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Education, health and subjective wellbeing in Europe

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Abstract

The productive and allocative theories predict that education has positive impact on health: the more educated adopt healthier life styles and use more efficiently health inputs and this explains why they live longer. We find partial support for these theories with an econometric analysis on a large sample of Europeans aged above 50 documenting a significant and positive correlation among education years, life styles, health outputs and functionalities. We however find confirmation for an anomaly already observed in the US, namely the more educated are more likely to contract cancer. Our results are robust when controlling for endogeneity and reverse causality in IV estimates with instrumental variables related to quarter of birth and neighbours' cultural norms.

Keywords: health satisfaction, education, life satisfaction, public health costs.

JEL numbers: I21 *Analysis of education*; I12 *Health Behavior*; I31 *General welfare, wellbeing*

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1. Introduction

The impact of education on health is a well-known stylized fact in the medical literature. Olshansky, et al. (2012) look at mortality data between 1990 and 2008 in the US and estimate a higher than 10 year difference in life expectancy between white males with less than 12 years and more than 16 years of education. Meara et al. (2008) show that all gains in life expectancy at age 25 in the US between the 1980s and the 1990s occurred among the better educated thereby raising educational differentials in life expectancy by 30 percent. The difference in Europe is narrower but still relevant. Corsini (2010) calculates that in 2007 life expectancy at age 50 for males was 5 years higher for men in Czech Republic, around 3 years higher in Belgium and in Italy, and around 2 years higher in Norway for those with tertiary education vis-à-vis those with primary education. Female gaps are slightly lower but still significant.

The contribution of the economic literature to the interpretation of these stylized facts is in formulating theories, identifying causal links and disentangling the impact of different drivers of the observed findings net of all the other controls with econometric analysis. First of all, we may expect that part of the above mentioned evidence is explained by channels different from that of the direct nexus between education and health (i.e. the more educated may be less likely to incur in car accidents). Second, we may for instance expect that differences in income determined by returns to schooling explain an important part of the health differential between the more and less educated¹ and we may therefore be interested in distinguishing between direct and indirect (i.e. through income) education effects.

Beyond the above mentioned concurring factors the empirical nexus between education years and health outcomes remains however the main well-established empirical finding accounting for the correlation between education and life expectancy (see, e.g., Grossman, 2006, for a survey). Such

¹Education years affect earned income through returns to schooling and thereby reduce the cost of health allowing richer individuals to buy more expensive medical treatments and healthier foods.

nexus has been interpreted in the sense of a causality link going from education years to health with two main rationales.

The first rationale refers to the “productivity argument” and follows the Becker (1965) theoretical framework where individual utility accrues from the enjoyment of a set of non market goods which include health. Non market goods can be “produced” with a productive function having as inputs time and market goods (such as diet, cigarette smoking, alcohol use and medical care), with some of them having positive while other negative effects on health. In this production function education years act as Hicks neutral technical progress increasing the productivity of inputs (Kenkel et al., 2006). Due to this productivity effect it is possible to demonstrate that the demand of the nonmarket output “health” grows in education years under reasonable assumptions on income elasticities and elasticities of substitution between health and other goods. The intuition behind the model is that education raises the impact of time and market goods on health. This is because educated individuals know how to use in a more productive way the time spent - directly or indirectly through doctor visits – for health advice and to understand their health conditions and the market goods which contribute to it, while lack of education may lead to misuse and ignorance on the effectiveness of some therapies.

The second rationale refers to the “allocative efficiency” argument assuming that education years do not act just as technological progress in the production function of health but also induce individuals to change the input mix (see, among others, Rosenzweig and Schultz, 1983 and Ross and Mirowsky, 1999). The intuition is that the more educated have superior information about the true nature of the production function and therefore make better choices among market inputs of the health production function (i.e. they adopt healthier life styles since they are more informed about the harmful effects of smoking, drinking and following a bad diet).

As is well known this strand of theoretical and empirical research may provide important contributions to the human capital literature: if the two above described causality links exist they reinforce the importance of education years on productivity and returns to schooling given that the

more educated are more productive not just because of their superior knowledge and skills but also because they are likely to lose less working days due to health problems.

1.2 Related studies and endogeneity issues

Empirical findings confirm the positive relationship between education and health postulated by the theoretical literature. Effects of education on health behaviors are reported, among others, by Kenkel (1991) and Meara (2001). Wagstaff (1986), Gilleskie and Harrison (1998) and Erbsland et al. (1995) find support for the productive efficiency model, while results of Kenkel (1991), confirming the effect of education on healthier life styles support the allocative efficiency model. Ross and Wu (1995) find a positive and significant gradient for both the direct relationship and the indirect relationship mediated by life habits. Cutler and Lleras-Muney (2006) find that higher levels of education are linked to higher health status and are positively associated to healthier life styles. Other papers show that the more educated live longer in the US (Christenson and Johnson, 1995; Deaton and Paxson, 2001) and in other countries (Mustard, 1997; Manor et al., 1999; Liang, et al., 2000), while Kunst and Mackenack (1994) confirm the result for Europe. Elo and Preston (1996) document that the education gradient loses some of its importance for older ages on mortality rate. It is reasonable to assume that this phenomenon is due to a kind of survival effect (Lynch, 2003). Among the various effects, education improves capacity of learning when a process of learning is possible (as in chronic diseases) (Goldman and Lakdawalla, 2001 and Case et al., 2005). Ross and Mirowsky (1999) observe that the more educated have a higher sense of control and self-esteem, both of them related to a superior health. Meara (2001) and Currie and Moretti (2003) show that mother's education improves the health of children.

Exploiting the results of quasi-natural experiments (i.e. testing if the introduction of minimum schooling laws in some countries led to a higher health) Arendt (2005), Lleras-Muney (2005), and Oreopoulos (2007) show the presence of a specific causal effect of education on health. The relevance of the causal nexus seems reinforced by evidence showing that innovation which reduces

skills required to use drugs has negative effects on the education-health gradient. Goldman and Lakdawalla (2002) document that the introduction of beta blockers which drastically simplify therapies against hypertension reduce the morbidity gap between more and less educated.

The nexus between education and health may as well conceal a reverse causality nexus or a spurious link where a third omitted driver affecting both variables is the true factor explaining their observed correlation (see Card, 1999 and 2000).

The rationale for the endogeneity problem is that factors such as parental investments into their children, parental or family background, or differences in non-cognitive traits or time preferences (Braakman, 2010) may produce a spurious relationship between education and health. Parents with lower time impatience (or more altruistic preferences toward their children) invest more in their children education. At the same time their lower time impatience leads them to care more for their health and for that of their children. Hence the observed correlation between education years and health may be spurious and partially driven by parental preferences. Still in this case endogeneity is likely to be mixed with direct causality since remote factors, such as parental preferences, affecting education years do not prevent education years from exerting a positive impact on health through the three channels described above. Empirical evidence on the reverse causality nexus is as well documented by the fact that low health levels of children are linked to low levels of education (see Edwards and Grossman, 1979; Chaikind and Corman, 1991; Currie, 2000; Alderman et al., 2001 and Case et al., 2005) and that children born underweight and with other health problems are likely to receive less schooling (Case et al., 2005 and Black et al., 2005).

1.3 The contribution of our paper

Our paper intends to contribute originally to this literature in several respects. First, we explicitly provide a framework for testing the productive and allocative theories on a cross-country sample including 19 European countries. Second, we propose instruments and robust econometric techniques in order to control for endogeneity and disentangle the direct effect of education years

on health from the spurious correlation caused by omitted unobservable third drivers. More specifically we use birth quarters and average education years of the neighbouring regions as relevant and valid instruments since they are assumed (and indeed do) affect the respondent's education years while not directly her/his health status. Third, we provide further evidence for European countries on an anomaly already observed by Cutler and Lleras-Muney (2006) in the US on the impact of education on cancer. Our findings provide support for both the allocative and the productive theory at European level but also confirm the "anomaly" already observed by Cutler and Lleras-Muney (2006) in the US showing that the probability of contracting cancer is higher for the more educated.

2. Our hypotheses

In this section we formulate theoretical hypotheses which will be tested in the empirical analysis which follows on the basis of the above described (productivity and allocation) theories in the education-health literature.

More specifically we outline the following two hypotheses:

H_{0A} : *there is no difference in terms of health inputs (smoking, drinking, vigorous physical activities, overweight/obese) between the more and less educated;*

H_{0B} : *there is no difference in terms of health outputs (cancer, Parkinson, hypertension, diabetes, etc.) between the more and less educated.*

Based on the different combinations of our results we may have the following outcomes:

- 1) *Both H_{0A} and H_{0B} are not rejected.*

If education does not make any significant difference in terms of both health inputs and outputs neither the productive nor the allocative theories are supported by our empirical evidence.

2) *H_{0A} is not rejected while H_{0B} is rejected.*

If the more educated report better health outputs (without having significantly different inputs) only the productive theory is supported: even though the more educated use the same health inputs of the less educated their health outcomes are significantly different.

3) *Both H_{0A} and H_{0B} are rejected. H_{0B} is rejected even when we control for health inputs*

The more educated are significantly different from the less educated in terms of both health inputs and outputs. In this case both the allocative and productive theories are supported if the difference is in the direction that the more educated have healthier life styles (drink and smoke less, practice more intensely physical activities and are in less proportion overweight) and better health outcomes (are less likely to suffer from the different pathologies considered in our analysis) even after controlling for differences in health inputs.

4) *H_{0A} is rejected. H_{0B} is not rejected once we control for health inputs, while it is rejected if we do not control for health inputs*

If rejection of H_{0A} goes in the direction that the more educated have better health inputs (i.e. drink and smoke less, practice more intensely physical activities and are in lower proportion overweight), while not better health outcomes once we control for the level of input only the allocative theory is supported. The difference between the more and less educated in terms of health outcomes would be entirely explained in this case by the significant differences in health inputs. If, on other terms, the less educated use the same levels of health inputs adopting healthier life styles they would have exactly the same health outputs as the more educated. This scenario obviously requires as maintained assumption that health inputs impact significantly upon health.

3. Database description

Data for the empirical analysis come from three waves of the Survey of Health, Ageing and Retirement in Europe (SHARE), a panel dataset on health, socio-economic status, and the social and family networks of more than 45,000 Europeans aged 50 and over. The survey covers the following 19 countries: Austria, Germany, Sweden, Netherlands, Spain, Italy, France, Denmark, Greece, Switzerland, Belgium, Israel, Czech Republic, Poland, Ireland, Hungary, Portugal, Slovenia and Estonia.

We provide variable legend in Table 1, while descriptive statistics of our sample in Table A2. The average number of education years in the sample is 10.50, while more than half of respondents are retired (around 52 percent). Around 44 percent of the sample is above 69 years and 12 percent above 79 years. Around 58 percent of sample respondents is married or with regular partner. The average number of children is 2.2 while that of grandchildren 2.6.

Table 2 provides as well descriptive statistics for four categories of health indicators. A first group of variables includes subjective and composite health indicators such as: i) the respondent self-assessed health status (*health_insat*);² ii) the CASP (*casp*) quality of life indicator based on four subscales measuring control, autonomy, pleasure and self-realization (the indicator ranges from 12 to 48); iii) the ADLA (Activities of Daily Living) indicator;³ iv) the IADLA (Instrumental Activities of Daily Living) indicator,⁴ v) an index of cognitive functions (*n_wordsrecalled*);⁵ vi) an

² The indicator scores are 1 for “excellent” health, 2 for “very good”, 3 for “good”, 4 for “fair” and 5 for “poor” health.

³ The ADLA (Activities of Daily Living) index measures the self-evaluated skills in performing the following tasks: dressing, bathing or showering, eating and cutting up food, walking across a room and getting in or out of bed. The index (ranging from 0 to 5) is higher the higher the difficulties in performing these tasks due to the reduced respondent’s mobility.

⁴ The IADLA (Instrumental Activities of Daily Living) index is calculated by summing responses on the self-evaluated skills in performing the following tasks: telephone calls, taking medications and managing money. The index (ranging from 0 to 3) is higher in presence of higher difficulties in performing these tasks due to the reduced respondent’s mobility.

⁵ A list of ten words is communicated to the respondent and, after a fixed time, the number of words recalled is reported.

index of mobility (*mobilityind*);⁶ vii) an index measuring numeracy skills (*numeracy*) viii) a dummy which takes value one for individuals reporting long-term health problems, illness, disability or infirmity (*longtermillness*); ix) the number of visits to the doctor in the last 12 months (*n_doctorvisits*).

The second group of variables considered concerns illnesses and, more specifically: i) high blood pressure or hypertension (*hypertension*); ii) heart attack including myocardial infarction or coronary thrombosis or any other heart problem including congestive heart failure (*heartattack*); iii) stroke or cerebral vascular disease (*stroke*); iv) cancer or malignant tumour, including leukaemia or lymphoma, but excluding minor skin cancers (*cancer*); v) Parkinson disease (*Parkinson*); vi) diabetes or high blood sugar (*diabetes*); vii) asthma (*asthma*); viii) Arthritis, including osteoarthritis, or rheumatism (*arthritis*); ix) osteoporosis (*osteoporosis*); x) stomach or duodenal ulcer, peptic ulcer (*ulcer*); xi) cataracts (*cataracts*); xii) hip fracture or femoral fracture (*fracture*).

A third group of variables measures symptoms and, more specifically: joint pain, heart trouble, swollen legs, sleeping problems, falling down, fear of falling down, breathlessness, persistent cough, dizziness, stomach or intestine, incontinence.

Descriptive evidence on health conditions in our sample (see Table A1 in the Appendix) documents that half of respondents (50.6 percent) report a long-term illness, 36.2 percent hypertension and around 5 percent a cancer. Only 24.8 percent report no illnesses.

3.1 Descriptive evidence on education related differences in terms of health inputs and outputs

⁶ The index measures the self-assessed ability of performing the following tasks: walking across a room, walking 100 metres, climbing one flight of stairs and climbing several flights of stairs.

We perform a preliminary descriptive investigation on the impact of education on health inputs and outputs based on ISCED (International Standard Classification of Education) 1997 classification. We identify four groups which we define as: “primary school” (the ISCED level 1 of primary education or first stage basic education); “secondary school” (the ISCED level 2 including lower secondary or second stage of basic education), “high school” (the ISCED level 3 of (upper) secondary education) and “bachelor” (the ISCED levels 5 and 6 of first stage of tertiary education and second stage of tertiary education).

Evidence provided in Table 2 suggests several directions. For most of the considered health outputs education seems to have a clear-cut impact: 16.8 and 13.8 percent in the primary and secondary school group respectively got a heart attack against only 10.01 percent in the bachelor group. The descriptive education-hypertension gradient is as well remarkable: 41.5 percent in the primary school, 37.8 in the secondary school, 34.6 in the high school and 30 percent in the bachelor group. Diabetes affects 15.1 percent in the primary school group, 11.09 in the secondary school group, 10.02 in the high school group and 8 percent in the bachelor group. In all of these four cases the difference in means between the lowest and the highest education group is highly significant at 95 percent level. Findings on almost all the other pathologies considered (cataracts, asthma, arthritis, osteoporosis, Parkinson, stroke, etc.) register similar patterns. Indications are however not so clear cut and in the same direction for cancer: 3.99 percent of the primary school group has contracted a type of cancer against 4.5 percent in the secondary school and 5.4 percent in the bachelor group.

Education seem to matter a lot also in terms of health inputs providing preliminary evidence in favour of the allocative theory hypothesis. The share of non drinkers in the last three months before the interview among those with primary school is 19.4 percent against 22 percent in the bachelor group. Of course drinking alcohol every day is not necessarily an unhealthy habit if one drinks moderately but, since we do not have more accurate measures of higher drinking intensity in our sample we cannot shed light further on this point. Average body mass index is also higher for the

less educated (27.13 percent in the primary school group against 26.02 percent in the bachelor).⁷

Behind this aggregate result we find that the share of individuals who are obese (BMI above 34.9) is 22.4 percent in the primary school group, 21.1 in the secondary school group, 19.1 in the high school group and 13.6 in the bachelor group. Our descriptive findings also document that 54.8 percent of individuals in the primary school group hardly ever or never practice a sport, against 34.7 percent in the bachelor group. The only health style variable where the effect of education is less clear-cut is smoking. We find that smokers are 16.1 percent among the primary school group, 21.2 percent in the secondary school group, 22 percent in the high school group and 17.5 percent in the bachelor group. To conclude with, those with higher education have healthier life styles (mostly in terms of physical activity and diet with the notable exception of smoking habits).

The impact of education on physical functionalities from a descriptive point of view is also strong as expected. The mobility index is on average 82.3 for the primary school group, 57 for the secondary school, 41.03 for the high school and 30.6 for the bachelor group. The ADLA indicator registers a similar pattern with a value of 34.3 for the primary school group, 20.09 for the secondary school, 15.7 for the high school and 11.6 for the bachelor group. The distance between the low and high educated in terms of mental functionalities, where education is expected to produce a positive and significant impact per se, is relevant. In the word recall test performed by SHARE investigators individuals in the primary school group remember 4.06 words on average, against 4.90 in the secondary school group, 5.40 in the high school group and 5.84 in the bachelor group. The outcome in the numeracy score of the primary school group is 2.72, against 3.19 of the secondary school, 3.59 of the high school and 3.90 of the highest education group.

Consistently with what observed above in terms of health inputs, outputs and functionalities health (un)satisfaction falls with education. The primary school group registers an average (un)

⁷ The Body Mass Index is calculated as the weight divided by the square of height expressed in meters. 24.9 is conventionally considered a regular weight value. A BMI lower than 18 (higher than 29.9) is considered underweight (overweight). Obesity starts with BMI above 34.9. Withlock et al. (2009) find that individuals with BMI equal to 29 lose one year of life, while those with BMI to 31 two years of life.

satisfaction level of 3.27 (health satisfaction between “fair” and “good”), the secondary school group of 2.98, the high school group of 2.88, while the bachelor group of 2.55 (health satisfaction between “good” and “very good”). Last but not least, the less educated go systematically more to the doctor (8.02 visits per year for the primary school group against 5.57 for the bachelor group). The interpretation of this indicator is ambiguous because, on the one side, doctor visits can be considered an input (patients may go to doctors for prevention) while, on the other side, a signal of bad health output (individuals with more or more severe pathologies are highly likely to go more to the doctor).

To conclude with, our descriptive evidence documents that the more educated have a different health input mix consisting in healthier life styles, better functionalities and better health outcomes in most pathologies (hearth attack, hypertension, diabetes and Parkinson) with the notable exception of cancer.

4. Econometric findings

Descriptive findings provided preliminary answers to interpret the stylized facts of differences in life expectancy among the less and the more educated. They cannot help us to understand however whether their more favourable health outcomes in many pathologies are determined by a direct effect of education or by an indirect effect which is mediated by income or life styles. The econometric analysis in first differences which follows may help us to answer to this question testing whether the impact of education on a given pathology is significant even when we control for standard socio-demographic factors and health styles.

More specifically, and in order to test hypotheses H_{0A} and H_{0B} outlined in section 2 our baseline specifications are

$Health_indicator_{i,t}$

$$\begin{aligned}
&= \alpha + \beta EduYears_{i,t} + \gamma Ln_Income_{i,t} + \sum_{k=1}^K \delta_k Socio_Dem_{i,t} \\
&+ \sum_{l=1}^L \lambda_l HealthStyles_{i,t} + \sum_{v=1}^V \chi_v DInt_Year_{i,v} + \sum_{g=1}^G \kappa_g DCountry_{i,g} + \varepsilon_{i,t}
\end{aligned} \tag{1}$$

and

$HealthStyle_{i,t}$

$$\begin{aligned}
&= \alpha + \beta EduYears_{i,t} + \gamma Ln_Income_{i,t} + \sum_{k=1}^K \delta_k Socio_Dem_{i,t} \\
&+ \sum_{v=1}^V \chi_v DInt_Year_{i,v} + \sum_{g=1}^G \kappa_g DCountry_{i,g} + \varepsilon_{i,t}
\end{aligned} \tag{2}$$

where the dependent variable in (1), $Health_indicator_{i,t}$ is one of the different health indicators being part of the synthetic indicators or specific illnesses described in the previous section. The impact of education on changes in health is captured by the variable $EduYears_{i,t}$, beyond Ln_income (the log of per capita total household income), the vector of $Socio_Dem$ regressors includes variables such as gender, age, employment and marital status, number of children and grandchildren. Health styles are measured by information on physical activities, alcohol, overweight/obesity and smoking habits (variables *Sport*, *Alcohol*, *Overweight/Obese* and *Smoking* respectively). All estimates include year (*DInt_year*) as well as country fixed effects (*DCountry*). The well-known problem of missing variables in the SHARE database for variables such as income is solved, as in most empirical studies using the same information, with the Christelis (2011) imputation method.⁸ All estimates are clustered at country level.

⁸ Missing information is imputed using the Fully Conditional Specification method (FCS) (Van Buuren et al., 2006). Conditionally on the non-missing values of other dataset variables a distribution for the missing value of a given variable is generated. Based on this approach five different imputed datasets (one for each iteration) are made available from the SHARE website. The variables in our empirical analysis with imputed values are *number of children*, *logincome*, *number of grandchildren*, *limited activities*. For each of them we use an average of values from the five datasets.

With reference to our hypothesis testing, H_{0A} (no difference in health inputs) is not rejected if β is not statistically different from zero in (2) and H_{0B} (no difference in health outputs) is not rejected if β is not statistically different from zero in (1). The allocative theory is supported by our empirical evidence if $\beta=0$ is rejected in (2), while the productive theory is supported if $\beta=0$ is rejected in (1). We as well obtain evidence that only the allocative theory works if $\beta=0$ is rejected in (2) but not in (1) and health styles impact significantly on health outcomes (or when education impacts significantly on health outcomes when not controlling for health styles).

Econometric findings presented in Table 3 document that lagged education years are significantly correlated with health inputs (life styles) consistently with the allocative theory. The more educated drink less (columns 1-2), practice more frequently vigorous physical activities (columns 3-4), smoke less (columns 5-6) and are in a less proportion overweight (columns 7-8).

Results presented in Table 4 (columns 1-4) document that all the descriptive evidence discussed above in terms of physical and mental functionalities, health satisfaction and doctor visits is confirmed when we control for concurring factors in econometric estimates.⁹ Education years are inversely correlated with health (un)satisfaction and doctor visits, while positively correlated with all the considered functionalities. In the same Table 4 we find that education years are negatively correlated with the insurgence of almost all pathologies, controlling or not for life styles. The impact of education years on cancer remains however positive confirming what already evidenced in our descriptive findings. Overall our results provide support to both the allocative and productive theories.

In Table 4 (columns 5-8) we repeat the previous specifications correcting for attrition bias. The problem of attrition is particularly relevant in empirical health studies not using mortality rates and in our SHARE sample with aged respondents who may exit from the survey for various reasons (death or nonresponse due to health worsening or other reasons unrelated to health). To check

⁹ Full estimate findings are presented in Tables A3a-A4d.

whether our findings are robust to attrition bias we follow the standard approach of regressing the probability of survival on the set of controls used in our specifications and use the inverse of the predicted probability as a weight of our estimates.¹⁰ The impact of education years is stronger and robust on weight and drinking, while no more significant on several pathologies. The effects which remain significant are those on pathologies which are presumably more influenced by life styles such as heart attack, stroke, diabetes, arthritis and osteoporosis. Note as well that hypertension remains significant only when not corrected for life styles. This implies that, once we correct for attrition bias, the impact of education on hypertension is explained by the allocative and not by the productive theory. The finding is consistent with what found by Goldman and Lakdawalla (2002) documenting that the introduction of more user-friendly drugs such as beta blockers reduced the education-health gradient (and the dependence of health output from the higher ability of the more educated of using properly prescribed therapies).

