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Does trust in political institutions affect life satisfaction?

Evidence from the ESS longitudinal survey

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Abstract

The determinants of life satisfaction have been the subject of academic research for decades. Several studies show the impact of, for example, age, income, or health. Controlling for demographic, personal factors, and economic factors we extend the existing literature by examining how trust in political institutions affects people's life satisfaction. Our results indicate that trust in political institutions significantly increases the level of life satisfaction. Using logistic regressions, we also examine how trust impacts the probability of being satisfied with life and find that the probability of being satisfied with life increases by about 3.9 percentage points for each unit of trust. Moreover, we show that people living in Western Europe are, on average, more satisfied with life and confirm the U-shaped functional form of the dependence of life satisfaction on age described in the literature. Our results are robust with respect to different specifications.

Keywords: Life satisfaction, political institutions, trust, (logistic) regression analysis **JEL classification:** I31, P16, O57

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1. Introduction

For years, the pursuit of contentment, well-being, happiness, and life satisfaction has been considered a desirable goal in life. Their natures and origins have preoccupied mankind throughout history. Philosophers, theologians, and other academic disciplines have traditionally debated the meaning of life satisfaction and how to achieve it. Religious counsellors, social workers, psychologists, and others have devoted themselves to helping individuals to achieve higher levels of life satisfaction. The social sciences have used empirical studies to investigate life satisfaction for decades. Thereby, identifying the determinants of life satisfaction has played a central role. It has been shown that life satisfaction as a measure of subjective well-being is determined by a variety of factors such as income, employment, health, or education for example (Helliwell et al. 2017; Weller and Acisu 1996).

This paper focuses on the relationship between life satisfaction and trust in political institutions. This is particularly relevant in the context of rising populism, increasing polarization and the resulting social differentiation and intensification of disagreements. According to Inglehart (1995), political satisfaction, in contrast to general life satisfaction, shows much stronger fluctuations, which are almost equal to economic development, with differences between cultural regions becoming apparent. Analyzing countries in the European Union, they show that in countries where people are less politically satisfied, life satisfaction is also lower. Faus et al. (2019) conclude that trust in institutions is associated with lower social cohesion.

This paper extends the current state of research by analyzing the relationship between life satisfaction and trust in political institutions. It also examines whether there are significant differences between Eastern and Western European countries and the role played by other demographic, personal, and economic factors.

2. Related literature

Happiness, quality of life, and subjective or psychological well-being are terms related to life satisfaction in the literature (Buetell 2006; Veenhoven 1996). Diener (1984) defines life satisfaction as an overall assessment of feelings and attitudes about one's life at a given point in time ranging from negative to positive. In contrast, Veenhoven (1996) acknowledges that the term "life satisfaction", as opposed to subjective well-being, refers to an overall assessment of life rather than current feelings or specific psychosomatic symptoms. According to Veenhoven (1996), life satisfaction is the degree to which a person positively evaluates the overall quality of his or her life as a whole; in other words, how much the person likes the life he or she is living.

According to Diener et al. (2009), subjective well-being includes cognitive and affective evaluations of an individual's overall life. These evaluations include emotional reactions to events as well as cognitive judgments of satisfaction and fulfilment. Subjective well-being is thus seen as a broad concept that includes high levels of pleasant emotions and moods, low levels of negative emotions and moods, and high levels of life satisfaction.

Another well-established term for life satisfaction is defined by George (1981) as "essentially a cognitive assessment of progress toward desired goals – an evaluation of the congruence between ideal and real-life circumstances".

Although there are subtle differences between the definitions, the basic idea is the same. Life satisfaction refers to a person's overall feelings about their life. In other words, life satisfaction describes a global assessment rather than one that relates to a specific point in time (e.g., current emotional state) or a specific domain.

The first empirical studies and measures of subjective life satisfaction began at the beginning of the 20th century. Flugel (1925) studies the state of mind of individuals by having them record their emotional events and then summarizing their emotional reactions over several moments. After the Second World War, researchers began to ask people about their happiness and life satisfaction using simple questionnaires. The first assessment techniques used were simple response options to the question "How happy are you?", ranging from "not very happy" to " very happy". Since then, the scientific discipline of subjective life satisfaction has experienced strong growth, also driven by the development of more sophisticated scientific methods for studying subjective well-being (Diener et al. 2009). This raises the question of what factors influence subjective life satisfaction using an eleven-point scale ranging from zero (completely dissatisfied) to ten (completely satisfied) with the question: "Overall, how satisfied are you with your life these days?" (Enste and Ewers 2014; Helliwell et al. 2017).

