Los efectos del desajuste educativo sobre el bienestar subjetivo

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Abstract

This paper analyzes the effects of educational mismatch on subjective wellbeing. We study whether a discrepancy exists between the aspirations associated with the level of education acquired by the individuals and the opportunities found in the labor market and, consequently, whether educational mismatch affects their overall levels of subjective wellbeing. Consistent with education generating certain aspirations, we find that educational mismatch has a sizable significant negative impact on life satisfaction for over-educated individuals while the effect is positive for under-educated individuals. We also study whether individuals showing educational mismatch are less satisfied than other workers being adequately educated, within a similar job, since this dissatisfaction could translate into lower performance and productivity. In this case we only find under-education to negatively affect life satisfaction levels.

Keywords: Life Satisfaction, Happiness, educational mismatch.

JEL codes: I20, J24, J62

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1. Introduction

Educational mismatch has dramatically increased in most developed countries, especially as regards to the percentage of workers being overeducated. In a survey of the literature McGuiness (2006) finds that approximately 30% of the workforce is over-educated, with some studies reporting more than 40% of over qualified individuals. A mismatch between the education acquired by workers and that required by their jobs has potentially large negative impacts on the economy. From a policy perspective, part of the skills acquired through education are being underused, which results in a loss of growth potential and in a loss of resources spent on unutilized skills. From a firm perspective, educational mismatch has been found to significantly decrease firm productivity (Tsang, 1987, Tsang et al., 1991). From workers point of view, educational mismatch results in lower wages compared to similarly educated peers (Bauer, 2002) and higher probabilities of quitting or changing jobs. In this paper we investigate the psychological channels through which educational mismatch may result in lower productivity and wages by studying the effect of educational mismatch on subjective wellbeing.

We test two related hypotheses. On the one hand, we study whether workers showing educational mismatch suffer a loss in life satisfaction as compared to adequately matched workers performing similar jobs. As happiness levels have been found to significantly affect workers' productivity (Freeman, 1978; Tsang and Levin, 1985; Tsang, 1987), if over or under-educated workers are less happy than their adequately matched co-coworkers, they will be less productive. On the other hand we test whether over-educated workers suffer a loss in life satisfaction when compared to similarly educated workers that are well matched. The idea here is that education generates expectations regarding the type of job that workers will obtain after school. Workers that do not meet those expectations are likely to suffer a psychological wellbeing loss compared to their adequately matched classmates. A similar reasoning leads also to expect under-educated workers to enjoy greater levels of satisfaction with life due to exceeded expectations.

By analyzing these hypotheses we contribute to several research agendas. On the one hand we contribute to the literature on the determinants of life satisfaction. We build upon two established facts in this literature. First, many papers have shown that people's utility depends on relative levels of consumption or income (Easterlin, 1974, 1995; Clark and Oswald, 1996). People care not only about what they have, but also about how what they have compares with what others have. The interest within this literature has been thus far mostly on the effects of relative income on life satisfaction. In this literature education and job market status are usually considered to affect life satisfaction directly, not in relation with the education or the job market status of other individuals (Frey and Stutzer, 2002). Educational mismatch is a relative variable that relates both education and labor market outcomes. We contribute to this research agenda by showing that education levels and job status also show a relative domain: life satisfaction is affected by being more or less educated than one's peers and by having a better or a worse job than people with similar levels of education.

Our second contribution relates to a second established fact in the literature on life satisfaction. Many papers find a negative impact of unemployment on subjective wellbeing even when the effects of unemployment on individuals' income are taken into account (Clark and Oswald, 1994; Di Tella et al. 2001; Clark, 2003; Winkelmann, 2009; Kassembohemer and Haisken-DeNew, 2009). Education is usually seen as contributing to individual wellbeing by reducing the probability of unemployment. However, even when it is generally acknowledged that education contributes to subjective wellbeing via employment opportunities, the study of the relationship between education and the job held by an individual (and its effects on subjective wellbeing), has rarely been analyzed. Under certain conditions, education can be seen as a means to escape unemployment, so the individuals would be willing to accept a job that requires a lower level of qualification than that acquired by the individual through formal education (Pollman-Schult and Büschel, 2005). If an individual invests in education as a means to escape unemployment, the failure to obtain a job would be a source of dissatisfaction, but once the individual is hired, educational mismatch should not, *a priori*, show any negative effect on subjective wellbeing since expectations would be fulfilled. Some works support this view, pointing that individuals may prefer to voluntarily acquire a higher level of education than that required for doing a particular job in order to avoid unemployment (Sicherman and Galor, 1990). By contrast, if individual aspirations

increase with the level of education, obtaining a job would not be enough to fulfill the individual's aspirations. In this case, the individuals may accept jobs for which they are overqualified, but this involuntary educational mismatch would be a source of individual dissatisfaction since it would reflect a discrepancy between aspirations and actual job opportunities (Pollmann-Schult and Büschel, 2005; Ferrante, 2009). The question of whether educational mismatch affects individual subjective wellbeing therefore contributes to greater understanding of whether the individuals overinvest in education of their own will to avoid unemployment, or whether educational mismatch is involuntary and appears as result of the labor market conditions.

Finally, this paper also contributes to the research agenda on the effects of over-education. This literature has focused mainly on the study of the labor market effects of educational mismatch (McGuinness, 2006; Hartog, 2000). Since the work of Duncan and Hoffman (1981), many papers have studied the effects of educational mismatch on wages, with most of this research finding that a wage penalty is incurred by over-educated or under-educated people compared to similarly educated peers (Rumberger, 1987; Bauer, 2002: Cohn and Ng, 2000; Groeneveld and Hartog, 2004). Some studies have looked at the effect on other labor market variables, showing a higher turnout among over-educated workers (Alba-Ramirez, 1993), higher promotion rates (Hersh, 1995, Groeneveld and Hartog, 2004), higher probability of quitting (Hersh, 1995), and lower investment on workers' training by firms (Hersh, 1995). Searching for a relationship between productivity and educational mismatch, this literature has also looked at some of the negative psychological effects of educational mismatch but has focused on its effects on job satisfaction and other narrower job domains as opposed to overall subjective wellbeing (Tsang, 1987, Büchel, 2002, Verhaest and Omey, 2009). In general, this literature concludes that educational mismatch affects job satisfaction when individuals are compared to similarly educated people but the results are mixed when compared with adequately matched individuals performing similar jobs[1]. While job satisfaction and satisfaction regarding other job domains may capture some workers'