The above mentioned theoretical findings are consistent and provide a reasonable explanation for the reported result on health satisfaction. Superior physical and mental functionalities and a lower number of chronic diseases justify why we find education years impacting positively on health satisfaction. In this sense findings on objective health indicators provide a validity check of those on the subjective health indicator.

Overall our econometric findings may be interpreted in the sense that higher education leads to better health styles and functionalities with positive consequences on health. In addition to it, even after controlling for health styles, the more educated have a better technology (i.e. higher ability to

¹⁰ The attrition probability is estimated as follows

$A_{i,t} = \alpha + \sum_{k=1}^K \beta_k \text{Sociodem}_{i,t} + \gamma \text{noconditions}_{i,t} + \delta \text{nosymptoms}_{i,t} + \sum_{v=1}^{V-1} \chi_v \text{DInt_Year}_{i,v} + \sum_{g=1}^{G-1} \kappa_g \text{DCountry}_{i,g} + \epsilon_{i,t}$ where $A_{i,t}$ is a dummy variable = 1 if the respondent is not in the panel for at least 2 waves, *Sociodem* variables include gender, age, income, employment and marital status, education years, number of children and grandchildren, smoking, drinking and physical activity habits and a dummy for respondents being overweight or obese; *nocondition* and *nosymptoms* are dummy variables taking value one if the respondent reports not having specific illnesses or symptoms respectively. Results from the attrition estimates (omitted for reasons of space) show that female gender, the number of grandchildren and the *nocondition* dummy impact negatively on attrition, while being divorced/separated and doing sport activities infrequently impact positively. This evidence strongly suggests that mortality and worsening health conditions are likely to be the main cause of nonresponses. For a similar approach on the attrition weighting procedure see, among others, Raab et al. (2005), Nicoletti and Peracchi (2005) and Vandecasteele and Debels (2007).

exploit medical information) which allows them to obtain better health outcomes even after controlling for the input mix. Overall, these findings provide a reasonable and empirically grounded interpretation of what is behind the stylized fact of the positive correlation between education years and life expectancy.

In terms of economic significance our results indicate that one year more of education reduces by around 0.3 percent the probability of incurring in a long term illness, by 0.2 percent in a heart attack, by 0.1 percent in a stroke, by 0.27 percent in diabetes, by 0.4 percent in arthritis and by 0.14 percent in osteoporosis, while raising by 0.1 percent that of incurring in cancer. If we consider that the education year distance between those with primary school and those with tertiary education may be up to 11-13 years we find that the magnitude of the effect between the primary and the bachelor group becomes relevant (i.e. around 4 percent higher probability of incurring in a long term illness).

Note finally that, even before controlling for endogeneity, the significant correlation we find in Tables 3-4 is important *per se*. It means that if we observe a highly educated individual such individual has a higher health outcomes either because education causes such outcomes or because there are other characteristics which are associated to education and good health outcomes. In both cases higher educated should expect a better life outcome. The policy suggestion however is different since in the first case we must promote education to have better health, while in the second case it is the unobservable driver related to education that should be possibly supported by proper policies.

This is why is important to use instrumental variables to verify whether the observed correlation hides a causality link from education years to health styles, health outcomes and functionalities.

5. Instrumental Variable estimates

To control whether our findings hide a direct causality nexus between education, on the one side, and life styles, health outcomes and functionalities, on the other side, we perform IV estimates using the following set of equations

$$EduYears_{i,t} = \zeta + \xi Z_{i,t} + \eta_{i,t} \quad (2a)$$

$$\begin{aligned} Health_indicator_{i,t} \\ = \alpha + \beta \widehat{EduYears}_{i,t} + \gamma Ln_Income_{i,t} + \sum_{k=1}^K \delta_k Socio_Dem_{i,t} \\ + \sum_{l=1}^L \lambda_l HealthStyles_{i,t} + \sum_{v=1}^V \chi_v DInt_Year_{i,v} + \sum_{g=1}^G \kappa_g DCountry_{i,g} + \varepsilon_{i,t} \end{aligned} \quad (2b)$$

where equations (2a) and (2b) represent respectively the first and second stage of our IV estimation. Our identification strategy consists of two instruments (Z) for $EduYears_{i,t}$ in (1). Following Angrist and Krueger (1991), we instrument education years with the respondent's quarter of birth ($First_qtr_i$ is a dummy equal to one for those born in the first quarter of the year) by exploiting the longer/shorter stay at school due to the month of birth and the local laws regulating the entry age and the length of compulsory schooling. The exclusion restriction hinges on the exogenous variation in $EduYears_{i,t}$ induced by the respondent's month of birth which is correlated with our outcome variable (health) only through schooling years. The validity of the instrument can be hardly confuted since month of birth cannot be suspected of affecting directly health outcomes. The relevance of the instruments hinges on the correlation between birth quarter and education years. Such correlation is expected since i) students born in different periods of the year start school at different ages and ii) compulsory schooling laws require students to attend school up to a specific age. Students born early in the year (i.e. January) are expected (net of those who anticipate) to be on average older when they enrol (i.e. typically in September) relative to those who are born later in the year. This implies that, by reaching the legal dropout age earlier, the former are more likely to have attended the school for a shorter period than the latter. Or, on the contrary, by reaching the end

of a given course of studies later, they will have *coeteris paribus* a lower propensity to start the following education cycle. Figure 1 reports the k-density of schooling years by quarter of births for the first wave of SHARE respondents. As expected, the distributions differ especially at middle values of education years with fewer respondents reporting 8 or 13 years of schooling if born in the first quarter *vis-à-vis* those born later in the year. From a statistical point of view, the two-sample Kolmogorov-Smirnov test confirms that education years are distributed in a statistically different way by quarter of birth (p -value = 0.006; combined K-S = 0.0269). The negative effect of being born in the first quarter of the year (relative to being born later in the year) on education years is also confirmed by results from first stage IV regressions discussed below.

The second instrument, $\overline{EduYears}_{i,t}$, is the average number of education years in the i 's neighbouring region. In presence of multiple neighbours we use a weighted average of $\overline{EduYears}_{i,t}$ for each neighbouring region, with the weights equal to the length of the shared border.¹¹ We believe that the instrument is relevant due to peer effects and/or social conformity.¹²

¹¹ The instrumental variable is derived by choosing the second level of the NUTS (Nomenclature of Territorial Units for Statistics) subdivision as calculation units. Missing values at second NUTS level were replaced with information at first (Germany) or third (Denmark and Estonia) while records with missing information at both second and third NUTS levels were discarded. The variable is built by using the GIS (Geographic Information System) framework. NUTS adjacent to the residence are identified for each record and lengths in km of the shared boundaries between the residence NUTS and each of the adjacent ones are calculated. Values of the corresponding non-instrumental parameter detected in each adjacent NUTS are subsequently averaged using the respective length of the shared boundary as a weight. In case of no-neighbors NUTS (i.e. islands), values of the instrumental variable detected in the closest NUTS have been considered. Routes within the same nation have been considered as better means of communication than international ones and adjacent or closest NUTS belonging to the respondent's nation have received a 75% more weighted value in the calculation of the mean. Instrumental variables were generated by using cartographical data provided by "Eurostat". Two different sets of cartographical data had to be used, i.e. the administrative units of 2003 (for Greece, Italy, Denmark, Estonia, Sweden and Germany) and of 2010 (for the other countries) since some countries changed names, number and geographic boundaries of their NUTS during the time period considered in our sample. All calculations were done using the R 3.1.1 software and the add-one packages "maptools", "rgeos", "spdep" and "doParallel". For further reference in the literature on the use of geographical aggregates as internal instruments see also Aslam and Corrado (2012).

¹² The rationale for the relevance of our instrument hinges on the literature of peer effects and/or social conformity since we interpret $\overline{EduYears}_{i,t}$ as out-group effects calculated as the average of the responses across all 'neighboring' groups/regions by the i 's region. In this sense we extend the work by Cohen-Cole (2006) by considering between-group interdependencies where a group is defined by individuals living in a specific region. Our identification strategy is based on the fact that agents' schooling years in one region are correlated with those of other agents in the surrounding regions and guaranteed if the number of individuals exceeds the number of regions (which is our case).

We also believe our exclusion restriction is valid, since it is plausible for $\overline{EduYears}_{i,t}$ to affect changes in health indicators not directly but only indirectly through $EduYears_{i,t}$.¹³

Estimation findings obtained by instrumenting schooling years with $First_qtr_i$, with $\overline{EduYears}_{i,t}$, and with both simultaneously, are reported in columns 1-4, 5-8 and 9-14 of Table 5 respectively.¹⁴ IV results generally confirm the main findings in Table 3 concerning functionalities. The positive effects of education years remain significant for all the functionality indicators considered but the number of doctor visits (as in Table 3 when controlling for attrition) and the number of chronic diseases. Different results, however, emerge when considering specific illnesses. When using $First_qtr_i$ as single instrument, education years negatively impact the likelihood of reporting most of the specific illnesses. Conversely, when we use $\overline{EduYears}_{i,t}$ or both as instruments, baseline results are confirmed only for hypertension and cancer. Since the IV coefficients when using $\overline{EduYears}_{i,t}$ or both instruments look closer in magnitude to the baseline ones in Table 3, we consider them as more reliable with respect to the estimation results where $First_qtr_i$ is used as a single instrument.

To summarize, the effect of schooling years on health functionalities is generally robust also to the IV robustness checks, while it stays so only for hypertension (one education years reduces by 0.46 percent the insurgence of the pathology) and cancer (one education years increases by 0.26 percent the insurgence of the pathology) when considering specific illnesses.

5.1 Further discussion on our results

In what presented above we find support for allocative and productive theories confirming that education has positive effects on physical and mental functionalities and on health outcomes, with or without controlling for health styles and after controlling for attrition bias. Some of the effects on

¹³ Notice that $\overline{EduYears}_{i,t}$ is not significant when added as a control in the specifications in Tables 3a-3c. Results from these estimates are omitted for reason of space but available upon request.

¹⁴ Full estimate findings are provided in Tables A5a-A5e in the Appendix.

specific illnesses are no longer significant when using our IV approach, while a causality nexus going from education to outputs is verified only for hypertension and cancer. The paradox on the effect of education on cancer is therefore supported by our research confirming what already observed by Cutler and Lleras-Muney (2006). We provide some tentative rationales for the paradox.

The first is that the more educated die less of other diseases and therefore are more likely to get cancer. This rationale however does not seem supported by our data since, when considering cancer patients, the more educated are in generally older than the less educated. A second rationale is that illness reporting accuracy is higher among the more educated. This would not explain however why in all other illnesses the more educated perform better and would apply only if the reporting inaccuracy of the less educated applies only to cancer. A third rationale is that unobservable health style components associated with the life styles of the more educated are positively correlated with cancer (i.e. late marriage and lower birth rate for women may be related to breast cancer, more sedentary life and higher stress of the high educated work to other forms, etc.). The puzzle remains since we do not find a univocal conclusive and clear cut explanation.

6. Conclusions

Our empirical work investigates on a large sample of Europeans aged above 50 whether the different life expectancy of the more and less educated found in the literature may be accounted for by differences in health styles and outcomes. We document that, consistently with the allocative theory, the more educated adopt significantly healthier life styles (with the notable exception of smoking habits). However, the productive theory is as well supported by our evidence since, even after controlling for health styles, the more educated have significantly better functionalities (mobility and memory skills) and significantly lower probability of incurring in chronic diseases. A paradox common to the recent evidence provided from Cutler and Lleras-Muney (2006) for the US

is that the more educated have a higher probability of contracting cancer. We find a similar result in our analysis.

Some but not all the documented effects are robust when controlling for endogeneity with IV estimates. More specifically a causal link is found for physical and mental functionalities, hypertension and cancer. Overall, these effects are largely consistent with the reported positive impact of education years on health satisfaction and provide a sound interpretation of the stylized facts of the higher life expectancy of the more educated. On this last point our findings predict that the education - life expectancy gap will get larger in case of a relatively larger progress in cancer treatments *vis-à-vis* other pathologies.

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Table 1 - Variable Legend

Variable	Description
N_Doctorvisits	how often seen or talked to medical doctor last 12 months
N_Chronicdeseases	number of chronic diseases
Adla	activities of daily living index (high: has difficulties) (see section 2)
Iadla	instrumental activities of daily living index (high: has difficulties) (see section 2)
Mobilityind	mobility index (high: has difficulties)
N_Wordsrecalled	results of word recalling task (see section 2)
Numeracy	numeracy score: mathematical performance (see section 2)
Casp	CASP: quality of life and well-being index (see section 2)
Health_Insat.	self-perceived health - us version (1 = excellent; 2 = very good; 3 = good; 4 = fair; 5 = poor)
Longtermillness	Dummy variable=1 if the individual has a long-term illness
Heartattack	Dummy variable=1 if the doctor told you had: heart attack. 0 otherwise

Hypertension	Dummy variable=1 if the doctor told you had: high blood pressure or hypertension. 0 otherwise
Stroke	Dummy variable=1 if the doctor told you had: stroke. 0 otherwise
Diabetes	Dummy variable=1 if the doctor told you had: diabetes or high blood sugar. 0 otherwise
Asthma	Dummy variable=1 if the doctor told you had: asthma. 0 otherwise
Arthritis	Dummy variable=1 if the doctor told you had: arthritis. 0 otherwise
Osteoporosis	Dummy variable=1 if the doctor told you had: osteoporosis. 0 otherwise
Cancer	Dummy variable=1 if the doctor told you had: cancer. 0 otherwise
Ulcer	Dummy variable=1 if the doctor told you had: stomach or duodenal ulcer, peptic ulcer. 0 otherwise
Parkinson	Dummy variable=1 if the doctor told you had: Parkinson disease. 0 otherwise
Cataracts	Dummy variable=1 if the doctor told you had: cataracts. 0 otherwise
Fracture	Dummy variable=1 if the doctor told you had: hip fracture or femoral fracture. 0 otherwise
Noconditions	Dummy variable=1 if the doctor told you had: none. 0 otherwise
Otherconditions	Dummy variable=1 if the doctor told you had: other conditions. 0 otherwise
Female	Dummy variable = 1 if the respondent's gender is female. 0 otherwise
Eduyears	years of schooling
Married	Dummy variable=1 if the respondent is married. 0 otherwise
Reg_Partnership	Dummy variable=1 if the respondent has a registered partnership. 0 otherwise
Separated	Dummy variable=1 if the respondent is separated. 0 otherwise
Never_Married	Dummy variable=1 if the respondent has never been married. 0 otherwise
Divorced	Dummy variable=1 if the respondent is divorced. 0 otherwise
Widowed	Dummy variable=1 if the respondent is widowed. 0 otherwise
Retired	Dummy variable=1 if the respondent is retired. 0 otherwise
Employed	Dummy variable=1 if the respondent is employed. 0 otherwise
Unemployed	Dummy variable=1 if the respondent is unemployed. 0 otherwise
Housework	Dummy variable=1 if the respondent deals with housework . 0 otherwise
Other_Job	Dummy variable=1 if the respondent has a second job. 0 otherwise
N_Children	number of children
N_Grandchildren	number of grandchildren
Drinking	Frequency of alcohol consumption in the last 3 months (0/1 dummies): <i>Almosteveryday, 5or6daysaweek, 3or4daysaweek, Onceortwiceaweek, Onceortwiceamonth, Lessoftenthanonceamonth, Notatallinthelastthreemonths</i>
Sports	Frequency of sports or vigorous activities (0/1 dummies): <i>Min1week, Oneweek, OneorThreemonth, Hardly_ever_never.</i>
Smoking	Dummy variable=1 if the respondent smokes at the present time
Bmi	body mass index (easySHARE version)
OverWeight_Obese	Dummy variable=1 if the respondent is overweight ($29.9 < \text{BMI} < 34.9$) or obese ($\text{BMI} > 34.9$). 0 otherwise
Country	country identifier
First_Qtr	See section 5
<u>EduYears</u>	See section 5
Lnincome	Ln of household total gross income. Its value is equal to the sum over all household members of the individual-level values of: annual net income from employment and self-employment (in the previous year); Annual public old age/early or pre-retirement/disability pension (or sickness benefits); Annual public unemployment benefit or insurance, public survivor pension from partner; Annual war pension, private (occupational) old age/early retirement/disability pension, private (occupational) survivor pension from partner's job, public old age supplementary pension/public old age/public disability second pension, secondary public survivor pension from spouse or partner, occupational old age pension from a second and third job; Annual public and private long-term insurance payments; Annual life insurance payment, private annuity or private personal pension, private health insurance payment, alimony, payments from charities received; Income from rent. Values of the following household level variables are added: Annual other hhd members' net income; Annual other hhd members' net income from other sources; Household bank accounts, government and corporate bonds, stocks/shares; mutual funds.

Table 2: Health styles, health outcomes and functionalities by education groups

	Variable	Primary School	Secondary School	High School	Bachelor
<i>Synthetic indicators and functionality indexes</i>	Casp	34.822	36.554	37.918	38.970
	N_Chronicdeseases	1.655	1.390	1.233	1.103
	N_Doctorvisits	8.024	6.971	6.316	5.573
	Iadla	0.157	0.075	0.047	0.038
	Adla	0.343	0.209	0.157	0.116
	N_Wordsrecalled	4.066	4.896	5.403	5.844
	Mobilityind	0.823	0.570	0.413	0.306
	Numeracy	2.719	3.190	3.593	3.902
	Heatlh_Insat_Lastwave	3.274	2.976	2.880	2.549
	Bmi	27.142	26.999	26.637	25.823
<i>Specific illnesses</i>	Longtermillness	0.553	0.528	0.482	0.440
	Limitedactivities	2.266	2.334	2.445	2.544
	Heartattack	0.168	0.138	0.113	0.101
	Hypertension	0.415	0.378	0.346	0.300
	Stroke	0.050	0.044	0.036	0.030
	Diabetes	0.151	0.119	0.102	0.080
	Asthma	0.040	0.028	0.024	0.027
	Arthritis	0.294	0.213	0.186	0.158
	Osteoporosis	0.072	0.052	0.037	0.036
	Cancer	0.045	0.052	0.050	0.054
<i>Drinking</i>	Ulcer	0.062	0.060	0.054	0.046
	Parkinson	0.011	0.006	0.006	0.006
	Cataract	0.105	0.077	0.065	0.068
	Fracture	0.031	0.023	0.018	0.014
	5or6days_A_Week	0.094	0.101	0.109	0.090
<i>Sport</i>	3or4days_A_Week	0.087	0.110	0.135	0.124
	1or2_A_Week	0.119	0.166	0.197	0.220
	1or2_A_Month	0.037	0.059	0.077	0.106
	<1_A_Month	0.017	0.024	0.030	0.038
	0_For_3_Months	0.194	0.182	0.180	0.220
	1_Week	0.114	0.124	0.148	0.167
	1or3_A_Month	0.088	0.083	0.094	0.095
	Hardlyever_Or_Never	0.548	0.445	0.376	0.347
	Smoking	0.161	0.212	0.220	0.175
	Overweight_Obese	0.661	0.645	0.613	0.535
	Obese	0.224	0.211	0.191	0.136

Table 3. The determinants of health behavior

Dep. Var:	(1) Random Effects	(2) Pooled OLS (Attrition adj.)	(3) Random Effects	(4) Pooled OLS (Attrition adj.)	(5) Random Effects	(6) Pooled OLS (Attrition adj.)	(7) Random Effects	(8) Pooled OLS (Attrition adj.)	
	DRINKING		SPORT		SMOKING		Overweight	Obese	
Eduyears	0.0404*** (0.00860)	0.0724*** (0.0128)	-0.00911** (0.00374)	-0.0112 (0.00701)	-0.00254* (0.00133)	-0.00524** (0.00200)	-0.0100*** (0.00143)	-0.0147*** (0.00147)	
Female	-1.178*** (0.0955)	-0.942*** (0.187)	0.225*** (0.0294)	0.255*** (0.0602)	-0.0858*** (0.0140)	-0.0453 (0.0298)	-0.104*** (0.0196)	-0.110*** (0.00930)	
Age55_59	0.0847*** (0.0246)	0.153*** (0.0421)	0.0637*** (0.0130)	0.0955*** (0.0235)	-0.0325*** (0.00416)	-0.0267** (0.0114)	0.0398*** (0.00564)	0.0120 (0.00896)	
Age60_64	0.120** (0.0504)	0.306*** (0.0688)	0.136*** (0.0261)	0.164*** (0.0262)	-0.0840*** (0.00875)	-0.0768*** (0.0118)	0.0505*** (0.00666)	0.0227* (0.0108)	
Age65_69	0.0983 (0.0613)	0.192* (0.0948)	0.209*** (0.0316)	0.215*** (0.0286)	-0.138*** (0.0109)	-0.141*** (0.0131)	0.0477*** (0.00885)	-0.00142 (0.0192)	
Age70_74	-0.0236 (0.0823)	0.0279 (0.0637)	0.397*** (0.0325)	0.383*** (0.0508)	-0.189*** (0.0148)	-0.191*** (0.0130)	0.0232** (0.0114)	-0.0228 (0.0205)	
Age75_79	-0.122 (0.100)	0.104 (0.138)	0.625*** (0.0320)	0.610*** (0.0609)	-0.222*** (0.0175)	-0.228*** (0.0140)	-0.00255 (0.0106)	-0.0492 (0.0319)	
Age	-0.302*** (0.114)	-0.142 (0.0888)	0.960*** (0.0404)	1.053*** (0.0692)	-0.255*** (0.0192)	-0.262*** (0.0144)	-0.0836*** (0.0119)	-0.162*** (0.0286)	
Above_80	Married	0.184** (0.0807)	0.482** (0.160)	-0.110*** (0.0395)	-0.289*** (0.0435)	-0.0605*** (0.00688)	-0.0788*** (0.0119)	0.0556*** (0.0106)	0.0167 (0.0194)
Reg_	Partnership	0.236* (0.130)	0.500** (0.187)	-0.0433 (0.0609)	-0.304*** (0.0623)	-0.00607 (0.0189)	-0.0500 (0.0391)	0.0302* (0.0174)	0.0106 (0.0172)
Separated	0.127 (0.0821)	0.103 (0.237)	-0.0939** (0.0427)	-0.472*** (0.105)	0.0312* (0.0168)	0.0594 (0.0461)	0.0137 (0.0161)	0.0548 (0.0450)	
Divorced	0.170*** (0.0514)	0.270* (0.142)	-0.0771 (0.0469)	-0.221** (0.0930)	0.0494*** (0.0129)	0.0273 (0.0406)	0.0188** (0.00870)	-0.00529 (0.0177)	
Widowed	0.0442 (0.0479)	0.155 (0.139)	-0.0423 (0.0338)	-0.284*** (0.0728)	-0.0206** (0.00819)	-0.0371 (0.0210)	0.0646*** (0.0126)	0.0194 (0.0214)	
Retired	0.263*** (0.0573)	0.299** (0.111)	-0.363*** (0.0408)	-0.380*** (0.0446)	-0.0457*** (0.00721)	-0.0545** (0.0233)	0.00813 (0.00868)	-0.00322 (0.0158)	
Employed	0.281*** (0.0411)	0.326*** (0.0923)	-0.662*** (0.0310)	-0.615*** (0.0618)	-0.0538*** (0.00938)	-0.0741*** (0.0196)	-0.00935 (0.00806)	-0.0371* (0.0182)	
Homemaker	-0.0410 (0.0594)	-0.179 (0.166)	-0.396*** (0.0450)	-0.464*** (0.0753)	-0.0615*** (0.00864)	-0.0974*** (0.0280)	-0.0143 (0.0110)	-0.0252 (0.0165)	
Other_Job	0.197* (0.112)	0.262** (0.104)	-0.444*** (0.0530)	-0.436*** (0.0778)	-0.0351** (0.0152)	-0.0412 (0.0490)	0.00128 (0.0158)	-0.0378 (0.0330)	
N_Children	-0.0308* (0.0166)	-0.0355** (0.0146)	-0.0159** (0.00651)	0.00109 (0.00652)	-0.00281 (0.00192)	-0.00325 (0.00205)	0.00403*** (0.00141)	0.00482 (0.00453)	
N_Grand children	0.00549 (0.00401)	0.00588 (0.00716)	0.00737** (0.00363)	0.00616 (0.00704)	0.00173** (0.000844)	0.00165* (0.000891)	0.00652*** (0.00125)	0.00900** (0.00314)	
Logincome	0.0701*** (0.00813)	0.0412 (0.0295)	-0.0165* (0.00981)	-0.00803* (0.00426)	-0.00206* (0.00111)	0.000950 (0.00126)	0.00355*** (0.00106)	-0.0128*** (0.00300)	
Year Dummies	YES	YES	YES	YES	YES	YES	YES	YES	
Country Dummies	YES	YES	YES	YES	YES	YES	YES	YES	
Obs.	105,943	85,400	105,931	85,400	105,965	85,400	103,516	85,400	
R-Squared		0.179		0.123		0.062		0.052	
N. Resp.	71,052		71,049		71,068		69,640		

Dependent variables: Drinking: Almost_Every_Day=7, 5or6days_week=6, 3or4days_week=5, 1or2_week=4, 1or2_month=3, <1_month=2, 0_in_3months =1, Notatallinthelastthreemonths=0. Sport: MoreThanOnceAweek=1, OnceAWeek=2, OnceEveryOneorThreeMonths =3, Hardly_ever_never=4. Smoking = dummy variable taking value 1 if smoker. OverWeight_Obese = dummy variable taking value 1 if Overweight (29.9<BMI<34.9) or Obese (BMI>34.9). We use OLS for all dependent variables (results are not substantially different in ordered logit or logit estimates and are omitted for reasons of space).

