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Educational inequalities in risky health behaviours in 21 European countries: new estimates from the European Social Survey on smoking, alcohol use, physical activity and fruit and vegetable consumption

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Abstract

Background

It has been suggested that cross-national variation in educational inequalities in health outcomes (e.g. NCDs) is due to cross-national variation in risky health behaviour. In this paper we aim to use highly recent data (2014) to examine educational inequalities in risky health behaviour in 21 European countries from all regions of the continent to map cross-national variation in the extent to which educational level is associated with risky health behaviour. We focus on four dimensions of risky health behaviour: smoking, alcohol use, lack of physical activity, and lack of fruit and vegetable consumption.

Methods

We make use of recent data from the 7th wave of the European Social Survey (2014), which contains a special rotating module on the social determinants of health. We performed logistic regression analyses to examine the associations between educational level and the risky health behaviour indicators. Educational level was measured through a three-category version of the harmonized International Standard Classification of Education (ISCED).

Results

Our findings show substantial and mostly significant inequalities in risky health behaviour between educational groups in most of the 21 European countries examined in this paper. The risk of being a daily smoker is higher as respondents' level of education is lower (Low education (L): OR=4.24 (95% CI: 3.83-4.68); Middle education (M): OR=2.91 (95% CI: 2.65-3.19)). Respondents have a lower risk of consuming alcohol frequently if they have a low level of education (L: OR=0.59 (95% CI: 0.54-0.64); M: OR=0.70 (95% CI: 0.65-0.76)),

but a higher risk of binge drinking frequently (L: OR=1.29 (95% CI: 1.16-1.44); M: OR=1.15 (95% CI: 1.04-1.27)). People are more likely to be physically active at least 3 days in the past week when they have a higher level of education (M: OR=1.42 (95% CI: 1.34-1.50); H: OR=1.67 (95% CI: 1.55-1.80)). Finally, people are more likely to consume fruit and vegetables at least daily if they have a higher level of education (fruit: M: OR=1.09 (95% CI: 1.03-1.16); H: OR=1.77 (95% CI: 1.63-1.92); vegetables: M: OR=1.34 (95% CI: 1.26-1.42); H: OR=2.35 (95% CI: 2.16-2.55)). However, we also found considerable cross-national variation in the associations between education and risky health behaviour.

Conclusions

Our results yield a complex picture: the lowest educational groups are more likely to smoke and less likely to engage in physical activity and to eat fruit and vegetables, but the highest educational groups are at greater risk of frequent alcohol consumption. Additionally, inequalities in risky health behavior do not appear to be systematically weakest in the South or strongest in the North and West of Europe.

Key words: health behaviours; education; health inequalities; European Social Survey

Introduction

The burden of non-communicable diseases (NCDs) for people's health is substantial, even in relation to the total Global Burden of Disease worldwide.^{1,2} Risky health behaviour has a clear role in increasing the risk of NCDs: to name only a few examples, the link between smoking and lung cancer is undisputed, diet has a clear impact on cardiovascular disease, and alcohol consumption is associated with liver cancer. Risky health behaviour is not just a matter of lifestyles and personal choice: the importance of structural determinants of risky health behaviour (e.g. educational attainment) has been established for decades.³⁻⁵ As such, it is not surprising that earlier research has shown that education is a strong determinant of a wide range of health outcomes.⁶

Moreover, education is strongly related to health in Europe, but the relationship is much stronger in some countries than in others.^{7,8} In this earlier comparative work it has been suggested that cross-national variation in educational inequalities in health outcomes (e.g. NCDs) is due to cross-national variation in risky health behaviour. This is usually explained by pointing at the epidemiological transition: countries with smaller educational inequalities in health have seen later uptake of several risky health behaviours (particularly smoking), e.g. in Southern Europe, whereas in Northern Europe this transition has already taken place and these risky health behaviours are now selective to the most disadvantaged social groups (e.g. people with the lowest educational levels).⁹

In this paper we aim to examine educational inequalities in risky health behaviour in 21 European countries from all regions of the continent to map cross-national variation in the extent to which educational level is associated with risky health behaviour. We focus on four dimensions of risky health behaviour: smoking, alcohol use, lack of physical activity, and diet (here we focus on lack of fruit and vegetable consumption). Each of these dimensions has

clear associations with health outcomes, and is likely to be influenced by education (e.g., through income, knowledge, and social influence and status).^{3,4,6,10} We make use of recent data from the 7th wave of the European Social Survey (2014).¹¹ This wave contains a special rotating module on the social determinants of health, which includes the first simultaneous, comprehensive pan-European overview of these measures of risky health behaviour. All in all, this paper goes beyond existing research^{8,12-15} by exploring multiple key dimensions of risky health behavior simultaneously, and by providing highly recent estimates of educational inequalities in risky health behavior in Europe: given e.g. cohort replacement and changes in tobacco and alcohol policy it is not evident that estimates from one or two decades ago will still hold.¹⁶

Methods

Data

To obtain estimates of educational inequalities in risky health behaviour we use the 7th wave of the European Social Survey (2014).¹¹ This particular wave includes a special rotating module on social inequalities in health and their determinants, and includes information on educational level and risk behaviour for individuals from 20 European countries plus Israel: Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Ireland, Israel, Lithuania, Netherlands, Norway, Poland, Portugal, Slovenia, Spain, Sweden, Switzerland and UK. The data aims to provide a representative sample of the non-institutionalised population aged 15 and over living in each of these countries, covering both citizens and non-citizens. The data were collected through face to face interviews in people's homes. More information on the data design and collection and the questionnaire can be found on the ESS website: <http://www.europeansocialsurvey.org/>. For this paper we only

selected respondents aged 25 to 75, in line with several studies on earlier ESS waves that have excluded respondents aged below 25 (because they often still live with their parents and/or have not completed their education yet) and respondents aged above 75 (because this may be a selective group of relatively healthy, non-institutionalised elderly respondents).¹⁷

Four dimensions of risky health behaviour were included in the rotating module: smoking, alcohol use, (lack of) physical activity, and (lack of) fruit and vegetable consumption. In the following section we describe the questions and measurements used to obtain information on respondents' educational level and risky health behaviour, and our process of recoding these items to make them suitable for the analyses in this paper. Further details on the rationale behind the development and selection of these particular measures of risk behaviour in the special rotating module on the social determinants of health and more information on the design of the questionnaire included in this rotating module can be found in a data profile published by Eikemo and colleagues.¹⁸ Descriptive statistics for all measurements are reported in Table 1. For further discussion of the prevalence of the risk behaviour factors in the European countries in our sample we refer to another paper in this supplement.¹⁹

