

Does Individualistic Culture Lower the Well-Being of the Unemployed? Evidence from Europe

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Abstract The paper tests whether the well-being cost of own unemployment is higher in individualistic countries and among persons with more individualistic orientations. I consider two dimensions of individualism: family support and self-reliance. I adopt a multilevel regression methodology on data of the European Values Study (2008) for 42 European countries. The results confirm that in Europe individualism correlates with higher well-being cost of own unemployment. Specifically, the relationship between unemployment and well-being is moderated by the family support norm. Its effect size is substantial, similar to the effect of country unemployment rate. This paper is the first one to establish in a comparative context that the well-being cost of own unemployment is higher in individualistic countries. It is also the first one to investigate the mechanisms behind this regularity. In contrast to the theoretical predictions, the importance of personal orientations is much weaker than the one of normative factors. Consistently with previous literature, the results suggest that the support among family members depends more on social norms than on individual values.

Keywords Subjective well-being · Happiness · Life satisfaction · Unemployment · Family support · Self-reliance · Social norms

1 Introduction

In individualist societies, where everyone is considered responsible for their own lives, well-being depends largely on individual success (Diener et al. 1995). Being unemployed is a sign of (at least temporary) lack of success, therefore individualist culture may increase the well-being cost of unemployment. This paper examines if such an effect exists in European countries.

It is now well established that unemployed persons have lower subjective well-being than employed ones (Helliwell 2003; Lucas et al. 2004; Pittau et al. 2010). Analyses of

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longitudinal data demonstrated the causal character of this link (Clark 2003; Clark and Oswald 1994; Gerlach and Stephan 1996; Winkelmann and Winkelmann 1998), which led to the important conclusion that unemployment is involuntary. The negative effect of unemployment on well-being is stronger than what can be attributed to the loss of income (Helliwell and Putnam 2004; Brereton et al. 2008; Winkelmann and Winkelmann 1998), which shows that employment has also non-financial, psychological benefits (Warr and Jackson 1987).

We currently know that well-being cost of own unemployment differs across countries and regions (Bonini 2008; Paul 2005) according to various socioeconomic factors. The well-being cost of own unemployment is lower in countries with higher unemployment rate (Clark 2003; Bonini 2008; Shields and Price 2005) and lower income inequality (Paul 2005). The relationship with the generosity of unemployment benefits seems weak (Di Tella et al. 2003; McKee-Ryan et al. 2005).

The consequences of individualism for the well-being of the unemployed have so far received little attention. The issue is however important, even though culture is rarely consciously shaped and usually does not raise the interest of economists or policy makers. Despite this, culture and its changes affect the well-being of individuals (Diener et al. 1995). Accounting for cultural factors may identify groups who suffer the most in case of unemployment and require more welfare assistance than others. Moreover, the cultural factors can also partly explain the cross-country differences in the well-being cost of unemployment.

The goal of this paper is two-fold. First, I want to systematically examine if cultural individualism is related to higher well-being cost of own unemployment. This relationship has been suggested by Diener et al. (1995), but the empirical evidence is scarce (Paul 2005) and limited in geographical range (see: Martella and Maass 2000). My analysis uses a sample of 42 European countries to test if indeed individualism is related to higher well-being cost of own unemployment. To better understand the nature of this relationship, I focus on two dimensions of individualism: family support and self-reliance, and investigate if each of these dimensions moderates the relationship between unemployment and subjective well-being.

My second goal is to investigate the mechanisms contributing to the observed regularities; in particular, I test whether the relationship between individualism and the well-being consequences of own unemployment is moderated by individual-level mechanisms. The theoretical works speculate that more individualistically oriented persons (a) receive less social support and (b) experience more feeling of guilt and frustration when unemployed (Diener et al. 1995; Beck and Beck-Gernsheim 2002; Hofstede et al. 2010). However, a test of these mechanisms has not been conducted so far. Alternatively, it is possible that individualistic culture moderates the well-being consequences of unemployment through expectations and social norms. In particular, the well-being cost of unemployment may be higher in individualist countries due to (c) lower probability of receiving social support, (d) stronger social pressure and ostracism against the unemployed.

My results show that cultural individualism is related to more negative well-being consequences of own unemployment. The moderating factor is mainly the family support norm; the effect of self-reliance is negligible. The effect of family support norm is comparable in size to the effect of country unemployment rate: the well-being gap between unemployed and employed grows from about five to about 13 percentage points between high-family-support and low-family-support European countries.

I also demonstrate that the relationship exists mainly at the country level. Neither persons with weak family support nor persons with a strong self-reliance orientation

experience lower well-being when unemployed. On the contrary, individuals living in countries with weak family support norm experience lower well-being when unemployed. These results stand in a sharp contrast to the theory, which associates the well-being consequences of unemployment with individual-level mechanisms.