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[1] Tsang (1987) compares workers with similar level of education and concludes that over-education leads to lower overall job satisfaction. Büchel (2002) shows that when compared with people performing similar jobs over-educated workers do not show a lower job-satisfaction but they do appear to perform better according to other objective indicators such as health, and involvement with the firm. Verhaest and Omey (2009) finds that overall job satisfaction is negatively affected by educational mismatch when individuals with similar levels of education are compared and also when the comparison is between people performing the same jobs. Cabral Viera (2005) studies several job domains such as satisfaction with pay, security or hours worked and concludes that educational mismatch negatively affects satisfaction along these dimensions when controlling for education levels.

characteristics associated with their performance, the psychological research on the topic has pointed to job satisfaction being flawed as a measure of subjective wellbeing because of its narrow scope (e.g. Wright and Compranzano, 2000). Educational mismatch is therefore likely to have a stronger impact on subjective wellbeing when a more general measure is used. We contribute to this literature by using life satisfaction and happiness as our overall measures of subjective wellbeing and by showing that educational mismatch does indeed affect other domains of individual wellbeing beyond those related to the job.

We estimate the relationship between educational mismatch and subjective wellbeing using data from two waves of the European Social Survey, a large sample of individuals belonging to thirty different European countries. Our results are consistent with the hypothesis that education generates certain aspirations and when those are not met people suffer a psychological cost. We find that over-education is associated with lower levels of subjective wellbeing when individuals are compared with similarly educated individuals. Consistent also with education generating certain expectations regarding the type of job individuals should obtain, we also find that under-educated individuals enjoy an increase in life satisfaction compared to properly matched people with similar levels of education. On the other hand, when compared with people performing similar jobs, we do not find over-education to be associated with lower levels of subjective wellbeing, but we do find that under-educated people report lower levels of life satisfaction and happiness than their adequately matched peers. This points to the existence of a dissatisfaction from being a "small fish in a big pond" for under-educated workers which results in lower levels of subjective wellbeing, and potentially in lower productivity. Finally, while making cardinal comparisons is difficult when using life satisfaction data, we find evidence suggesting that the psychological costs imposed by educational mismatch amount, in some of the specifications, to as much as one fourth of the costs imposed by being unemployed. Given the prevalence of educational mismatch in today's labor markets, we find this magnitude to have as strong economic relevance.

The remaining of the paper is structured as follows. Section 2 presents the specification and the estimation methods. Section 3 describes the data and variables. Section 4 presents the main results. Section 5 discusses some extensions and robustness. Finally section 6 closes with a discussion of the main findings and conclusions.

2. Empirical model

2.1. Specification

We follow a similar approach to Verhaest and Omey (2009) and estimate a series of regressions of the type:

$$SW_{ijt} = \beta_0 + \beta_1 OVER_{ijt} + \beta 2 UNDER_{ijt} + \beta_3\ EDUYRS_{ijt} + \beta_4 X_{ijt} + \gamma_j + \delta_t + \gamma_j\ \delta_t + \varepsilon_{ijt}$$

[1]

And :

$$SW_{ijt} = \beta_0 + \beta_5 OVER_{ijt} + \beta_6 UNDER_{ijt} + \beta_3\ YRSREQ_{ijt} + \beta_4 X_{ijt} + \gamma_j + \delta_t + \gamma_j\ \delta_t + \varepsilon_{ijt}$$

[2]

The dependent variable, SW, refers to life satisfaction of individual i in country j in time t, where time is given by the survey wave. OVER and UNDER are our variables of interest and refer to the number of years of over or under-education of the individual. These variables are measured as the difference between attained education (EDUYRS) and required education (YRSREQ) and their construction will be described in detail in the next section. EDUYRS -in eq. [1]-is the number of years of education attained by the individual, YRSREQ –in eq. [2]- is the number of years of education that would normally be required for a worker to be performing the job that individual i is performing, and X is the set of control variables. In order to eliminate the effect of other country characteristics, we include country fixed effects, γ_j. We also take advantage of the repeated cross section structure of the data and account for general time trends that are common across countries by including year fixed effects, δ_t. Finally, the country specific time effects, $\gamma_j\ \delta_t$, account for shocks that are country and time specific.

It is worth noting that equation [2] is just a re-write of equation [1] that takes into account that the number of years of education attained by an individual is the number of years required for their job plus their educational mismatch: EDUYRS=YRSREQ+OVER-UNDER. This implies that $\beta_5 = \beta_1 + \beta_3$, and $\beta_6 = \beta_2 - \beta_3$, and that the other parameters of both equations are the same. While both equations are completely equivalent, the coefficients of the educational mismatch variables are

different in each equation and so is their interpretation given that *either* EDUYRS or YRSREQ appear as control variables in each specification.

By including EDUYRS as a control, equation [1] estimates the effect of educational mismatch on life satisfaction holding the level of education constant. This implies that the coefficients of OVER and UNDER should be interpreted as reflecting the impact on life satisfaction of being over or undereducated compared to people that attained exactly the same level of education but landed in a job for which they were adequately educated. For example, a negative sign of the OVER variable would show that an individual that has a job for which he or she is overqualified would be less happy compared to individuals with the same level of education that obtained a job for which they were adequately qualified. A negative sign in this variable would indicate, therefore, that underachieving with respect to one's peers is a source of dissatisfaction. Similarly, if overachieving leads to increased life satisfaction, we would expect the sign of the coefficient of UNDER to be positive, indicating that performing better than what is generally expected given one's level of education makes people happier. Those signs would support Clark and Oswald's (1994) claim that workers do not voluntarily choose to be over-educated in order to maximize their chances of obtaining a certain job, but on the contrary, their education creates aspirations regarding the type of job that they should have, and when the aspirations are not met, life satisfaction decreases.

If the reverse signs were found in equation [1], that is if we found a positive coefficient in the OVER variable and a negative one in the UNDER variable, underachievers would be happier and overachievers unhappier, which would support the idea that some workers would voluntarily choose to be over-educated to maximize their chances of obtaining a certain type of job (Sicherman and Galor, 1990).