[Table 1]

Measurements

1) Educational level and control variables

Respondents' highest completed level of education was measured in the European Social Survey with country-specific categorical variables. These country-specific variables were already harmonized in the original data according to the International Standard Classification of Education (ISCED)²⁰ (in the variable *eisced*), which distinguishes seven categories. For this

paper we recoded this original variable into a more parsimonious and cross-nationally comparable variable with three categories. The three categories are: lower secondary or less education (ISCED I and II; labelled 'low'); upper secondary or advanced vocational education (ISCED IIIa, IIIb and IV; labelled 'middle'); and tertiary education (ISCED V1 and V2; labelled 'high'). This categorization was chosen because in several European countries the proportion of respondents with less than secondary education is very low, and ISCED I may not fully capture the lowest educated groups in these countries. As a sensitivity analysis, we also re-estimated our models using a country-specific Z-standardized version of the original seven-category ISCED scale. Overall, this resulted in similar conclusions (a full overview of the findings of this sensitivity analysis is available in Online Supplement 1). We use three control variables: gender (male=0, female=1), age (in years) and a squared term for age to take into account nonlinear relationships between age and our risk behaviour indicators.

2) Smoking

Firstly, respondents were asked to point out which of the following descriptions on a showcard is indicative of their smoking behaviour: 'I smoke daily', 'I smoke but not every day', 'I don't smoke now but I used to', 'I have only smoked a few times', and 'I have never smoked'. The interviewer also asked respondents to only consider cigarette smoking; use of other tobacco products (e.g. cigars) is therefore not captured by this question. In this paper we focus on the risk of being a current daily smoker, and contrast this group against all other categories. People who responded to the first question that they smoke (either daily or not every day) received a follow-up question asking how many cigarettes they smoke on a typical day. For this paper we decided to dichotomize this variable, distinguishing people who smoke 20 or more cigarettes (at least one pack) on a typical day from smokers who consume less than one pack on a typical day.

3) Alcohol use

The data include separate measures to capture frequency and quantity of alcohol consumption as well as binge drinking. For this paper we used these measures to create four indicators of alcohol use: (1) frequency of alcohol consumption; (2) quantity of alcohol consumption on weekdays; (3) quantity of alcohol consumption on weekend days; and (4) frequency of binge drinking. Respondents were asked how often they drink alcohol to measure the frequency of alcohol consumption. Seven answering categories were available: 'Never', 'Less than once a month', 'Once a month', '2-3 time a month', 'Once a week', 'Several times a week', and 'Every day'. In this paper we only distinguish between respondents who drink alcohol more than once a week (scoring 1 on this dichotomous variable) and respondents who drink alcohol only once a week or less often (scoring 0). The quantity of alcohol consumed was measured by two separate questions about how much respondents drank on the last occasions on which they consumed alcohol on a weekday (Monday to Thursday) and on a weekend day (Friday to Sunday). Country-specific showcards were developed to help respondents to show which and how many drinks they consumed on these occasions. Examples of these showcards and more information on the design process can be found on the website of the European Social Survey (www.europeansocialsurvey.org). The reported quantities consumed were then converted to grams of alcohol. To deal with the possibility that unlikely high numbers of grams are based on exaggerated reporting we decided to cap the grams of alcohol consumed at 300 grams (i.e., for any respondent reporting consumption of more than 300 grams of alcohol we have substituted their responses by the value of 300 grams). For this paper, we have converted the grams of alcohol consumed to units by dividing the grams of alcohol by 8. In this paper we distinguish respondents who consumed more than 2 units on the last occasion (scoring 1 on the dichotomous variables) from respondents who consumed less than this (scoring 0). We do this separately for weekdays and weekend days, and in analysing the quantity consumed we

exclude respondents who reported that they never consume any alcohol, so that the analyses on quantity only apply to alcohol consumers. Finally, the frequency of binge drinking was measured by showing respondents country-specific showcards containing a number of drinks that correspond with standard binge drinking classifications (i.e., 6 units for women; 8 units for men). Respondents were asked how often in the past 12 months they had drunk the equivalent of or more than the amount of alcohol shown on the showcards on one single occasion. The answering categories were: 'Never', 'Less than monthly', 'Monthly', 'Weekly', 'Daily or almost daily'. In this paper we use a dichotomous variable distinguishing respondents who reported binge drinking at least weekly (scoring 1) from respondents who reported less frequent binge drinking (scoring 0).

4) Physical activity

Physical activity was measured in the data by one question asking on how many of the last 7 days respondents walked quickly, did sports or other physical activity for 30 minutes or longer. For this paper we distinguish respondents who undertook this kind of physical activity on 3 or more days over the last week from respondents who engaged in this kind of physical activity on 0-2 days. Additionally we used a similar estimate to distinguish respondents who were physically active on at least 5 days in the past week from respondents who were physically active less frequently.

5) Fruit and vegetable consumption

Fruit and vegetable consumption were measured by asking respondents two separate questions on how often they eat fruit, excluding drinking juice, and how often they eat vegetables or salad, excluding potatoes. For both questions the answering categories were: three times or more a day; twice a day; once a day; less than once a day but at least 4 times a

week; less than 4 times a week but at least once a week; less than once a week; and never. In this paper we distinguish respondents who consumed fruit at least once a day from respondents who consumed fruit less frequently, and the same was done for vegetable consumption.

Analysis

We performed logistic regression analyses to examine the associations between educational level and the risky health behaviour indicators. In the analyses on smoking and alcohol use the highest educational group acts as the reference category, while for the analyses on physical activity and fruit and vegetable consumption we use the lowest educational level as the reference group. For each analysis we present odds ratios (OR) and 95% confidence intervals (95% CI). Before the analysis we weighted the data by using the post-stratification weights (*pspwght*) in the European Social Survey. This was done to take into account the different sampling designs and selection probabilities in the various countries included in the data. Pooled estimates for the combined cross-national sample were additionally weighted by the countries' population size (*pweight*). For more information on the rationale and computation of the weighting process we refer to documentation on the ESS website.²¹ We show both pooled estimates for the combined cross-national sample and country-specific results. We grouped countries roughly by geographical regions in the tables to explore regional similarities in the estimates of educational inequalities in risk behaviour. Tables are grouped according to the four groups of risky health behaviour factors that were distinguished in the data. Separate results for men and women are available upon request from the authors; due to space limitations it was not possible to present gender-specific results in the tables.