My analysis is the first one to establish in a comparative cross-country context that the well-being cost of own unemployment is higher in individualistic countries. I also show that in less individualistic countries the estimated effect of unemployment on well-being may be very low or nil. This paper is also the first attempt to investigate mechanisms which increase the well-being gap between the unemployed and the employed in individualistic countries. In contrast to previous theoretical works, my results suggest that social norms (and not individual attitudes) play a major role, in particular the norm for family support. This result suggests that the support between family members depends on socially established norms rather than on individual values, which is consistent with recent literature (Eggebeen and Davey 1998; Kalmijn and Saraceno 2008).

2 Individualism and Well-Being: Theoretical Background

Diener et al. (1995) suggested that the well-being cost of own unemployment is higher in individualistic cultures and the limited empirical evidence supports this hypothesis. Martella and Maass (2000) identified a systematic lower well-being response to unemployment in the collectivist south of Italy than in the more individualist North. Re-analyzing broader data, Paul (2005) concluded that indeed the effect of own unemployment on well-being is stronger in individualistic countries, although the evidence is not stable across analysed studies.

Although these works provide valuable evidence, they ignore that individualism has different meanings in the literature. First, individualism is defined either as an individual orientation or as a characteristic of a society. Second, although individualism is consistently associated with personal freedom and autonomy (Diener et al. 1995; Ahuvia 2002; Halman 1996), its detailed meaning is not clear. A review by Oyserman et al. (2002) points out that no single standard measure of individualism has been so far accepted, and the notion has been related to various concepts: freedom, individual goals, competition, personal uniqueness, emphasizing privacy, self-knowing, and preference for direct communication. The cultural opposite of individualism, collectivism, has been connected with: relatedness as an element of identity, enjoyment of belonging, recognition of obligations and duties, concern for harmony, seeking advice, embeddedness in a context, focus on hierarchy, and preference for group work (Oyserman et al. 2002). Empirically there exist separate, hardly correlated “individualisms” which do not form any single underlying cultural dimension (Halman 1996; Rego and Cunha 2009).

To account for the multidimensionality of individualism I focus on its two dimensions: self-reliance [“personal competition and winning” in Oyserman et al. (2002)] and family support [close to “duty” in Oyserman et al. (2002)]. By doing this I neglect the aspects of individualism related to personal freedom and to fading of religious and traditional values because there are no theoretical predictions that these factors might affect specifically the well-being of the unemployed.

Self-reliance is the dimension of individualism related to the responsibility for one’s own life: in individualist cultures personal accomplishment shapes one’s identity (Hofstede et al. 2010), and everyone is accountable for their own successes and failures (Halman 1996). Consequently, in individualist countries people who achieve personal goals and who

have positive self-esteem (“feeling good about oneself”) benefit more in terms of subjective well-being (Oishi et al. 1999; Diener and Diener 1995; Oyserman et al. 2002). Hence, people in individualist countries are on average happier (Diener et al. 1995).

As a “side-effect”, the self-reliance norm transforms social problems (such as unemployment) into individual ones. The rule “your own life—your own failure” affects especially people who fail to achieve and are troubled by feelings of guilt and anxiety. As put by Ulrich Beck, autonomy inevitably brings responsibility:

The difference between a bondsman or slave in the Middle Ages and the unemployed, homeless, illiterate or ghettoized in present-day Manhattan, Rio or Berlin is – to be quite blunt about it – that slaves and bondsmen did not have endless trouble explaining to themselves and others why they were in such dire and hopeless straits (Beck and Beck-Gernsheim 2002, p. 179).

Weaker family support is the second dimension of individualism considered in this analysis. In individualistic cultures belonging to groups requires less loyalty and conformity, is associated with weaker integration, and offers less social support in case of need (Hofstede et al. 2010; Halman 1996; Diener et al. 1995). Lower social support may overall lower the subjective well-being (Diener et al. 1995; Helliwell and Putnam 2004; Shields and Price 2005).

Empirical evidence shows that the lack of social support (either from one’s family or from others) affects especially individuals in need. According to the “buffering hypothesis” (for a review see: Thoits 1982; for a review see: Cohen and Wills 1985), social support effectively protects against the negative consequences of adverse life events: it decreases occupational stress (LaRocco et al. 1980), lowers anxiety of the unemployed and their spouses (Westman et al. 2004), improves psychological and mental health, as well as life satisfaction of the unemployed (Shams 1993; McKee-Ryan et al. 2005) and positively correlates with the well-being of the divorcees (Kalmijn 2010; Tov and Diener 2009). Social support is not only emotional: the unemployed (even those collecting unemployment benefits) regularly receive financial support from their families and friends (Schoeni 2002).

In this analysis I focus on family support, because it may be more important for the unemployed than other types of social support. First, because in critical situations help is first expected—and received—from one’s family (Eggebeen and Davey 1998); second, because family ties are more stable, and do not erode due to unemployment, as it happens with other types of social connections (Thoits 1982). The literature on family support for the unemployed concerns predominantly young people and shows that family support plays an important role in preventing unemployment-related deprivation and distress (Julkunen 2002; Bjarnason and Sigurdardottir 2003).