Equation [2], on the other hand, includes YRSREQ as a control. By doing so, this equation studies the effect of being over or undereducated compared to people who perform a similar job but have the required amount of education. A positive sign of the coefficient of OVER would imply that people that have more years of education than their co-workers are on average happier, while a negative sign would imply the opposite. Similarly a positive sign of the coefficient of UNDER should be interpreted as meaning that people with lower levels of education than their co-workers are happier, while a negative sign would imply that they are less happy. This equation therefore

compares the differences in reported levels of wellbeing among people performing the same jobs. If happier individuals are more productive, as many papers have shown (e.g Tsang 1987), this equation tests the productivity consequences of educational mismatch.

2.2. Measurement issues

The first econometric question to address is the estimation method. The adequate method to estimate equations [1] and [2] depends on whether we consider life satisfaction as a cardinal or an ordinal variable. Psycologists have traditionally treated life satisfaction as a cardinal variable while economists reject that interpersonal comparisons of utility are meaningful and therefore treat life satisfaction scales as ordinal. From the empirical point of view this is relevant because assuming cardinality would allow the use of OLS estimators while ordinal variables are better estimated by techniques tailored specifically for ordered categorical outcomes such as ordered probit estimators. Ferrer-i-Carbonell and Fritjers (2004) studied the topic extensively and concluded that assuming cardinality or ordinality makes little difference because in practice both OLS and ordered probits estimators produce very similar results. In this study we estimated our equations of interest both by OLS and by ordered probit, confirming that indeed our results are the same regardless of the method. As the coefficients of the OLS model have a simpler interpretation, our discussion of the results will focus on these specifications. The ordered probit results are included in an appendix.

In their methodological study Ferrer-i-Carbonell and Fritjers (2004) point out that a more relevant concern for the estimation of life satisfaction equations is that the coefficients of some relevant determinants of wellbeing, such as income, seem to change drastically when individual fixed effects are accounted for. Our estimation suffers from this problem because the repeated cross section nature of our database prevents us from being able to include an individual fixed effect term in the regression. Ferrer-i-Carbonell and Fritjers (2004) recommend dealing with this problem by choosing a set of controls likely to capture some of the observable individual personality traits that would normally be buried in a fixed effects term. We believe that our choice of controls and the inclusion of country and year fixed effects as well as country and year interactions alleviate this problem. We are aware, however, of the limitations of interpreting the regression coefficients as causal despite the inclusion of

an extensive set of controls and fixed effects terms. Our results should therefore be interpreted as suggestive evidence rather than clear causation.

3. Data and Variables

3.1. Data

We examine the impact of educational mismatch on subjective wellbeing using data from two rounds of the European Social Survey (ESS). The ESS is a widely known and heavily used database among social scientists. The webpage of the ESS currently reports 778 research papers that have used this database in recent years[2]. The database is a large cross section of individuals living in an array of European countries. The European Social Survey currently includes five rounds that were conducted biannually since 2002 (2002/2003, 2003/2004, 2005/2006, 2007/2008, 2009/2010). Over thirty countries participated in at least one of the five rounds.

Each year's survey consists of two sections. The first section is a permanent module of core questions that are included in every round of the survey. Among others, the core module includes a variety of questions related to individual socio-demographic characteristics such as age, gender, health, civil status, or education level, which are our main control variables. The permanent part of the questionnaire also includes two questions related to individual wellbeing, which we will use to construct the dependent variables in this study.

The second part of each wave of the ESS consists of one or more rotating modules. Waves 2 and 5 include a rotating module entitled "*Work, Family and Well-being",* which includes information about the characteristics of the job and work environment of the respondent. This module contains questions that allow us to compute the degree of each individual's educational mismatch, our main variable of interest. As this information is only contained in waves 2 and 5, our sample is restricted to these two waves.

After dropping observations for which any of the relevant variables were missing, our final sample consists of 34,969 observations belonging to 28 countries[3].

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[2] For a complete list of papers that use this database visit the ESS webpage: http://ess.nsd.uib.no/bibliography/complete.html

[3] This number is small in comparison with the total number of observations currently available in the ESS. The reason for the large number of observations that were not used in the estimation is that our

The list of countries is provided in the appendix while the summary statistics of the sample are presented in Table 1.

3.2. Dependent variable

The dependent variable in our equation of interest is a measure of individual wellbeing. In order to capture individual wellbeing, we follow the standard approach in the literature (see Frey and Stutzer, 2005) and use self-reported levels of wellbeing as our main variable. Self-reported measures have been found to be a reliable way of capturing individual levels of wellbeing (Di Tella and MacCulloch, 2006, Frey and Stutzer, 2002, Kahneman and Krueger, 2006). While most of the studies that test the reliability of these measures show that self-reported levels of life satisfaction are subject to an array of biases steaming from the wording of the question, the order in which the question is answered, the short-time experiences or the mood of the respondents, these studies also show that in large samples these biases are averaged out and that self-reported levels of happiness correlate quite well with other objectives measures of life satisfaction, which makes them a very useful tool for the study of individual wellbeing (Kahneman and Krueger, 2006: 9).

The ESS includes two questions in which respondents are asked to report their subjective levels of wellbeing. The first of these questions asks respondents to report their overall satisfaction with life in a scale from 0 to 10. The literal wording of the question is the following: *"All things considered, how satisfied are you with your life as a whole nowadays?"*. The second question asks respondents to report their level of happiness also in a scale from 0 to 10: *"Taking all things together, how happy would you say you are?"*. There is an extensive literature in psychology that distinguishes life satisfaction as having a more cognitive element that reflects how far people are from their aspirations, and happiness as having more of an affective element related to how an individual feels (Bruni and Porta, 2007: xviii; Lucas, Diener and Suh, 1996: 616). Economists however have mostly used both life satisfaction and happiness as synonymous concepts. In practice both self-reported measures are highly correlated. In the particular case of the ESS the correlation between the two variables is 0.72. In this study we will estimate the equations of interest using the two available measures of

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estimating sample consists of only two waves and in each of these waves we are using only individuals that report information on the years of education required to perform their job. This implies that large populations groups such as students, retired or unemployed people are excluded from the sample.

subjective wellbeing, and an additional variable defined as the average of each individual's answer to the two questions described above. This latter measure is intended to capture both the cognitive component and the affective component of subjective wellbeing. The conclusions reported in this paper hold regardless of the measure we use.

3.3. Measurement of Educational Mismatch

Educational mismatch can be broadly defined as the difference between the education of an individual and the education typically required to perform that individual's current job. An individual that has attained more years of education than those required for the job would be over-educated while an individual that has attained less years than required for the job would be under-educated. Thus, in order to measure educational mismatch we need to obtain information on each individual's level of education and on the education required to perform a certain job.