Results

Smoking

In Table 2 we present results on educational inequalities in smoking behaviour. For the pooled sample we find that the risk of being a daily smoker is higher as respondents' level of education is lower (Low education (L): OR=4.24 (95% CI: 3.83-4.68); Middle education (M): OR=2.91 (95% CI: 2.65-3.19). Country-specific results show that this association is statistically significant at a 95% confidence interval in each of the countries in the sample, except for Portugal (L: OR=1.01 (95% CI: 0.56-1.83); M: OR=0.93 (95% CI: 0.45-1.90)). However, there is still also considerable variation across countries in the strength of the relationship between educational level and daily smoking, with the association being relatively strong in e.g. Finland (L: OR=8.60; M: OR=4.01), Norway (L: OR=7.72; M: OR=6.27) and Estonia (L: OR=8.20; M: OR=3.87). Among the group of daily smokers we also examined educational inequalities in the risk of smoking 20 or more cigarettes on a typical day. Here too we find an overall higher risk for respondents with lower levels of education (L: OR=2.99 (95% CI: 2.46-3.63); M: OR=1.91 (95% CI: 1.58-2.32), but in several countries (e.g. Sweden, Netherlands and UK) the difference between educational groups is not significant.

[Table 2]

Alcohol use

Table 3 shows estimates of the association between educational level and four indicators of alcohol use. Firstly, looking at the frequency of alcohol consumption it is clear that respondents have a lower rather than higher risk of consuming alcohol more than once per

week if they have a low level of education (L: OR=0.59 (95% CI: 0.54-0.64); M: OR=0.70 (95% CI: 0.65-0.76). This suggests that people with tertiary education are most likely to consume alcohol several times per week. In some countries this association is not statistically significant, especially in Central and Eastern Europe. Secondly, for the quantity of alcohol consumption overall the results found for weekday consumption and weekend consumption are fairly similar (weekdays: L: OR=0.72 (95% CI: 0.66-0.78); M: OR=0.83 (95% CI: 0.77-0.89); weekends: L: OR=0.72 (95% CI: 0.65-0.79); M: OR=0.88 (95% CI: 0.80-0.95) In the pooled sample people have a lower risk of consuming more than two units of alcohol on the last drinking occasion as they have a lower educational level, but in most countries the associations are nonsignificant. Finally, for binge drinking at least weekly overall we observe that people are at a higher risk if they have a lower level of education (L: OR=1.29 (95% CI: 1.16-1.44); M: OR=1.15 (95% CI: 1.04-1.27). However, this finding based on the pooled sample is fairly weak and does not hold for all separate countries: in several countries (e.g. Switzerland, Portugal and Spain) there is no significant relationship between educational level and the risk of frequent binge drinking, and in one case (Norway) we even find an opposite relationship, with the lowest educational group being least likely to report binge drinking at least weekly (L: OR=0.47 (95% CI: 0.24-0.91); M: OR=0.87 (95% CI: 0.58-1.31).

[Table 3]

Physical activity

Results on educational inequalities in physical activity are presented in Table 4. We find that generally people are more likely to be physically active at least 3 days in the past week when they have a higher level of education (M: OR=1.42 (95% CI: 1.34-1.50); H: OR=1.67 (95% CI: 1.55-1.80). There is considerable variation across countries in the strength of this

association, and in 6 out of 21 countries in the sample the association is not statistically significant. When we look at the relationship between educational level and being physically active for at least 5 days in the past week we find no clear educational gradient in any of the countries in the sample (M: OR=1.12 (95% CI: 1.06-1.19); H: OR=1.05 (95% CI: 0.97-1.14).

[Table 4]

Fruit and vegetable consumption

Table 5 shows the relationship between educational level and fruit and vegetable consumption. Overall people are more likely to consume fruit and vegetables at least daily if they have a higher level of education (fruit: M: OR=1.09 (95% CI: 1.03-1.16); H: OR=1.77 (95% CI: 1.63-1.92); vegetables: M: OR=1.34 (95% CI: 1.26-1.42); H: OR=2.35 (95% CI: 2.16-2.55). However, for most countries the relationship is either modest or nonsignificant. In several countries respondents with tertiary education are significantly more likely to consume fruit and vegetables every day than people in the lowest educational group, while daily fruit and vegetable consumption do not differ significantly between the lowest and middle educational groups.

[Table 5]

As a final step, we have conducted a sensitivity analysis to assess the robustness of our findings. As noted by Mood²², in logistic regression analysis the comparison of odds ratios between groups can lead to an over- or underestimation of associations between grouping variables and outcomes. We have therefore re-estimated our models using linear regression analyses, in which the following continuous versions of the risky health behaviour indicators

were used as outcomes: the number of cigarettes smoked on a typical day; the frequency of alcohol consumption (a 7 point scale ranging from ‘Never’ to ‘Daily’); the number of units of alcohol consumed on the last weekday drinking occasion, and the same for the last weekend drinking occasion; the frequency of binge drinking (a 5 point scale ranging from ‘Never’ to ‘Daily’); the number of days with physical activity per week; and the frequency of fruit and vegetable consumption (two separate 4 point scales ranging from ‘Never’ to ‘Three times per day’). We found that overall the results are very similar to the results of our logistic regression models, with alcohol use as the only exception: for the quantity of alcohol consumed on weekdays and for the frequency of binge drinking we did not find a statistically significant association with education for the pooled sample, and for most countries we found negative rather than positive associations between education and the units of alcohol consumed during the weekend. This discrepancy can be explained by the fact that higher educated respondents are more likely to have a moderate alcohol intake compared to respondents with lower levels of education, while lower educated respondents are at a greater risk of consuming large quantities of alcohol. A full overview of the results of this sensitivity analysis can be found in Online Supplement 2.

Discussion

Our findings show substantial and mostly significant inequalities in risky health behaviour between educational groups in most of the 21 European countries examined in this paper. We also found considerable cross-national variation in the extent to which educational groups differ in their risky health behaviour. Our results yield a complex picture: the lowest educational groups are more likely to smoke and less likely to engage in physical activity and to eat fruit and vegetables, but the highest educational groups are at greater risk of frequent

alcohol consumption. Additionally, not all results correspond to the idea that the epidemiological transition can explain the patterns of cross-national variation in educational inequalities in health that were observed in earlier studies: inequalities in risky health behavior do not appear to be systematically weakest in the South or strongest in the North and West of Europe.^{5,8,,9, 13,19, 23}

Generally speaking, our results are in line with results from previous research on educational inequalities in risky health behaviour in Europe. Like earlier studies our results show a clear and consistent association between educational level and the risk of being a smoker.^{13,14} However, with the exception of Portugal there is no clear pattern of lower inequalities in Southern Europe compared to other European regions. The presence of educational inequalities in physical activity in our results corresponds to findings from a systematic review on this issue.¹² However, contrary to this study we did not find systematically smaller associations between educational level and physical activity in Central and Eastern Europe compared to other European regions. For fruit and vegetable consumption our findings mirror figures from an earlier European study that suggested that educational inequalities in vegetable consumption are especially pronounced in Northern Europe.⁵ However, this study did not cover countries in Central and Eastern Europe, and our findings indicate that in most countries in this regions inequalities in fruit and vegetable consumption are also stronger than in the rest of Europa, and the South in particular.