In 2017, the authors of the "World Happiness Report" addressed the question of the extent to which individual factors explain the variance in overall satisfaction (Helliwell et al. 2017). In a stylized form, they explain satisfaction in terms of both immediate influences (current situation) and past influences (childhood, schooling, family background). This is helpful in presenting the complexity of the issue in a simplified way and provides a first indication of which factors influence life satisfaction and how.

According to Helliwell et al. (2017), life satisfaction in adulthood largely depends on the economic situation (income, education, and employment), the social situation (e.g., marital status) and personal health. The situation as an adult, in turn, depends partly on the development as a child, which in turn is influenced by the family and education. In a further step, the study examines the influence of individual variables on life satisfaction. Looking at these variables in isolation, it is found that health accounts for a larger share of the variance in life satisfaction than income, employment, or health. Education is also found to have a positive effect, but it is less pronounced than income. In addition, income relative to other people's income is found to have a significant effect on life satisfaction. A similar phenomenon can be observed with education. One's own level of education is therefore considered to be relevant compared to that of others.

In general, the differences in average life satisfaction across several countries can be attributed to their living conditions. That is, economically prosperous countries tend to have higher average life satisfaction than poorer countries. Likewise, people living in countries with better job prospects tend to be more satisfied with life than people living in countries with high unemployment (Helliwell et al. 2017). Veenhoven (1996) also concludes that the differences in average life satisfaction between countries are largely due to the quality of living conditions. According to his study, 81% of the differences can be explained by material wealth, social equality, political freedom, and access to knowledge.

3. Data

For our analysis we use the 2018/19 dataset of the ESS longitudinal survey (European Social Survey 2018). The ESS is a multi-country survey conducted by researchers in Europe. Since the seventh survey round, the survey has been funded by the members, observers, and guests of the ESS European Research Infrastructure Consortium (ESS ERIC), represented by national governments (European Social Survey 2021).

The ESS requires strict random sampling in the selection of respondents. The aim is to achieve a response rate of at least 70%. The language of the survey is based on the national language of each country. The fieldwork is carried out by the national survey institute in the form of a one-hour face-to-face or computer-assisted personal interview. The survey includes questions on several core topics, such as education, income, politics, justice and demography, carried over from previous rounds, as well as two modules developed for the ninth round on justice and fairness in Europe and life planning (European Social Survey 2021). The raw data set for the ninth round of the survey contains 49,519 observations.

Life satisfaction is measured on a scale from 0 (extremely dissatisfied) to 10 (extremely satisfied). To control for demographic and personal factors we use age, education, gender, health status, religiosity, and marital status. The influence of age on subjective well-being is well recognized in research (Bartram 2020; Blanchflower and Oswald 2004; Graham 2009; Steptoe et al. 2015). Several studies show that the functional form of the relationship between life satisfaction and age is U-shaped (Blanchflower and Oswald 2008; Graham 2009). Blanchflower and Oswald (2008) find the U-shape in Eastern European, Latin American, and Asian countries, as well as in separate regression equations for well-being in 72 developed and developing countries. Interestingly, the overall U-shape does not seem to be affected by cohort effects. According to their estimates, life satisfaction in European countries reaches its minimum around the mid-40s. To account for the U-shape, we include age squared in our analysis.

Studies on the impact of education on life satisfaction also seem to present a relatively consistent picture, with people with more education reporting higher life satisfaction (Cheung and Chan 2009; Enste and Ewers 2014; Frey and Stutzer 2002; FitzRoy und Nolan (2020); Graham 2009; Veenhoven 1996). In their study of 35 countries, Cheung and Chan (2009) find that life satisfaction is higher in countries where people are more educated. They also find that life satisfaction increases with years of education. To control for education, we include four dummy variables for lower secondary, upper secondary, vocational, and tertiary education.

There are many studies in the literature that examine differences in life satisfaction and gender. Diener (2009) reviews many studies and concludes that, overall, there is no difference in life satisfaction between the genders. This finding is consistent with other studies that also

observe no statistically significant difference in life satisfaction between the genders (Dolan et al. 2008; Fahey and Smyth 2004). Della et al. (2011) also find that the average level of life satisfaction is very similar for men and women. However, the distribution of life satisfaction differs, with a higher dispersion for women.