Table 4. The impact of education years on health outcomes and functionalities

Dep. Var.	Beta	Panel Random Effects		Pooled WLS (attrition adjusted)				
		Std. Err.	Beta	Std. Err.	Beta	Std. Err.	Beta	Std. Err.
<i>Panel A: health functionalities</i>								
Casp	0.205***	(0.0328)	0.181***	(0.0314)	0.166***	(0.0342)	0.131***	(0.0374)
Healthinsat	-0.0381***	(0.00409)	-0.0322***	(0.00364)	-0.0415***	(0.00188)	-0.0325***	(0.00223)
N_Chronicdeseases	-0.0249***	(0.00407)	-0.0198***	(0.00364)	-0.0269***	(0.00355)	-0.0189***	(0.00435)
Adla	-0.0125***	(0.00223)	-0.00964***	(0.00188)	-0.0107***	(0.00141)	-0.00803***	(0.00155)
Iadla	-0.00753***	(0.00134)	-0.00627***	(0.00114)	-0.00540***	(0.00103)	-0.00478***	(0.000896)
N_Doctorvisits	-0.0877***	(0.0279)	-0.0610**	(0.0276)	-0.0804	(0.0527)	-0.0531	(0.0452)
N_Wordsrecalled	0.0992***	(0.0133)	0.0942***	(0.0132)	0.0994***	(0.00896)	0.0934***	(0.00916)
Mobilityind	-0.0256***	(0.00342)	-0.0202***	(0.00304)	-0.0234***	(0.00276)	-0.0174***	(0.00246)
Control For Health Behavior	NO		YES		NO		YES	
<i>Panel B: specific illnesses</i>								
Longtermillness	-0.00579***	(0.00154)	-0.00390***	(0.00143)	-0.00648***	(0.00141)	-0.00386**	(0.00135)
Heartattack	-0.00270***	(0.000579)	-0.00205***	(0.000471)	-0.00333***	(0.000413)	-0.00245***	(0.000486)
Hypertension	-0.00488***	(0.000770)	-0.00337***	(0.000682)	-0.00589**	(0.00207)	-0.00334	(0.00217)
Stroke	-0.00102***	(0.000312)	-0.000678**	(0.000271)	-0.00145***	(0.000230)	-0.00101***	(0.000212)
Diabetes	-0.00392***	(0.000720)	-0.00297***	(0.000665)	-0.00452***	(0.000467)	-0.00268***	(0.000585)
Asthma	-0.000815***	(0.000253)	-0.000698***	(0.000237)	-0.00197*	(0.000968)	-0.00146*	(0.000802)
Arthritis	-0.00662***	(0.00141)	-0.00592***	(0.00136)	-0.00500**	(0.00176)	-0.00410**	(0.00188)
Osteoporosis	-0.000406	(0.000426)	-0.000488	(0.000437)	-0.00157***	(0.000363)	-0.00145***	(0.000320)
Cancer	0.00103***	(0.000363)	0.00108***	(0.000376)	0.00103*	(0.000518)	0.000988*	(0.000537)
Ulcer	-0.00139***	(0.000409)	-0.00133***	(0.000369)	-0.00141***	(0.000429)	-0.00115**	(0.000486)
Parkinson	-0.000205**	(8.27e-05)	-0.000136*	(7.92e-05)	-0.000166	(0.000110)	-0.000105	(0.000113)
Cataracts	0.000614**	(0.000300)	0.000715**	(0.000296)	-0.000566	(0.00116)	-0.000475	(0.00130)
Fracture	-0.000552***	(0.000130)	-0.000478***	(0.000136)	-0.000450*	(0.000213)	-0.000392	(0.000280)
Othercondition	-0.000118	(0.000813)	0.000110	(0.000806)	-0.00139	(0.00108)	-0.000818	(0.00112)
Noconditions	0.00430***	(0.000982)	0.00318***	(0.000899)	0.00539**	(0.00186)	0.00344	(0.00199)
Control For Health Behavior	NO		YES		NO		YES	

Robust standard errors clustered at country level in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Figure 1. Schooling years and quarter of birth (SHARE sample, wave 1)

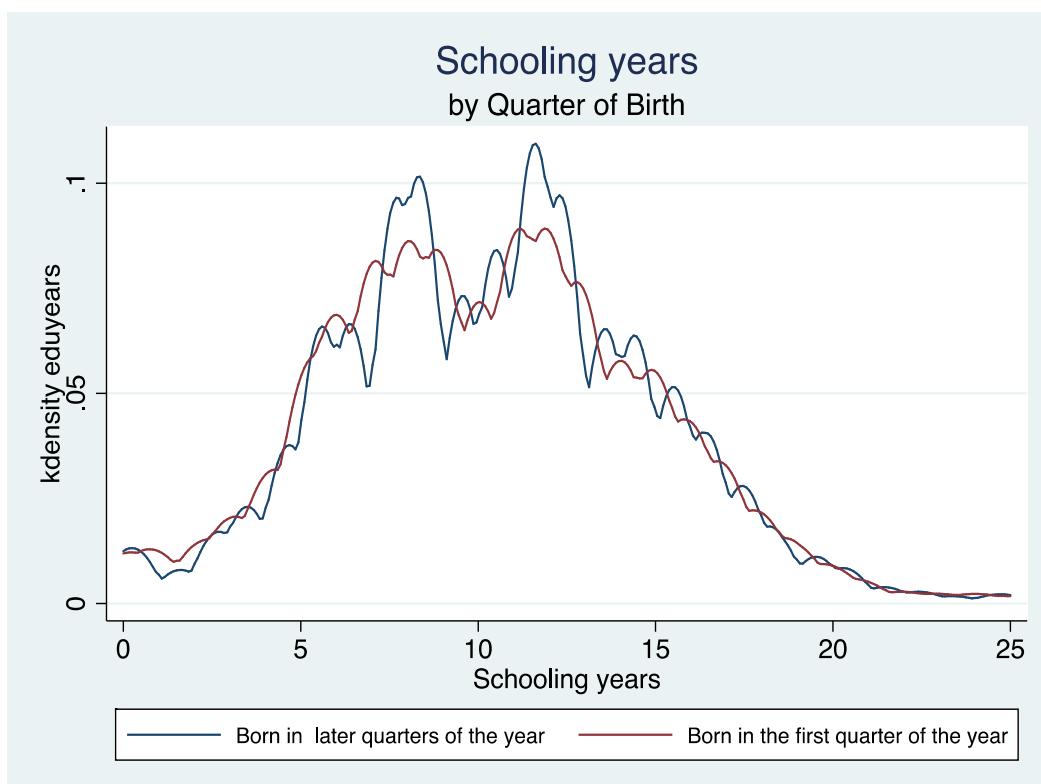


Table 5: The impact of education years on health outcomes and functionalities (IV estimates)

Dep. Var.:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	IV: First_qtr				IV: EduYears				IV: First_qtr & EduYears					
	Education (2nd stage)	First_qtr (1st stage)	Education (2nd stage)	EduYears (1st stage)	Education (2nd stage)	First_qtr (1st stage)	EduYears (1st stage)		Education (2nd stage)	First_qtr (1st stage)	EduYears (1st stage)			
Beta	Std. Err.	Beta	Std. Err.	Beta	Std. Err.	Beta	Std. Err.		Beta	Std. Err.	Beta	Std. Err.	Beta	Std. Err.
<i>Panel A: health functionalities</i>														
Casp	0.726***	(0.143)	-0.0995**	(0.0403)	0.121**	(0.0580)	0.515***	(0.0825)	0.122**	(0.0578)	-0.0792*	(0.0414)	0.515***	(0.0827)
Healthinsat	-0.147***	(0.0262)	-0.0763*	(0.0460)	-0.0314***	(0.00483)	0.515***	(0.0825)	-0.0314***	(0.00470)	-0.0799*	(0.0417)	0.515***	(0.0827)
N_Chronicdeseases	-0.171***	(0.0317)	-0.0762*	(0.0432)	-0.00860	(0.0111)	0.515***	(0.0825)	-0.00918	(0.0112)	-0.0806*	(0.0411)	0.515***	(0.0827)
Adla	-0.277***	(0.0251)	-0.0310	(0.0191)	-0.0143**	(0.00717)	0.514***	(0.0826)	-0.0143**	(0.00703)	-0.0802*	(0.0418)	0.514***	(0.0828)
ladla	-0.193***	(0.0153)	-0.0382***	(0.0136)	-0.00985**	(0.00499)	0.514***	(0.0827)	-0.0103**	(0.00489)	-0.0825**	(0.0410)	0.514***	(0.0828)
N_Doctorvisits	-0.00137	(0.148)	-0.108***	(0.0416)	0.0267	(0.0852)	0.515***	(0.0825)	0.0246	(0.0865)	-0.0799*	(0.0413)	0.515***	(0.0827)
N_Wordsrecalled	0.524***	(0.0618)	-0.0916***	(0.0307)	0.0931***	(0.0107)	0.515***	(0.0826)	0.0933***	(0.0104)	-0.0802**	(0.0401)	0.515***	(0.0827)
Mobilityind	-0.297***	(0.0319)	-0.0362*	(0.0197)	-0.0205***	(0.00663)	0.515***	(0.0826)	-0.0208***	(0.00658)	-0.0799*	(0.0414)	0.515***	(0.0828)
<i>Panel B: Specific Illnesses</i>														
Longtermillness	-0.0351***	(0.00994)	-0.0959**	(0.0416)	-0.000535	(0.00221)	0.515***	(0.0825)	-0.000680	(0.00221)	-0.0804*	(0.0416)	0.515***	(0.0826)
Heartattack	-0.0160**	(0.00694)	-0.0959**	(0.0481)	-0.000815	(0.000816)	0.515***	(0.0825)	-0.000899	(0.000826)	-0.0806*	(0.0413)	0.515***	(0.0827)
Hypertension	-0.0260**	(0.0101)	-0.0954**	(0.0444)	-0.00452***	(0.00167)	0.515***	(0.0825)	-0.00461***	(0.00163)	-0.0793*	(0.0414)	0.515***	(0.0827)
Stroke	-0.0160**	(0.00726)	-0.0933**	(0.0406)	-0.000500	(0.000705)	0.515***	(0.0825)	-0.000676	(0.000692)	-0.0799*	(0.0416)	0.515***	(0.0827)
Diabetes	0.00582	(0.00561)	-0.107**	(0.0418)	-0.000826	(0.00286)	0.515***	(0.0825)	-0.000814	(0.00286)	-0.0801*	(0.0413)	0.515***	(0.0827)
Asthma	0.00643	(0.00512)	-0.0921**	(0.0413)	-0.000851	(0.000558)	0.515***	(0.0825)	-0.000975	(0.000599)	-0.0805*	(0.0417)	0.515***	(0.0827)
Arthritis	-0.0412***	(0.00817)	-0.0945**	(0.0388)	-0.00188	(0.00216)	0.515***	(0.0825)	-0.00206	(0.00219)	-0.0800*	(0.0416)	0.515***	(0.0826)
Cancer	-0.00535*	(0.00316)	-0.0998**	(0.0433)	0.00262***	(0.000931)	0.515***	(0.0825)	0.00264***	(0.000918)	-0.0814*	(0.0417)	0.515***	(0.0826)
Ulcer	9.75e-05	(0.00405)	-0.108***	(0.0415)	-0.000775	(0.000871)	0.515***	(0.0825)	-0.000746	(0.000849)	-0.0800*	(0.0414)	0.515***	(0.0827)
Parkinsonsdisease	-0.0111*	(0.00664)	-0.109***	(0.0391)	-0.000459	(0.000423)	0.515***	(0.0825)	-0.000616	(0.000439)	-0.0814*	(0.0416)	0.515***	(0.0827)
Cataracts	-0.0388***	(0.00718)	-0.0917**	(0.0426)	0.00294*	(0.00174)	0.515***	(0.0825)	0.00298*	(0.00170)	-0.0786*	(0.0413)	0.515***	(0.0827)
Fracture	-0.0125***	(0.00308)	-0.103***	(0.0382)	-0.000368	(0.000535)	0.515***	(0.0825)	-0.000331	(0.000520)	-0.0799*	(0.0414)	0.515***	(0.0827)
Noconditions	0.0840***	(0.0145)	-0.0675*	(0.0376)	0.000208	(0.00185)	0.515***	(0.0825)	0.000244	(0.00185)	-0.0800*	(0.0414)	0.515***	(0.0826)

Robust standard errors clustered at country level in parentheses. *** p<0.01, ** p<0.05, * p<0.1

APPENDIX

Table A1 - Descriptive Statistics (health indicators)

Variable	Obs	Mean	Std. Dev.	Min	Max	95% Confidence Intervals
<i>Synthetic indicators and functionality indexes</i>						
Health_Insat.	125369	3.132	1.095	1	5	3.126
N_Doctorvisits	124269	6.780	9.887	0	98	6.726
N_Chronicdeseases	125314	1.358	1.371	0	10	1.351
Adla	125327	0.218	0.749	0	5	0.214
ladla	125327	0.087	0.410	0	3	0.085
Mobilityind	125299	0.544	0.947	0	4	0.539
N_Wordsrecalled	122959	5.013	1.865	0	10	5.003
Numeracy	104409	3.324	1.155	1	5	3.317
Casp	107553	37.030	6.347	12	48	36.992
<i>Specific illnesses</i>						
Longtermillness	125409	0.506	0.500	0	1	0.501
Heartattack	125314	0.131	0.337	0	1	0.129
Hypertension	125314	0.362	0.481	0	1	0.360
Stroke	125314	0.116	0.320	0	1	0.114
Diabetes	125314	0.029	0.169	0	1	0.029
Asthma	125314	0.219	0.413	0	1	0.217
Arthritis	125314	0.049	0.216	0	1	0.048
Osteoporosis	125314	0.049	0.216	0	1	0.048
Cancer	125314	0.055	0.228	0	1	0.054
Ulcer	125314	0.007	0.084	0	1	0.007
Parkinson	125314	0.079	0.270	0	1	0.078
Cataracts	125314	0.022	0.146	0	1	0.021
Hiporfemoralfracture	125314	0.155	0.362	0	1	0.153
Noconditions	125314	0.248	0.432	0	1	0.245

Table A2 - Descriptive Statistics (socio-demographic and life style variables)

	Variable	Obs	Mean	Std. Dev.	Min	Max	95% Confidence Intervals
Age	Female	126013	0.561	0.496	0	1	0.558 0.564
	50_54	125609	0.149	0.356	0	1	0.147 0.151
	55_59	125609	0.178	0.382	0	1	0.175 0.180
	60_64	125609	0.175	0.380	0	1	0.173 0.177
	65_69	125609	0.153	0.360	0	1	0.151 0.155
	70_74	125609	0.130	0.336	0	1	0.128 0.131
	75_79	125609	0.100	0.300	0	1	0.098 0.101
Job Status	Above_80	125609	0.116	0.321	0	1	0.115 0.118
	Eduyears	111351	10.497	4.408	0	25	10.471 10.523
	Retired	124549	0.521	0.500	0	1	0.518 0.524
	Employed	124549	0.284	0.451	0	1	0.281 0.286
	Unemployed	124549	0.031	0.173	0	1	0.030 0.032
	Housework	124549	0.116	0.321	0	1	0.115 0.118
Family Status	Other_Job	124549	0.010	0.098	0	1	0.009 0.010
	Married	124674	0.699	0.459	0	1	0.697 0.702
	Reg_Partnership	124674	0.015	0.123	0	1	0.015 0.016
	Separated	124674	0.012	0.108	0	1	0.011 0.012
	Never_Married	124674	0.053	0.224	0	1	0.052 0.054
	Divorced	124674	0.074	0.262	0	1	0.073 0.075
Drinking	Widowed	124674	0.146	0.354	0	1	0.144 0.148
	N_Children	125149	2.223	1.460	0	17	2.151 2.167
	N_Grandchildren	124666	2.600	3.217	0	25	2.449 2.485
	Almost_Every_Day	124687	0.330	0.470	0	1	0.327 0.332
	5or6days_week	124687	0.099	0.299	0	1	0.098 0.101
	3or4days_week	124687	0.114	0.317	0	1	0.112 0.115
Sport	1or2_week	124687	0.173	0.378	0	1	0.171 0.175
	1or2_month	124687	0.068	0.253	0	1	0.067 0.070
	<1_month	124687	0.027	0.161	0	1	0.026 0.027
	0_in_3months	124687	0.189	0.391	0	1	0.187 0.191
	>1_week	124676	0.340	0.474	0	1	0.337 0.343
	1_week	124676	0.137	0.344	0	1	0.135 0.139
OverWeight_Obese	1or3_month	124676	0.091	0.287	0	1	0.089 0.092
	Hardlyever_never	124676	0.432	0.495	0	1	0.429 0.435
	Smoking	125014	0.191	0.393	0	1	0.189 0.194
	Logincome	121594	10.225	1.470	-18.175	15.398	10.217 10.233
	First_Qtr	121243	0.616	0.486	0	1	0.613 0.618
	EduYears	125400	0.269	0.444	0	1	0.267 0.272
		117714	10.915	2.681	5.685	27.417	10.899 10.930

Table A3a - Education years and health functionalities

VARIABLES	(1) Casp	(2) health_satisfaction	(3) n_chronicdeseases	(4) adla	(5) iadla	(6) n_doctorvisits	(7) n_wordsrecalled	(8) mobilityind
Eduyears	0.205*** (0.0328)	-0.0381*** (0.00409)	-0.0249*** (0.00407)	-0.0125*** (0.00223)	-0.00753*** (0.00134)	-0.0877*** (0.0279)	0.0992*** (0.0133)	-0.0256*** (0.00342)
Female	-0.331*** (0.0875)	0.0359* (0.0188)	0.0453* (0.0260)	0.0215** (0.0110)	-0.00214 (0.00515)	0.653*** (0.0988)	0.354*** (0.0337)	0.131*** (0.0170)
Age55_59	0.0610 (0.0829)	0.108*** (0.0184)	0.192*** (0.0191)	-0.00280 (0.00566)	-0.00579** (0.00247)	0.217* (0.125)	-0.0885*** (0.0254)	0.0385*** (0.00898)
Age60_64	0.222* (0.131)	0.111*** (0.0282)	0.347*** (0.0212)	0.0139 (0.00951)	-0.00340 (0.00379)	0.263 (0.176)	-0.194*** (0.0300)	0.0670*** (0.0171)
Age65_69	0.0307 (0.182)	0.174*** (0.0385)	0.522*** (0.0325)	0.0443*** (0.0146)	0.0118** (0.00507)	0.823*** (0.300)	-0.382*** (0.0376)	0.145*** (0.0283)
Age70_74	-0.535*** (0.201)	0.310*** (0.0390)	0.727*** (0.0302)	0.0981*** (0.0164)	0.0323*** (0.00562)	1.460*** (0.272)	-0.721*** (0.0396)	0.282*** (0.0354)
Age75_79	-1.274*** (0.243)	0.448*** (0.0432)	0.932*** (0.0414)	0.212*** (0.0282)	0.0890*** (0.0128)	2.131*** (0.315)	-1.082*** (0.0413)	0.494*** (0.0467)
AgeAbove_80	-2.567*** (0.314)	0.616*** (0.0444)	1.013*** (0.0441)	0.509*** (0.0472)	0.270*** (0.0265)	2.583*** (0.362)	-1.730*** (0.0545)	0.873*** (0.0536)
Married	0.874*** (0.121)	-0.0305 (0.0273)	0.0447 (0.0334)	-0.0270** (0.0117)	-0.0355*** (0.00733)	-0.0700 (0.218)	0.216*** (0.0308)	-0.0791*** (0.0196)
Reg_Partnership	0.660*** (0.234)	-0.0483 (0.0387)	0.0284 (0.0614)	-0.00226 (0.0191)	-0.0387*** (0.00827)	0.00405 (0.371)	0.188*** (0.0664)	-0.0294 (0.0214)
Separated	-0.278 (0.218)	0.00443 (0.0287)	0.135** (0.0532)	0.0403 (0.0262)	-0.0332*** (0.0103)	0.0122 (0.281)	0.167*** (0.0609)	-0.0430 (0.0336)
Divorced	-0.249 (0.171)	0.0109 (0.0244)	0.114*** (0.0293)	-0.000745 (0.0136)	-0.0389*** (0.00749)	0.273 (0.167)	0.183*** (0.0416)	-0.0235 (0.0175)
Widowed	0.207 (0.140)	0.00485 (0.0265)	0.155*** (0.0341)	0.0268* (0.0150)	-0.00420 (0.00803)	-0.0167 (0.197)	0.0121 (0.0335)	0.0294** (0.0131)
Retired	2.530*** (0.223)	-0.432*** (0.0401)	-0.253*** (0.0382)	-0.243*** (0.0418)	-0.0970*** (0.0222)	-3.050*** (0.402)	0.218*** (0.0257)	-0.346*** (0.0408)
Employed	3.133*** (0.292)	-0.686*** (0.0354)	-0.498*** (0.0439)	-0.269*** (0.0345)	-0.0915*** (0.0173)	-4.433*** (0.406)	0.336*** (0.0417)	-0.436*** (0.0384)
Homemaker	2.223*** (0.263)	-0.461*** (0.0437)	-0.329*** (0.0450)	-0.286*** (0.0453)	-0.0978*** (0.0255)	-3.157*** (0.374)	0.149*** (0.0545)	-0.343*** (0.0362)
Other_Job	2.144*** (0.265)	-0.466*** (0.0460)	-0.299*** (0.0534)	-0.185*** (0.0348)	-0.0509*** (0.0185)	-2.943*** (0.469)	0.139** (0.0559)	-0.300*** (0.0453)
N_Children	-0.0458 (0.0358)	-0.0146** (0.00676)	-0.0109 (0.00688)	-0.000388 (0.00280)	0.00199 (0.00164)	0.00726 (0.0484)	-0.0162* (0.00892)	0.00644 (0.00458)
N_Grandchildren	0.0200 (0.0134)	0.00755*** (0.00213)	0.0190*** (0.00298)	0.00477** (0.00202)	0.00282* (0.00154)	0.0543* (0.0308)	-0.00484 (0.00488)	0.00844*** (0.00232)
Logincome	0.300*** (0.0413)	-0.0256*** (0.00750)	0.00544 (0.00768)	0.00304 (0.00192)	-0.000606 (0.00169)	0.0256 (0.0442)	0.0522*** (0.0151)	-0.00644 (0.00422)
Year dummies	YES	YES	YES	YES	YES	YES	YES	YES
Country dummies	YES	YES	YES	YES	YES	YES	YES	YES
Observations	94,439	105,917	105,884	105,914	105,914	105,255	104,287	105,896
N. respondents	67,667	71,037	71,007	71,025	71,025	70,574	70,008	71,014

Omitted benchmarks: unemployed for job status, never_married for marital status, Austria for country dummies, age50_54 for age dummies, Robust standard errors in parentheses clustered at country level. *** p<0.01, ** p<0.05, * p<0.1.