Some of our findings warrant further discussion. For alcohol, our findings are broadly consistent with the alcohol harm paradox: higher educated people quite often drink more than low educated people but they tend not to have the negative social or health effects.²⁴ The fact that higher educated respondents did not consume alcohol less frequently may also stem from evidence indicating that moderate alcohol intake is associated with health benefits, particularly a lower risk of cardiovascular diseases.²⁵ For physical activity, our finding of

stronger (and significant) associations between educational level and 3 days of physical activity than for 5 days of physical activity is not necessarily surprising: the indicator measuring 5 days of physical activity per week captures respondents who exercise 3 or 4 days per week in the same category as people who do not exercise at all. Because only a minority of respondents manage to exercise on 5 or more days per week, this suggests that this indicator does not manage to discriminate well between people who exercise on at least 3 or 4 days per week and respondents who do not engage in physical activity. As such, the indicator measuring 3 days of physical activity per week may be better able to capture a problematic lack of physical activity. As our results show, it is especially this lack of physical activity that is more prevalent among the lower educated, rather than very high frequencies of physical activity being more prevalent among the highest educated.

There are some limitations to the data and analysis presented here. Firstly, full cross-national comparability of the measures used is difficult to achieve.^{26,27} Secondly, all measures are self-reported, and answers on some risky health behaviours may be biased (for example, social desirability bias may arise from underreporting alcohol consumption). Thirdly, data were derived through a survey and may not be fully representative.²⁸ Additionally, bias may occur due to selective unit non-response (e.g., respondents with alcohol addictions may be less likely to participate). Related to this, due to the use of post-stratification weights to account for selective non-response among the lowest educated the results presented may be slightly exaggerated. After all, people from the lowest educational group (i.e., the group with the highest level of non-response) are weighted more heavily than the other educational groups in the analysis. This would apply most strongly to countries with the highest non-response rates. Finally, most of the measures used are straightforward and therefore easy to understand for respondents, but also fairly simplistic. We only have information on cigarette smoking and not on cigars or e-cigarettes. We know the frequency but not the type or

intensity of physical activity. The data measure the frequency rather than quantity and diversity of fruit and vegetables consumed. Although the thoroughly developed showcards on alcohol consumption take into account country differences in which drink containers are used, we could not distinguish types of alcoholic drinks consumed.²⁹ Further research is needed to add further layers of detail to these findings.

This paper has presented estimates of educational inequalities in risky health behaviour in Europe that are recent and informative, but also fairly descriptive. Future work will be able to explore the mechanisms explaining the educational inequalities in risky health behaviour that we observed in these particular European countries (e.g. income, financial strain, and knowledge). Additionally it is possible that the importance of the different mechanisms varies across different countries. A more detailed picture of which mechanisms account for the observed inequalities would help the development of tailored, country-specific solutions to reduce social inequalities in risky health behaviour. Connected to this, future research should aim to examine the underlying macro-level causes for the cross-national differences in the strength of educational inequalities in risk behaviour that we found here. This could include welfare regimes and social security arrangements that would address some of the stressors that increase the risk of behaviour that could be harmful to people's health.³ Additionally, it has been shown that regulation, taxation and advertising of tobacco and alcohol influence the levels of alcohol and tobacco consumption,¹⁶ and future work should examine to what extent educational groups are differentially affected. Finally, cultural and religious values may contribute to cross-national differences in risk behaviour, and this link could be examined in more detail.³

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Table 1. Descriptive statistics (pooled and separately for 21 European countries)

	Gender (% female)	Age (mean)	Educational level			Daily smoker (%)	20 or more cigarettes per day (%)	Alcohol > once per week (%)	>2 units on last week-day drinking (%)	>2 units on last weekend day drinking (%)	Binge drinking at least weekly (%)	Physically active at least 3 days / week (%)	Physically active at least 5 days / week (%)	Fruit at least once per day (%)	Vegetables at least once per day (%)
			Low (%)	Middle (%)	High (%)										
All (pooled)	53.1	50.08	21.8	52.0	26.2	22.3	32.6	23.5	50.3	75.7	17.6	53.0	33.0	68.3	71.6
North															
Denmark	49.5	49.96	15.4	44.9	39.7	18.2	29.2	35.5	47.2	79.7	11.5	60.0	35.0	72.9	70.9
Finland	50.4	51.66	16.7	52.5	30.8	16.1	29.0	14.6	41.9	74.6	15.5	69.0	40.0	71.8	78.8
Norway	46.5	49.90	12.8	46.1	41.2	14.8	18.7	19.4	56.9	85.9	15.5	55.0	28.0	72.9	79.8
Sweden	50.1	50.21	13.3	56.4	30.2	10.0	14.3	19.8	50.1	79.9	25.3	58.0	33.0	63.2	79.9
West															
Austria	51.9	49.26	17.2	68.0	14.8	27.2	52.7	27.9	57.6	78.2	19.6	55.0	32.0	62.7	56.5
Belgium	49.7	49.16	25.5	45.0	29.4	22.9	34.4	37.6	46.2	74.3	19.2	47.0	28.0	66.7	87.0
France	51.6	49.81	19.1	57.8	23.2	25.8	27.8	33.1	39.0	66.4	7.6	42.0	25.0	69.2	77.6
Germany	48.4	51.10	6.5	66.1	27.4	24.3	31.5	32.4	49.2	73.0	14.6	63.0	40.0	72.2	67.6
Ireland	54.3	49.64	35.7	43.7	20.6	21.4	36.1	17.0	61.0	93.6	42.3	65.0	40.0	73.1	82.5
Netherlands	55.6	51.03	32.7	34.9	32.5	22.1	25.6	42.1	42.1	68.9	14.6	59.0	35.0	71.2	79.0
Switzerland	50.3	49.66	16.9	61.7	21.4	21.9	32.7	33.0	45.3	65.0	11.3	62.0	40.0	73.9	83.6
UK	55.3	50.72	32.1	39.5	28.4	18.3	25.1	35.1	63.8	82.7	34.6	57.0	38.0	72.0	78.2
Central/East															
Czech Rep	54.8	49.38	6.3	79.2	14.4	25.5	26.3	17.2	68.9	83.0	18.8	46.0	23.0	52.3	45.1
Estonia	58.9	49.62	9.2	57.7	33.1	22.5	31.6	10.1	38.6	69.3	11.6	62.0	44.0	69.6	71.2
Hungary	57.2	50.87	15.7	65.8	18.5	28.9	36.5	12.2	63.1	83.0	12.9	30.0	18.0	41.5	36.5
Lithuania	62.3	51.67	15.6	57.1	27.3	23.5	29.7	9.7	57.8	85.4	19.5	55.0	36.0	53.1	66.7
Poland	53.8	48.78	40.9	37.7	21.5	27.1	44.0	10.8	48.2	77.6	11.3	48.0	34.0	70.4	73.4