Several studies show that poor health can significantly reduce life satisfaction (Enste and Ewers 2014; Frey and Stutzer 2002; Gataūlinas and Banceviča 2014; Steptoe et al. 2015). Gataūlinas and Banceviča (2014) demonstrate this relationship in a cross-country comparison of European countries. In countries where average satisfaction with health is higher, general life satisfaction is also higher. The correlation at the individual level is lower, but still significant.

Moreover, we control for marital status and level of religiosity. Married people are on average happier than single, divorced, or widowed people (Diener et al. 2000; Enste and Ewers 2014; Gove et al. 1990, Myers 1999; Stack and Eshleman 1998, Veenhoven 1996). Lim and Putnam (2010) find that religious people are more satisfied with their lives because they regularly attend religious services and build social networks in their congregations. In our data religiosity is measured on a scale from 0 (not at all religious) to 10 (very religious).

Economic factors include income and experience of unemployment. There is considerable evidence of a positive relationship between income and life satisfaction (Diener 2009; Graham 2009; Helliwell and Barrington-Leigh 2010). The experience of unemployment has a significant negative impact on subjective well-being (Clark and Oswald 1994; Wilson and Walker 1993; Tella et al. 2003). Wolfers (2003) concludes that a ten-percentage point increase in unemployment reduces the proportion of people who consider themselves to be very satisfied by about twelve percentage points. To measure income, we consider the decile of the household's total net income. Unemployment experience is included as a dummy variable, which is one if someone has ever been unemployed or looking for work for more than three months.

Additionally, we include a dummy variable that equals to one if the country is Western European and zero otherwise.1 Berggren and Bjørnskov (2020) examine the relationship between political institutions and life satisfaction using data from the World Happiness Report 2019. They find that average life satisfaction differs significantly between autocratic and democratic countries.

The relationship between trust in political institutions and life satisfaction is less often part of the research. An exception is the study of Ciziceno and Travaglino (2019). They conclude that people who perceive corruption to be widespread in their environment lose trust in institutions and tend to be more dissatisfied with their lives. We use an index that measures an individual's overall trust in the political institutions by averaging over five variables:

¹ For our analysis we classify Austria, Belgium, Cyprus, Denmark, Finland, France, Germany, Iceland, Ireland, Italy, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom as Western European countries. Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Lithuania, Latvia, Montenegro, Poland, Serbia, Slovakia, and Slovenia are classified as Eastern European countries.

trustindex_i =
$$\left(\frac{1}{5}\right)$$
 (trust in parliament_i + trust in legal system_i + trust in police_i
+ trust in politicians_i + trust in political parties_i) (1)

where each of the five variables is measured from 0 (no trust at all) to 10 (complete trust). Table 1 below presents the descriptive statistics. After dropping observations with at least one missing value, we are left with 34'968 observations for our final analysis.

The average life satisfaction in our sample is 7.21 and relatively high. The average income decile amounts to 5.34. About 22% have lower secondary education, 38% upper secondary education, 13% vocational education, and 26% have tertiary education. There are slightly more women in the sample, and about 51% of the respondents are married or in a legally registered civil relationship. People in our sample are religious with an average of 4.41 from 10 and in good health. The average health score is 3.80 with a maximum of 5. Some 66% live in a Western European country and 29% have experienced unemployment. The average level of trust in political institutions is 4.86 out of 10.

To get a first understanding of whether people who are satisfied with life differ from people who are less satisfied with life on these characteristics, we create a dummy variable that takes the value one if life satisfaction is 6 or higher and zero otherwise. Table 2 below shows the differences in the unconditional means, including a t-test to test whether they are statistically significant.

Table 2 shows that there are significant differences between the satisfied and dissatisfied in all characteristics. Trust in political institutions, as measured by our trust index, is also about 1.7 units or nearly 50% higher in the satisfied category than among the dissatisfied. As expected, the health status of those who are satisfied with life is also higher. On average, they report their health to be about 0.7 units higher than those who are not satisfied. This is a difference of 20%. On average, the income of the satisfied category is 1.7 deciles (around 43%) higher than that of the dissatisfied category.