Table A3b - Education years and health functionalities

VARIABLES	(1) Casp	(2) health_insat.	(3) n_chronicdeseases	(4) adla	(5) iadla	(6) n_doctorvisits	(7) n_wordsrecalled	(8) mobilityind
Eduyears	0.181*** (0.0314)	-0.0322*** (0.00364)	-0.0198*** (0.00364)	-0.00964*** (0.00188)	-0.00627*** (0.00114)	-0.0610** (0.0276)	0.0942*** (0.0132)	-0.0202*** (0.00304)
DRINKING								
5or6days_week	0.731*** (0.126)	-0.130*** (0.0170)	-0.0547** (0.0225)	-0.113*** (0.0135)	-0.0581*** (0.00770)	-1.141*** (0.165)	0.187*** (0.0220)	-0.145*** (0.0185)
3or4days_week	0.912*** (0.141)	-0.186*** (0.0126)	-0.0652** (0.0259)	-0.110*** (0.0123)	-0.0596*** (0.00572)	-1.335*** (0.169)	0.252*** (0.0326)	-0.180*** (0.0137)
1or2_week	1.099*** (0.134)	-0.239*** (0.0177)	-0.0988*** (0.0273)	-0.127*** (0.0119)	-0.0607*** (0.00647)	-1.625*** (0.214)	0.245*** (0.0385)	-0.190*** (0.0139)
1or2_month	1.048*** (0.133)	-0.262*** (0.0231)	-0.100*** (0.0278)	-0.129*** (0.0123)	-0.0580*** (0.00722)	-1.625*** (0.268)	0.285*** (0.0510)	-0.194*** (0.0135)
<1_month	0.810*** (0.102)	-0.281*** (0.0240)	-0.132*** (0.0375)	-0.138*** (0.0154)	-0.0625*** (0.00723)	-1.784*** (0.341)	0.337*** (0.0740)	-0.185*** (0.0215)
0_in_3months	1.006*** (0.0832)	-0.221*** (0.0173)	-0.0665*** (0.0224)	-0.137*** (0.0125)	-0.0650*** (0.00820)	-1.934*** (0.178)	0.195*** (0.0522)	-0.204*** (0.0120)
SPORT								
1_week	-0.537*** (0.109)	0.0961*** (0.0101)	0.0446** (0.0184)	0.00306 (0.00490)	-0.00106 (0.00206)	0.375*** (0.103)	-0.0182 (0.0283)	0.0337*** (0.00936)
1or3_month	-0.746*** (0.120)	0.145*** (0.0114)	0.0788*** (0.0200)	0.00476 (0.00709)	0.00191 (0.00350)	0.565*** (0.126)	-0.0381 (0.0311)	0.0704*** (0.0159)
Hardlyever_never	-1.770*** (0.176)	0.435*** (0.0186)	0.318*** (0.0407)	0.179*** (0.0241)	0.0609*** (0.00927)	2.219*** (0.214)	-0.216*** (0.0336)	0.371*** (0.0345)
Smoking	-0.486*** (0.0989)	0.0781*** (0.0167)	-0.0469*** (0.0169)	-0.0212*** (0.00584)	-0.0145*** (0.00251)	-0.612*** (0.120)	-0.0652*** (0.0193)	0.0254** (0.00993)
Overweight_Obese	-0.211*** (0.0645)	0.143*** (0.0125)	0.307*** (0.0142)	0.0119 (0.00896)	-0.0219*** (0.00518)	0.594*** (0.0798)	-0.0171 (0.0177)	0.108*** (0.0122)
Female	-0.0493 (0.0923)	-0.0241 (0.0226)	0.0332* (0.0187)	-0.0191 (0.0117)	-0.0224*** (0.00635)	0.160 (0.119)	0.406*** (0.0368)	0.0769*** (0.0182)
Age55_59	0.0723 (0.0829)	0.0978*** (0.0167)	0.172*** (0.0198)	-0.00588 (0.00589)	-0.00576** (0.00233)	0.142 (0.119)	-0.0868*** (0.0253)	0.0284*** (0.00777)
Age60_64	0.267** (0.124)	0.0910*** (0.0256)	0.312*** (0.0192)	0.00174 (0.00907)	-0.00503 (0.00389)	0.0793 (0.155)	-0.188*** (0.0279)	0.0452*** (0.0144)
Age65_69	0.110 (0.175)	0.145*** (0.0353)	0.478*** (0.0310)	0.0235* (0.0135)	0.00606 (0.00483)	0.537** (0.268)	-0.370*** (0.0347)	0.114*** (0.0258)
Age70_74	-0.326* (0.196)	0.246*** (0.0363)	0.659*** (0.0293)	0.0545*** (0.0131)	0.0163*** (0.00487)	0.921*** (0.237)	-0.684*** (0.0379)	0.217*** (0.0325)
Age75_79	-0.912*** (0.234)	0.347*** (0.0417)	0.840*** (0.0368)	0.142*** (0.0248)	0.0608*** (0.0106)	1.413*** (0.287)	-1.014*** (0.0424)	0.390*** (0.0428)
AgeAbove_80	-1.977*** (0.298)	0.465*** (0.0429)	0.909*** (0.0477)	0.399*** (0.0415)	0.219*** (0.0221)	1.490*** (0.366)	-1.616*** (0.0514)	0.718*** (0.0495)
Married	0.726*** (0.115)	-0.00504 (0.0261)	0.0319 (0.0294)	-0.0121 (0.0125)	-0.0231*** (0.00644)	-0.00532 (0.202)	0.183*** (0.0313)	-0.0572*** (0.0191)
Reg_Partnership	0.606** (0.272)	-0.0376 (0.0426)	0.0206 (0.0669)	0.0104 (0.0208)	-0.0291*** (0.00723)	0.0655 (0.375)	0.169** (0.0672)	-0.0185 (0.0243)
Separated	-0.351* (0.211)	0.0221 (0.0254)	0.126** (0.0512)	0.0590** (0.0268)	-0.0187** (0.00914)	0.0426 (0.262)	0.154** (0.0624)	-0.0293 (0.0356)
Divorced	-0.329* (0.184)	0.0291 (0.0279)	0.115*** (0.0301)	0.0159 (0.0140)	-0.0249*** (0.00603)	0.385** (0.165)	0.160*** (0.0401)	-0.00194 (0.0169)
Widowed	0.158 (0.143)	0.00625 (0.0256)	0.126*** (0.0319)	0.0354** (0.0152)	0.00570 (0.00687)	-0.0184 (0.196)	0.00506 (0.0353)	0.0331** (0.0145)
Retired	2.237*** (0.216)	-0.367*** (0.0355)	-0.222*** (0.0355)	-0.197*** (0.0365)	-0.0776*** (0.0193)	-2.778*** (0.363)	0.165*** (0.0248)	-0.288*** (0.0373)
Employed	2.637*** (0.271)	-0.573*** (0.0315)	-0.436*** (0.0368)	-0.209*** (0.0294)	-0.0673*** (0.0152)	-3.921*** (0.358)	0.255*** (0.0384)	-0.341*** (0.0319)
Homemaker	1.956*** (0.231)	-0.402*** (0.0397)	-0.298*** (0.0422)	-0.242*** (0.0403)	-0.0827*** (0.0239)	-2.979*** (0.348)	0.110** (0.0506)	-0.291*** (0.0349)
Other_Job	1.801*** (0.261)	-0.396*** (0.0425)	-0.266*** (0.0506)	-0.137*** (0.0356)	-0.0285 (0.0214)	-2.607*** (0.417)	0.0909* (0.0484)	-0.234*** (0.0430)
N_Children	-0.0557* (0.0336)	-0.0146** (0.00669)	-0.0105 (0.00693)	-0.000971 (0.00285)	0.00189 (0.00156)	-0.00990 (0.0518)	-0.0151* (0.00910)	0.00648 (0.00462)
N_Grandchildren	0.0278** (0.0120)	0.00586*** (0.00198)	0.0156*** (0.00278)	0.00369** (0.00179)	0.00248** (0.00122)	0.0463* (0.0270)	-0.00418 (0.00441)	0.00692*** (0.00200)
Logincome	0.274*** (0.0274)	-0.0196*** (0.00888)	0.00888 (0.00532***)	0.00532*** (0.000729)	0.000729 (0.0709*)	0.0465*** (0.0465***)	-0.00137 (0.00137)	

	(0.0380)	(0.00652)	(0.00730)	(0.00193)	(0.00149)	(0.0425)	(0.0145)	(0.00377)
Year dummies	YES	YES	YES	YES	YES	YES	YES	YES
Country dummies	YES	YES	YES	YES	YES	YES	YES	YES
Observations	92,469	103,395	103,369	103,403	103,403	102,834	101,930	103,390
N. Respondents	66,425	69,558	69,533	69,560	69,560	69,170	68,625	69,552

Omitted benchmarks: unemployed for job status, never_married for marital status, Austria for country dummies, age50_54 for age dummies, almost_every_day for drinking habits, <1_week for sport activities. Robust standard errors in parentheses clustered at country level. *** p<0.01, ** p<0.05, * p<0.1.

Table A3c - Education years and health functionalities (attrition-adjusted)

VARIABLES	(1) Casp	(2) health_satisfaction	(3) n_chronicdeseases	(4) adla	(5) iadla	(6) n_doctorvisits	(7) n_wordsrecalled	(8) mobilityind
Eduyears	-0.229 (0.134)	0.0676** (0.0298)	0.0358 (0.0383)	0.0288** (0.0105)	0.00118 (0.00367)	0.595*** (0.135)	0.440*** (0.0610)	0.147*** (0.0226)
Female	0.127 (0.197)	0.0937*** (0.0165)	0.230*** (0.0174)	0.00135 (0.00683)	-0.00266 (0.00221)	0.644*** (0.185)	0.00114 (0.0524)	0.0445** (0.0155)
Age55_59	0.339 (0.225)	0.0659 (0.0408)	0.343*** (0.0386)	0.00990 (0.0112)	-0.00528 (0.00447)	0.327 (0.214)	-0.0868 (0.0532)	0.0642** (0.0272)
Age60_64	0.0493 (0.264)	0.0515 (0.0924)	0.480*** (0.0739)	0.00884 (0.0282)	0.00457 (0.00697)	0.857** (0.357)	-0.289** (0.109)	0.120** (0.0471)
Age65_69	-0.0306 (0.267)	0.181 (0.105)	0.663*** (0.0563)	0.0339 (0.0360)	0.0158 (0.00958)	1.330** (0.510)	-0.607*** (0.107)	0.231*** (0.0560)
Age70_74	-0.766** (0.353)	0.340*** (0.0856)	0.837*** (0.0596)	0.104* (0.0547)	0.0374* (0.0174)	2.119*** (0.529)	-0.861*** (0.0408)	0.421*** (0.0807)
Age75_79	-2.023*** (0.348)	0.439*** (0.0924)	0.918*** (0.0569)	0.345*** (0.0702)	0.184*** (0.0262)	1.776*** (0.315)	-1.490*** (0.0938)	0.748*** (0.0833)
AgeAbove_80	0.871** (0.332)	-0.0592 (0.0487)	0.0103 (0.0349)	-0.0178 (0.0270)	-0.0532*** (0.0116)	-0.648** (0.257)	0.303*** (0.0842)	-0.156*** (0.0366)
Married	1.130** (0.497)	-0.0432 (0.0538)	-0.116 (0.0883)	0.0108 (0.0332)	-0.0565*** (0.0131)	-0.235 (0.312)	0.296*** (0.0885)	-0.115** (0.0451)
Reg_Partnership	-1.183 (0.714)	-0.0762 (0.0523)	0.276** (0.100)	0.0259 (0.0605)	-0.0267 (0.0259)	-0.939 (0.625)	0.0169 (0.252)	-0.131 (0.0882)
Separated	-0.457 (0.405)	0.0660 (0.0654)	0.194*** (0.0420)	0.0398 (0.0394)	-0.0333*** (0.00991)	0.167 (0.508)	0.125 (0.0961)	-0.00400 (0.0482)
Divorced	0.434 (0.415)	-0.0546 (0.0453)	0.129* (0.0651)	0.0281 (0.0236)	-0.00951 (0.0142)	-0.460 (0.366)	-0.00786 (0.105)	-0.0785* (0.0402)
Widowed	2.807*** (0.464)	-0.491*** (0.107)	-0.230** (0.100)	-0.243*** (0.0714)	-0.0844** (0.0340)	-2.684*** (0.535)	0.166*** (0.0468)	-0.360*** (0.103)
Retired	3.394*** (0.283)	-0.827*** (0.0638)	-0.518*** (0.0620)	-0.280*** (0.0537)	-0.0808*** (0.0259)	-3.712*** (0.422)	0.224*** (0.0407)	-0.423*** (0.0864)
Employed	2.567*** (0.526)	-0.560*** (0.101)	-0.343*** (0.0931)	-0.276*** (0.0659)	-0.0855** (0.0307)	-2.324** (0.775)	0.142* (0.0686)	-0.346*** (0.101)
Homemaker	2.739*** (0.779)	-0.525*** (0.0841)	-0.193*** (0.0640)	-0.163*** (0.0463)	-0.0435 (0.0301)	-2.515*** (0.528)	0.0950 (0.115)	-0.259*** (0.0711)
Other_Job	-0.0977 (0.0753)	0.00634 (0.00620)	0.00107 (0.00719)	-0.00575 (0.00392)	-0.00133 (0.00138)	-0.0287 (0.0382)	-0.0183 (0.0116)	0.0153*** (0.00506)
N_Children	0.0117 (0.0252)	-0.00410 (0.00358)	0.0135*** (0.00384)	0.00585 (0.00429)	0.00274** (0.00124)	0.0799* (0.0427)	6.40e-05 (0.00802)	0.00633 (0.00529)
N_Grandchildren	0.0664 (0.0989)	-0.0139 (0.0156)	0.0512** (0.0197)	0.0167** (0.00767)	0.00882** (0.00296)	0.197*** (0.0644)	0.0395*** (0.0119)	0.0300 (0.0173)
Logincome	-0.229 (0.134)	0.0676** (0.0298)	0.0358 (0.0383)	0.0288** (0.0105)	0.00118 (0.00367)	0.595*** (0.135)	0.440*** (0.0610)	0.147*** (0.0226)
Year dummies	YES	YES	YES	YES	YES	YES	YES	YES
Country dummies	YES	YES	YES	YES	YES	YES	YES	YES
Observations	77,549	85,374	85,400	85,377	85,377	84,935	84,283	85,370
R-squared	0.199	0.211	0.113	0.065	0.059	0.093	0.271	0.170

Omitted benchmarks: unemployed for job status, never_married for marital status, Austria for country dummies, age50_54 for age dummies, Robust standard errors in parentheses clustered at country level. *** p<0.01, ** p<0.05, * p<0.1.

Table A3d - Education years and health functionalities (attrition-adjusted)

VARIABLES	(1) Casp	(2) health_insat.	(3) n_chronicdeseases	(4) adla	(5) iadla	(6) n_doctorvisits	(7) n_wordsrecalled	(8) mobilityind
Eduyears	0.131*** (0.0374)	-0.0325*** (0.00223)	-0.0189*** (0.00435)	-0.00803*** (0.00155)	-0.00478*** (0.000896)	-0.0531 (0.0452)	0.0934*** (0.00916)	-0.0174*** (0.00246)
DRINKING								
5or6days_week	0.512 (0.319)	-0.0998*** (0.0280)	-0.103*** (0.0277)	-0.117*** (0.0251)	-0.0525*** (0.0102)	-0.846* (0.402)	0.222*** (0.0457)	-0.137*** (0.0450)
3or4days_week	0.809*** (0.180)	-0.156*** (0.0252)	-0.109*** (0.0245)	-0.110*** (0.0148)	-0.0592*** (0.00657)	-0.940** (0.339)	0.292*** (0.0594)	-0.160*** (0.0240)
1or2_week	1.270*** (0.235)	-0.241*** (0.0208)	-0.161*** (0.0353)	-0.118*** (0.0140)	-0.0537*** (0.00634)	-1.216*** (0.403)	0.272*** (0.0730)	-0.194*** (0.0210)
1or2_month	1.507*** (0.278)	-0.322*** (0.0438)	-0.162*** (0.0423)	-0.110*** (0.0258)	-0.0504*** (0.0121)	-0.701 (0.566)	0.339*** (0.0686)	-0.186*** (0.0272)
<1_month	1.495*** (0.290)	-0.319*** (0.0522)	-0.247*** (0.0555)	-0.124*** (0.0224)	-0.0322* (0.0163)	-1.747** (0.759)	0.544*** (0.125)	-0.185*** (0.0504)
0_in_3months	1.228*** (0.163)	-0.240*** (0.0327)	-0.114*** (0.0322)	-0.116*** (0.00925)	-0.0489*** (0.00780)	-1.363*** (0.442)	0.339*** (0.0529)	-0.191*** (0.0181)
SPORT								
1_week	-0.265 (0.210)	0.112*** (0.0320)	0.0469 (0.0555)	0.000916 (0.00568)	-0.000540 (0.00244)	0.542*** (0.143)	-0.0248 (0.0323)	0.0498*** (0.0122)
1or3_month	-0.631*** (0.180)	0.148*** (0.0180)	0.0669*** (0.0221)	-0.0152 (0.00880)	-0.00526 (0.00737)	0.380 (0.218)	0.0169 (0.0460)	0.0623** (0.0264)
Hardlyever_never	-1.817*** (0.142)	0.518*** (0.0407)	0.368*** (0.0319)	0.182*** (0.0170)	0.0623*** (0.00815)	2.222*** (0.391)	-0.246*** (0.0610)	0.405*** (0.0316)
Smoking	-0.434*** (0.108)	0.0715*** (0.0233)	-0.0944*** (0.0226)	-0.0114* (0.00609)	-0.0200*** (0.00395)	-0.842*** (0.256)	-0.0831** (0.0338)	0.0132 (0.0150)
Overweight_Obese	-0.329*** (0.0792)	0.158*** (0.00891)	0.320*** (0.0148)	0.0195** (0.00680)	-0.00941** (0.00397)	0.433** (0.176)	0.00494 (0.0319)	0.101*** (0.0165)
Female	0.0726 (0.125)	0.00128 (0.0296)	0.0158 (0.0402)	0.000140 (0.0115)	-0.0116** (0.00417)	0.226* (0.123)	0.507*** (0.0580)	0.0967*** (0.0237)
Age55_59	0.134 (0.187)	0.0853*** (0.0155)	0.216*** (0.0156)	-0.00251 (0.00742)	-0.00442** (0.00196)	0.576*** (0.185)	-0.00111 (0.0504)	0.0354** (0.0157)
Age60_64	0.350 (0.222)	0.0547 (0.0377)	0.315*** (0.0348)	0.00375 (0.0111)	-0.00836 (0.00514)	0.191 (0.210)	-0.0954* (0.0463)	0.0502* (0.0240)
Age65_69	0.0949 (0.232)	0.0301 (0.0813)	0.441*** (0.0685)	-0.00586 (0.0247)	-0.00351 (0.00598)	0.599 (0.354)	-0.284** (0.0953)	0.0949** (0.0382)
Age70_74	0.142 (0.234)	0.125 (0.0912)	0.599*** (0.0507)	0.00341 (0.0336)	0.000632 (0.0100)	0.871 (0.498)	-0.581*** (0.0922)	0.177*** (0.0470)
Age75_79	-0.441 (0.293)	0.248*** (0.0737)	0.745*** (0.0546)	0.0577 (0.0509)	0.0154 (0.0169)	1.454** (0.562)	-0.817*** (0.0353)	0.336*** (0.0669)
AgeAbove_80	-1.379*** (0.370)	0.266*** (0.0778)	0.788*** (0.0503)	0.260*** (0.0645)	0.145*** (0.0250)	0.706 (0.408)	-1.383*** (0.0824)	0.593*** (0.0665)
Married	0.564* (0.292)	0.0216 (0.0542)	0.0494 (0.0301)	0.00938 (0.0293)	-0.0446*** (0.0117)	-0.398 (0.234)	0.245** (0.0837)	-0.0981** (0.0358)
Reg_Partnership	0.856* (0.461)	0.0348 (0.0627)	-0.0765 (0.0865)	0.0361 (0.0350)	-0.0474*** (0.0137)	0.0379 (0.348)	0.242** (0.0924)	-0.0580 (0.0476)
Separated	-1.453* (0.675)	-0.00347 (0.0441)	0.328** (0.109)	0.0576 (0.0583)	-0.0145 (0.0247)	-0.517 (0.645)	-0.0196 (0.249)	-0.0680 (0.0818)
Divorced	-0.606 (0.425)	0.119 (0.0830)	0.237*** (0.0424)	0.0631 (0.0450)	-0.0244** (0.0113)	0.433 (0.545)	0.0881 (0.0898)	0.0406 (0.0604)
Widowed	0.208 (0.384)	0.00866 (0.0440)	0.165** (0.0575)	0.0523* (0.0260)	-0.00104 (0.0151)	-0.227 (0.349)	-0.0486 (0.102)	-0.0289 (0.0409)
Retired	2.487*** (0.443)	-0.408*** (0.0937)	-0.181* (0.0943)	-0.215*** (0.0667)	-0.0757** (0.0316)	-2.394*** (0.511)	0.116** (0.0429)	-0.299*** (0.0920)
Employed	2.847*** (0.304)	-0.688*** (0.0530)	-0.426*** (0.0671)	-0.235*** (0.0524)	-0.0667** (0.0243)	-3.226*** (0.381)	0.149*** (0.0492)	-0.321*** (0.0819)
Homemaker	2.254*** (0.514)	-0.474*** (0.0932)	-0.288*** (0.0947)	-0.250*** (0.0660)	-0.0793** (0.0297)	-2.093** (0.787)	0.107 (0.0685)	-0.283** (0.0976)
Other_Job	2.322** (0.775)	-0.437*** (0.0810)	-0.134* (0.0730)	-0.138** (0.0459)	-0.0363 (0.0277)	-2.220*** (0.537)	0.0490 (0.118)	-0.196** (0.0779)
N_Children	-0.0898 (0.0749)	0.00277 (0.00663)	-0.00284 (0.00743)	-0.00730 (0.00445)	-0.00189 (0.00147)	-0.0473 (0.0402)	-0.0158 (0.0111)	0.0124** (0.00548)
N_Grandchildren	0.0178 (0.0253)	-0.00596 (0.00390)	0.0105** (0.00370)	0.00569 (0.00441)	0.00287** (0.00115)	0.0759* (0.0382)	-2.53e-05 (0.00847)	0.00519 (0.00486)
Logincome	0.0470	-0.00767	0.0584**	0.0192**	0.00962***	0.226***	0.0349***	0.0349*

	(0.0949)	(0.0141)	(0.0198)	(0.00748)	(0.00294)	(0.0616)	(0.0115)	(0.0167)
Year dummies	YES	YES	YES	YES	YES	YES	YES	YES
Country dummies	YES	YES	YES	YES	YES	YES	YES	YES
Observations	77,549	85,374	85,400	85,377	85,377	84,935	84,283	85,370
R-squared	0.227	0.271	0.147	0.093	0.074	0.110	0.281	0.231

Omitted benchmarks: unemployed for job status, never_married for marital status, Austria for country dummies, age50_54 for age dummies, almost_every_day for drinking habits, <1_week for sport activities. Robust standard errors in parentheses clustered at country level. *** p<0.01, ** p<0.05, * p<0.1.

