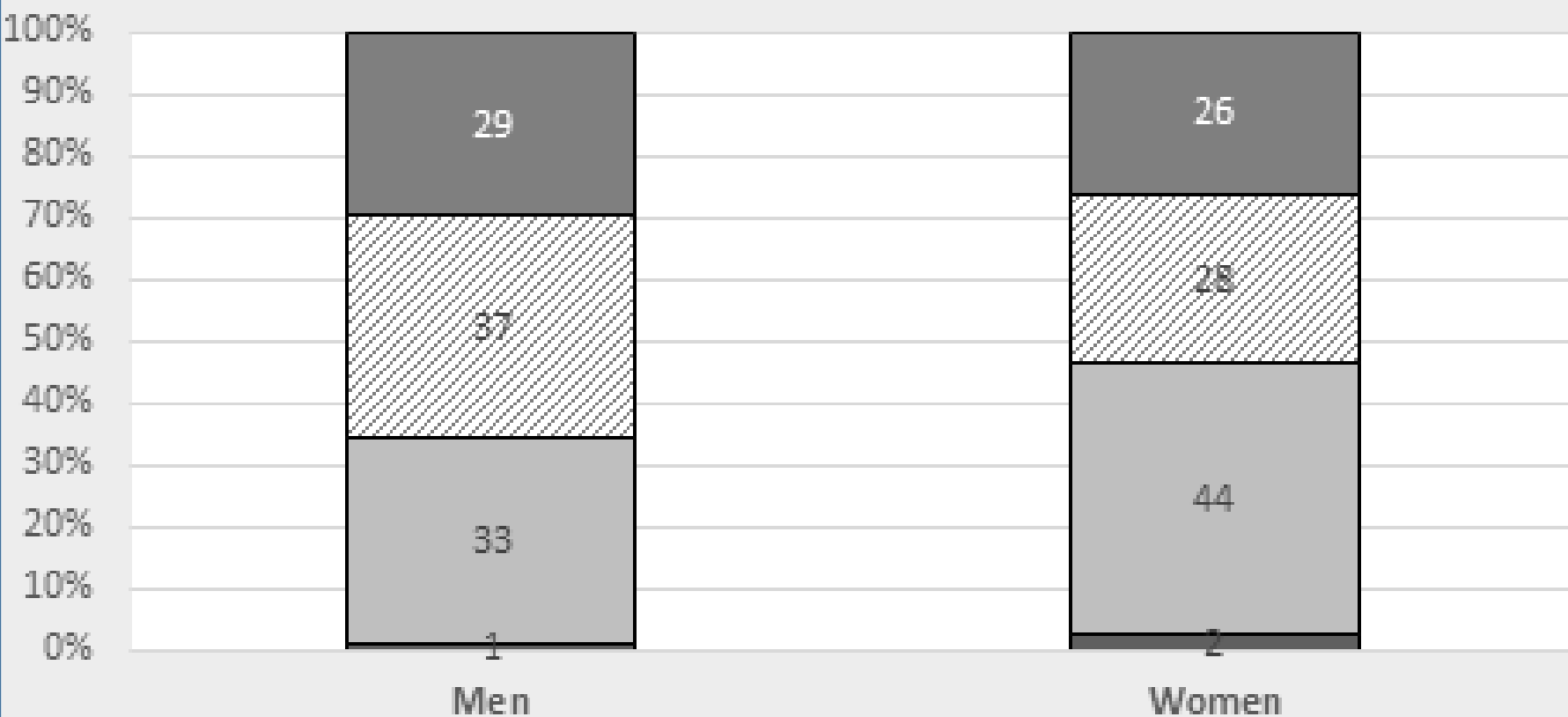
Method

- Multivariate OLS models
- DV: BMI
- IV Model 1: lifestyle behaviors
- IV Model 2: lifestyle behaviors + socioeconomic characteristics: occupation, education, income, marital status, place of residence
- Controls: age, health