Furthermore, the unconditional mean comparison shows that people who are satisfied with their lives are on average more likely to have vocational or tertiary education and less likely to have lower or upper secondary education. They are significantly less likely to have been unemployed, are slightly less religious and are younger than those who are not satisfied. In addition, there is a significantly higher proportion of Western Europeans in the satisfied group and a significantly higher proportion of women in the dissatisfied group.

| Variable | Description | Min | Mean | St. Dev. | Max |
|---------------------|---|-----|-------|----------|-----|
| LifeSat | Life satisfaction 0 = extremely dissatisfied 10 = extremely satisfied | 0 | 7.22 | 2.11 | 10 |
| Household Income | Decile of household's total net income | 1 | 5.36 | 2.78 | 10 |
| Age | Age of respondent | 15 | 51.53 | 17.90 | 90 |
| Education | Lower secondary | 0 | 0.22 | 0.41 | 1 |
| | Upper secondary | 0 | 0.38 | 0.49 | 1 |
| | Vocational | 0 | 0.13 | 0.34 | 1 |
| | Tertiary | 0 | 0.27 | 0.44 | 1 |
| Health | Health status 1 = Very bad 5 = Very good | 1 | 3.81 | 0.90 | 5 |
| Married | 1 if legally married or in legally registered civil union | 0 | 0.51 | 0.50 | 1 |
| Female | Gender, 1 if female 0 otherwise | 0 | 0.53 | 0.50 | 1 |
| Unemployed | Ever unemployed and seeking work for a period more than three months | 0 | 0.29 | 0.45 | 1 |
| Religious | How religious are you? 0 = not at all 10 = very religious | 0 | 4.39 | 3.11 | 10 |
| West | Region of Country 0 = Eastern European Country 1 = Western European Country | 0 | 0.66 | 0.47 | 1 |
| Trust-Index | Average of Trust in parliament Trust in legal system Trust in police Trust in politicians Trust in parties | 0 | 4.87 | 2.11 | 10 |

Table 1: Descriptive statistics (n = 34'968)

| Variable | Dissatisfied | Satisfied | Difference | Welch's T-test |
|------------------|--------------|-----------|------------|-------------------|
| Household Income | 3.96 | 5.68 | 1.72 | 49.76*** |
| | (0.031) | (0.016) | (0.035) | |
| Age | 55.41 | 50.77 | -4.64 | -20.04*** |
| | (0.205) | (0.108) | (0.232) | |
| Lower secondary | 0.32 | 0.20 | -0.12 | -19.15*** |
| | (0.006) | (0.002) | (0.006) | |
| Upper secondary | 0.43 | 0.37 | -0.06 | -9.26*** |
| | (0.006) | (0.003) | (0.007) | |
| Vocational | 0.10 | 0.14 | 0.04 | 8.73*** |
| | (0.004) | (0.002) | (0.004) | |
| Tertiary | 0.15 | 0.29 | 0.14 | 27.85*** |
| | (0.004) | (0.003) | (0.005) | |
| Health | 3.27 | 3.94 | 0.67 | 52.47*** |
| | (0.012) | (0.005) | (0.013) | |
| Married | 0.43 | 0.53 | 0.10 | 14.36*** |
| | (0.006) | (0.003) | (0.007) | |
| Female | 0.55 | 0.52 | -0.03 | -4.07*** |
| | (0.006) | (0.003) | (0.007) | |
| Unemployed | 0.38 | 0.27 | -0.12 | -18.26*** |
| | (0.006) | (0.003) | (0.006) | |
| Religious | 4.48 | 4.39 | -0.09 | -2.05** |
| | (0.037) | (0.019) | (0.042) | |
| West | 0.45 | 0.71 | 0.26 | 39.86*** |
| | (0.006) | (0.003) | (0.007) | |
| Trust-Index | 3.48 | 5.21 | 1.73 | 63.30*** |
| | (0.025) | (0.012) | (0.027) | |
| # Observations | 6'983 | 27'985 | | |

Table 2: Unconditional mean comparison of characteristics for satisfied and dissatisfied people

Note: People are considered satisfied if life satisfaction is 6 or higher, dissatisfied if 5 or lower. Standard errors in parentheses. ***significant at 1%, ** significant at 5%, *significant at 10%.

4. Empirical strategy and results

We estimate the baseline model by ordinary least squares (OLS), regressing individual life satisfaction on our trust index, a dummy variable for Western European countries ("west") and individual respondent characteristics:

$$y_i = \beta_0 + \beta_1 * \text{trustindex}_i + \beta_2 * \text{west}_i + X'_i \gamma + \varepsilon_i$$
 (2)

where y_i is the life satisfaction of individual i, β_1 and β_2 are the parameters for trust and west, and X_i is a vector of individual characteristics with corresponding parameters γ . The results are shown in Model 1 in Table 3 below. Except for tertiary education all variables are highly statistically significant at the 1% level. Tertiary education is significant at the 5% level.