	(0.0152)	(0.00710)	(0.0113)	(0.00486)	(0.00762)	(0.00361)	(0.0156)	(0.00866)	(0.00512)	(0.00456)	(0.00201)	(0.00743)	(0.00240)	(0.00790)	(0.0136)
AgeAbove_80	0.134*** (0.0156)	0.148*** (0.00995)	0.174*** (0.0143)	0.0473*** (0.00562)	0.0565*** (0.00934)	-0.00780* (0.00427)	0.147*** (0.0173)	0.0581*** (0.0101)	0.0232*** (0.00577)	0.00314 (0.00517)	0.0161*** (0.00240)	0.206*** (0.00965)	0.0396*** (0.00352)	-0.0309*** (0.00695)	-0.228*** (0.0150)
Married	-0.00685 (0.00748)	0.0129* (0.00710)	0.0157* (0.00956)	0.00210 (0.00290)	-0.00906 (0.00753)	-0.00216 (0.00304)	-0.00653 (0.00807)	-0.00455 (0.00305)	0.00738*** (0.00260)	1.30e-05 (0.00326)	-8.62e-05 (0.00146)	-0.00849** (0.00387)	-0.00242 (0.00240)	-0.0357*** (0.00688)	0.00412 (0.00675)
Reg_Partnership	-0.00869 (0.0183)	0.0150 (0.0153)	-0.0160 (0.0149)	0.00155 (0.00449)	-0.00810 (0.0138)	0.00477 (0.00767)	-0.00748 (0.0147)	-0.00514 (0.00564)	-0.00180 (0.00750)	0.00182 (0.00707)	0.00293 (0.00285)	-0.00257 (0.00857)	-0.000811 (0.00403)	-0.0344*** (0.00784)	0.00956 (0.0149)
Separated	0.00882 (0.0179)	0.00868 (0.0123)	0.0135 (0.0171)	0.0188*** (0.00607)	0.0161 (0.0119)	-0.00238 (0.00441)	0.00625 (0.00981)	-0.00405 (0.00700)	0.0121 (0.00827)	0.00968 (0.00837)	0.00332 (0.00330)	0.00282 (0.00773)	-0.00171 (0.00425)	-0.0374*** (0.0118)	-0.0150 (0.0196)
Divorced	0.0334*** (0.0111)	0.0236*** (0.00847)	-0.00207 (0.00900)	0.00474 (0.00354)	-0.00640 (0.00732)	0.00845*** (0.00285)	0.0264*** (0.00939)	0.00772 (0.00470)	0.0115*** (0.00351)	0.0153*** (0.00438)	-0.00140 (0.00175)	0.00261 (0.00400)	0.000761 (0.00273)	-0.00799 (0.00672)	-0.0220*** (0.00792)
Widowed	0.00440 (0.00930)	0.0205*** (0.00543)	0.0488*** (0.0115)	0.00169 (0.00349)	0.00462 (0.00827)	0.000769 (0.00342)	0.0146 (0.0107)	0.00706** (0.00355)	0.000655 (0.00242)	0.00180 (0.00469)	-0.000652 (0.00184)	0.0118** (0.00594)	0.00576** (0.00253)	-0.0394*** (0.00545)	-0.0145* (0.00829)
Retired	-0.159*** (0.0165)	-0.0302*** (0.00711)	-0.0186** (0.00888)	-0.0239*** (0.00418)	-0.0239*** (0.00460)	-0.00888** (0.00428)	-0.0611*** (0.00600)	-0.0214*** (0.00470)	-0.00964** (0.00432)	-0.0174** (0.00687)	-0.00219 (0.00161)	-0.00791** (0.00349)	-0.0128*** (0.00318)	-0.0892*** (0.00536)	0.0773*** (0.00806)
Employed	-0.251*** (0.0147)	-0.0607*** (0.00737)	-0.0515*** (0.0102)	-0.0384*** (0.00407)	-0.0393*** (0.00492)	-0.0155*** (0.00455)	-0.0870*** (0.00796)	-0.0211*** (0.00435)	-0.0327*** (0.00324)	-0.0287*** (0.00589)	-0.00346*** (0.00134)	-0.0189*** (0.00222)	-0.0152*** (0.00229)	-0.121*** (0.00903)	0.159*** (0.0103)
Homemaker	-0.193*** (0.0159)	-0.0477*** (0.00827)	-0.0235** (0.0114)	-0.0321*** (0.00514)	-0.0194*** (0.00728)	-0.0110*** (0.00407)	-0.0554*** (0.0125)	-0.00763 (0.00760)	-0.0199*** (0.00423)	-0.0251*** (0.00712)	-0.00435** (0.00171)	-0.0141*** (0.00369)	-0.0127*** (0.00227)	-0.101*** (0.00718)	0.0934*** (0.0101)
Other_Job	-0.166*** (0.0292)	-0.0276** (0.0113)	-0.0323* (0.0173)	-0.0189*** (0.00619)	-0.0262** (0.0121)	-0.0217*** (0.00723)	-0.0540*** (0.0123)	-0.0210*** (0.00670)	-0.0128 (0.00913)	-0.0272*** (0.00686)	-0.00505** (0.00256)	-0.0160* (0.00879)	-0.0110** (0.00427)	-0.0767*** (0.0130)	0.0883*** (0.0120)
N_Children	-0.00347 (0.00219)	0.000125 (0.00132)	-0.00203 (0.00137)	0.00103 (0.000912)	0.00252* (0.00145)	0.000858* (0.000513)	0.000903 (0.00211)	-0.00173* (0.000886)	-0.00239*** (0.000754)	-0.000619 (0.00105)	0.000208 (0.000343)	-0.00205 (0.00127)	-0.000520 (0.000575)	-0.00173 (0.00138)	0.00458*** (0.00177)
N_Grandchildren	0.00451*** (0.000652)	0.00272** (0.000641)	0.00270*** (0.000599)	0.000328 (0.000449)	0.00161*** (0.000578)	0.000625** (0.000244)	0.00220** (0.000885)	0.000729 (0.000454)	2.46e-05 (0.000267)	0.000862* (0.000469)	1.05e-05 (0.000155)	0.000542 (0.000486)	0.000187 (0.000256)	0.000372 (0.000560)	-0.00408*** (0.000667)
Logincome	0.00541** (0.00268)	0.000910 (0.00116)	-0.00134 (0.00188)	0.00125* (0.000656)	-0.000195 (0.00119)	0.00227** (0.00108)	0.00149 (0.00141)	0.000495 (0.00175)	0.00406*** (0.00102)	4.50e-05 (0.00102)	0.000346* (0.000181)	0.00234 (0.00156)	0.000715 (0.000512)	0.00628*** (0.00156)	-0.00667*** (0.00158)
Year dummies	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Country dummies	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Observations	103,412	103,369	103,369	103,369	103,369	103,369	103,369	103,369	103,369	103,369	103,369	103,369	103,369	103,369	103,369
N. respondents	69,573	69,533	69,533	69,533	69,533	69,533	69,533	69,533	69,533	69,533	69,533	69,533	69,533	69,533	69,533

Omitted benchmarks: unemployed for job status, never_married for marital status, Austria for country dummies, age50_54 for age dummies, almost_every_day for drinking habits, <1_week for sport activities. Robust standard errors in parentheses clustered at country level. *** p<0.01, ** p<0.05, * p<0.1.

Separated	0.0275 (0.0372)	0.00376 (0.0223)	-0.0162 (0.0329)	0.0307 (0.0251)	0.0540 (0.0323)	0.00321 (0.0157)	0.0863** (0.0392)	-0.0195 (0.0184)	0.00667 (0.0274)	0.0713* (0.0373)	0.00881 (0.0104)	0.0213 (0.0273)	0.00262 (0.00900)	-0.0578 (0.0346)	-0.0699*** (0.0210)
Divorced	0.0593*** (0.0191)	0.0479** (0.0218)	0.0123 (0.0231)	0.0118 (0.0123)	0.0153 (0.0109)	0.0234** (0.0106)	0.0654*** (0.0202)	0.00500 (0.0133)	0.0203 (0.0191)	0.00703 (0.00757)	0.00229 (0.00218)	-0.000526 (0.0106)	0.0106 (0.0109)	-0.0240 (0.0161)	-0.0505** (0.0225)
Widowed	-0.00798 (0.0158)	0.00676 (0.0104)	0.0453 (0.0352)	0.00636 (0.00880)	0.0182** (0.00813)	0.00820 (0.0152)	0.0246 (0.0141)	-0.0120 (0.0121)	-0.00126 (0.0106)	0.00588 (0.00847)	0.00564** (0.00245)	0.0152 (0.0160)	0.0139* (0.00663)	-0.0572*** (0.0181)	-0.0239 (0.0269)
Retired	-0.169*** (0.0203)	-0.0192* (0.00988)	-0.00766 (0.0164)	-0.0280 (0.0162)	-0.0218* (0.0109)	-0.00871 (0.00895)	-0.0562* (0.0310)	-0.0263*** (0.00699)	-0.0193** (0.00772)	-0.00508 (0.00731)	-0.000676 (0.00431)	0.000221 (0.0108)	-0.00738 (0.00490)	-0.0672*** (0.0140)	0.0863*** (0.0145)
Employed	-0.284*** (0.0193)	-0.0628*** (0.00649)	-0.0304** (0.0131)	-0.0499*** (0.0113)	-0.0416*** (0.0102)	-0.0147 (0.0122)	-0.0926*** (0.0168)	-0.0295*** (0.00588)	-0.0434*** (0.00575)	-0.0180* (0.00983)	-0.00436 (0.00318)	-0.0114 (0.0119)	-0.0127*** (0.00247)	-0.111*** (0.0100)	0.179*** (0.0156)
Homemaker	-0.201*** (0.0166)	-0.0243 (0.0159)	0.00832 (0.0123)	-0.0430** (0.0172)	-0.0245** (0.0101)	-0.0230*** (0.00659)	-0.0654** (0.0268)	-0.0145 (0.0157)	-0.0293** (0.0100)	-0.0164* (0.00760)	-0.00529 (0.00370)	-0.0138 (0.0160)	-0.00718* (0.00384)	-0.0972*** (0.0185)	0.103*** (0.0143)
Other_Job	-0.151*** (0.0288)	-0.0407 (0.0260)	-0.0501 (0.0361)	-0.0116 (0.00773)	-0.0188 (0.0187)	-0.0340** (0.0154)	-0.0527 (0.0308)	0.0137 (0.0151)	-0.00523 (0.0205)	-0.00637 (0.00959)	-0.00528 (0.00508)	-0.0136 (0.0199)	-0.00739 (0.00796)	-0.0660 (0.0388)	0.0291 (0.0316)
N_Children	-0.00877** (0.00368)	0.00131 (0.00211)	0.000963 (0.00159)	0.00293* (0.00136)	0.00222 (0.00341)	0.000724 (0.00184)	0.00320 (0.00220)	-0.00214*** (0.000693)	-0.00227 (0.00181)	-0.00151 (0.000894)	-5.00e-05 (0.000667)	-0.00324 (0.00226)	-0.00221 (0.00192)	-0.00415* (0.00224)	0.00881** (0.00360)
N_Grandchildren	0.00564*** (0.00164)	0.00319** (0.00140)	0.000415 (0.00148)	-0.000876* (0.000410)	0.00206*** (0.000630)	0.00129* (0.000609)	0.00203* (0.00109)	0.000742 (0.00118)	0.000467 (0.000825)	0.00116 (0.000784)	0.000175 (0.000548)	0.000359 (0.00149)	0.000161 (0.000637)	-0.00485*** (0.000920)	0.00149 (0.00149)
Logincome	0.0198** (0.00809)	0.00657*** (0.00217)	0.0119* (0.00624)	0.00259*** (0.000482)	0.00527** (0.00190)	0.00105** (0.000408)	0.0103** (0.00429)	0.00118 (0.00101)	0.00277*** (0.000731)	0.00126 (0.000752)	0.000623** (0.000213)	0.00752*** (0.00222)	0.00187*** (0.000461)	0.00641*** (0.00151)	-0.0228** (0.00829)
Year dummies	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Country dummies	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Observations	85,379	85,400	85,400	85,400	85,400	85,400	85,400	85,400	85,400	85,400	85,400	85,400	85,400	85,400	85,400
R-squared	0.094	0.067	0.071	0.027	0.044	0.018	0.105	0.067	0.016	0.011	0.009	0.094	0.016	0.037	0.092

Omitted benchmarks: unemployed for job status, never_married for marital status, Austria for country dummies, age50_54 for age dummies, almost_every_day for drinking habits, <1_week for sport activities. Robust standard errors in parentheses clustered at country level. *** p<0.01, ** p<0.05, * p<0.1.

Table A5a - Education years and health functionalities (IV estimates)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
VARIABLES	casp	casp edyears	healthinsat	healthinsat edyears	n_chronicdeseases	n_chronicdes.	adla	adla edyears	iadla	edyears	n_doctorvisits	edyears	n_wordsrec.	n_wordsrecalled	mobilityind	mobilityind edyears
Eduyears	0.726*** (0.143)		-0.147*** (0.0262)		-0.171*** (0.0317)		-0.277*** (0.0251)		-0.193*** (0.0153)		-0.00137 (0.148)		0.524*** (0.0618)		-0.297*** (0.0319)	
First_Qtr		-0.0995** (0.0403)		-0.0763* (0.0460)		-0.0762* (0.0432)		-0.0310 (0.0191)		-0.0382*** (0.0136)		-0.108*** (0.0416)		-0.0916*** (0.0307)		-0.0362* (0.0197)
Age		-0.105* (0.0605)		-0.141** (0.0602)		-0.148** (0.0635)		0.0487 (0.0298)		0.116*** (0.0230)		-0.112* (0.0628)		-0.0296 (0.0517)		-0.0142 (0.0439)
Age ²		1.54e-05 (0.000394)		0.000285 (0.000394)		0.000334 (0.000420)		-0.00112*** (0.000185)		-0.00160*** (0.000170)		6.70e-05 (0.000414)		-0.000545* (0.000323)		-0.000660** (0.000265)
Female	0.364** (0.170)	-0.783*** (0.119)	-0.105*** (0.0323)	-0.789*** (0.119)	-0.0780** (0.0372)	-0.790*** (0.119)	-0.212*** (0.0351)	-0.754*** (0.116)	-0.156*** (0.0254)	-0.741*** (0.114)	0.216** (0.0976)	-0.784*** (0.119)	0.744*** (0.0797)	-0.769*** (0.118)	-0.125*** (0.0422)	-0.766*** (0.118)
DRINKING																
5or6days_week	0.780*** (0.139)		-0.141*** (0.0181)		-0.0713*** (0.0248)		-0.123*** (0.0135)		-0.0615*** (0.00821)		-1.198*** (0.180)		0.203*** (0.0225)		-0.166*** (0.0186)	
3or4days_week	0.937*** (0.166)		-0.191*** (0.0151)		-0.0865*** (0.0282)		-0.114*** (0.0141)		-0.0602*** (0.00561)		-1.312*** (0.185)		0.271*** (0.0348)		-0.195*** (0.0151)	
1or2_week	1.151*** (0.145)		-0.250*** (0.0179)		-0.123*** (0.0279)		-0.125*** (0.0115)		-0.0582*** (0.00605)		-1.626*** (0.242)		0.258*** (0.0397)		-0.201*** (0.0140)	
1or2_month	1.061*** (0.156)		-0.282*** (0.0262)		-0.123*** (0.0308)		-0.125*** (0.0134)		-0.0547*** (0.00698)		-1.553*** (0.294)		0.314*** (0.0533)		-0.195*** (0.0149)	
<1_month	0.740*** (0.119)		-0.299*** (0.0264)		-0.142*** (0.0362)		-0.127*** (0.0138)		-0.0559*** (0.00666)		-1.653*** (0.362)		0.381*** (0.0735)		-0.182*** (0.0211)	
0_in_3months	1.041*** (0.0989)		-0.233*** (0.0187)		-0.0835*** (0.0247)		-0.133*** (0.0126)		-0.0652*** (0.00786)		-1.890*** (0.203)		0.222*** (0.0524)		-0.206*** (0.0138)	
SPORT																
1_week	-0.599*** (0.113)		0.107*** (0.00964)		0.0521** (0.0209)		-0.00272 (0.00461)		-0.00271 (0.00216)		0.345*** (0.108)		-0.00337 (0.0304)		0.0348*** (0.0106)	
1or3_month	-0.867*** (0.110)		0.164*** (0.01000)		0.0993*** (0.0203)		-0.00858 (0.00739)		-0.00375 (0.00367)		0.635*** (0.135)		-0.0235 (0.0354)		0.0752*** (0.0179)	
Hardlyever_never	-2.075*** (0.180)		0.502*** (0.0186)		0.410*** (0.0390)		0.205*** (0.0244)		0.0661*** (0.00931)		2.537*** (0.229)		-0.225*** (0.0342)		0.438*** (0.0321)	
Smoking	-0.540*** (0.0848)		0.0950*** (0.0173)		-0.0365** (0.0176)		-0.0100** (0.00480)		-0.00901*** (0.00225)		-0.604*** (0.133)		-0.0746*** (0.0209)		0.0400*** (0.00878)	
Overweight_Obese	-0.267*** (0.0684)		0.164*** (0.0131)		0.361*** (0.0114)		0.0238*** (0.00888)		-0.0165*** (0.00475)		0.691*** (0.0955)		-0.0282 (0.0174)		0.134*** (0.0133)	
Age55_59	0.404*** (0.105)		0.0273 (0.0263)		0.104*** (0.0350)		-0.103*** (0.0209)		-0.0583*** (0.0124)		0.164 (0.166)		0.108*** (0.0353)		-0.0920*** (0.0183)	
Age60_64	0.944*** (0.154)		-0.0447 (0.0439)		0.163*** (0.0490)		-0.195*** (0.0318)		-0.118*** (0.0209)		0.116 (0.246)		0.199*** (0.0399)		-0.190*** (0.0258)	
Age65_69	0.978*** (0.235)		-0.0531 (0.0571)		0.245*** (0.0610)		-0.290*** (0.0436)		-0.185*** (0.0310)		0.582 (0.377)		0.213*** (0.0482)		-0.250*** (0.0360)	
Age70_74	0.888*** (0.273)		-0.0106 (0.0667)		0.337*** (0.0721)		-0.400*** (0.0583)		-0.271*** (0.0438)		0.968** (0.382)		0.116** (0.0567)		-0.300*** (0.0446)	
Age75_79	0.656** (0.335)		0.0254 (0.0826)		0.439*** (0.0922)		-0.482*** (0.0708)		-0.342*** (0.0545)		1.525*** (0.496)		0.0303 (0.0654)		-0.295*** (0.0585)	
AgeAbove_80	0.00704		0.0496		0.379***		-0.463***		-0.363***		1.482***		-0.210**		-0.199***	

	(0.412)	(0.0896)	(0.101)	(0.0869)	(0.0648)	(0.416)	(0.0931)	(0.0720)
Married	0.673*** (0.127)	0.00117 (0.0276)	0.0350 (0.0299)	-0.00700 (0.0112)	-0.0190*** (0.00668)	0.0338 (0.181)	0.176*** (0.0303)	-0.0523*** (0.0193)
Reg_Partnership	0.591** (0.271)	-0.00909 (0.0434)	0.0271 (0.0662)	0.0197 (0.0181)	-0.0203*** (0.00753)	0.101 (0.324)	0.149** (0.0579)	-0.0114 (0.0249)
Separated	-0.396* (0.225)	0.0206 (0.0267)	0.118** (0.0489)	0.0462** (0.0235)	-0.0193*** (0.00618)	-0.00258 (0.238)	0.147** (0.0570)	-0.0490 (0.0377)
Divorced	-0.356* (0.197)	0.0287 (0.0319)	0.122*** (0.0298)	0.0179 (0.0126)	-0.0223*** (0.00670)	0.434*** (0.151)	0.154*** (0.0348)	0.000384 (0.0197)
Widowed	0.166 (0.160)	-0.00242 (0.0274)	0.115*** (0.0346)	0.0110 (0.0129)	-0.0111 (0.00762)	0.109 (0.192)	0.0346 (0.0332)	0.0102 (0.0169)
Retired	2.594*** (0.239)	-0.434*** (0.0426)	-0.287*** (0.0397)	-0.246*** (0.0423)	-0.103*** (0.0239)	-3.116*** (0.403)	0.209*** (0.0311)	-0.354*** (0.0437)
Employed	2.934*** (0.259)	-0.648*** (0.0395)	-0.508*** (0.0350)	-0.236*** (0.0317)	-0.0769*** (0.0175)	-4.273*** (0.373)	0.261*** (0.0429)	-0.379*** (0.0335)
Homemaker	2.313*** (0.230)	-0.478*** (0.0490)	-0.364*** (0.0482)	-0.273*** (0.0418)	-0.0959*** (0.0266)	-3.314*** (0.395)	0.118** (0.0499)	-0.343*** (0.0421)
Other_Job	2.027*** (0.285)	-0.461*** (0.0453)	-0.341*** (0.0490)	-0.166*** (0.0392)	-0.0404* (0.0244)	-3.083*** (0.431)	0.113** (0.0544)	-0.276*** (0.0407)
N_Children	-0.0812** (0.0360)	-0.00994 (0.00695)	-0.00813 (0.00609)	0.00200 (0.00287)	0.00331** (0.00156)	-0.00766 (0.0462)	-0.0212** (0.00975)	0.0102** (0.00435)
N_Grandchildren	0.0355*** (0.0123)	0.00275 (0.00214)	0.0127*** (0.00279)	0.00181 (0.00178)	0.00126 (0.00110)	0.0442 (0.0272)	0.000598 (0.00449)	0.00387* (0.00206)
Logincome	0.322*** (0.0478)	-0.0241*** (0.00694)	0.0101 (0.00755)	0.00753*** (0.00185)	0.00257 (0.00179)	0.0727* (0.0407)	0.0553*** (0.0150)	-0.000564 (0.00416)
Year dummies	YES	YES	YES	YES	YES	YES	YES	YES
Country dummies	YES	YES	YES	YES	YES	YES	YES	YES
Observations	111,314	111,314	111,321	111,321	111,321	111,321	111,321	111,321
	111,321	111,321	111,321	111,321	111,321	111,321	111,320	111,320
							111,311	111,311
							111,321	111,321

Omitted benchmarks: unemployed for job status, never_married for marital status, Austria for country dummies, age50_54 for age dummies, almost_every_day for drinking habits, <1_week for sport activities. Robust standard errors in parentheses clustered at country level. *** p<0.01, ** p<0.05, * p<0.1.