Slovenia	53.3	50.87	18.0	62.7	19.2	21.2	37.8	21.1	45.5	55.5	6.7	48.0	31.0	80.9	82.3
South															
Israel	55.8	48.19	15.1	50.7	34.2	23.0	45.7	6.9	74.7	83.8	17.8	36.0	17.0	71.8	80.5
Portugal	54.0	52.08	61.8	20.5	17.8	20.7	30.6	33.6	39.6	54.9	13.3	34.0	20.0	85.4	78.8
Spain	47.8	48.33	51.3	25.0	23.7	28.0	28.8	31.9	27.0	61.7	10.9	52.0	37.0	76.9	57.7

Source: European Social Survey (2016). N=31,774. Notes: Statistics presented are unweighted.

Table 2. Inequalities by educational level in the risk of being a daily smoker, and (for daily smokers only) in the risk of smoking 20 or more cigarettes on a typical day.

	Education	Daily smoker		20 or more cigarettes per day	
		OR	95% CI	OR	95% CI
All (pooled)	Low	4.24	(3.83 – 4.68)	2.99	(2.46 – 3.63)
	Middle	2.91	(2.65 – 3.19)	1.91	(1.58 – 2.32)
	High	1.00		1.00	
North					
Denmark	Low	6.08	(3.65 – 10.11)	4.01	(1.46 – 10.97)
	Middle	2.60	(1.64 – 4.13)	2.62	(1.00 – 6.84)
	High	1.00		1.00	
Finland	Low	8.60	(5.25 – 14.08)	2.52	(1.03 – 6.19)
	Middle	4.01	(2.56 – 6.28)	1.96	(0.83 – 4.65)
	High	1.00		1.00	
Norway	Low	7.72	(3.92 – 15.19)	6.36	(1.09 – 37.07)
	Middle	6.27	(3.40 – 11.58)	3.64	(0.68 – 19.54)
	High	1.00		1.00	
Sweden	Low	6.67	(3.14 – 14.15)	0.98	(0.15 – 6.49)
	Middle	3.69	(1.87 – 7.29)	1.80	(0.33 – 9.89)
	High	1.00		1.00	
West					
Austria	Low	2.87	(1.82 – 4.53)	5.41	(2.41 – 12.13)
	Middle	2.36	(1.56 – 3.56)	1.97	(0.96 – 4.06)
	High	1.00		1.00	
Belgium	Low	7.12	(4.39 – 11.54)	3.82	(1.41 – 10.37)
	Middle	4.11	(2.55 – 6.62)	3.06	(1.11 – 8.43)
	High	1.00		1.00	
France	Low	3.88	(2.42 – 6.21)	7.93	(2.47 – 25.42)
	Middle	2.90	(1.86 – 4.50)	2.46	(0.78 – 7.78)
	High	1.00		1.00	
Germany	Low	5.77	(3.91 – 8.50)	2.56	(1.19 – 5.50)
	Middle	3.05	(2.18 – 4.29)	2.32	(1.14 – 4.71)
	High	1.00		1.00	
Ireland	Low	4.45	(3.06 – 6.46)	3.70	(1.68 – 8.16)
	Middle	2.10	(1.49 – 2.97)	2.73	(1.27 – 5.88)
	High	1.00		1.00	
Netherlands	Low	4.46	(2.93 – 6.79)	1.34	(0.60 – 2.99)
	Middle	3.13	(2.09 – 4.70)	1.12	(0.51 – 2.45)
	High	1.00		1.00	
Switzerland	Low	3.73	(2.29 – 6.08)	6.75	(2.30 – 19.79)
	Middle	2.28	(1.52 – 3.43)	4.22	(1.58 – 11.25)
	High	1.00		1.00	
UK	Low	3.91	(2.71 – 5.65)	1.88	(0.91 – 3.91)
	Middle	2.61	(1.84 – 3.69)	1.08	(0.52 – 2.25)
	High	1.00		1.00	
Central/East					
Czech Rep	Low	2.50	(1.52 – 4.11)	3.65	(1.38 – 9.64)
	Middle	1.47	(0.97 – 2.23)	1.74	(0.74 – 4.10)
	High	1.00		1.00	

Estonia	Low	8.20	(5.23 – 12.87)	5.34	(2.20 – 12.94)
	Middle	3.87	(2.68 – 5.60)	1.98	(0.87 – 4.50)
	High	1.00		1.00	
Hungary	Low	4.25	(2.58 – 7.00)	2.94	(1.14 – 7.62)
	Middle	2.70	(1.69 – 4.30)	1.66	(0.65 – 4.23)
	High	1.00		1.00	
Lithuania	Low	2.73	(1.73 – 4.32)	2.44	(1.09 – 5.43)
	Middle	2.24	(1.57 – 3.19)	1.41	(0.72 – 2.77)
	High	1.00		1.00	
Poland	Low	5.04	(3.26 – 7.77)	2.28	(1.08 – 4.81)
	Middle	3.45	(2.25 – 5.29)	2.40	(1.12 – 5.13)
	High	1.00		1.00	
Slovenia	Low	3.61	(1.72 – 7.58)	2.48	(0.65 – 9.42)
	Middle	3.74	(1.89 – 7.43)	2.10	(0.60 – 7.36)
	High	1.00		1.00	
South					
Israel	Low	2.65	(1.81 – 3.86)	7.98	(3.77 – 16.90)
	Middle	2.21	(1.65 – 2.97)	2.56	(1.45 – 4.54)
	High	1.00		1.00	
Portugal	Low	1.01	(0.56 – 1.83)	3.22	(0.94 – 11.04)
	Middle	0.93	(0.45 – 1.90)	1.23	(0.28 – 5.33)
	High	1.00		1.00	
Spain	Low	3.33	(2.33 – 4.76)	2.77	(1.35 – 5.65)
	Middle	1.69	(1.12 – 2.55)	0.89	(0.37 – 2.19)
	High	1.00		1.00	

Source: European Social Survey (2016). All results are adjusted for gender, age and age squared.