Trust in political institutions, as represented by the variable trust index, is positively correlated with life satisfaction. For a one unit increase in the trust index, life satisfaction increases by 0.24 units. Health has the largest magnitude, with a coefficient of 0.63. The dummy variable for Western European countries is also positively correlated with life satisfaction, which is about 0.57 units higher for people living in Western Europe. The experience of unemployment is also highly relevant for life satisfaction, which decreases by 0.25 units if someone has had an experience of unemployment.

Total household income also has a positive effect on life satisfaction. Moreover, we find that women are on average more satisfied with life and that the level of education has a significant effect. Compared to people with lower secondary education, people with upper secondary education have 0.15 units more life satisfaction and people with tertiary education about 0.08 more life satisfaction. On average, people with vocational education are the most satisfied with life, having 0.20 units more life satisfaction than people with lower secondary education.

Controlling for the other variables, the regression analysis shows that more religious people are more satisfied with life, in contrast to the unconditional mean comparison. However, the magnitude is relatively small. An increase of one unit leads to 0.02 units more life satisfaction.

Age squared controls for the U-shaped functional form described in the literature. Our results support the findings — both age and age squared are highly significant at the 1% level.

| | Model 1: OLS | Model 2: Logit | Model 3: OLS | Model 4: OLS | Model 5: Logit |
|-----------------------|--------------|----------------|--------------|---------------------|----------------|
| | Coefficients | Average ME | Coefficients | Coefficients | Average ME |
| Dependent variable | LifeSat | 1(LifeSat ≥ 6) | LifeSat | LifeSat | 1(LifeSat ≥ 8) |
| Household Income | 0.107*** | 0.018*** | 0.102*** | 0.106*** | 0.022*** |
| | (0.004) | (0.001) | (0.007) | (0.004) | (0.001) |
| Age | -0.043*** | 0.001*** | -0.040*** | -0.044*** | 0.001*** |
| | (0.003) | (0.000) | (0.006) | (0.003) | (0.000) |
| Age ² | 0.0005*** | | 0.0004*** | 0.0005*** | |
| | (0.000) | | (0.000) | (0.000) | |
| Upper secondary | 0.145*** | 0.020*** | 0.067 | 0.156*** | 0.013** |
| | (0.027) | (0.005) | (0.049) | (0.027) | (0.007) |
| Vocational | 0.199*** | 0.040*** | 0.131** | 0.212*** | 0.021** |
| | (0.035) | (0.007) | (0.057) | (0.035) | (0.009) |
| Tertiary | 0.079** | 0.039*** | 0.027 | 0.112*** | 0.014* |
| | (0.031) | (0.006) | (0.053) | (0.031) | (0.008) |
| Health | 0.630*** | 0.076*** | 0.615*** | 0.628*** | 0.119*** |
| | (0.012) | (0.002) | (0.023) | (0.012) | (0.003) |
| Married | 0.317*** | 0.032*** | 0.359*** | 0.305*** | 0.064*** |
| | (0.022) | (0.004) | (0.040) | (0.022) | (0.005) |
| Female | 0.095*** | 0.013*** | 0.045 | 0.083*** | 0.020*** |
| | (0.020) | (0.004) | (0.034) | (0.020) | (0.005) |
| Unemployment | -0.246*** | -0.039*** | -0.306*** | -0.251*** | -0.059*** |
| 1 / | (0.022) | (0.004) | (0.040) | (0.022) | (0.005) |
| Religious | 0.018*** | 0.001** | 0.006 | 0.016*** | 0.004*** |
| 0 | (0.003) | (0.001) | (0.006) | (0.003) | (0.001) |
| West | 0.565*** | 0.086*** | 0.456*** | 0.539*** | 0.142*** |
| | (0.022) | (0.004) | (0.039) | (0.022) | (0.005) |
| Trust-Index | 0.243*** | 0.039*** | 0.228*** | (0:0==) | 0.041*** |
| | (0.005) | (0.001) | (0.010) | | (0.001) |
| Trust in parliament | (0.000) | (0.001) | (0.010) | 0.048*** | (0.001) |
| n doe in parliament | | | | (0.006) | |
| Trust in legal system | | | | 0.028*** | |
| n use in regul system | | | | (0.006) | |
| Trust in police | | | | 0.153*** | |
| nust in police | | | | (0.005) | |
| Trust in politicians | | | | -0.011 | |
| | | | | (0.009) | |
| Trust in partics | | | | 0.043*** | |
| Trust in parties | | | | | |
| Constant | 3.193*** | | 3.417*** | (0.009) 2.915*** | |
| Constant | | | | | |
| # Obconvotions | (0.096) | 24/069 | (0.165) | (0.096) | 21/000 |
| # Observations | 34'968 | 34'968 | 34'968 | 34'968 | 34'968 |
| R ² | 0.266 | 0.044 | 0.217 | 0.276 | 0.454 |
| Pseudo R ² | | 0.214 | | | 0.151 |