Table A5b - Education years and specific illnesses (IV estimates)

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	longterm illness		heartattack		hypertension		stroke		diabetes		asthma		arthritis	
	2nd stage	1st stage	2nd stage	1st stage	2nd stage	1st stage	2nd stage	1st stage	2nd stage	1st stage	2nd stage	1st stage	2nd stage	1st stage
Eduyears	-0.0351*** (0.00994)		-0.0160** (0.00694)		-0.0260** (0.0101)		-0.0160** (0.00726)		0.00582 (0.00561)		0.00643 (0.00512)		-0.0412*** (0.00817)	
First_Qtr		-0.0959** (0.0416)		-0.0959** (0.0481)		-0.0954** (0.0444)		-0.0933** (0.0406)		-0.107** (0.0418)		-0.0921** (0.0413)		-0.0945** (0.0388)
Age		-0.124** (0.0626)		-0.112* (0.0623)		-0.127* (0.0657)		-0.110* (0.0611)		-0.108* (0.0646)		-0.112* (0.0618)		-0.133** (0.0635)
Age ²		0.000155 (0.000410)		6.45e-05 (0.000407)		0.000180 (0.000437)		5.56e-05 (0.000399)		3.74e-05 (0.000427)		6.47e-05 (0.000404)		0.000222 (0.000417)
Female	-0.0168 (0.0111)	-0.786*** (0.119)	-0.0723*** (0.00733)	-0.784*** (0.119)	0.00446 (0.00962)	-0.787*** (0.119)	-0.0284*** (0.00660)	-0.784*** (0.119)	-0.0248*** (0.00698)	-0.783*** (0.119)	0.00718* (0.00393)	-0.784*** (0.119)	0.0765*** (0.0124)	-0.788*** (0.119)
Age55_59	0.0215* (0.0125)		-0.000798 (0.00373)		0.0490*** (0.0119)		-0.00599 (0.00433)		0.0197*** (0.00360)		-0.000345 (0.00328)		0.0253*** (0.00743)	
Age60_64	0.00662 (0.0180)		0.00509 (0.00796)		0.0869*** (0.0194)		-0.0124 (0.00754)		0.0340*** (0.00518)		0.00242 (0.00584)		0.0287*** (0.00963)	
Age65_69	0.0110 (0.0209)		0.0179* (0.00956)		0.120*** (0.0257)		-0.0133 (0.0116)		0.0598*** (0.0101)		0.00337 (0.00830)		0.0321** (0.0139)	
Age70_74	0.0204 (0.0252)		0.0486*** (0.0125)		0.144*** (0.0296)		-0.0139 (0.0147)		0.0689*** (0.0110)		0.0104 (0.0114)		0.0269* (0.0158)	
Age75_79	0.0270 (0.0307)		0.0841*** (0.0176)		0.141*** (0.0330)		-0.00326 (0.0182)		0.0762*** (0.0145)		0.0126 (0.0133)		0.0325* (0.0192)	
AgeAbove_80	0.0224 (0.0366)		0.0973*** (0.0171)		0.0985** (0.0400)		-0.00402 (0.0240)		0.0686*** (0.0173)		0.0148 (0.0173)		0.0312 (0.0200)	
Married	-0.00702 (0.00787)		0.0122* (0.00737)		0.0140 (0.00949)		0.00398 (0.00318)		-0.00822 (0.00596)		-0.00202 (0.00315)		-0.00304 (0.00867)	
Reg_Partnership	-0.00669 (0.0177)		0.00881 (0.0164)		-0.0123 (0.0159)		0.00290 (0.00478)		-0.00829 (0.0109)		0.00469 (0.00737)		-0.000612 (0.0137)	
Separated	0.00746 (0.0189)		0.00813 (0.0134)		0.00871 (0.0155)		0.0236*** (0.00733)		0.0178 (0.0131)		-0.00235 (0.00444)		0.00866 (0.0101)	
Divorced	0.0330*** (0.0112)		0.0237*** (0.00901)		-0.00270 (0.00797)		0.00615 (0.00393)		-0.00377 (0.00658)		0.00874*** (0.00297)		0.0290*** (0.00907)	
Widowed	0.000576 (0.00962)		0.0160** (0.00649)		0.0442*** (0.0114)		0.00121 (0.00385)		0.00585 (0.00729)		0.00123 (0.00355)		0.0172* (0.00989)	
Retired	-0.182*** (0.0196)		-0.0375*** (0.00743)		-0.0277*** (0.00877)		-0.0294*** (0.00497)		-0.0285*** (0.00693)		-0.00891** (0.00438)		-0.0744*** (0.00640)	
Employed	-0.277*** (0.0176)		-0.0677*** (0.00723)		-0.0551*** (0.0113)		-0.0424*** (0.00449)		-0.0489*** (0.00666)		-0.0161*** (0.00468)		-0.0980*** (0.00778)	
Homemaker	-0.220*** (0.0203)		-0.0544*** (0.00831)		-0.0272** (0.0110)		-0.0362*** (0.00625)		-0.0287*** (0.00844)		-0.0115*** (0.00423)		-0.0699*** (0.0138)	
Other_Job	-0.178*** (0.0302)		-0.0382*** (0.0107)		-0.0409** (0.0181)		-0.0260*** (0.00710)		-0.0342** (0.0159)		-0.0225*** (0.00741)		-0.0620*** (0.0124)	
N_Children	-0.00231 (0.00225)		0.000458 (0.00137)		-0.00123 (0.00139)		0.00142 (0.000985)		0.00178 (0.00138)		0.000765 (0.000512)		0.00171 (0.00205)	
N_Grandchildren	0.00371*** (0.000623)		0.00254*** (0.000630)		0.00199*** (0.000651)		-9.88e-06 (0.000454)		0.00149** (0.000623)		0.000691*** (0.000254)		0.00178** (0.000900)	

Logincome	0.00563** (0.00269)	0.00118 (0.00132)	-0.00119 (0.00185)	0.00149** (0.000635)	-0.000877 (0.00120)	0.00218** (0.00106)	0.000211 (0.00150)
DRINKING							
5or6days_week	-0.0243*** (0.00713)	-0.0271*** (0.00731)	-0.00222 (0.00731)	-0.0182*** (0.00476)	-0.0255*** (0.00301)	-0.00400** (0.00163)	0.000732 (0.00598)
3or4days_week	-0.0471*** (0.00827)	-0.0301*** (0.00713)	-0.00982 (0.00729)	-0.0197*** (0.00423)	-0.0361*** (0.00374)	-0.00457** (0.00219)	0.00567 (0.00577)
1or2_week	-0.0677*** (0.00667)	-0.0347*** (0.00614)	-0.0179*** (0.00635)	-0.0215*** (0.00453)	-0.0457*** (0.00478)	-0.00439*** (0.00160)	0.00181 (0.00621)
1or2_month	-0.0585*** (0.0101)	-0.0340*** (0.00785)	-0.0162*** (0.00549)	-0.0246*** (0.00429)	-0.0495*** (0.00552)	-0.00516** (0.00218)	0.00197 (0.00791)
<1_month	-0.0769*** (0.0113)	-0.0390*** (0.00657)	-0.0205*** (0.00790)	-0.0234*** (0.00365)	-0.0624*** (0.00573)	-0.00603** (0.00245)	-0.00215 (0.00825)
0_in_3months	-0.0623*** (0.00731)	-0.0353*** (0.00559)	-0.00226 (0.00680)	-0.0194*** (0.00347)	-0.0543*** (0.00648)	-0.00156** (0.000766)	0.00528 (0.00718)
SPORT							
1_week	0.00925 (0.00638)	0.00428 (0.00334)	0.0189*** (0.00646)	0.000105 (0.00123)	0.00633* (0.00333)	0.000497 (0.00161)	0.00509 (0.00409)
1or3_month	0.0461*** (0.00789)	0.0200*** (0.00449)	0.0270*** (0.00805)	0.00226 (0.00202)	0.0137*** (0.00388)	0.00286 (0.00184)	0.00739 (0.00559)
Hardlyever_never	0.159*** (0.00993)	0.0672*** (0.00647)	0.0650*** (0.00809)	0.0298*** (0.00513)	0.0460*** (0.00444)	0.0124*** (0.00216)	0.0617*** (0.00714)
Smoking	-0.00868 (0.00541)	-0.0171*** (0.00270)	-0.0389*** (0.00544)	-5.10e-05 (0.00180)	-0.00728** (0.00306)	-0.00297 (0.00191)	-0.00239 (0.00402)
Overweight_Obese	0.0715*** (0.00489)	0.0216*** (0.00404)	0.164*** (0.00702)	0.000859 (0.00120)	0.0700*** (0.00341)	0.00469*** (0.00169)	0.0476*** (0.00491)
Year dummies	YES	YES	YES	YES	YES	YES	YES
Country dummies	YES	YES	YES	YES	YES	YES	YES
Observations	111,321	111,321	111,321	111,321	111,321	111,321	111,321

Omitted benchmarks: unemployed for job status, never_married for marital status, Austria for country dummies, age50_54 for age dummies, almost_every_day for drinking habits, <1_week for sport activities. Robust standard errors in parentheses clustered at country level. *** p<0.01, ** p<0.05, * p<0.1.

Table A5b - Education years and specific illnesses (IV estimates) - continued

VARIABLES	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)
	cancer 2nd stage	cancer 1st stage	ulcer 2nd stage	ulcer 1st stage	parkinson 2nd stage	parkinson 1st stage	cataracts 2nd stage	cataracts 1st stage	femoral fracture 2nd stage	femoral fracture 1st stage	none 2nd stage	none 1st stage
Eduyears	-0.00535* (0.00316)		9.75e-05 (0.00405)		-0.0111* (0.00664)		-0.0388*** (0.00718)		-0.0125*** (0.00308)		0.0840*** (0.0145)	
First_Qtr		-0.0998** (0.0433)		-0.108*** (0.0415)		-0.109*** (0.0391)		-0.0917** (0.0426)		-0.103*** (0.0382)		-0.0675* (0.0376)
Age		-0.115* (0.0629)		-0.113* (0.0626)		-0.0991 (0.0610)		-0.0916 (0.0601)		-0.0995 (0.0617)		-0.175*** (0.0581)
Age ²		8.61e-05 (0.000413)		7.33e-05 (0.000411)		-2.32e-05 (0.000401)		-8.68e-05 (0.000390)		-2.80e-05 (0.000402)		0.000538 (0.000382)
Female	0.000142 (0.00207)	-0.785*** (0.119)	-0.00944*** (0.00338)	-0.784*** (0.119)	-0.0115** (0.00552)	-0.781*** (0.117)	-0.00796 (0.00721)	-0.780*** (0.119)	-0.00677** (0.00311)	-0.782*** (0.119)	0.0457*** (0.0144)	-0.794*** (0.119)

Age55_59	0.000843 (0.00379)	-0.000775 (0.00439)	-0.00603* (0.00347)	-0.0161*** (0.00262)	-0.00649*** (0.00190)	-0.0321** (0.0149)
Age60_64	0.00196 (0.00512)	0.000868 (0.00511)	-0.00970 (0.00637)	-0.0205*** (0.00573)	-0.0106*** (0.00283)	-0.0314 (0.0225)
Age65_69	0.000946 (0.00620)	0.00118 (0.00664)	-0.0133 (0.00918)	-0.0157** (0.00729)	-0.0145*** (0.00377)	-0.0244 (0.0269)
Age70_74	0.00851 (0.00869)	0.00338 (0.00948)	-0.0166 (0.0122)	0.00665 (0.00861)	-0.0152*** (0.00493)	-0.0210 (0.0317)
Age75_79	0.00515 (0.0101)	0.00660 (0.0109)	-0.0194 (0.0163)	0.0465*** (0.0126)	-0.00953 (0.00657)	-0.00229 (0.0363)
AgeAbove_80	0.000507 (0.0132)	0.00603 (0.0139)	-0.0212 (0.0196)	0.0755*** (0.0154)	0.00129 (0.00822)	0.0336 (0.0374)
Married	0.00575** (0.00289)	-0.000462 (0.00359)	0.000516 (0.00154)	-0.00873** (0.00378)	-0.00174 (0.00243)	0.00343 (0.00654)
Reg_Partnership	-0.00352 (0.00633)	0.00231 (0.00637)	0.00490 (0.00307)	-0.00221 (0.00836)	-0.00103 (0.00341)	-0.00222 (0.0151)
Separated	0.00725 (0.00774)	0.00946 (0.00813)	0.00319 (0.00327)	0.00194 (0.00685)	-0.000907 (0.00428)	-0.0131 (0.0194)
Divorced	0.00967*** (0.00332)	0.0143*** (0.00406)	-0.00107 (0.00170)	0.00188 (0.00391)	0.00199 (0.00289)	-0.0215*** (0.00827)
Widowed	-0.000739 (0.00325)	-0.000304 (0.00552)	-0.000654 (0.00168)	0.00880 (0.00568)	0.00535** (0.00239)	-0.00948 (0.00779)
Retired	-0.0131*** (0.00482)	-0.0193** (0.00753)	-0.00288 (0.00224)	-0.0104** (0.00421)	-0.0138*** (0.00286)	0.0957*** (0.0105)
Employed	-0.0364*** (0.00365)	-0.0323*** (0.00675)	-0.00396*** (0.00141)	-0.0208*** (0.00250)	-0.0148*** (0.00238)	0.178*** (0.0120)
Homemaker	-0.0244*** (0.00470)	-0.0264*** (0.00801)	-0.00533** (0.00209)	-0.0160*** (0.00437)	-0.0113*** (0.00213)	0.110*** (0.0121)
Other_Job	-0.0189** (0.00878)	-0.0296*** (0.00752)	-0.00368 (0.00304)	-0.0189** (0.00842)	-0.0129*** (0.00419)	0.104*** (0.0124)
N_Children	-0.00216*** (0.000752)	-0.000632 (0.000995)	0.000272 (0.000300)	-0.00143 (0.00128)	-0.000242 (0.000560)	0.00368* (0.00199)
N_Grandchildren	3.65e-05 (0.000308)	0.000817* (0.000460)	-4.85e-05 (0.000190)	6.49e-05 (0.000457)	1.07e-05 (0.000225)	-0.00315*** (0.000718)
Logincome	0.00490*** (0.00110)	-5.69e-05 (0.000110)	0.000502*** (0.000195)	0.00257* (0.00153)	0.000968* (0.000563)	-0.00670*** (0.00236)
DRINKING						
5or6days_week	-0.00632*** (0.00203)	-0.00352 (0.00413)	-0.00353*** (0.000872)	0.00467 (0.00439)	-0.00110 (0.00172)	-0.00525 (0.00719)
3or4days_week	-0.00476** (0.00216)	-0.00319 (0.00362)	-0.00372*** (0.00103)	0.00501 (0.00377)	-0.00207 (0.00137)	0.00641 (0.00625)
1or2_week	-0.00693*** (0.00227)	-0.00591 (0.00454)	-0.00459*** (0.00103)	0.00337 (0.00397)	-0.00115 (0.00154)	0.0116* (0.00619)
1or2_month	-0.00708* (0.00399)	-0.00779** (0.00344)	-0.00476*** (0.00113)	0.00342 (0.00415)	-0.000161 (0.00183)	0.0173* (0.0101)
<1_month	-0.00297 (0.00494)	-0.00559 (0.00601)	-0.00548*** (0.00153)	0.00483 (0.00669)	-0.000739 (0.00268)	0.0208 (0.0130)
0_in_3months	-0.00564** (0.00256)	-0.00683** (0.00335)	-0.00529*** (0.000933)	0.00838*** (0.00292)	-0.000545 (0.00161)	0.00451 (0.00802)
SPORT						
1_week	0.00165	-0.000254	-0.000223	0.00341	-3.34e-05	-0.0173**

	(0.00253)	(0.00275)	(0.000473)	(0.00317)	(0.000970)	(0.00709)
1or3_month	0.00210	0.000275	-9.95e-05	0.000482	0.000898	-0.0422***
	(0.00278)	(0.00219)	(0.000599)	(0.00234)	(0.00158)	(0.00681)
Hardlyever_never	0.0225***	0.0128***	0.00605***	0.0191***	0.0106***	-0.0920***
	(0.00190)	(0.00289)	(0.000569)	(0.00314)	(0.00134)	(0.00704)
Smoking	-0.00424*	0.0199***	-0.00185***	-4.97e-05	0.000481	0.00185
	(0.00226)	(0.00298)	(0.000566)	(0.00230)	(0.00111)	(0.00342)
Overweight_Obese	-0.00430***	-0.000766	-0.00140**	0.00506**	-0.000873	-0.0874***
	(0.00146)	(0.00257)	(0.000562)	(0.00207)	(0.000764)	(0.00280)
Year Dummies	YES	YES	YES	YES	YES	YES
Country Dummies	YES	YES	YES	YES	YES	YES
Observations	111,321	111,321	111,321	111,321	111,321	111,321

Omitted benchmarks: unemployed for job status, never_married for marital status, Austria for country dummies, age50_54 for age dummies, almost_every_day for drinking habits, <1_week for sport activities. Robust standard errors in parentheses clustered at country level. *** p<0.01, ** p<0.05, * p<0.1.

Table A5c - Education years and health functionalities (IV estimates)

	(1) casp	(2) eduyears	(3) healthinsat	(4) eduyears	(5) n_chronicdeseases	(6) eduyears	(7) adla	(8) eduyears	(9) iadla	(10) eduyears	(11) n_doctorvisits	(12) eduyears	(13) n_wordsrecalled	(14) n_words	(15) mobilityind	(16) eduyears
VARIABLES	casp	eduyears	healthinsat	eduyears	n_chronicdeseases	eduyears	adla	eduyears	iadla	eduyears	n_doctorvisits	eduyears	recalled	eduyears	mobilityind	eduyears
Eduyears	0.121** (0.0580)		-0.0314*** (0.00483)		-0.00860 (0.0111)		-0.0143** (0.00717)		-0.00985** (0.00499)		0.0267 (0.0852)		0.0931*** (0.0107)		-0.0205*** (0.00663)	
EduYears		0.515*** (0.0825)		0.515*** (0.0825)		0.515*** (0.0825)		0.514*** (0.0826)		0.514*** (0.0827)		0.515*** (0.0825)		0.515*** (0.0826)		0.515*** (0.0826)
DRINKING																
5or6days_week	0.784*** (0.139)		-0.141*** (0.0180)		-0.0723*** (0.0249)		-0.126*** (0.0140)		-0.0638*** (0.00843)		-1.198*** (0.181)		0.206*** (0.0226)		-0.168*** (0.0186)	
3or4days_week	0.942*** (0.167)		-0.191*** (0.0151)		-0.0871*** (0.0285)		-0.117*** (0.0146)		-0.0620*** (0.00594)		-1.314*** (0.184)		0.273*** (0.0349)		-0.196*** (0.0154)	
1or2_week	1.155*** (0.146)		-0.251*** (0.0181)		-0.124*** (0.0282)		-0.127*** (0.0120)		-0.0606*** (0.00645)		-1.627*** (0.241)		0.262*** (0.0400)		-0.204*** (0.0143)	
1or2_month	1.067*** (0.158)		-0.282*** (0.0265)		-0.124*** (0.0312)		-0.126*** (0.0138)		-0.0559*** (0.00742)		-1.562*** (0.290)		0.315*** (0.0537)		-0.196*** (0.0153)	
<1_month	0.748*** (0.121)		-0.299*** (0.0267)		-0.143*** (0.0364)		-0.128*** (0.0148)		-0.0572*** (0.00727)		-1.664*** (0.359)		0.382*** (0.0727)		-0.183*** (0.0219)	
0_in_3months	1.041*** (0.101)		-0.232*** (0.0189)		-0.0831*** (0.0251)		-0.134*** (0.0130)		-0.0658*** (0.00809)		-1.893*** (0.203)		0.222*** (0.0527)		-0.206*** (0.0142)	
SPORT																
1_week	-0.601*** (0.113)		0.107*** (0.00967)		0.0527** (0.0209)		-0.00277 (0.00470)		-0.00288 (0.00216)		0.347*** (0.108)		-0.00396 (0.0303)		0.0351*** (0.0107)	
1or3_month	-0.868*** (0.112)		0.165*** (0.00987)		0.1000*** (0.0204)		-0.00851 (0.00737)		-0.00409 (0.00373)		0.632*** (0.136)		-0.0253 (0.0351)		0.0758*** (0.0180)	
Hardlyever_never	-2.084*** (0.180)		0.505*** (0.0185)		0.413*** (0.0389)		0.212*** (0.0244)		0.0712*** (0.00942)		2.531*** (0.230)		-0.234*** (0.0341)		0.445*** (0.0319)	
Smoking	-0.530*** (0.114)		0.0928*** (0.0189)		-0.0393** (0.0251)		-0.0155*** (0.0130)		-0.0128*** (0.00809)		-0.603*** (0.203)		-0.0664*** (0.0527)		0.0346*** (0.0142)	