Previous literature has measured educational mismatch using three main methods (Hartog, 2000:132-134). In the first method, called the objective or job analyst method, professional job analysts are asked to specify the years of education that are required for each job title. In the second method, the subjective or self-assessment method, workers are directly asked to report whether they are over-educated or under-educated (direct subjective method). In other cases, they are asked to report the years of education required for their job, which allows then to determine whether a worker is over-educated or under-educated by comparison with its own level of education (indirect subjective method). Finally, according to the realized matches method or statistical method, the number of years of education required for each job is calculated using as reference the mean or the mode of the distribution of workers that perform that job. Which of these methods is preferable is subject to debate, with each of them having advantages and disadvantages (Chevalier, 2003: 511; Hartog, 2000:133). In most empirical studies the decision on which method to use is based on data availability. Most researchers conceptually prefer the job analyst method followed by the subjective method and then the statistical method. Given, however, that the measurement of educational mismatch using the job analyst method is costly and labor intensive, very few databases contain such a measure. Thus the self-assessment method is usually the

best available method (Hartog, 2000:133). In this study we follow the indirect self-assessment method.

The *"Work, Family and Well-being"* module included in waves 2 and 5 of the ESS contains two variables that allow us to calculate educational mismatch using the indirect self-assessment method. The wording of the questions is: 1) *"If someone was applying nowadays for the job you do now, would they need any education or vocational schooling beyond compulsory education?"*, and 2) *"About how many years of education or vocational schooling beyond compulsory education would they need?"*. The possible answers for the first question are either yes or no. For the second question respondents can choose one of eight possible answers: *"01 Less than 1 year (beyond compulsory school); 02 about 1 year; 03 about 2 years; 04 about 3 years; 05 about 4-5 years; 06 about 6-7 years; 07 about 8-9 years; 08 10 years or more (beyond compulsory school)"*.

In order to calculate the number of years of required education for each respondent's job in our sample, we first obtained the number of years of compulsory education in each country from the UNESCO statistical database[4]. Then, we calculated the number of years of required education for each job as follows. First, for respondents that answered "no" to question 1 above, we considered that their job required 0 years of additional education. Second, for people that answered "yes" to question 1 above, we considered that their job required either the number of years reported in their answer to question 2 above if they chose option 2, 3, 4 or 8, or the middle point of the interval of values covered in their option if they chose option 1, 5, 6 or 7. For example, individuals that chose option 2 in question 2) were considered to be working on a job that requires 1 year of education beyond compulsory, while the job of individuals that chose option 5 was considered to require 4.5 years of additional education because 4.5 is the middle range between 4 and 5 years, which is the interval covered in option 5 of the response card. The number of required years for each job was then computed as the number of years of additional education beyond compulsory required for the job plus the number of years of compulsory education in the country[5].

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[4] The data can be found in the UNESCO Institute for Statistics webpage: http://www.uis.unesco.org/.
[5] As our measure of years required for each job was constructed from a scale, we are introducing some measurement error in the calculation of the educational mismatch variables. While this error is likely to be random , we also experimented defining as overeducated and undereducated those individuals for

Educational mismatch was calculated by subtracting the number of years of education of the individual minus the number of years required for the job[6]. This variable measures the number of years of over or under-education of an individual. Finally, we created separate over-education and under-education variables by multiplying our measure of educational mismatch by 1 for over-educated individuals and by -1 for under-educated individuals. These two measures will be our main variables of interest.

3.4. Control variables

The literature on the determinants of subjective wellbeing has identified a set of variables that appear to be correlated with individual subjective wellbeing and that should be included as controls in our specification. In their review of the literature Frey and Stutzer (2002) distinguish between economic, socio-demographic and institutional determinants of life satisfaction. Among the economic variables, individual income has been found to be a prominent determinant of happiness. Since Easterlin (1974) many studies have found that relative income, more than the absolute level of income, seems to be the adequate way to control for income differences across individuals in cross country comparisons of happiness. Following this finding, we include a control variable that captures the relative income of the individual compared to people living in the same country. In order to construct this variable we use the question of the ESS that asks individuals to report their total household after tax income. This variable is coded differently in Waves 2 and 5. In Wave 5 this variable is reported in country specific income deciles. In Wave 2, the variable also includes ten different levels of income in which the respondent can be placed but the brackets are kept in absolute levels and are not country specific. In order to make both measures comparable, we transformed the absolute levels reported in wave 2 into country specific relative levels of income by finding the relevant income deciles for each country using the information available in our sample. Finally, to facilitate presentation of the results in our final specifications we

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which the number of years of over or under-education was greater than 1 or greater than 2, finding no significant differences in the results.

[6] The variable that measures the number of years of education attained by the individual in the ESS is labeled *eduyrs*. The exact wording of the question is: *"About how many years of education have you completed, whether full-time or part-time? Please report these in full-time equivalents and include compulsory years of schooling."*

grouped relative income deciles into only three income groups (high, medium and low)[7].

Among the socio-demographic determinants of wellbeing, a consistent result found in previous literature is that health conditions, civil status and the religiosity of the individual strongly correlate with life-satisfaction. We control for health conditions and religion non-linearly by including a set of five dummy variables that reflect perceived levels of health in a scale from 1 (very good) to 5 (very bad), and a set of three dummies that captures the level of religiosity of the individual (high, medium or low)[8]. We control for civil status by including a dummy variable that captures whether the individual is married or not and include an additional dummy for individuals with kids. Other demographic determinants of subjective wellbeing found in previous studies are age and gender, with women reporting higher levels of live satisfaction on average, and age showing a U-shape impact. We account for these effects by including a gender dummy, and a quadratic polynomial on age.

Finally, previous research shows that both general economic conditions, as measured by prices or unemployment levels, as well as the quality of political or legal institutions in the country do have an effect on individual life satisfaction. As these variables are country and year specific their potential effect is accounted for by the inclusion of country fixed effects, year fixed effects and country and year fixed effects interactions.

4. Results

The summary statistics of our sample are presented in Table 1. The level of self-reported satisfaction with life is 7.01 for the average person in our sample, while self-reported levels of happiness are slightly greater (7.34). Over-educated people report slightly lower levels of life satisfaction compared to undereducated people. Comparing the control variables in the sample of overeducated individuals with the sample of undereducated individuals, we observe that overeducated workers have completed a greater number of years of education while their jobs require less years of education on

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[7] Including the full vector of income deciles does not alter the coefficients of the educational mismatch variables.