Table 3: Results of the OLS and Logistic regression

Standard errors in parentheses. *** indicates significance at the 1% level, ** indicates significance at the 5% level, * indicates significance at the 10% level.

Figure 1 below shows the functional form. In line with the existing literature, we find the analytical minimum for life satisfaction at the age of 45.8 years.

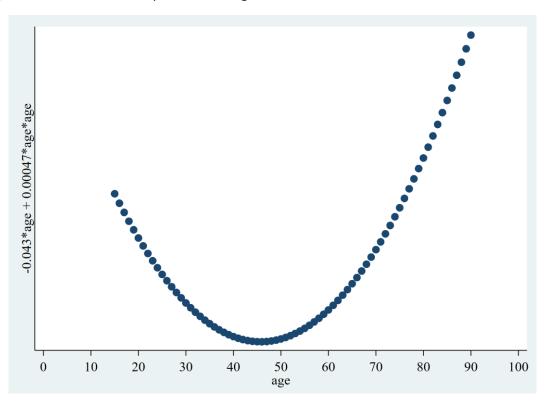


Figure 1: Functional form dependence on age

To better understand how the probability of being satisfied with life changes, we run a logistic regression with the dummy variable satisfied as the dependent variable. Let s_i be a dummy variable that takes the value 1 if individual i is satisfied with life and 0 otherwise. Thereby, someone is satisfied with life if the variable life satisfaction is 6 or higher and zero otherwise. In this case the conditional probability of being satisfied with life is given by

$$P(s_i | \text{trustindex}_i, \text{west}_i, X_i) = F(\beta_0 + \beta_1 * \text{trustindex}_i + \beta_2 * \text{west}_i + X'_i \gamma)$$
(2)

where $F(\cdot)$ is the CDF of the logistic distribution. Model 2 in Table 3 reports the average marginal effects of the logistic regression. Again, all variables are statistically significant. We find that one unit more trust in political institutions as measured by our trust index increases the probability of being satisfied with life by 3.9 percentage points. Figure 2 below plots the predictive margins at different values of our trust index. The probability of being satisfied with life ranges from 56.7%, if the trust index is 0, to 95.3%, if the trust index is 10.

On the other hand, being one decile higher in terms of household income increases the probability of being satisfied with life by about 1.8 percentage points. Good health increases the probability of being satisfied with life by around 7.6 percentage points. Higher education also has a significant effect on the probability of being satisfied with life. Moreover, according to this model women have a 1.3 percentage point higher probability of being satisfied, while

having experienced unemployment reduces the probability by almost 4 percentage points. Our results suggest that being more religious increases the probability of being satisfied with life, but only by 0.1 percentage points. The dummy variable for Western Europe is again large in magnitude – people living in a Western European country are, ceteris paribus, 8.6 percentage points more likely to be satisfied with life.

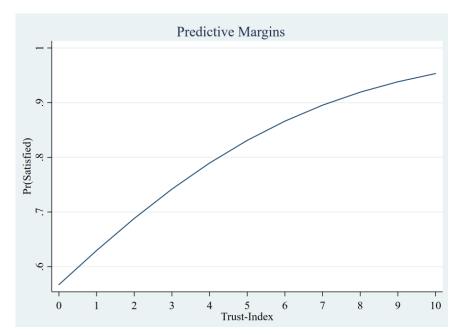


Figure 2: Predictive margins for the trust index

To validate our results, we carry out robustness checks (Model 3). We use the specification of Model 1 as the baseline specification but include the group-specific weights from the questionnaire. Our main finding remains the same - a one unit increase in the trust index is associated with a 0.23 unit increase in life satisfaction (previously 0.24 units). Overall, the results are very similar, except that being female and being religious become insignificant and only people with vocational education have on average a significantly higher life satisfaction than people with lower secondary education.

