Modelling alcohol consumption in elderly: exploring causes and consequences based on the SHARE data

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PROLOGUE (1)

- Tiina's presentation at the EDK summer seminar 2019
  "Is the internal rule of alcohol ban really harmless in older people day centers"
  (Qualitative data from the project "Old guys say yes to community", 2017)

- The aim was to examine the relationship between alcohol consumption and social engagement among Estonian older men, taking into account the benefits and harms of alcohol

PROLOGUE (2)

- Andrei Petuhhov's Master Thesis 2019
"Associations between loneliness and alcohol consumption among old people in Denmark, Estonia and Luxembourg based on SHARE data"

- Denmark, Estonia and Luxembourg, countries which in this study represent Northern, Eastern and Central Europe accordingly, have been known for their above average alcohol consumption and prevalence of binge drinking in the (already infamous for its consumption) European Region of the WHO

- Possible relationships between loneliness and alcohol consumption

- The relationship between loneliness and alcohol consumption in old people was not significant - alcohol consumption in those lonelier was low and feeling lonelier did not correlate with a substantial increase in drinking

- Thus, alcohol consumption in Estonia, Denmark and Luxembourg can be considered as a rather social activity, related to regional and local patterns of alcohol consumption.

RESEARCH QUESTIONS

- How is alcohol consumption associated with health-related issues (mental health, physical health) and other relevant variables?

- Differences in different cultural contexts (Estonia, Denmark Luxembourg)?
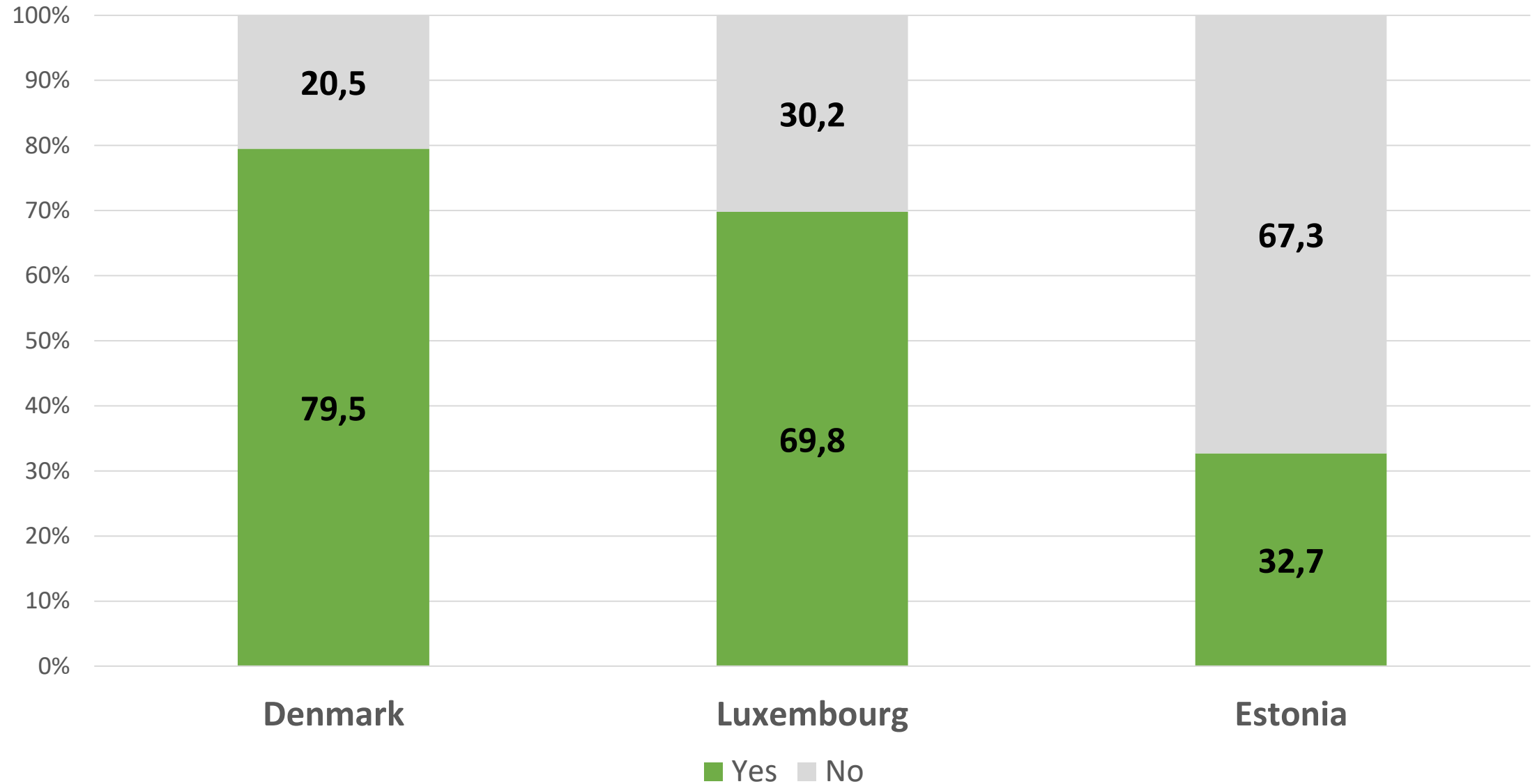
METHODS