Table 3. Inequalities by educational level in the risk of drinking alcohol more than once a week, the risk of drinking for than 2 units of alcohol on the last drinking occasion on weekday and weekend day (for those who drink alcohol only), and the risk of binge drinking at least weekly.

	Education	Alcohol more than once per week		> 2 units on last weekday drinking		> 2 units on last weekend day drinking		Binge drinking at least weekly	
		OR	95% CI	OR	95% CI	OR	95% CI	OR	95% CI
All (pooled)	Low	0.59	(0.54 – 0.64)	0.72	(0.66 – 0.78)	0.72	(0.65 – 0.79)	1.29	(1.16 – 1.44)
	Middle	0.70	(0.65 – 0.76)	0.83	(0.77 – 0.89)	0.88	(0.80 – 0.95)	1.15	(1.04 – 1.27)
	High	1.00		1.00		1.00		1.00	
North									
Denmark	Low	0.38	(0.25 – 0.58)	1.73	(1.11 – 2.70)	0.75	(0.46 – 1.22)	1.94	(1.08 – 3.50)
	Middle	0.57	(0.41 – 0.79)	0.93	(0.66 – 1.29)	0.93	(0.62 – 1.38)	1.13	(0.70 – 1.85)
	High	1.00		1.00		1.00		1.00	
Finland	Low	0.43	(0.27 – 0.68)	1.38	(0.98 – 1.95)	1.42	(0.93 – 2.17)	1.97	(1.24 – 3.12)
	Middle	0.65	(0.45 – 0.94)	0.97	(0.74 – 1.27)	1.06	(0.76 – 1.48)	1.57	(1.06 – 2.33)
	High	1.00		1.00		1.00		1.00	
Norway	Low	0.38	(0.23 – 0.65)	0.58	(0.39 – 0.88)	0.97	(0.56 – 1.69)	0.47	(0.24 – 0.91)
	Middle	0.55	(0.38 – 0.80)	0.83	(0.61 – 1.13)	1.12	(0.72 – 1.74)	0.87	(0.58 – 1.31)
	High	1.00		1.00		1.00		1.00	
Sweden	Low	0.58	(0.36 – 0.93)	0.89	(0.59 – 1.33)	0.86	(0.52 – 1.43)	1.17	(0.74 – 1.83)
	Middle	0.69	(0.47 – 0.99)	0.87	(0.64 – 1.17)	0.88	(0.60 – 1.29)	0.87	(0.61 – 1.24)
	High	1.00		1.00		1.00		1.00	
West									
Austria	Low	0.64	(0.42 – 0.98)	0.98	(0.63 – 1.51)	0.79	(0.47 – 1.34)	3.10	(1.79 – 5.38)
	Middle	0.93	(0.65 – 1.33)	0.88	(0.61 – 1.27)	1.00	(0.63 – 1.58)	1.36	(0.83 – 2.22)
	High	1.00		1.00		1.00		1.00	
Belgium	Low	0.49	(0.35 – 0.68)	1.02	(0.72 – 1.43)	0.92	(0.62 – 1.38)	1.06	(0.68 – 1.63)
	Middle	0.61	(0.44 – 0.84)	0.92	(0.67 – 1.28)	0.84	(0.58 – 1.23)	1.07	(0.70 – 1.62)
	High	1.00		1.00		1.00		1.00	
France	Low	0.49	(0.33 – 0.72)	0.90	(0.60 – 1.35)	0.76	(0.50 – 1.16)	3.88	(1.64 – 9.22)
	Middle	0.54	(0.38 – 0.78)	0.79	(0.55 – 1.14)	0.71	(0.48 – 1.03)	2.27	(0.99 – 5.19)
	High	1.00		1.00		1.00		1.00	

Germany	Low	0.40	(0.28 – 0.57)	0.77	(0.56 – 1.08)	0.58	(0.40 – 0.84)	1.63	(1.04 – 2.58)
	Middle	0.67	(0.51 – 0.87)	0.84	(0.65 – 1.08)	0.79	(0.59 – 1.06)	1.18	(0.82 – 1.70)
	High	1.00		1.00		1.00		1.00	
Ireland	Low	0.53	(0.37 – 0.77)	0.79	(0.58 – 1.09)	0.90	(0.48 – 1.69)	1.78	(1.29 – 2.46)
	Middle	0.84	(0.62 – 1.14)	0.96	(0.74 – 1.26)	1.05	(0.60 – 1.81)	1.57	(1.19 – 2.06)
	High	1.00		1.00		1.00		1.00	
Netherlands	Low	0.51	(0.37 – 0.70)	1.09	(0.78 – 1.52)	1.09	(0.77 – 1.54)	2.08	(1.31 – 3.32)
	Middle	0.84	(0.63 – 1.12)	1.00	(0.74 – 1.36)	1.26	(0.92 – 1.74)	1.48	(0.96 – 2.19)
	High	1.00		1.00		1.00		1.00	
Switzerland	Low	0.36	(0.23 – 0.56)	0.73	(0.47 – 1.13)	0.85	(0.54 – 1.34)	0.59	(0.26 – 1.35)
	Middle	0.62	(0.45 – 0.85)	0.80	(0.59 – 1.09)	0.85	(0.61 – 1.18)	1.12	(0.74 – 1.95)
	High	1.00		1.00		1.00		1.00	
UK	Low	0.47	(0.36 – 0.62)	0.39	(0.29 – 0.52)	0.94	(0.65 – 1.34)	1.38	(1.02 – 1.88)
	Middle	0.88	(0.69 – 1.12)	0.57	(0.44 – 0.75)	1.28	(0.91 – 1.80)	1.40	(1.07 – 1.84)
	High	1.00		1.00		1.00		1.00	
Central/East									
Czech Rep	Low	0.65	(0.38 – 1.11)	0.58	(0.35 – 0.95)	0.38	(0.20 – 0.70)	1.90	(1.00 – 3.63)
	Middle	0.57	(0.38 – 0.86)	1.08	(0.68 – 1.49)	0.87	(0.50 – 1.51)	1.30	(0.79 – 2.13)
	High	1.00		1.00		1.00		1.00	
Estonia	Low	1.02	(0.61 – 1.71)	1.29	(0.87 – 1.92)	1.80	(1.12 – 2.89)	1.38	(0.75 – 2.56)
	Middle	0.65	(0.44 – 0.96)	0.91	(0.70 – 1.20)	1.13	(0.84 – 1.52)	1.43	(0.93 – 2.22)
	High	1.00		1.00		1.00		1.00	
Hungary	Low	1.14	(0.62 – 2.10)	0.54	(0.31 – 0.96)	0.53	(0.25 – 1.11)	3.31	(1.49 – 7.38)
	Middle	0.95	(0.55 – 1.67)	0.56	(0.34 – 0.92)	0.61	(0.32 – 1.16)	1.19	(0.55 – 2.57)
	High	1.00		1.00		1.00		1.00	
Lithuania	Low	2.31	(1.27 – 4.17)	2.50	(1.57 – 3.99)	1.28	(0.67 – 2.46)	3.41	(2.03 – 5.74)
	Middle	1.03	(0.63 – 1.68)	1.59	(1.16 – 2.19)	1.17	(0.74 – 1.87)	1.31	(0.88 – 1.94)
	High	1.00		1.00		1.00		1.00	
Poland	Low	1.04	(0.63 – 1.72)	1.35	(0.93 – 1.96)	1.42	(0.89 – 2.28)	1.81	(1.01 – 3.24)
	Middle	0.98	(0.59 – 1.60)	1.03	(0.72 – 1.46)	1.05	(0.69 – 1.61)	1.66	(0.96 – 2.90)
	High	1.00		1.00		1.00		1.00	
Slovenia	Low	0.46	(0.23 – 0.91)	1.31	(0.73 – 2.35)	1.29	(0.71 – 2.34)	1.63	(0.57 – 4.67)