Model 4 in Table 3 contains the trust variables themselves instead of the index. Overall, the results are again very similar to those found in our baseline Model 1. Like in Model 1 all the control variables are highly statistically significant. However, we see that only four out of the five trust variables are statistically significant. Trust in the police has the largest effect. Trust in politicians on the other hand has no significant impact on life satisfaction.

In Model 5 we change the definition of being satisfied for the logistic regression. In this model we consider someone to be satisfied with life, if their life satisfaction is above average, that is 8 or higher. The results are very similar to those obtained in Model 2. The impact of trust on life satisfaction is even more pronounced in this specification. One unit more trust in political institutions as measured by our trust index increases the probability of being satisfied with life by 4.1 percentage points.

5. Conclusions

While the key factors influencing life satisfaction have already been analyzed in many studies, the influence of trust in political institutions has not yet been considered. To fill this gap, we investigate a possible relationship between life satisfaction and trust in political institutions.

Based on several regression analyses, we find strong evidence that trust in political institutions has a significant influence on life satisfaction. A one-unit increase in our trust index raises average life satisfaction by 0.24 units and increases the probability of being satisfied with life by approximately 3.9 percentage points. The results are robust to different specifications. In line with the existing literature, we find that health status is an important determinant of life satisfaction and confirm the U-shaped functional form of the dependence life satisfaction on age. Education also contributes to life satisfaction, but to a lesser extent than health. We also find significant differences between Eastern and Western European countries.

Our findings illustrate the social relevance of trust in political institutions for citizens' life satisfaction. Thus, institutional quality cannot be measured by political freedom alone. Rather, appropriate measures must be taken to enhance the effectiveness of political institutions.

References

Bartram, D. (2020). Age and Life Satisfaction: Getting Control Variables under Control. Sociology, 55(2), 421–437.

Berggren N. & Bjørnskov C. (2020). Institutions and Life Satisfaction. In K. Zimmermann (Hrsg.), Handbook of Labor, Human Resources and Population Economics. Springer.

Blanchflower, D. G. & Oswald, A. (2008). Is Well-being U-shaped over the Life Cycle? (Nr. 12935). National Bureau of Economic Research.

Blanchflower, D. G. & Oswald, A. J. (2004). Well-being over time in Britain and the USA. Journal of Public Economics, 88(7–8), 1359–1386.

Buetell, N. (2006). Life satisfaction, a Sloan Work and Family Encyclopedia entry. Work and Family Researchers Network. <u>https://wfrn.org/wp-content/uploads/2018/09/Life-Satisfaction-encyclopedia.pdf</u>

Cheung, H. Y. & Chan, A. W. H. (2009). The effect of education on life satisfaction across countries. Alberta Journal of Educational Research, 55(1), 124–136.

Ciziceno, M. & Travaglino, G. A. (2019). Perceived Corruption and Individuals' Life Satisfaction: The Mediating Role of Institutional Trust. Social Indicators Research, 141(2), 685–701.

Clark, A. E. & Oswald, A. J. (1994). Unhappiness and Unemployment. The Economic Journal, 104(424), 648–659.

Della Giusta, M., Jewell, S. L. & Kambhampati, U. S. (2011). Gender and Life Satisfaction in the UK. Feminist Economics, 17(3), 1–34.

Diener, E. (1984). Subjective well-being. Psychological Bulletin, 95(3), 542–575.

Diener, E., Gohm, C. L., Suh, E. & Oishi, S. (2000). Similarity of the Relations between Marital Status and Subjective Well-Being Across Cultures. Journal of Cross-Cultural Psychology, 31(4), 419–436.

Diener, E. (2009). The Science of Well-Being: The Collected Works of Ed Diener (Social Indicators Research Series, 37). Springer.

Diener, E., Oishi, S. & Lucas, R. E. (2009). Subjective Well-Being: The Science of Happiness and Life Satisfaction. The Oxford Handbook of Positive Psychology, 2ed., 186–194.

Dolan, P., Peasgood, T. & White, M. (2008). Do we really know what makes us happy? A review of the economic literature on the factors associated with subjective well-being. Journal of Economic Psychology, 29(1), 94–122.