[8] The original variable in the ESS has 10 categories. As with income we collapsed them into three groups to facilitate the presentation. We also estimated the models including the religiosity variable linearly or the ten categories separately. These alternative specifications produced the same results.

average. In addition, there is a greater percentage of females in the sample of undereducated workers and they are also older on average. A t-test of the differences in means supports that the differences are statistically significant while the t-tests show that there are no striking differences between the two samples in terms of income, health or religiosity. A mean comparison test also shows that there are statistically significant differences in the reported levels of life satisfaction between younger and older individuals, between college educated individuals and those without a college degree, between individuals reporting greater income and those reporting lower levels of income, between relatively healthier individuals and those that report lower levels of perceived health and between individuals with different levels of religiosity. These significant differences support the choice of these variables as controls in our regressions.

Table 2 shows the results of the OLS estimation of the empirical model. Each column includes the results of both equation [1] and equation [2]. As both equations share the same coefficients for the control variables, we report them only once to save space. We include the coefficients of the educational mismatch variables in separate rows for equation [1] (rows labeled "Regression including Years of Education") and equation 2 (rows labeled "Regressions including Required Years"). The difference between the three columns is that each of them uses a different measure of subjective wellbeing as the dependent variable. Self-reported life satisfaction is the dependent variable in the regression of the first column, self-reported happiness is the dependent variable in the second column, and the average of life-satisfaction and happiness is the dependent variable in the third one.

We start the discussion of our results by analyzing the coefficients of the control variables. All the covariates have the expected signs and are statistically significant at conventional levels, except for the coefficient of Kids which is non-significant. Higher relative income, enjoying a better health and being religious are associated with greater levels of life satisfaction. Civil status and gender affect life satisfaction also in the way reported in previous studies, with men, single individuals and individuals with kids reporting lower levels. Finally, age also follows the pattern observed in previous research. The two terms in the quadratic polynomial are significant and show the expected U-shape, which implies that reported wellbeing decreases with age up to a

certain age and then increases again. In our sample the turning point –the minimum of the curve- occurs at 47.6 years.

Our main coefficients of interest are those of the variables that measure the years of over or under-education. The rows labeled "Regressions including Years of Education" report the coefficients of equation [1], which was estimated including the number of years of education as a control. In these regressions the coefficients of the educational mismatch variables should be interpreted in comparison with individuals that attained the same level of education but work in a job that matches their level of education. If obtaining a certain level of education generates aspirations on individuals regarding what level of a job they can obtain, we should expect educational mismatch to show an asymmetric effect on individuals. Over-educated individuals would be negatively affected by not matching their aspirations while under-educated individuals would be positively affected because they exceeded the expectations generated by their level of education.

The coefficient of the over-education variable is negative and significant in all three regressions estimated including years of education as a control, which supports the idea that individuals incur a cost in terms of life satisfaction when the aspirations generated by the education they acquired are not met. The results are robust to the use of different measures of wellbeing although the effect seems to be smaller when happiness levels are used instead of life satisfaction. Column 1 shows that for every year of educational mismatch, overeducated individuals suffer a cost of 0.0581 points in terms of life satisfaction. According to the magnitude of the coefficient, an individual that is, for example, college educated but that works in a job that requires only a high school degree would report 0.23 (4x0.0581) points less of life satisfaction than similar individuals that have jobs that require a college degree. As the average level of life satisfaction in our sample is 7, this implies a 3.3% decrease in life satisfaction, *ceteris paribus*. To put this number into context, it is worth comparing this number with the effect of other life events such as being unemployed. A regression similar to the one in column 1 but including unemployment as a covariate and eliminating the two educational mismatch variables shows that being unemployed has a negative impact of 0.95 points on life satisfaction, or a 13% decrease[9]. In other words, the college educated

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[9] This number should be taken just as an illustrative example of the overall magnitude. The question in the ESS that asks respondents to report the years of required education for their job refers only to the "job

individual of our example suffers approximately one fourth of the psychological cost incurred by being unemployed.

The coefficient of the under-education variable is positive and significant in the regressions that controls for the years of education. This result is also consistent with the hypothesis that individuals have certain expectations when they decide their education levels. If they end up in a better job than they expected, their levels of life satisfaction improve. The positive effects of overachieving, however, are smaller than those of underachieving. Performing a similar exercise as before, if we use the coefficient in column 1 as a reference, an individual with a high-school diploma that ends up working at a job that usually requires a college degree enjoys an increase in life satisfaction of 0.12 points, or close to a 2% improvement. As with the over-education coefficient, as income levels are controlled for in the regression, this effect of the coefficient of under-education is just the net effect due to exceeding the aspirations created by the education level. The gross effect is obviously higher due to the higher income associated with working at a job that requires greater qualifications.

The third and fourth rows of columns 1 to 3 show the coefficient estimates of the educational mismatch variables when the number of years required for a certain job are included as a control instead of the education attained by the individual (rows labeled "Regressions including Required Years"). This regression is our test of the hypothesis that educational mismatch leads to productivity differences among workers performing the same job. Our results do not support the existence of a productivity loss among over-educated workers. The coefficients indicate that over-education does not lead to lower levels of reported life satisfaction or happiness among people performing the same job. In all three regressions, the coefficient of the over-education variable is small in magnitude and far from being significant.

Our results, however, do show that there is a significant loss in terms of life satisfaction among under-educated workers when compared to properly educated workers performing the same job. In this case the coefficient of the under-education variable is negative and highly significant in all three regressions. These results point to the existence of a "small fish in a big pond" effect among undereducated workers:

you do now". Most unemployed people therefore do not respond to that question, which implies that the regression that includes unemployment is estimated using a different subsample.

individuals with lower levels of educational attainment than their workmates suffer a loss in life satisfaction. This could be either due to a sort of inferiority complex due to being less educated or due to a struggle to perform a job for which the worker is not properly qualified. In the example of an individual without a college degree working on a place that usually requires a college degree, the psychological loss would be of approximately 0.07 units, or a 1% decrease. In this case, the effect is higher when happiness or the composite index is used as a dependent variable.