	Middle	0.74	(0.41 – 1.34)	1.35	(0.82 – 2.25)	1.18	(0.71 – 1.97)	0.86	(0.32 – 2.28)
	High	1.00		1.00		1.00		1.00	
South									
Israel	Low	0.36	(0.18 – 0.69)	3.25	(1.05 – 10.09)	1.51	(0.55 – 4.13)	4.24	(2.15 – 8.35)
	Middle	0.51	(0.34 – 0.77)	0.91	(0.58 – 1.43)	0.64	(0.40 – 1.03)	2.29	(1.43 – 3.68)
	High	1.00		1.00		1.00		1.00	
Portugal	Low	1.83	(0.92 – 3.63)	1.03	(0.56 – 1.90)	0.81	(0.44 – 1.49)	2.76	(0.97 – 7.85)
	Middle	1.80	(0.80 – 4.05)	0.84	(0.39 – 1.79)	1.12	(0.52 – 2.42)	2.53	(0.78 – 8.20)
	High	1.00		1.00		1.00		1.00	
Spain	Low	0.68	(0.49 – 0.95)	1.51	(1.04 – 2.20)	0.77	(0.55 – 1.08)	1.58	(0.94 – 2.66)
	Middle	0.71	(0.47 – 1.05)	0.85	(0.53 – 1.35)	0.63	(0.43 – 0.94)	0.89	(0.47 – 1.69)
	High	1.00		1.00		1.00		1.00	

Source: European Social Survey (2016). All results are adjusted for gender, age and age squared.

Table 4. Inequalities by educational level in being physically active at least 3 days per week, and being physically active at least 5 days per week.

	Education	Physically active at least 3 days / week		Physically active at least 5 days / week	
		OR	95% CI	OR	95% CI
All (pooled)	Low	1.00		1.00	
	Middle	1.42	(1.34 – 1.50)	1.12	(1.06 – 1.19)
	High	1.67	(1.55 – 1.80)	1.05	(0.97 – 1.14)
North					
Denmark	Low	1.00		1.00	
	Middle	1.16	(0.85 – 1.58)	1.06	(0.77 – 1.45)
	High	1.24	(0.86 – 1.80)	0.95	(0.65 – 1.39)
Finland	Low	1.00		1.00	
	Middle	2.02	(1.54 – 2.65)	1.35	(1.03 – 1.77)
	High	2.43	(1.75 – 3.38)	1.16	(0.84 – 1.60)
Norway	Low	1.00		1.00	
	Middle	1.39	(1.00 – 1.94)	1.27	(0.87 – 1.85)
	High	1.88	(1.28 – 2.76)	1.43	(0.92 – 2.20)
Sweden	Low	1.00		1.00	
	Middle	1.52	(1.11 – 2.06)	1.15	(0.83 – 1.59)
	High	1.94	(1.33 – 2.84)	1.27	(0.85 – 1.90)
West					
Austria	Low	1.00		1.00	
	Middle	1.61	(1.24 – 2.08)	1.28	(0.96 – 1.71)
	High	4.53	(3.01 – 6.83)	2.18	(1.49 – 3.20)
Belgium	Low	1.00		1.00	
	Middle	0.94	(0.73 – 1.22)	0.77	(0.58 – 1.02)
	High	0.99	(0.73 – 1.36)	0.65	(0.46 – 0.92)
France	Low	1.00		1.00	
	Middle	1.08	(0.84 – 1.39)	0.93	(0.70 – 1.25)
	High	1.21	(0.84 – 1.74)	0.91	(0.60 – 1.40)
Germany	Low	1.00		1.00	
	Middle	1.08	(0.85 – 1.36)	0.83	(0.67 – 1.05)
	High	0.94	(0.70 – 1.28)	0.58	(0.43 – 0.79)
Ireland	Low	1.00		1.00	
	Middle	1.81	(1.43 – 2.30)	1.30	(1.03 – 1.65)
	High	1.88	(1.40 – 2.52)	1.05	(0.79 – 1.40)
Netherlands	Low	1.00		1.00	
	Middle	1.45	(1.14 – 1.85)	1.22	(0.95 – 1.56)
	High	1.45	(1.08 – 1.95)	0.86	(0.63 – 1.17)
Switzerland	Low	1.00		1.00	
	Middle	1.33	(0.96 – 1.85)	1.12	(0.81 – 1.55)
	High	1.12	(0.76 – 1.65)	0.85	(0.57 – 1.25)
UK	Low	1.00		1.00	
	Middle	1.26	(1.00 – 1.59)	1.22	(0.96 – 1.55)
	High	1.85	(1.43 – 2.40)	1.26	(0.97 – 1.64)
Central/East					
Czech Rep	Low	1.00		1.00	
	Middle	1.53	(1.13 – 2.08)	1.39	(0.97 – 2.00)
	High	1.83	(1.20 – 2.80)	1.39	(0.85 – 2.29)