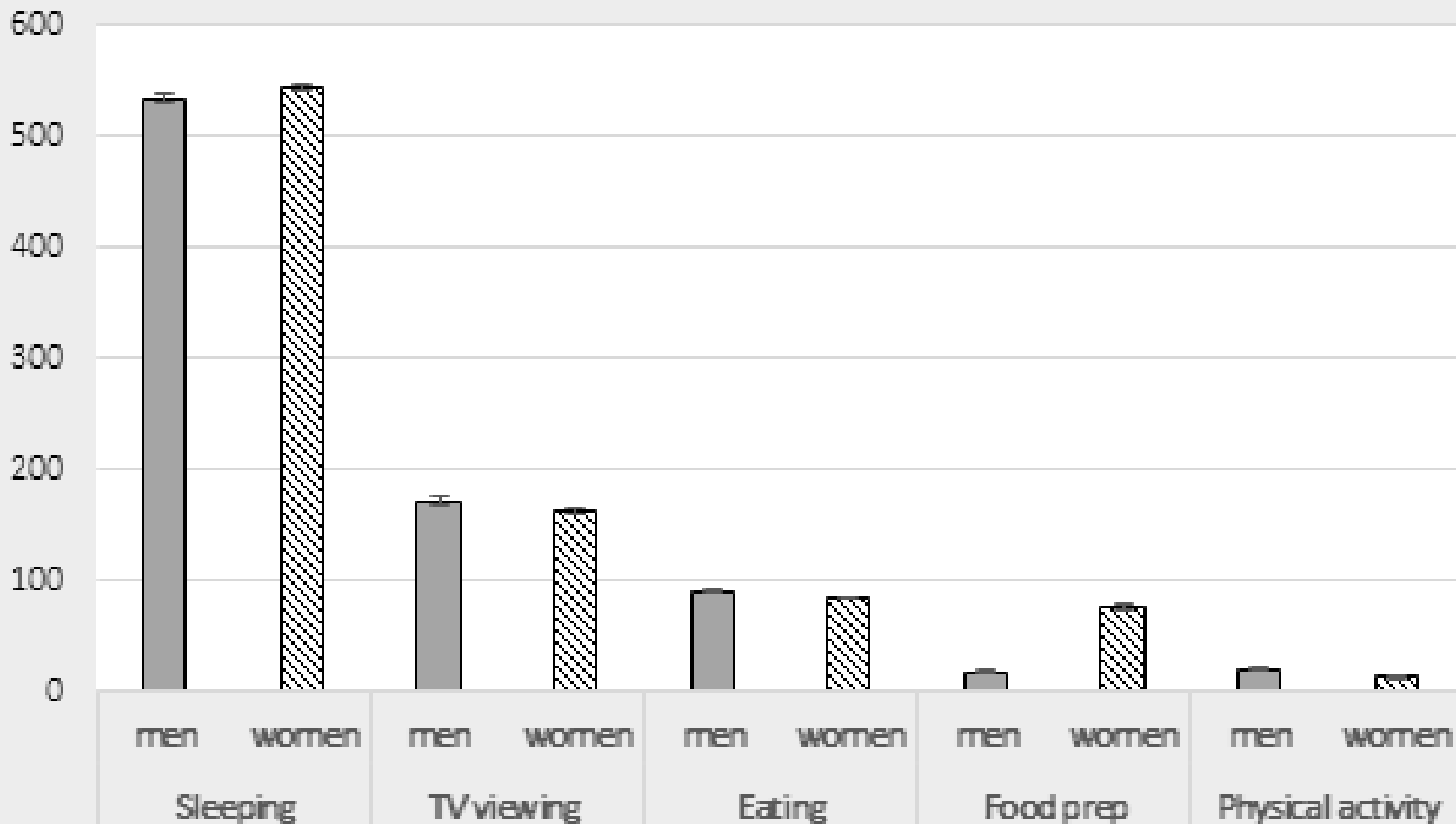
Findings

Percentage of different BMI categories by gender (weighted)

■ Underweight □ Normal weight ▨ Overweight ■ Obese



Mean time spent daily in selected activities, by gender (weighted)