5. Extensions: Looking for fish that prefer small ponds

So far our estimates of equation [1] show that over-educated people suffer a decrease in life satisfaction when compared to people that attained the same level of education. As pointed in the introduction, at least theoretically, some people may voluntarily choose to be over-educated compared to people that attained the same level of education. For example, if over-education increases the chances of mobility in a certain job people may prefer a level of education higher than the job requires just to increase their mobility options. Similarly, some people may prefer to work in a job for which they are overqualified to have more free time, more flexible hours or more job security. In all these cases, over qualified people would have met their aspirations and therefore, we would expect their over-education coefficient to be either non-significant and close to zero or positive and significant, implying that people that chose to be over-educated either by increasing their level of education or by choosing a less qualified job, should not be affected in terms of life satisfaction. It could also be argued that certain aspirations in life such as having a job according to one's qualifications may sometimes get in the way of attaining other aspirations in life such as enjoying time with family, or having a more flexible or secure job. In these cases being over-educated generates both negative impacts on life satisfaction steaming from not having a job according to one`s qualifications and positive impacts due to the positive effects of over-education on reaching other life goals.

In this section we investigate this possibility. In order to do so, we first identify groups for which over-education is more likely to have a positive effect and then re-run

equations [1] and [2] adding a separate dummy for these groups and an interaction of the dummy with the educational mismatch variables. The idea behind this specification is that if some over-educated individuals find that being over qualified makes it easier for them to find jobs that they prefer, they may not perceive over-education as a negative source of subjective wellbeing. For example, over-educated people in jobs that allow them to combine family and work or in very secure jobs may perceive that over-education helped them achieved those jobs. We should then observe that the effect of over-education is different across jobs with different characteristics. Table 3 presents the results of the regressions estimated following this strategy and using the composite index of subjective wellbeing as the dependent variable[10].

Column 1 of Table 3 focuses on people that report having a job that allows them to combine family and work. According to our above reasoning, over-education may have either a positive, zero, or a smaller negative impact on life satisfaction for this group if being in a job that requires lower qualifications allows people to combine family and work. To identify those individuals with family friendly jobs we select the following ESS question: *"Do you find that your job prevents you from giving time to your partner/family? How often?"*. Individuals that answer 1(Never) or 2(Hardly Ever) in 5 point scale are considered as having jobs that allow them to combine family and work. Column 1 of Table 3 presents the estimation of the equations of interest adding an interaction term for over-educated people in "family friendly jobs". The coefficient of the new interaction term ("*Family Friendly Job x Over*" in column 1 of Table 3) is positive but far from being significant, implying that there seem to be no differences in the effect of over-education across people working on jobs that differ in their degree of "family friendliness".

Column 2 focuses on people that report working on very secure jobs. Some over-educated people may prefer a job that requires lower qualifications but that is very secure to a job for which they are perfectly qualified but in which they would have a higher risk of being laid off. Again here, being over-educated may create negative psychological impacts but those impacts may be smaller if people perceive that being over-educated helped them attain some other life goals such as having a secure job. To determine who belongs to this group we use the question of the ESS that asks people to

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[10] For simplicity, we use just one measure of subjective wellbeing. Using either of the two other measures leads to the same conclusions.

rank how true the following statement is regarding their job: *"My job is secure"*. This variable is ranked from 1 (Not true) to 4 (Very true). We classify as having a secure job people that chose option 4 in this question. The interaction term ("*Secure Job x Over*" in column 2 of Table 3) is again non-significant and in this case negative, showing that over-educated people working at secure jobs are not affected differently by their educational mismatch compared to other over-educated people.

Finally, in column 3 we study the group of people that may perceive that over-education increased their job mobility. The original argument in Sicherman and Galor (1990) was that over-education may increase mobility across jobs, particularly when mobility is difficult. In a scenario in which workers value mobility, being over-educated may be a way to increase mobility and thus subjective wellbeing. If changing jobs is easy for everybody, being over-educated should not affect mobility, for this reason in this specification we focus only on people who report that changing jobs is difficult. In column 3 we select the sub-group of people in low mobility jobs using the question in the ESS that asks them to answer the following question: *"How difficult or easy would it be for you to get a similar or better job with another employer if you had to leave your current job?"* The answer is coded in a scale from 0 (Extremely difficult) to 10 (Extremely easy). We considered as people working in jobs in which mobility is difficult those that chose options 0, 1 or 2 in this question. Column 3 of Table 3 shows that the interaction of this variable with the over-education variable is again positive and non-significant. People in jobs with low mobility do not obtain gains from being over-educated in terms of life satisfaction.

The results of Table 3 show that the negative effects of over-education on subjective wellbeing seem to be homogeneous across job characteristics. We did not find evidence suggesting that over-educated individuals working in less mobile, more secure or more family friendly jobs may be affected differently from being over-educated compared to the rest of the population. It is worth mentioning though, that while the interaction terms in Table 3 are non-significant, the separate dummy variables that capture each of the job characteristics ("Family Friendly Job" and "Secure Job" in Table 3) are very significant and quantitatively quite large. The very large magnitude of these dummies point to the job characteristics having a bigger impact on peoples choices than being properly qualified for the job or not. For example, the coefficient of the dummy that captures that the individual is working on a family friendly job (column 1 of Table 3) is significant at

the 1% level and has a magnitude of 0.320. In order to illustrate the relevance of this result, let us analyze the case of college educated individuals faced with the choice of working on either a family friendly job for which they are over-qualified or on a job for which they are perfectly qualified but makes it more difficult to combine work and family. *Ceteris paribus,* the first job would generate a decrease in subjective wellbeing equal to 0.2 units (0.05x4 years = 0.2) due to the negative effect of over-education, but an increase of 0.32 generated by working on a family friendly job. The net effect would be clearly positive, which may explain why over-educated people may choose jobs that require lower skills if they come with characteristics that allow them to attain other life aspirations.

6. Conclusion

In this paper we use two waves of the European Social Survey to estimate the relationship between educational mismatch and subjective wellbeing. We first compare over-educated and under-educated workers with similarly educated peers and found that over-education has a negative effect on life satisfaction while under-education has a positive impact. We interpret these results as being consistent with individuals choosing their level of education under the expectation that education should help them obtain a job of a certain quality. According to our results, individuals that obtain jobs of lower than expected quality suffer a decrease in subjective wellbeing, while individuals that exceed the aspirations generated by their education levels (under-educated people) enjoy an increase in happiness levels. This result confirms that educational mismatch has psychological effects that extend beyond the job domain and into overall subjective wellbeing. We find these effects to be quantitatively very relevant, but lower than the negative effects caused by unemployment, which justifies why workers would be willing to accept jobs for which they are over-qualified.