	(0.0844)	(0.0175)	(0.0174)	(0.00504)	(0.00240)	(0.133)	(0.0209)	(0.00858)
Overweight_Obese	-0.262*** (0.0687)	0.163*** (0.0131)	0.360*** (0.0113)	0.0195** (0.00872)	-0.0200*** (0.00491)	0.692*** (0.0956)	-0.0231 (0.0183)	0.131*** (0.0134)
Female	-0.0528 (0.0943)	-0.0167 (0.0222)	0.0376* (0.0193)	-0.0148 (0.0111)	-0.0211*** (0.00579)	0.170 (0.114)	0.424*** (0.0379)	0.0816*** (0.0179)
Age55_59	0.0931 (0.0997)	0.0969*** (0.0192)	0.196*** (0.0218)	-0.00322 (0.00649)	-0.00427* (0.00240)	0.136 (0.130)	-0.0938*** (0.0256)	0.0334*** (0.00873)
Age60_64	0.368*** (0.142)	0.0835*** (0.0277)	0.332*** (0.0217)	0.00904 (0.00965)	-0.000454 (0.00431)	0.0579 (0.156)	-0.190*** (0.0296)	0.0535*** (0.0162)
Age65_69	0.133 (0.211)	0.133*** (0.0378)	0.489*** (0.0357)	0.0325** (0.0151)	0.0110* (0.00560)	0.493* (0.253)	-0.378*** (0.0350)	0.123*** (0.0288)
Age70_74	-0.235 (0.230)	0.233*** (0.0407)	0.656*** (0.0340)	0.0604*** (0.0157)	0.0200*** (0.00583)	0.853*** (0.245)	-0.694*** (0.0391)	0.215*** (0.0368)
Age75_79	-0.744*** (0.274)	0.325*** (0.0456)	0.831*** (0.0390)	0.129*** (0.0257)	0.0577*** (0.0111)	1.384*** (0.319)	-1.010*** (0.0435)	0.370*** (0.0474)
AgeAbove_80	-1.790*** (0.336)	0.429*** (0.0447)	0.873*** (0.0463)	0.401*** (0.0457)	0.228*** (0.0256)	1.294*** (0.354)	-1.608*** (0.0550)	0.706*** (0.0528)
Married	0.670*** (0.125)	0.00134 (0.0277)	0.0354 (0.0302)	-0.00855 (0.0110)	-0.0206*** (0.00639)	0.0365 (0.180)	0.177*** (0.0303)	-0.0531*** (0.0198)
Reg_Partnership	0.617** (0.268)	-0.0143 (0.0440)	0.0189 (0.0658)	0.0123 (0.0185)	-0.0241*** (0.00725)	0.0986 (0.325)	0.164*** (0.0597)	-0.0212 (0.0244)
Separated	-0.408* (0.227)	0.0239 (0.0262)	0.122** (0.0495)	0.0508** (0.0234)	-0.0169*** (0.00596)	-0.00879 (0.238)	0.138** (0.0595)	-0.0433 (0.0378)
Divorced	-0.360* (0.198)	0.0309 (0.0321)	0.124*** (0.0304)	0.0205* (0.0121)	-0.0214*** (0.00610)	0.424*** (0.152)	0.148*** (0.0346)	0.00368 (0.0198)
Widowed	0.128 (0.158)	0.00581 (0.0280)	0.125*** (0.0349)	0.0326** (0.0135)	0.00438 (0.00767)	0.105 (0.196)	0.00363 (0.0335)	0.0317* (0.0173)
Retired	2.563*** (0.236)	-0.428*** (0.0428)	-0.279*** (0.0399)	-0.234*** (0.0425)	-0.0950*** (0.0239)	-3.119*** (0.403)	0.188*** (0.0307)	-0.341*** (0.0443)
Employed	2.936*** (0.257)	-0.649*** (0.0395)	-0.509*** (0.0347)	-0.237*** (0.0319)	-0.0771*** (0.0178)	-4.273*** (0.374)	0.263*** (0.0430)	-0.380*** (0.0335)
Homemaker	2.295*** (0.231)	-0.476*** (0.0492)	-0.361*** (0.0486)	-0.268*** (0.0426)	-0.0926*** (0.0268)	-3.311*** (0.396)	0.109** (0.0488)	-0.337*** (0.0426)
Other_Job	2.018*** (0.284)	-0.460*** (0.0457)	-0.339*** (0.0496)	-0.161*** (0.0400)	-0.0371 (0.0244)	-3.085*** (0.430)	0.107** (0.0529)	-0.272*** (0.0409)
N_Children	-0.0748** (0.0352)	-0.0115* (0.00681)	-0.0101* (0.00604)	-0.000868 (0.00288)	0.00155 (0.00164)	-0.00636 (0.0472)	-0.0161* (0.00968)	0.00695 (0.00429)
N_Grandchildren	0.0300** (0.0119)	0.00367* (0.00215)	0.0143*** (0.00279)	0.00341* (0.00187)	0.00227** (0.00115)	0.0460* (0.0268)	-0.00244 (0.00410)	0.00580*** (0.00210)
Logincome	0.323*** (0.0482)	-0.0242*** (0.00699)	0.00995 (0.00756)	0.00730*** (0.00189)	0.00235 (0.00190)	0.0730* (0.0404)	0.0559*** (0.0153)	-0.000855 (0.00425)
Year dummies	YES	YES	YES	YES	YES	YES	YES	YES
Country dummies	YES	YES	YES	YES	YES	YES	YES	YES
Observations	107,822	107,822	108,259	108,259	108,239	108,239	108,249	108,249
	108,249	108,249	108,249	108,249	108,249	108,155	108,155	108,249
						108,155	108,169	108,249
							108,169	108,249
								108,249

Omitted benchmarks: unemployed for job status, never_married for marital status, Austria for country dummies, age50_54 for age dummies, almost_every_day for drinking habits, <1_week for sport activities. Robust standard errors in parentheses clustered at country level. *** p<0.01, ** p<0.05, * p<0.1.

Table A5d - Education years and specific illnesses (IV estimates)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
VARIABLES	longterm illness 2nd stage	longterm illness 1st stage	heartattack 2nd stage	heartattack 1st stage	hypertension 2nd stage	hypertension 1st stage	stroke 2nd stage	stroke 1st stage	diabetes 2nd stage	diabetes 1st stage	asthma 2nd stage	asthma 1st stage	arthritis 2nd stage	arthritis 1st stage
Eduyears	-0.000535 (0.00221)		-0.000815 (0.000816)		-0.00452*** (0.00167)		-0.000500 (0.000705)		-0.000826 (0.00286)		-0.000851 (0.000558)		-0.00188 (0.00216)	
EduYears		0.515*** (0.0825)		0.515*** (0.0825)		0.515*** (0.0825)		0.515*** (0.0825)		0.515*** (0.0825)		0.515*** (0.0825)		0.515*** (0.0825)
DRINKING														
5or6days_week	-0.0245*** (0.00715)		-0.0272*** (0.00733)		-0.00234 (0.00732)		-0.0183*** (0.00478)		-0.0254*** (0.00301)		-0.00395** (0.00164)		0.000453 (0.00605)	
3or4days_week	-0.0473*** (0.00826)		-0.0301*** (0.00716)		-0.00985 (0.00733)		-0.0198*** (0.00427)		-0.0362*** (0.00373)		-0.00453** (0.00221)		0.00545 (0.00582)	
1or2_week	-0.0679*** (0.00667)		-0.0348*** (0.00617)		-0.0180*** (0.00638)		-0.0216*** (0.00457)		-0.0457*** (0.00477)		-0.00435*** (0.00161)		0.00156 (0.00624)	
1or2_month	-0.0588*** (0.0102)		-0.0341*** (0.00787)		-0.0161*** (0.00540)		-0.0246*** (0.00434)		-0.0496*** (0.00559)		-0.00514** (0.00219)		0.00155 (0.00794)	
<1_month	-0.0773*** (0.0113)		-0.0392*** (0.00663)		-0.0203** (0.00793)		-0.0234*** (0.00369)		-0.0626*** (0.00568)		-0.00601** (0.00247)		-0.00261 (0.00832)	
0_in_3months	-0.0623*** (0.00741)		-0.0353*** (0.00562)		-0.00215 (0.00684)		-0.0193*** (0.00349)		-0.0544*** (0.00651)		-0.00158** (0.000768)		0.00531 (0.00726)	
SPORT														
1_week	0.00938 (0.00642)		0.00433 (0.00335)		0.0190*** (0.00645)		0.000132 (0.00123)		0.00634* (0.00333)		0.000478 (0.00160)		0.00525 (0.00409)	
1or3_month	0.0462*** (0.00790)		0.0200*** (0.00448)		0.0271*** (0.00807)		0.00233 (0.00200)		0.0136*** (0.00392)		0.00285 (0.00184)		0.00750 (0.00564)	
Hardlyever_never	0.160*** (0.00988)		0.0675*** (0.00642)		0.0656*** (0.00803)		0.0301*** (0.00515)		0.0457*** (0.00450)		0.0122*** (0.00214)		0.0622*** (0.00714)	
Smoking	-0.00928* (0.00545)		-0.0174*** (0.00268)		-0.0393*** (0.00538)		-0.000337 (0.00179)		-0.00712** (0.00303)		-0.00283 (0.00193)		-0.00306 (0.00407)	
Overweight_Obese	0.0713*** (0.00488)		0.0215*** (0.00404)		0.163*** (0.00701)		0.000735 (0.00119)		0.0701*** (0.00344)		0.00476*** (0.00167)		0.0474*** (0.00487)	
Female	0.00678 (0.00749)		-0.0617*** (0.00369)		0.0219*** (0.00567)		-0.0168*** (0.00276)		-0.0311*** (0.00442)		0.00182 (0.00150)		0.103*** (0.0108)	
Age55_59	0.0397*** (0.00865)		0.00721*** (0.00214)		0.0623*** (0.00757)		0.00266* (0.00140)		0.0151*** (0.00335)		-0.00436* (0.00230)		0.0462*** (0.00654)	
Age60_64	0.0401*** (0.00904)		0.0199*** (0.00385)		0.112*** (0.00953)		0.00371** (0.00156)		0.0254*** (0.00402)		-0.00503* (0.00286)		0.0670*** (0.00910)	
Age65_69	0.0597*** (0.0113)		0.0396*** (0.00346)		0.156*** (0.0137)		0.0103*** (0.00239)		0.0471*** (0.00744)		-0.00754** (0.00351)		0.0876*** (0.0137)	
Age70_74	0.0847*** (0.0129)		0.0773*** (0.00453)		0.191*** (0.0120)		0.0173*** (0.00332)		0.0520*** (0.00547)		-0.00404 (0.00382)		0.1000*** (0.0161)	
Age75_79	0.107*** (0.0169)		0.120*** (0.00647)		0.199*** (0.0119)		0.0355*** (0.00441)		0.0552*** (0.00827)		-0.00533 (0.00361)		0.123*** (0.0168)	
AgeAbove_80	0.124*** (0.0168)		0.143*** (0.0106)		0.173*** (0.0147)		0.0459*** (0.00524)		0.0415*** (0.00794)		-0.00823* (0.00433)		0.146*** (0.0183)	
Married	-0.00692 (0.00785)		0.0122* (0.00739)		0.0140 (0.00958)		0.00400 (0.00318)		-0.00819 (0.00597)		-0.00204 (0.00314)		-0.00290 (0.00868)	

Reg_Partnership	-0.00833 (0.0176)	0.00812 (0.0164)	-0.0133 (0.0159)	0.00223 (0.00478)	-0.00805 (0.0111)	0.00501 (0.00749)	-0.00249 (0.0134)
Separated	0.00808 (0.0189)	0.00843 (0.0133)	0.00942 (0.0154)	0.0240*** (0.00740)	0.0175 (0.0131)	-0.00253 (0.00437)	0.00936 (0.0102)
Divorced	0.0331*** (0.0113)	0.0238*** (0.00904)	-0.00210 (0.00807)	0.00643* (0.00390)	-0.00412 (0.00653)	0.00863*** (0.00296)	0.0292*** (0.00934)
Widowed	0.00275 (0.00973)	0.0170*** (0.00639)	0.0458*** (0.0112)	0.00230 (0.00371)	0.00523 (0.00709)	0.000719 (0.00354)	0.0196* (0.0103)
Retired	-0.180*** (0.0197)	-0.0368*** (0.00758)	-0.0265*** (0.00896)	-0.0286*** (0.00492)	-0.0289*** (0.00697)	-0.00927** (0.00438)	-0.0726*** (0.00622)
Employed	-0.277*** (0.0177)	-0.0678*** (0.00719)	-0.0552*** (0.0112)	-0.0425*** (0.00448)	-0.0489*** (0.00668)	-0.0160*** (0.00469)	-0.0983*** (0.00780)
Homemaker	-0.219*** (0.0203)	-0.0540*** (0.00843)	-0.0268** (0.0111)	-0.0359*** (0.00627)	-0.0287*** (0.00848)	-0.0116*** (0.00427)	-0.0690*** (0.0138)
Other_Job	-0.178*** (0.0302)	-0.0380*** (0.0108)	-0.0405** (0.0182)	-0.0258*** (0.00712)	-0.0343** (0.0159)	-0.0226*** (0.00741)	-0.0617*** (0.0124)
N_Children	-0.00268 (0.00220)	0.000288 (0.00137)	-0.00154 (0.00135)	0.00122 (0.000966)	0.00191 (0.00139)	0.000855* (0.000513)	0.00129 (0.00203)
N_Grandchildren	0.00406*** (0.000615)	0.00268*** (0.000640)	0.00213*** (0.000659)	0.000118 (0.000448)	0.00147** (0.000620)	0.000629*** (0.000243)	0.00218** (0.000907)
Logincome	0.00561** (0.00270)	0.00117 (0.00132)	-0.00122 (0.00185)	0.00147** (0.000631)	-0.000862 (0.00120)	0.00219** (0.00107)	0.000187 (0.00152)
Year dummies	YES	YES	YES	YES	YES	YES	YES
Country dummies	YES	YES	YES	YES	YES	YES	YES
Observations	111,321	111,321	111,321	111,321	111,321	111,321	111,321
	111,321	111,321	111,321	111,321	111,321	111,321	111,321
	111,321	111,321	111,321	111,321	111,321	111,321	111,321

Omitted benchmarks: unemployed for job status, never_married for marital status, Austria for country dummies, age50_54 for age dummies, almost_every_day for drinking habits, <1_week for sport activities. Robust standard errors in parentheses clustered at country level. *** p<0.01, ** p<0.05, * p<0.1.

Table A5d - Education years and specific illnesses (IV estimates) - continued

VARIABLES	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)
	cancer 2nd stage	ulcer 1st stage	ulcer 2nd stage	parkinson 1st stage	parkinson 2nd stage	cataracts 1st stage	cataracts 2nd stage	femoral fracture 1st stage	femoral fracture 2nd stage	none 1st stage	none 2nd stage	
Eduyears	0.00262*** (0.000931)		-0.000775 (0.000871)		-0.000459 (0.000423)		0.00294* (0.00174)		-0.000368 (0.000535)		0.000208 (0.00185)	
EduYears		0.515*** (0.0825)		0.515*** (0.0825)		0.515*** (0.0825)		0.515*** (0.0825)		0.515*** (0.0825)		0.515*** (0.0825)
DRINKING												
5or6days_week	-0.00639*** (0.00202)		-0.00352 (0.00412)		-0.00361*** (0.000909)		0.00436 (0.00445)		-0.00118 (0.00173)		-0.00480 (0.00717)	
3or4days_week	-0.00483** (0.00213)		-0.00320 (0.00362)		-0.00377*** (0.00106)		0.00474 (0.00383)		-0.00212 (0.00139)		0.00671 (0.00629)	
1or2_week	-0.00700*** (0.00227)		-0.00591 (0.00454)		-0.00466*** (0.00105)		0.00307 (0.00409)		-0.00123 (0.00156)		0.0119* (0.00632)	
1or2_month	-0.00726* (0.00227)		-0.00784** (0.00454)		-0.00474*** (0.00105)		0.00311 (0.00409)		-0.000180 (0.00156)		0.0174* (0.00632)	

	(0.00393)	(0.00346)	(0.00114)	(0.00426)	(0.00186)	(0.0102)
<1_month	-0.00317	-0.00564	-0.00545***	0.00451	-0.000755	0.0209
	(0.00494)	(0.00602)	(0.00151)	(0.00661)	(0.00270)	(0.0129)
0_in_3months	-0.00566**	-0.00684**	-0.00525***	0.00842***	-0.000515	0.00415
	(0.00253)	(0.00336)	(0.000945)	(0.00296)	(0.00162)	(0.00802)
SPORT						
1_week	0.00170	-0.000248	-0.000213	0.00353	-9.00e-06	-0.0176**
	(0.00253)	(0.00274)	(0.000465)	(0.00319)	(0.000980)	(0.00716)
1or3_month	0.00210	0.000262	-6.23e-05	0.000585	0.000938	-0.0426***
	(0.00279)	(0.00220)	(0.000578)	(0.00237)	(0.00159)	(0.00686)
Hardlyever_never	0.0226***	0.0128***	0.00631***	0.0198***	0.0108***	-0.0934***
	(0.00187)	(0.00287)	(0.000697)	(0.00320)	(0.00135)	(0.00709)
Smoking	-0.00436*	0.0199***	-0.00207***	-0.000820	0.000251	0.00335
	(0.00226)	(0.00303)	(0.000587)	(0.00232)	(0.00110)	(0.00334)
Overweight_Obese	-0.00435***	-0.000754	-0.00150***	0.00470**	-0.000985	-0.0870***
	(0.00145)	(0.00256)	(0.000556)	(0.00208)	(0.000779)	(0.00279)
Female	0.00486**	-0.0104***	-0.00324***	0.0215***	0.00230*	-0.0159***
	(0.00206)	(0.00262)	(0.000602)	(0.00241)	(0.00136)	(0.00468)
Age55_59	0.00450*	-0.00149	-2.62e-05	0.00524***	0.000144	-0.0835***
	(0.00267)	(0.00400)	(0.000468)	(0.00171)	(0.00135)	(0.0109)
Age60_64	0.00864***	-0.000490	0.00152*	0.0194***	0.00182	-0.125***
	(0.00234)	(0.00327)	(0.000833)	(0.00343)	(0.00147)	(0.0107)
Age65_69	0.0107***	-0.000825	0.00317***	0.0431***	0.00371	-0.158***
	(0.00260)	(0.00459)	(0.000929)	(0.00425)	(0.00237)	(0.0139)
Age70_74	0.0214***	0.000734	0.00539***	0.0852***	0.00909***	-0.194***
	(0.00375)	(0.00391)	(0.00143)	(0.00433)	(0.00248)	(0.0150)
Age75_79	0.0212***	0.00332	0.00806***	0.145***	0.0207***	-0.213***
	(0.00451)	(0.00478)	(0.00226)	(0.00761)	(0.00254)	(0.0153)
AgeAbove_80	0.0210***	0.00179	0.0143***	0.203***	0.0405***	-0.228***
	(0.00622)	(0.00519)	(0.00287)	(0.00974)	(0.00336)	(0.0155)
Married	0.00578**	-0.000456	0.000519	-0.00874**	-0.00174	0.00313
	(0.00285)	(0.00360)	(0.00152)	(0.00386)	(0.00244)	(0.00670)
Reg_Partnership	-0.00390	0.00234	0.00447	-0.00409	-0.00155	0.00226
	(0.00629)	(0.00631)	(0.00312)	(0.00835)	(0.00329)	(0.0145)
Separated	0.00731	0.00940	0.00349	0.00269	-0.000610	-0.0153
	(0.00777)	(0.00818)	(0.00329)	(0.00698)	(0.00430)	(0.0193)
Divorced	0.00959***	0.0142***	-0.000838	0.00217	0.00218	-0.0229***
	(0.00325)	(0.00404)	(0.00172)	(0.00398)	(0.00290)	(0.00815)
Widowed	-0.000305	-0.000402	0.000160	0.0116**	0.00622***	-0.0149*
	(0.00325)	(0.00560)	(0.00191)	(0.00566)	(0.00237)	(0.00800)
Retired	-0.0128***	-0.0194***	-0.00232	-0.00842*	-0.0132***	0.0914***
	(0.00482)	(0.00746)	(0.00199)	(0.00432)	(0.00292)	(0.0105)
Employed	-0.0365***	-0.0323***	-0.00404***	-0.0211***	-0.0148***	0.179***
	(0.00369)	(0.00677)	(0.00143)	(0.00242)	(0.00236)	(0.0119)
Homemaker	-0.0241***	-0.0264***	-0.00517**	-0.0151***	-0.0111***	0.109***
	(0.00472)	(0.00801)	(0.00205)	(0.00440)	(0.00221)	(0.0121)
Other_Job	-0.0188**	-0.0296***	-0.00354	-0.0184**	-0.0127***	0.104***
	(0.00880)	(0.00753)	(0.00298)	(0.00837)	(0.00420)	(0.0123)
N_Children	-0.00222***	-0.000611	0.000129	-0.00189	-0.000394	0.00478**
	(0.000758)	(0.000978)	(0.000298)	(0.00128)	(0.000582)	(0.00194)
N_Grandchildren	0.000135	0.000819*	2.62e-05	0.000436	0.000108	-0.00390***

	(0.000316)	(0.000467)	(0.000183)	(0.000453)	(0.000221)	(0.000695)
Logincome	0.00490*** (0.00110)	-5.41e-05 (0.00110)	0.000487** (0.000199)	0.00254* (0.00153)	0.000955* (0.000565)	-0.00664*** (0.00234)
Year dummies	YES	YES	YES	YES	YES	YES
Country dummies	YES	YES	YES	YES	YES	YES
Observations	111,321	111,321	111,321	111,321	111,321	111,321

Omitted benchmarks: unemployed for job status, never_married for marital status, Austria for country dummies, age50_54 for age dummies, almost_every_day for drinking habits, <1_week for sport activities. Robust standard errors in parentheses clustered at country level. *** p<0.01, ** p<0.05, * p<0.1.