Estonia	Low	1.00		1.00	
	Middle	1.34	(0.98 – 1.81)	1.17	(0.86 – 1.59)
	High	1.44	(1.02 – 2.04)	0.94	(0.67 – 1.33)
Hungary	Low	1.00		1.00	
	Middle	1.28	(0.93 – 1.76)	1.05	(0.73 – 1.53)
	High	2.22	(1.46 – 3.38)	1.36	(0.83 – 2.23)
Lithuania	Low	1.00		1.00	
	Middle	1.51	(1.12 – 2.03)	1.34	(0.97 – 1.84)
	High	1.16	(0.79 – 1.69)	0.81	(0.54 – 1.21)
Poland	Low	1.00		1.00	
	Middle	1.72	(1.31 – 2.26)	1.60	(1.21 – 2.13)
	High	1.55	(1.12 – 2.13)	1.25	(0.89 – 1.75)
Slovenia	Low	1.00		1.00	
	Middle	1.09	(0.79 – 1.50)	0.85	(0.60 – 1.19)
	High	1.23	(0.75 – 2.03)	0.86	(0.50 – 1.49)
South					
Israel	Low	1.00		1.00	
	Middle	1.82	(1.31 – 2.53)	1.98	(1.28 – 3.07)
	High	2.88	(2.01 – 4.14)	1.86	(1.15 – 3.02)
Portugal	Low	1.00		1.00	
	Middle	1.64	(1.05 – 2.56)	0.97	(0.55 – 1.71)
	High	1.73	(1.04 – 2.89)	1.34	(0.73 – 2.44)
Spain	Low	1.00		1.00	
	Middle	1.38	(1.03 – 1.84)	1.13	(0.84 – 1.52)
	High	1.63	(1.22 – 2.18)	0.85	(0.63 – 1.15)

Source: European Social Survey (2016). All results are adjusted for gender, age and age squared.

Table 5. Inequalities by educational level in eating fruit at least once per day and eating vegetables at least once per day.

	Education	Fruit at least once per day		Vegetables at least once per day	
		OR	95% CI	OR	95% CI
All (pooled)	Low	1.00		1.00	
	Middle	1.09	(1.03 – 1.16)	1.34	(1.26 – 1.42)
	High	1.77	(1.63 – 1.92)	2.35	(2.16 – 2.55)
North					
Denmark	Low	1.00		1.00	
	Middle	1.63	(1.17 – 2.28)	1.97	(1.43 – 2.72)
	High	2.57	(1.69 – 3.92)	5.03	(3.24 – 7.83)
Finland	Low	1.00		1.00	
	Middle	1.42	(1.07 – 1.88)	2.17	(1.63 – 2.90)
	High	2.30	(1.62 – 3.25)	4.06	(2.73 – 6.03)
Norway	Low	1.00		1.00	
	Middle	1.50	(1.04 – 2.16)	1.51	(1.02 – 2.25)
	High	2.62	(1.69 – 4.08)	2.67	(1.64 – 4.35)
Sweden	Low	1.00		1.00	
	Middle	1.52	(1.09 – 2.12)	1.46	(1.03 – 2.07)
	High	2.71	(1.78 – 4.11)	4.09	(2.44 – 6.88)
West					
Austria	Low	1.00		1.00	
	Middle	1.78	(1.36 – 2.33)	1.56	(1.20 – 2.02)
	High	2.15	(1.47 – 3.16)	1.86	(1.29 – 2.69)
Belgium	Low	1.00		1.00	
	Middle	1.29	(0.98 – 1.69)	0.98	(0.68 – 1.43)
	High	1.85	(1.32 – 2.60)	1.62	(0.97 – 2.69)
France	Low	1.00		1.00	
	Middle	1.00	(0.76 – 1.30)	1.93	(1.46 – 2.55)
	High	1.62	(1.09 – 2.40)	4.39	(2.71 – 7.12)
Germany	Low	1.00		1.00	
	Middle	1.51	(1.17 – 1.95)	1.02	(0.80 – 1.30)
	High	1.75	(1.26 – 2.45)	1.63	(1.18 – 2.27)
Ireland	Low	1.00		1.00	
	Middle	1.62	(1.26 – 2.09)	1.70	(1.26 – 2.29)
	High	1.95	(1.42 – 2.67)	1.51	(1.06 – 2.14)
Netherlands	Low	1.00		1.00	
	Middle	1.19	(0.92 – 1.55)	1.50	(1.13 – 1.98)
	High	1.49	(1.07 – 2.06)	2.52	(1.73 – 3.66)
Switzerland	Low	1.00		1.00	
	Middle	0.83	(0.57 – 1.23)	1.26	(0.83 – 1.92)
	High	1.08	(0.68 – 1.70)	2.78	(1.60 – 4.85)
UK	Low	1.00		1.00	
	Middle	1.26	(0.98 – 1.62)	1.72	(1.32 – 2.25)
	High	2.64	(1.96 – 3.56)	3.19	(2.31 – 4.42)
Central/East					
Czech Rep	Low	1.00		1.00	
	Middle	1.33	(0.99 – 1.78)	1.28	(0.95 – 1.71)
	High	1.95	(1.28 – 2.97)	2.37	(1.56 – 3.60)

Estonia	Low	1.00		1.00	
	Middle	1.60	(1.17 – 2.20)	1.73	(1.27 – 2.34)
	High	2.24	(1.56 – 3.22)	2.50	(1.75 – 3.57)
Hungary	Low	1.00		1.00	
	Middle	1.85	(1.38 – 2.49)	1.88	(1.38 – 2.56)
	High	3.34	(2.24 – 5.00)	3.70	(2.45 – 5.57)
Lithuania	Low	1.00		1.00	
	Middle	3.02	(2.22 – 4.12)	3.04	(2.27 – 4.06)
	High	5.98	(4.02 – 8.91)	5.40	(3.60 – 8.11)
Poland	Low	1.00		1.00	
	Middle	1.62	(1.22 – 2.17)	1.54	(1.14 – 2.07)
	High	1.82	(1.28 – 2.58)	1.66	(1.16 – 2.38)
Slovenia	Low	1.00		1.00	
	Middle	1.36	(0.92 – 2.01)	1.69	(1.15 – 2.50)
	High	2.58	(1.32 – 5.07)	3.23	(1.57 – 6.62)
South					
Israel	Low	1.00		1.00	
	Middle	0.82	(0.61 – 1.11)	1.15	(0.85 – 1.57)
	High	1.14	(0.80 – 1.61)	1.91	(1.31 – 2.79)
Portugal	Low	1.00		1.00	
	Middle	0.51	(0.31 – 0.85)	1.26	(0.76 – 2.09)
	High	0.97	(0.49 – 1.91)	1.78	(0.93 – 3.43)
Spain	Low	1.00		1.00	
	Middle	1.54	(1.11 – 2.14)	1.42	(1.06 – 1.90)
	High	1.81	(1.29 – 2.55)	1.70	(1.26 – 2.28)

Source: European Social Survey (2016). All results are adjusted for gender, age and age squared.