We also compared over-educated and under-educated workers with adequately educated workers performing similar jobs. According to our results, over-educated workers are not found to be less happy in general than their adequately matched workmates. To the extent that happiness levels are associated with changes in productivity, our results find no differences in productivity between over-educated workers and adequately educated workers.

Combined, the results of both specifications show that what matters the most for overall subjective wellbeing is the type of job one is performing. People in better jobs report higher levels of life satisfaction than people in worse jobs, while people performing similar jobs report similar levels of wellbeing, even if they have greater levels of education than their co-workers. However, having a better job is not the only driver of differences in life satisfaction among people with different levels of educational mismatch. We find a strong negative effect of under-education on life-satisfaction when controlling for the years required to perform the job. This result implies that people with lower levels of education than other people performing similar jobs suffer from feeling under-prepared, or from struggling to perform a job for which they may not be properly qualified. These negative effects on happiness levels may in turn result in lower productivity.

The results are likely to be economically quite relevant. We find that the negative effects of educational mismatch amount to between one fifth and one fourth of the negative effects created by involuntary unemployment. With more than 50 per cent of our sample employed in jobs for which they are over- or under-educated, the overall effects of educational mismatch on life satisfaction levels are potentially as large for society as a whole as those created by involuntary unemployment. The quantitative interpretation of the results should be taken with caution though due to the problems associated with the use of life satisfaction scales as a cardinal measure. In addition, our estimates have been obtained using a repeated cross-section of individuals where individual fixed effects were not controlled for beyond an extensive but standard set of socio-demographic controls. However, given the magnitude and the economic relevance of the estimates presented in this paper, our results should, at the minimum, encourage further research on the topic, and careful attention from policy makers.

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Table1. Summary Statistics (Mean/Standard Deviation)			
	All	Over-educated	Under-educated
Life Satisfaction	7.012	6.948	7.079
	2.110	2.097	2.124
Happiness	7.350	7.308	7.406
	1.828	1.825	1.811
Years of Education	13.370	15.614	11.209
	3.613	3.166	3.350
Years Required	13.319	12.037	14.591
	3.004	2.683	3.032
OVER	1.339	3,577	0.000
	2.055	2.065	0.000
UNDER	1.163	0.000	3.381
	1.896	0.000	2.040
Kids	0.512	0.498	0.512
	0.500	0.500	0.499
Religiosity (Medium)	0.448	0.447	0.452
	0.497	0.497	0.498
Religiosity (Medium)	0.148	0.155	0.152
	0.355	0.362	0.359
Married	0.618	0.587	0.658
	0.486	0.492	0.474
Health 1	0.272	0.319	0.228
	0.445	0.466	0.419
Health 2	0.485	0.464	0.505
	0.500	0.499	0.499
Health 3	0.215	0.194	0.234
	0.411	0.395	0.424
Health 4	0.025	0.020	0.030
	0.155	0.140	0.170
Income (High)	0.310	0.347	0.274
	0.462	0.476	0.446
Income (Medium)	0.461	0.427	0.490
	0.499	0.495	0.499
Age	41.339	39.630	43.093
	11.643	11.420	11.689
Gender	0.501	0.468	0.531
	0.500	0.499	0.499
Observations	34969	12155	10883

Table 2. Subjective Wellbeing Regressions			
	1	2	3
VARIABLES	Life Satisfaction	Happiness	Composite Index
Regressions including Years of Education:			
OVER	-0.0581***	-0.0294***	-0.0439***
	[0.008]	[0.008]	[0.007]
UNDER	0.0278***	0.0161	0.0208**
	[0.007]	[0.015]	[0.008]
Regressions including Years Required:			
OVER	-0.0128	0.009	-0.0024
	[0.010]	[0.012]	[0.009]
UNDER	-0.0175***	-0.0223	-0.0207**
	[0.006]	[0.014]	[0.009]
Control Variables:			
Years of Education/ Years Required	0.0453***	0.0384***	0.0415***
	[0.008]	[0.009]	[0.007]
Kids	-0.0482	-0.006	-0.0246
	[0.032]	[0.029]	[0.024]
Religiosity (Medium)	0.1629***	0.1811***	0.1718***
	[0.033]	[0.048]	[0.030]
Religiosity (High)	0.5844***	0.5112***	0.5514***
	[0.074]	[0.082]	[0.074]
Not Single	0.5265***	0.6822***	0.6056***
	[0.045]	[0.035]	[0.032]
Health 1	2.9277***	2.6326***	2.7813***
	[0.317]	[0.372]	[0.321]
Health 2	2.4164***	2.1612***	2.2903***
	[0.290]	[0.354]	[0.297]
Health 3	1.7809***	1.5784***	1.6823***
	[0.303]	[0.358]	[0.305]
Health 4	0.7237*	0.7740**	0.7402**
	[0.371]	[0.361]	[0.351]
Income (High)	0.6176***	0.3301***	0.4735***
	[0.065]	[0.036]	[0.047]
Income (Medium)	0.4468***	0.2684***	0.3551***
	[0.059]	[0.037]	[0.046]
Age	-0.0729***	-0.0815***	-0.0769***
	[0.011]	[0.013]	[0.012]
Age squared	0.0008***	0.0008***	0.0008***
	[0.000]	[0.000]	[0.000]
Gender	-0.0845**	-0.0666	-0.0751**
	[0.032]	[0.043]	[0.036]
Constant	5.2357***	5.9246***	5.5883***
	[0.424]	[0.477]	[0.446]
Observations	34,969	34,969	34,969
R-squared	0.248	0.208	0.266
Notes: Clustered standard errors (at the country level) in brackets			
*** p<0.01, ** p<0.05, * p<0.1			