- SHARE wave 6 (2015)
   Denmark (n=3733)
   Luxembourg (n=1564)
   Estonia (n=5638)
- Binary logistic regression analysis
- Backward (conditional) stepwise selection

VARIABLES – dependent variable

At least one alcoholic beverage the last 7 days – Yes / No

(Currently frequency of drinking and amount of drinks was not included into analysis)

At least one alcoholic beverage the last 7 days

Country	Yes	No
Denmark	79,5	20,5
Luxembourg	69,8	30,2
Estonia	32,7	67,3

Yes ■ No ■

VARIABLES – independent variables

VARIABLE	VALUES (binary, recoded if necessary)
Gender	Male / Female
Age	Below 65 / 65+
Number of limitations with activities of daily living	No limitations /1+ limitations
Number of chronic diseases	Less than 2 diseases / 2+ chronic diseases
Self-perceived health	Very good, excellent / Less than very good
Household able to make ends meet	Easily / With difficulty
Sports and activities that are vigorous	At least once a week / Monthly or never
Depression	Not depressed (EUROD 0-3) / Depressed (EUROD 4+)
Loneliness	Not lonely (UCLA 3) / Lonely (UCLA 4-9)

(Currently education and martial status was not included into analysis)

DENMARK (3 steps, R²=0.11)

At least one alcoholic beverage the last 7 days

VARIABLE	p-value	OR	95% CI
Gender male	<0.001	2.5	2.1 - 3.1
No daily limitations	0.006	1.6	1.2 - 2.3
Very good self-perceived health	<0.001	1.6	1.3 - 2.0
At least weekly sports and activities	<0.001	1.6	1.3 - 2.0
Not lonely	0.005	1.4	1.1 - 1.7
No chronic diseases	0.021	1.3	1.0 - 1.6
Age below 65	0.079	0.8	0.7 - 1.0
Easily making ends meet			
Not depressed			

LUXEMBOURG (5 steps, R²=0.08)

At least one alcoholic beverage the last 7 days

VARIABLE	p-value	OR	95% CI
Gender male	<0.001	2.0	1.5 - 2.6
Very good self-perceived health	0.001	1.8	1.3 - 2.5
No daily limitations	0.060	1.6	1.0 - 2.5
Easily making ends meet	0.018	1.5	1.1 - 2.1
No chronic diseases	0.081	1.3	1.0 - 1.7
Age below 65			
At least weekly sports and activities			
Not depressed			
Not lonely			

ESTONIA (3 steps, R^2=0.17)

At least one alcoholic beverage the last 7 days

VARIABLE	p-value	OR	95% CI
Gender male	<0.001	2.9	2.5 - 3.4
Age below 65	<0.001	2.0	1.7 - 2.4
No daily limitations	0.017	1.4	1.1 - 1.8
No chronic diseases	0.007	1.3	1.1 - 1.5
Very good self-perceived health	0.042	1.4	1.0 - 1.8
Easily making ends meet	<0.001	1.5	1.3 - 1.7
At least weekly sports and activities	<0.001	1.6	1.3 - 1.8
Not depressed			
Not lonely			

NEXT STEPS

- Estonia – extract males (modelling wave 6 data), use SHARE longitudinal data (challenge!) to find out causal relationships (drinking pattern, loneliness, health-related indicators), article together with Tiina, Luule and Liili

- Comparative study on Denmark, Luxembourg, Estonia (SHARE wave 6) – article together with Andrei and …