Table A5e - Education years and health functionalities (IV estimates)

	(1) casp	(2) eduyears	(3) healthinsat	(4) eduyears	(5) n_chronicdeseases	(6) eduyears	(7) adla	(8) eduyears	(9) iadla	(10) eduyears	(11) n_doctorvisits	(12) eduyears	(13) n_wordsrecalled	(14) n_words	(15) mobilityind	(16) eduyears
VARIABLES	casp	eduyears	healthinsat	eduyears	n_chronicdeseases	eduyears	adla	eduyears	iadla	eduyears	n_doctorvisits	eduyears	n_wordsrecalled	eduyears	mobilityind	eduyears
Eduyears	0.122** (0.0578)		-0.0314*** (0.00470)		-0.00918 (0.0112)		-0.0143** (0.00703)		-0.0103** (0.00489)		0.0246 (0.0865)		0.0933*** (0.0104)		-0.0208*** (0.00658)	
First_Qtr		-0.0792* (0.0414)		-0.0799* (0.0417)		-0.0806* (0.0411)		-0.0802* (0.0418)		-0.0825** (0.0410)		-0.0799* (0.0413)		-0.0802** (0.0401)		-0.0799* (0.0414)
EduYears	0.515*** (0.0827)		0.515*** (0.0827)		0.515*** (0.0827)		0.514*** (0.0828)		0.514*** (0.0828)		0.515*** (0.0827)		0.515*** (0.0827)		0.515*** (0.0828)	
Female	-0.0875 (0.0959)	-0.739*** (0.114)	-0.0174 (0.0223)	-0.739*** (0.114)	0.0440** (0.0189)	-0.738*** (0.114)	-0.0192 (0.0122)	-0.738*** (0.00667)	-0.0245*** (0.114)	-0.738*** (0.114)	0.231* (0.135)	-0.738*** (0.114)	0.424*** (0.0394)	-0.739*** (0.114)	0.0795*** (0.0178)	-0.739*** (0.114)
Age55_59	0.0930 (0.0998)		0.0969*** (0.0192)		0.196*** (0.0219)		-0.00324 (0.00651)		-0.00430* (0.00241)		0.136 (0.131)		-0.0938*** (0.0256)		0.0334*** (0.00873)	
Age60_64	0.367*** (0.142)		0.0835*** (0.0276)		0.332*** (0.0217)		0.00900 (0.00968)		-0.000475 (0.00433)		0.0584 (0.156)		-0.190*** (0.0296)		0.0535*** (0.0162)	
Age65_69	0.133 (0.211)		0.133*** (0.0378)		0.489*** (0.0357)		0.0325** (0.0151)		0.0110* (0.00561)		0.494* (0.253)		-0.378*** (0.0350)		0.123*** (0.0288)	
Age70_74	-0.236 (0.230)		0.233*** (0.0407)		0.656*** (0.0339)		0.0603*** (0.0157)		0.0200*** (0.00584)		0.853*** (0.246)		-0.694*** (0.0391)		0.215*** (0.0368)	
Age75_79	-0.745*** (0.274)		0.325*** (0.0456)		0.831*** (0.0390)		0.129*** (0.0257)		0.0577*** (0.0112)		1.385*** (0.319)		-1.010*** (0.0436)		0.370*** (0.0474)	
AgeAbove_80	-1.791*** (0.336)		0.429*** (0.0448)		0.873*** (0.0463)		0.401*** (0.0457)		0.228*** (0.0256)		1.296*** (0.354)		-1.608*** (0.0551)		0.706*** (0.0528)	
Married	0.670*** (0.125)		0.00134 (0.0277)		0.0354 (0.0302)		-0.00857 (0.0110)		-0.0206*** (0.00638)		0.0366 (0.180)		0.177*** (0.0303)		-0.0532*** (0.0198)	
Reg_Partnership	0.617** (0.268)		-0.0143 (0.0440)		0.0189 (0.0658)		0.0123 (0.0184)		-0.0241*** (0.00724)		0.0990 (0.325)		0.164*** (0.0597)		-0.0212 (0.0244)	
Separated	-0.408* (0.227)		0.0239 (0.0262)		0.122** (0.0495)		0.0508** (0.0234)		-0.0169*** (0.00599)		-0.00843 (0.238)		0.138** (0.0595)		-0.0433 (0.0378)	
Divorced	-0.360* (0.198)		0.0309 (0.0321)		0.124*** (0.0304)		0.0205* (0.0121)		-0.0213*** (0.00610)		0.424*** (0.152)		0.148*** (0.0346)		0.00371 (0.0198)	
Widowed	0.128 (0.158)		0.00581 (0.0280)		0.125*** (0.0349)		0.0325** (0.0135)		0.00437 (0.00766)		0.105 (0.196)		0.00363 (0.0335)		0.0317* (0.0173)	
Retired	2.564*** (0.236)		-0.428*** (0.0428)		-0.279*** (0.0398)		-0.234*** (0.0425)		-0.0950*** (0.0238)		-3.120*** (0.403)		0.188*** (0.0307)		-0.341*** (0.0443)	
Employed	2.936*** (0.236)		-0.649*** (0.0428)		-0.509*** (0.0398)		-0.237*** (0.0425)		-0.0771*** (0.0238)		-4.272*** (0.403)		0.263*** (0.0307)		-0.380*** (0.0443)	

	(0.257)	(0.0395)	(0.0347)	(0.0319)	(0.0178)	(0.374)	(0.0430)	(0.0335)
Homemaker	2.296*** (0.231)	-0.476*** (0.0491)	-0.361*** (0.0486)	-0.268*** (0.0426)	-0.0926*** (0.0268)	-3.312*** (0.395)	0.109** (0.0488)	-0.337*** (0.0426)
Other_Job	2.018*** (0.284)	-0.460*** (0.0457)	-0.339*** (0.0495)	-0.161*** (0.0400)	-0.0371 (0.0244)	-3.085*** (0.430)	0.107** (0.0529)	-0.272*** (0.0409)
N_Children	-0.0748** (0.0352)	-0.0115* (0.00681)	-0.0101* (0.00604)	-0.000870 (0.00289)	0.00154 (0.00164)	-0.00636 (0.0472)	-0.0161* (0.00968)	0.00694 (0.00429)
N_Grandchildren	0.0300** (0.0119)	0.00367* (0.00215)	0.0143*** (0.00279)	0.00340* (0.00187)	0.00226** (0.00115)	0.0460* (0.0267)	-0.00244 (0.00410)	0.00579*** (0.00210)
Logincome	0.323*** (0.0481)	-0.0242*** (0.00699)	0.00995 (0.00756)	0.00730*** (0.00189)	0.00235 (0.00190)	0.0730* (0.0404)	0.0559*** (0.0153)	-0.000855 (0.00425)
DRINKING								
5or6days_week	0.783*** (0.139)	-0.141*** (0.0180)	-0.0723*** (0.0249)	-0.126*** (0.0140)	-0.0638*** (0.00843)	-1.198*** (0.181)	0.206*** (0.0226)	-0.168*** (0.0186)
3or4days_week	0.941*** (0.167)	-0.191*** (0.0151)	-0.0871*** (0.0285)	-0.117*** (0.0145)	-0.0620*** (0.00594)	-1.313*** (0.184)	0.273*** (0.0350)	-0.196*** (0.0154)
1or2_week	1.154*** (0.146)	-0.251*** (0.0181)	-0.124*** (0.0282)	-0.127*** (0.0120)	-0.0606*** (0.00645)	-1.627*** (0.241)	0.262*** (0.0400)	-0.204*** (0.0143)
1or2_month	1.066*** (0.158)	-0.282*** (0.0265)	-0.124*** (0.0312)	-0.126*** (0.0138)	-0.0558*** (0.00742)	-1.562*** (0.290)	0.315*** (0.0537)	-0.196*** (0.0153)
<1_month	0.748*** (0.121)	-0.299*** (0.0267)	-0.143*** (0.0364)	-0.128*** (0.0148)	-0.0572*** (0.00727)	-1.664*** (0.359)	0.382*** (0.0727)	-0.183*** (0.0219)
0_in_3months	1.041*** (0.101)	-0.232*** (0.0189)	-0.0831*** (0.0251)	-0.134*** (0.0130)	-0.0658*** (0.00810)	-1.893*** (0.203)	0.222*** (0.0527)	-0.206*** (0.0142)
SPORT								
1_week	-0.601*** (0.113)	0.107*** (0.00967)	0.0527** (0.0209)	-0.00277 (0.00469)	-0.00289 (0.00216)	0.347*** (0.108)	-0.00396 (0.0303)	0.0351*** (0.0106)
1or3_month	-0.868*** (0.112)	0.165*** (0.00987)	0.100*** (0.0204)	-0.00852 (0.00736)	-0.00409 (0.00371)	0.632*** (0.136)	-0.0253 (0.0351)	0.0758*** (0.0180)
Hardlyever_never	-2.084*** (0.180)	0.505*** (0.0185)	0.413*** (0.0389)	0.212*** (0.0244)	0.0712*** (0.00941)	2.531*** (0.231)	-0.234*** (0.0341)	0.445*** (0.0319)
Smoking	-0.530*** (0.0844)	0.0928*** (0.0175)	-0.0393** (0.0174)	-0.0155*** (0.00505)	-0.0129*** (0.00240)	-0.602*** (0.133)	-0.0664*** (0.0209)	0.0345*** (0.00858)
Year dummies	YES	YES	YES	YES	YES	YES	YES	YES
Country dummies	YES	YES	YES	YES	YES	YES	YES	YES
Observations	107,805	107,805	108,247	108,247	108,227	108,227	108,237	108,237
	108,227	108,227	108,237	108,237	108,237	108,237	108,143	108,143
							108,143	108,143
							108,155	108,155
							108,237	108,237
								108,237

Omitted benchmarks: unemployed for job status, never_married for marital status, Austria for country dummies, age50_54 for age dummies, almost_every_day for drinking habits, <1_week for sport activities. Robust standard errors in parentheses clustered at country level. *** p<0.01, ** p<0.05, * p<0.1.

Table A5d - Education years and specific illnesses (IV estimates)

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	longterm illness		heartattack		hypertension		stroke		diabetes		asthma	
	2nd stage	1st stage	2nd stage	1st stage	2nd stage	1st stage	2nd stage	1st stage	2nd stage	1st stage	2nd stage	1st stage
Eduyears	-0.000680 (0.00221)		-0.000899 (0.000826)		-0.00461*** (0.00163)		-0.000676 (0.000692)		-0.000814 (0.00286)		-0.000975 (0.000599)	
First_Qtr		-0.0804* (0.0416)		-0.0806* (0.0413)		-0.0793* (0.0414)		-0.0799* (0.0416)		-0.0801* (0.0413)		-0.0805* (0.0417)
<u>EduYears</u>		0.515*** (0.0826)		0.515*** (0.0827)		0.515*** (0.0827)		0.515*** (0.0827)		0.515*** (0.0827)		0.515*** (0.0827)
Female	0.00898 (0.00735)	-0.739*** (0.114)	-0.0610*** (0.00368)	-0.738*** (0.114)	0.0207*** (0.00588)	-0.739*** (0.114)	-0.0169*** (0.00266)	-0.739*** (0.114)	-0.0299*** (0.00450)	-0.739*** (0.114)	0.00162 (0.00146)	-0.739*** (0.114)
DRINKING												
5or6days_week	-0.0245*** (0.00715)		-0.0272*** (0.00733)		-0.00234 (0.00732)		-0.0183*** (0.00478)		-0.0254*** (0.00301)		-0.00395** (0.00164)	
3or4days_week	-0.0473*** (0.00826)		-0.0301*** (0.00716)		-0.00985 (0.00733)		-0.0198*** (0.00427)		-0.0361*** (0.00373)		-0.00453** (0.00221)	
1or2_week	-0.0679*** (0.00667)		-0.0348*** (0.00617)		-0.0180*** (0.00639)		-0.0216*** (0.00457)		-0.0457*** (0.00477)		-0.00435*** (0.00161)	
1or2_month	-0.0588*** (0.0102)		-0.0341*** (0.00787)		-0.0161*** (0.00540)		-0.0246*** (0.00434)		-0.0496*** (0.00559)		-0.00512** (0.00219)	
<1_month	-0.0773*** (0.0113)		-0.0391*** (0.00663)		-0.0202** (0.00793)		-0.0233*** (0.00369)		-0.0626*** (0.00369)		-0.00599** (0.00247)	
0_in_3months	-0.0623*** (0.00741)		-0.0353*** (0.00562)		-0.00214 (0.00684)		-0.0193*** (0.00349)		-0.0544*** (0.00651)		-0.00157** (0.000767)	
SPORT												
1_week	0.00938 (0.00642)		0.00433 (0.00334)		0.0190*** (0.00645)		0.000129 (0.00123)		0.00634* (0.00333)		0.000475 (0.00160)	
1or3_month	0.0462*** (0.00790)		0.0200*** (0.00448)		0.0271*** (0.00807)		0.00233 (0.00200)		0.0136*** (0.00392)		0.00285 (0.00184)	
Hardlyever_never	0.160*** (0.00988)		0.0675*** (0.00642)		0.0656*** (0.00804)		0.0302*** (0.00515)		0.0457*** (0.00450)		0.0122*** (0.00215)	
Smoking	-0.00927* (0.00545)		-0.0173*** (0.00268)		-0.0393*** (0.00538)		-0.000336 (0.00179)		-0.00712** (0.00303)		-0.00283 (0.00193)	
Overweight_Obese	0.0713*** (0.00488)		0.0215*** (0.00404)		0.163*** (0.00701)		0.000734 (0.00119)		0.0701*** (0.00344)		0.00476*** (0.00167)	
Age55_59	0.0397*** (0.00865)		0.00721*** (0.00214)		0.0623*** (0.00757)		0.00265* (0.00140)		0.0151*** (0.00335)		-0.00437* (0.00230)	
Age60_64	0.0401*** (0.00905)		0.0199*** (0.00384)		0.112*** (0.00953)		0.00372** (0.00156)		0.0254*** (0.00402)		-0.00503* (0.00286)	
Age65_69	0.0597*** (0.0113)		0.0396*** (0.00346)		0.156*** (0.0137)		0.0103*** (0.00240)		0.0471*** (0.00745)		-0.00754** (0.00351)	
Age70_74	0.0848*** (0.0113)		0.0773*** (0.00346)		0.191*** (0.0137)		0.0173*** (0.00240)		0.0520*** (0.00745)		-0.00404 (0.00351)	

	(0.0129)	(0.00454)	(0.0120)	(0.00332)	(0.00547)	(0.00382)
Age75_79	0.107*** (0.0169)	0.120*** (0.00647)	0.199*** (0.0119)	0.0355*** (0.00441)	0.0553*** (0.00827)	-0.00532 (0.00361)
AgeAbove_80	0.124*** (0.0168)	0.143*** (0.0106)	0.173*** (0.0147)	0.0459*** (0.00525)	0.0415*** (0.00795)	-0.00822* (0.00433)
Married	-0.00691 (0.00785)	0.0123* (0.00739)	0.0140 (0.00958)	0.00400 (0.00318)	-0.00819 (0.00597)	-0.00204 (0.00314)
Reg_Partnership	-0.00832 (0.0176)	0.00813 (0.0164)	-0.0133 (0.0159)	0.00224 (0.00478)	-0.00805 (0.0111)	0.00501 (0.00749)
Separated	0.00810 (0.0189)	0.00844 (0.0133)	0.00942 (0.0154)	0.0240*** (0.00740)	0.0175 (0.0131)	-0.00252 (0.00437)
Divorced	0.0332*** (0.0113)	0.0238*** (0.00903)	-0.00209 (0.00807)	0.00645* (0.00390)	-0.00412 (0.00653)	0.00864*** (0.00296)
Widowed	0.00276 (0.00973)	0.0171*** (0.00639)	0.0458*** (0.0112)	0.00230 (0.00371)	0.00524 (0.00709)	0.000720 (0.00354)
Retired	-0.180*** (0.0197)	-0.0368*** (0.00758)	-0.0265*** (0.00896)	-0.0286*** (0.00492)	-0.0289*** (0.00697)	-0.00927** (0.00438)
Employed	-0.277*** (0.0177)	-0.0678*** (0.00719)	-0.0552*** (0.0112)	-0.0425*** (0.00448)	-0.0489*** (0.00668)	-0.0160*** (0.00468)
Homemaker	-0.219*** (0.0203)	-0.0540*** (0.00843)	-0.0268** (0.0111)	-0.0359*** (0.00626)	-0.0288*** (0.00849)	-0.0116*** (0.00426)
Other_Job	-0.178*** (0.0302)	-0.0380*** (0.0108)	-0.0405** (0.0182)	-0.0258*** (0.00712)	-0.0343** (0.0159)	-0.0226*** (0.00741)
N_Children	-0.00269 (0.00220)	0.000287 (0.00137)	-0.00154 (0.00135)	0.00122 (0.000966)	0.00191 (0.00139)	0.000854* (0.000513)
N_Grandchildren	0.00405*** (0.000614)	0.00268*** (0.000641)	0.00213*** (0.000660)	0.000113 (0.000448)	0.00147** (0.000619)	0.000626*** (0.000242)
Logincome	0.00561** (0.00270)	0.00117 (0.00132)	-0.00122 (0.00185)	0.00147** (0.000630)	-0.000863 (0.00120)	0.00219** (0.00107)
Year dummies	YES	YES	YES	YES	YES	YES
Country dummies	YES	YES	YES	YES	YES	YES
Observations	108,251	108,251	108,227	108,227	108,227	108,227
	108,227	108,227	108,227	108,227	108,227	108,227
	108,227	108,227	108,227	108,227	108,227	108,227

Omitted benchmarks: unemployed for job status, never_married for marital status, Austria for country dummies, age50_54 for age dummies, almost_every_day for drinking habits, <1_week for sport activities. Robust standard errors in parentheses clustered at country level. *** p<0.01, ** p<0.05, * p<0.1.

Table A5d - Education years and specific illnesses (IV estimates) - continued

VARIABLES	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)
	arthritis 2nd st.	cancer 1st st.	ulcer 2nd st.	parkinson 1st st.	cataracts 2nd st.	femoral fracture 1st st.	none 2nd st.	1st st.						
Eduyears	-0.00206 (0.00219)	0.00264*** (0.000918)		-0.000746 (0.000849)	-0.000616 (0.000439)	0.00298* (0.00170)	-0.000331 (0.000520)	0.000244 (0.00185)						

First_Qtr	-0.0800*	-0.0814*	-0.0800*	-0.0814*	-0.0786*	-0.0799*	-0.0800*
	(0.0416)	(0.0417)	(0.0414)	(0.0416)	(0.0413)	(0.0414)	(0.0414)
EduYears	0.515***	0.515***	0.515***	0.515***	0.515***	0.515***	0.515***
	(0.0826)	(0.0826)	(0.0827)	(0.0827)	(0.0827)	(0.0827)	(0.0826)
Female	0.106***	-0.739***	0.00607**	-0.739***	-0.0101***	-0.739***	-0.00363***
	(0.0107)	(0.114)	(0.00246)	(0.114)	(0.00278)	(0.114)	(0.000696)
DRINKING							
5or6days_week	0.000468	-0.00638***	-0.00352	-0.00361***	0.00436	-0.00118	-0.00481
	(0.00605)	(0.00202)	(0.00412)	(0.000909)	(0.00445)	(0.00173)	(0.00717)
3or4days_week	0.00547	-0.00482**	-0.00320	-0.00376***	0.00475	-0.00212	0.00670
	(0.00582)	(0.00214)	(0.00362)	(0.00106)	(0.00383)	(0.00138)	(0.00629)
1or2_week	0.00157	-0.00700***	-0.00591	-0.00466***	0.00307	-0.00123	0.0119*
	(0.00624)	(0.00227)	(0.00454)	(0.00105)	(0.00409)	(0.00156)	(0.00632)
1or2_month	0.00158	-0.00726*	-0.00784**	-0.00472***	0.00312	-0.000184	0.0174*
	(0.00794)	(0.00393)	(0.00346)	(0.00114)	(0.00426)	(0.00185)	(0.0102)
<1_month	-0.00259	-0.00318	-0.00564	-0.00543***	0.00450	-0.000760	0.0209
	(0.00832)	(0.00494)	(0.00602)	(0.00151)	(0.00661)	(0.00270)	(0.0129)
0_in_3months	0.00531	-0.00566**	-0.00684**	-0.00524***	0.00841***	-0.000516	0.00416
	(0.00726)	(0.00253)	(0.00336)	(0.000946)	(0.00295)	(0.00162)	(0.00802)
SPORT							
1_week	0.00525	0.00170	-0.000247	-0.000216	0.00353	-8.25e-06	-0.0176**
	(0.00409)	(0.00253)	(0.00274)	(0.000465)	(0.00319)	(0.000981)	(0.00716)
1or3_month	0.00751	0.00210	0.000263	-6.06e-05	0.000589	0.000938	-0.0426***
	(0.00564)	(0.00279)	(0.00220)	(0.000575)	(0.00237)	(0.00159)	(0.00686)
Hardlyever_never	0.0622***	0.0226***	0.0128***	0.00631***	0.0198***	0.0108***	-0.0934***
	(0.00714)	(0.00187)	(0.00287)	(0.000703)	(0.00320)	(0.00135)	(0.00709)
Smoking	-0.00305	-0.00436*	0.0199***	-0.00207***	-0.000815	0.000251	0.00334
	(0.00407)	(0.00226)	(0.00303)	(0.000587)	(0.00232)	(0.00110)	(0.00334)
Overweight_Obese	0.0474***	-0.00435***	-0.000754	-0.00150***	0.00470**	-0.000985	-0.0870***
	(0.00487)	(0.00145)	(0.00256)	(0.000557)	(0.00208)	(0.000779)	(0.00279)
Age55_59	0.0462***	0.00450*	-0.00149	-3.13e-05	0.00524***	0.000145	-0.0835***
	(0.00655)	(0.00267)	(0.00400)	(0.000466)	(0.00171)	(0.00135)	(0.0109)
Age60_64	0.0670***	0.00865***	-0.000488	0.00152*	0.0194***	0.00182	-0.125***
	(0.00910)	(0.00235)	(0.00327)	(0.000826)	(0.00343)	(0.00146)	(0.0107)
Age65_69	0.0877***	0.0107***	-0.000824	0.00318***	0.0431***	0.00371	-0.158***
	(0.0137)	(0.00261)	(0.00459)	(0.000924)	(0.00425)	(0.00237)	(0.0139)
Age70_74	0.100***	0.0214***	0.000735	0.00539***	0.0852***	0.00909***	-0.194***
	(0.0161)	(0.00375)	(0.00390)	(0.00143)	(0.00433)	(0.00247)	(0.0150)
Age75_79	0.123***	0.0212***	0.00332	0.00806***	0.145***	0.0207***	-0.213***
	(0.0169)	(0.00452)	(0.00477)	(0.00225)	(0.00761)	(0.00253)	(0.0153)
AgeAbove_80	0.146***	0.0210***	0.00179	0.0143***	0.203***	0.0405***	-0.228***
	(0.0183)	(0.00623)	(0.00518)	(0.00288)	(0.00973)	(0.00336)	(0.0155)
Married	-0.00289	0.00579**	-0.000453	0.000514	-0.00873**	-0.00173	0.00312
	(0.00868)	(0.00285)	(0.00360)	(0.00152)	(0.00386)	(0.00244)	(0.00670)
Reg_Partnership	-0.00247	-0.00390	0.00233	0.00447	-0.00408	-0.00155	0.00225
	(0.0134)	(0.00629)	(0.00632)	(0.00312)	(0.00836)	(0.00330)	(0.0145)

Separated	0.00938 (0.0101)	0.00732 (0.00778)	0.00940 (0.00818)	0.00350 (0.00329)	0.00270 (0.00697)	-0.000613 (0.00431)	-0.0153 (0.0193)
Divorced	0.0292*** (0.00934)	0.00959*** (0.00326)	0.0142*** (0.00405)	-0.000819 (0.00172)	0.00217 (0.00398)	0.00217 (0.00290)	-0.0229*** (0.00815)
Widowed	0.0196* (0.0103)	-0.000302 (0.00325)	-0.000402 (0.00561)	0.000161 (0.00191)	0.0116** (0.00565)	0.00622*** (0.00237)	-0.0149* (0.00800)
Retired	-0.0726*** (0.00623)	-0.0128*** (0.00482)	-0.0194*** (0.00746)	-0.00231 (0.00199)	-0.00843* (0.00432)	-0.0132*** (0.00292)	0.0914*** (0.0105)
Employed	-0.0983*** (0.00780)	-0.0365*** (0.00369)	-0.0323*** (0.00677)	-0.00404*** (0.00143)	-0.0211*** (0.00242)	-0.0148*** (0.00236)	0.179*** (0.0119)
Homemaker	-0.0691*** (0.0138)	-0.0241*** (0.00472)	-0.0264*** (0.00801)	-0.00517** (0.00205)	-0.0151*** (0.00440)	-0.0111*** (0.00221)	0.109*** (0.0121)
Other_Job	-0.0617*** (0.0124)	-0.0189** (0.00880)	-0.0296*** (0.00753)	-0.00353 (0.00298)	-0.0184** (0.00837)	-0.0127*** (0.00420)	0.104*** (0.0123)
N_Children	0.00129 (0.00203)	-0.00222*** (0.000758)	-0.000611 (0.000978)	0.000127 (0.000298)	-0.00189 (0.00128)	-0.000393 (0.000583)	0.00478** (0.00194)
N_Grandchildren	0.00217** (0.000907)	0.000136 (0.000316)	0.000820* (0.000467)	2.16e-05 (0.000184)	0.000437 (0.000453)	0.000109 (0.000221)	-0.00390*** (0.000696)
Logincome	0.000185 (0.00152)	0.00489*** (0.00110)	-5.42e-05 (0.00110)	0.000486** (0.000198)	0.00254* (0.00153)	0.000955* (0.000565)	-0.00664*** (0.00234)
Year dummies	YES	YES	YES	YES	YES	YES	YES
Country dummies	YES	YES	YES	YES	YES	YES	YES
Observations	108,227	108,227	108,227	108,227	108,227	108,227	108,227
	108,227	108,227	108,227	108,227	108,227	108,227	108,227

Omitted benchmarks: unemployed for job status, never_married for marital status, Austria for country dummies, age50_54 for age dummies, almost_every_day for drinking habits, <1_week for sport activities. Robust standard errors in parentheses clustered at country level. *** p<0.01, ** p<0.05, * p<0.1.