	Mean	Male 95% CI	Mean	Female 95% CI
Education				
Incomplete primary	26.6	(25.7-27.5)	27.6	(26.9-28.3)
Completed primary	26.8	(26.4-27.3)	26.7	(26.4-27.1)
Vocational	27.3	(27.0-27.5)	26.2	(25.9-26.5)
Secondary	26.3	(26.0-26.6)	25.2	(24.9-25.5)
Tertiary	26.6	(26.2-26.9)	24.6	(24.3-24.9)
Individual income				
<80000 Ft	26.4	(25.8-27.0)	25.8	(25.2-26.4)
80001 - 160000	27.0	(26.7-27.3)	25.7	(25.4-26.0)
160001 - 300000	26.7	(26.4-27.0)	25.1	(24.8-25.4)
300001 - 1000000	25.5	(24.9-26.1)	24.7	(24.0-25.4)
Missing	27.0	(26.7-27.3)	26.2	(25.0-26.5)
Occupation				
Managers and professionals	26.6	(26.3-26.9)	25.3	(25.0-25.7)
Technicians	26.9	(26.4-27.4)	25.4	(25.1-25.8)
Clerks	26.4	(24.4-28.4)	25.8	(25.3-26.2)
Sales and services	27.0	(26.5-27.5)	25.8	(25.5-26.3)
Agriculture	27.2	(26.5-28.0)	27.9	(26.9-28.8)
Trade, industry, construction	27.5	(27.2-27.8)	26.5	(25.9-27.0)
Machine operators	27.7	(27.2-28.1)	26.7	(26.2-27.3)
Low skill jobs	26.4	(25.8-26.9)	26.8	(26.4-27.2)
Missing (not in employment)	23.5	(23.0-24.0)	23.5	(23.0-24.0)

MODEL 1

	Male	Female
Number of meals	-0.188 (0.13)	-0.251*(0.12)
Ate breakfast	-0.190 (0.25)	0.150 (0.24)
Duration: food preparation	-0.199 (0.12)	0.251***(0.06)
Consumed alcohol	-0.370 (0.27)	-0.010 (0.66)
Smoked cigarettes	-0.792***(0.25)	-0.977***(0.30)
Duration: physical activity	-0.100 (0.09)	-0.252*(0.13)
Duration: TV	0.029 (0.04)	0.146***(0.04)
Duration: sleep	-0.042 (0.04)	-0.104**(0.04)
Intercept	24.522***(0.51)	22.400***(0.52)
R-squared/ N	0.08/3445	0.13/4320

MODEL 2

	Male	Female
Number of meals	-0.185 (0.12)	-0.299* (0.12)
Ate breakfast (<i>ref. did not eat</i>)	-0.245 (0.24)	0.193 (0.24)
Duration: food preparation	-0.099 (0.12)	0.091 (0.06)
Consumed alcohol (<i>ref. did not consume</i>)	-0.322 (0.27)	0.274 (0.66)
Smoked cigarettes (<i>ref. did not smoke</i>)	-0.949***(0.25)	-1.040*** (0.30)
Duration: physical activity	-0.058 (0.09)	-0.150 (0.13)
Duration: TV	0.039 (0.04)	0.167*** (0.04)
Duration: sleep	0.011 (0.04)	-0.078* (0.04)
Occupation (<i>ref. managers and professionals</i>)		
Technicians	0.274 (0.34)	-0.269 (0.29)
Clerks	0.427 (0.94)	-0.387 (0.33)
Sales and services	0.613 (0.35)	0.035 (0.33)
Agriculture	0.521 (0.46)	0.700 (0.51)
Trade, industry, construction	0.769* (0.31)	-0.063 (0.38)
Machine operators	0.949** (0.34)	0.369 (0.39)
Low skill jobs	-0.256 (0.40)	0.031 (0.36)
Intercept	24.575***(0.89)	23.033***(0.87)
R-squared/ N	0.11/3445	0.15/4320

Conclusions

- Lifestyle behaviors matter for female BMI but not for male (except for smoking)
- The effect of exercise and duration of food preparation are explained by social class → inequality
- Different policy approaches are needed

Thank you

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