Enste, D., & Ewers, M. (2014). Lebenszufriedenheit in Deutschland: Entwicklung und Einflussfaktoren. IW-Trends - Vierteljahresschrift zur empirischen Wirtschaftsforschung, 41(2), 43–58.

European Social Survey. (2018). European Social Survey Round 9 Data (3.0) [Data file]. NSD - Norwegian Centre for Research Data, Norway – Data Archive and distributor of ESS data for ESS ERIC.

European Social Survey. (2021). ESS9 2018 Documentation Report. Edition 3.1. European Social Survey Data Archive, NSD - Norwegian Centre for Research Data for ESS ERIC.

Fahey, T. & Smyth, E. (2004). Do subjective indicators measure welfare? Evidence from 33 European societies. European Societies, 6(1), 5–27.

Frey, B. S. & Stutzer, A. (2000). Happiness, Economy and Institutions. The Economic Journal, 110(466), 918–938.

FitzRoy, F. R. & Nolan, M. A. (2020). Education, income and happiness: panel evidence for the UK. Empirical Economics, 58(5), 2573–2592.

Gataūlinas, A. & Banceviča, M. (2014). Subjective Health and Subjective Well-Being (The Case of EU Countries). Advances in Applied Sociology, 04(09), 212–223.

George, L. K. (1981). Subjective well-being: Conceptual and methodological issues. In C. Eisdorfer (Hrsg.), Annual Review of Gerontology and Geriatrics (Bd. 2, S. 345–382). Springer Publishing Company.

Gove, W. R., Style, C. B. & Hughes, M. (1990). The Effect of Marriage on the Well-Being of Adults. Journal of Family Issues, 11(1), 4–35.

Graham, C. (2009). Happiness Around the World: The paradox of happy peasants and miserable millionaires. Oxford University Press.

Helliwell, J. F. & Barrington-Leigh, C. P. (2010). Measuring and understanding subjective wellbeing. Canadian Journal of Economics/Revue canadienne d'économique, 43(3), 729–753.

Helliwell, J., Layard, R. & Sachs, J. (2017). World Happiness Report. Sustainable Development Solutions Network.

Inglehart, R. (1995). Kultureller Umbruch. Frankfurt am Main: Campus Verlag.

Lim, C., & Putnam, R. D. (2010). Religion, social networks, and life satisfaction. American Sociological Review, 75(6), 914-933.

Myers, D. G. (1999). Close relationships and quality of life. In D. Kahneman, E. Diener & N. Schwarz (Hrsg.), Well-Being: Foundations of Hedonic Psychology (S. 374–391). Russell Sage Foundation.

Stack, S. & Eshleman, J. R. (1998). Marital Status and Happiness: A 17-Nation Study. Journal of Marriage and the Family, 60(2), 527–536.

Steptoe, A., Deaton, A. & Stone, A. A. (2015). Subjective wellbeing, health, and ageing. The Lancet, 385(9968), 640–648.

Tella, R. D., MacCulloch, R. J. & Oswald, A. J. (2003). The Macroeconomics of Happiness. Review of Economics and Statistics, 85(4), 809–827.

Veenhoven, R. (1996). The study of life satisfaction. In W. E. Saris, R. Veenhoven, A. C. Scherpenzeel & B. Bunting (Hrsg.), A comparative study of satisfaction with life in Europe (S. 11–48). Eötvös University Press.

Weller, I. & Acisu, A. (1996). Lebenszufriedenheit im europäischen Vergleich. Discussion Paper FS-III 96-402. Berlin: Wissenschaftszentrum, Berlin.

Wilson, S. & Walker, G. (1993). Unemployment and health: A review. Public Health, 107(3), 153–162.

Wolfers, J. (2003). Is Business Cycle Volatility Costly? Evidence from Surveys of Subjective Well-Being. International Finance, 6(1), 1-26.

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The determinants of life satisfaction have been the subject of academic research for decades. Several studies show the impact of, for example, age, income, or health. Controlling for demographic, personal factors, and economic factors we extend the existing literature by examining how trust in political institutions affects people's life satisfaction. Our results indicate that trust in political institutions significantly increases the level of life satisfaction. Using logistic regressions, we also examine how trust impacts the probability of being satisfied with life and find that the probability of being satisfied with life increases by about 3.9 percentage points for each unit of trust. Moreover, we show that people living in Western Europe are, on average, more satisfied with life and confirm the U-shaped functional form of the dependence of life satisfaction on age described in the literature. Our results are robust with respect to different specifications.