	1	2	3	4
Table 3. Subjective Wellbeing Regressions				
VARIABLES	Composite Index	Composite Index	Composite Index	Composite Index
Regressions including Years of Education:				
Over	-0.0502***	-0.0379***	-0.0445***	-0.0452***
	[0.007]	[0.009]	[0.011]	[0.013]
Under	0.0257**	0.015	0.0276**	0.0270*
	[0.011]	[0.010]	[0.011]	[0.014]
Regressions including Required Education:				
Over	-0.0039	0.0011	-0.0035	-0.002
	[0.009]	[0.011]	[0.012]	[0.014]
Under	-0.0206**	-0.0239**	-0.0134	-0.0162
	[0.009]	[0.009]	[0.012]	[0.013]
Interactions:				
Family Friendly Job x Over	0.0115			-0.0143
	[0.017]			[0.010]
Family Friendly Job x Under	0.0022			0.0083
	[0.024]			[0.011]
Family Friendly Job	0.3230***			0.2046***
	[0.042]			[0.040]
Secure Job x Over		-0.0118		0.0117
		[0.011]		[0.017]
Secure Job x Under		0.0104		-0.0004
		[0.012]		[0.023]
Secure Job		0.2167***		0.3150***
		[0.043]		[0.041]
Job Mobility Difficult x Over			0.0036	0.0063
			[0.019]	[0.020]
Job Mobility Difficult x Under			-0.0153	-0.0124
			[0.014]	[0.015]
Job Mobility Difficult			-0.111	-0.1128
			[0.082]	[0.089]
Controls:				
Years of Education/Years Required	0.0463***	0.0390***	0.0410***	0.0432***
	[0.007]	[0.007]	[0.007]	[0.007]
Kids	-0.018	-0.0292	-0.0277	-0.0254
	[0.022]	[0.025]	[0.023]	[0.023]
Religiosity (Medium)	0.1754***	0.1690***	0.1684***	0.1696***
	[0.030]	[0.028]	[0.030]	[0.029]
Religiosity (High)	0.5484***	0.5446***	0.5492***	0.5399***
	[0.073]	[0.074]	[0.073]	[0.074]
Not Single	0.5903***	0.6079***	0.6091***	0.5964***
	[0.037]	[0.032]	[0.033]	[0.037]
Health 1	2.7680***	2.7741***	2.7557***	2.7375***
	[0.310]	[0.331]	[0.315]	[0.313]
Health 2	2.2909***	2.2939***	2.2670***	2.2721***
	[0.289]	[0.308]	[0.292]	[0.292]
Health 3	1.6927***	1.6876***	1.6626***	1.6786***
	[0.294]	[0.314]	[0.301]	[0.299]
Health 4	0.7701**	0.7438**	0.7314**	0.7644**
	[0.336]	[0.358]	[0.348]	[0.341]
Income (High)	0.4638***	0.4653***	0.4623***	0.4455***
	[0.048]	[0.047]	[0.045]	[0.046]
Income (Medium)	0.3494***	0.3532***	0.3497***	0.3424***
	[0.047]	[0.043]	[0.045]	[0.044]
Age	-0.0740***	-0.0748***	-0.0768***	-0.0721***
	[0.012]	[0.011]	[0.012]	[0.011]
Age squared	0.0007***	0.0008***	0.0008***	0.0007***
	[0.000]	[0.000]	[0.000]	[0.000]
Gender	-0.058	-0.0722*	-0.0781**	-0.0587
	[0.037]	[0.035]	[0.036]	[0.037]
Constant	5.3602***	5.5289***	5.6588***	5.3799***
	[0.424]	[0.439]	[0.420]	[0.387]
Observations	34,969	34,969	34,969	34,969
R-squared	0.273	0.269	0.267	0.276

Notes: Clustered standard errors (at the country level) in brackets
*** p<0.01, ** p<0.05, * p<0.1

Table A1. List of countries and observations by wave			
	Wave 2	**Wave 5**	**Total**
Austria	779		779
Belgium	694	703	1397
Switzerland	933	686	1619
Chezc Republic	972	903	1875
Germany	1,017	1,273	2290
Denmark	701	706	1407
Estonia	873	728	1601
Spain	624	647	1271
Finland	866	723	1589
France		754	754
United Kingdom	742	944	1686
Greece	552	634	1186
Hungary	560	627	1187
Ireland	774	716	1490
Island	287		287
Luxemburg	666		666
Netherlands	738	760	1498
Norway	930	842	1772
Poland	568	637	1205
Portugal	616	521	1137
Sweeden	956	697	1653
Slovenia	523	466	989
Slovakia	527	603	1130
Turkey	326		326
Ukraine	665	546	1211
Bulgaria		721	721
Cyprus		354	354
Israel		765	765
Russia		1,124	1124
Total	16889	18080	34969

Table A2. Ordered probit estimation. Subjective Wellbeing regression			
	1	2	3
VARIABLES	Life Satisfaction	Happiness	Composite Index
Regressions that include Years of Education:			
OVER	-0.0288***	-0.0161***	-0.0263***
	[0.005]	[0.005]	[0.005]
UNDER	0.0130***	0.0074	0.0103*
	[0.004]	[0.009]	[0.006]
Regressions that include Years Required:			
OVER	-0.0088*	0.0019	-0.0047
	[0.005]	[0.007]	[0.006]
UNDER	-0.0070**	-0.0107	-0.0113**
	[0.003]	[0.008]	[0.006]
Control Variables:			
Years of Education/Years required	0.0199***	0.0181***	0.0216***
	[0.004]	[0.005]	[0.004]
Kids	-0.0219	0.0031	-0.0116
	[0.014]	[0.017]	[0.014]
Religiosity (Medium)	0.0792***	0.0987***	0.0982***
	[0.018]	[0.026]	[0.018]
Religiosity (High)	0.3360***	0.3252***	0.3645***
	[0.036]	[0.044]	[0.040]
Not Single	0.2803***	0.4136***	0.3730***
	[0.029]	[0.020]	[0.022]
Health 1	1.4426***	1.4384***	1.5636***
	[0.138]	[0.187]	[0.170]
Health 2	1.1258***	1.1045***	1.2078***
	[0.124]	[0.172]	[0.153]
Health 3	0.8043***	0.7747***	0.8537***
	[0.127]	[0.168]	[0.149]
Health 4	0.3193**	0.3795**	0.3561**
	[0.160]	[0.169]	[0.165]
Income (Middle)	0.3055***	0.1755***	0.2741***
	[0.030]	[0.021]	[0.027]
Income (High)	0.2076***	0.1404***	0.1973***
	[0.031]	[0.025]	[0.030]
Age	-0.0403***	-0.0502***	-0.0479***
	[0.006]	[0.007]	[0.007]
Age squared	0.0004***	0.0005***	0.0005***
	[0.000]	[0.000]	[0.000]
Gender	-0.0504***	-0.0481**	-0.0529***
	[0.016]	[0.024]	[0.020]
Observations	34,969	34,969	34,969
Clustered standard errors (al the country level) in brackets			
*** p<0.01, ** p<0.05, * p<0.1			