As mentioned above, the two potential measurement levels additionally complicate the multidimensionality of individualism: both self reliance and family support may be considered either individual orientations or cultural phenomena, e.g. social norms. Unemployed people may expect and receive less social support because they are less connected to their own families, but also because the social norm for family support is weaker. Similarly, the self-reliance norm may stigmatize the unemployed. The mechanisms postulated above may be summarized in the following hypotheses: the first two relate to individual characteristics, whereas the subsequent two refer to the cultural context.

Hypothesis 1 The well-being cost of own unemployment is higher among individuals with stronger self-reliance orientation.

Hypothesis 2 The well-being cost of own unemployment is lower among individuals with stronger family support.

Hypothesis 3 The well-being cost of own unemployment is higher in countries where the pressure on providing oneself is stronger, i.e. in countries with stronger self-reliance norm.

Hypothesis 4 The well-being cost of own unemployment is lower in countries where higher level of help between family members is considered normal, i.e. in countries with stronger norm for family support.

Each of the hypotheses postulates a different mechanism. Hypothesis 1 refers to the feelings of guilt and failure which are presumably stronger among unemployed individuals with self-reliant orientation, and which additionally contribute to the lowering of their subjective well-being. Hypothesis 2 refers to the actual and expected help from one's family, which should be higher among the individuals with strong family support, and which should alleviate the negative well-being consequences of own unemployment. Hypothesis 3 focuses on stigmatization, social pressure and ostracism against the unemployed, that should be higher in countries with stronger self-reliance norm, and negatively contribute to the well-being of the unemployed. In case of Hypothesis 4, the postulated mechanism is the actual and expected support from one's family in a given social context, that may buffer against the negative well-being consequences of own unemployment.

We may also expect a positive relationship between the overall level of subjective well-being and both the self-reliance and the family support. People with stronger self-reliance orientation tend to strive more for what makes them happy, which should lead them to being on average more happy (Diener et al. 1995). Similarly, social support should—through the feelings of belonging and closeness—contribute to the overall higher subjective well-being (Diener et al. 1995; Helliwell and Putnam 2004; Shields and Price 2005). Each of these predictions applies to both individual and cultural levels.

3 Data and Method

3.1 Data

I use data from the fourth edition of the European Values Study (EVS) (EVS Foundation/Tilburg University 2010) conducted in years 2008–2010 in 47 European countries and regions. The EVS, a cross-sectional survey program, dates back to 1981 and is a rich source of information on beliefs, attitudes and opinions of European citizens on a wide range of topics, such as family, work, religion, politics, society etc. I use data from 42 countries. From the full data-set I excluded Northern Cyprus, Northern Ireland, Macedonia and Kosovo for which some country statistics are not available, and Azerbaijan, which is an outlier in terms of self-reliance norm.¹ The range of countries is broad, including post-communist, post-soviet, Mediterranean, Western and Scandinavian countries.

Overall, the EVS includes information on over 60 thousands individuals. I limit the sample to individuals up to the age of 65 (i.e. potentially economic active population, this condition limits the sample to 82 % of the respondents). After accounting for missing data (list-wise deletion, overall percent of missing data is 19.8 %), my effective sample consists

¹ Additional analyses (available upon request) have demonstrated that estimations including Azerbaijan (which show that self-reliance norm affects the relationship between unemployment and well-being) are not stable.

of over 43 thousands persons. Regarding the income variable, due to the high percentage of missing data, I substitute missing values with the country average (for details see the control variables section). The effective sample size per country varies from above 500 in Sweden and Switzerland to over 1300 in Luxembourg.

3.2 Measurement

Subjective well-being is the dependent variable in the analysis. The EVS contains two indicators frequently used in the literature: happiness and life satisfaction. The relevant questions are: “*Taking all things together, would you say you are: very happy/quite happy/not very happy/not at all happy*” and “*All things considered, how satisfied are you with your life as a whole these days? (1) dissatisfied—(10) satisfied*”.

Both these variables are reliable indicators of subjective well-being: they are stable for individuals (Schimmack et al. 2010; Kahneman and Krueger 2006), they correlate with physiological symptoms of stress and pleasure (Blanchflower and Oswald 2008; Steptoe and Wardle 2005; Urry et al. 2004; van Reekum et al. 2007), with third-person judgements (Schneider and Schimmack 2009), and with satisfaction with particular domains of life (Schimmack et al. 2010).

Happiness and life satisfaction measure close but separate phenomena. Life satisfaction more strongly correlates with stable characteristics of social context (Helliwell and Putnam 2004) and economic factors (Peiró 2006), whereas happiness more strongly reflects the situation-dependent mood (Helliwell and Putnam 2004). As a complete assessment of an individual’s subjective well-being should incorporate both the life satisfaction as well as the momentary feelings (Dolan et al. 2006), I use both variables to construct a compound measure of subjective well-being [a strategy successfully used by Kalmijn (2010)]. After recoding (so that higher values indicate higher well-being), I standardize both variables (because they have different metrics) and sum them. The resulting variable is recoded into percentile scores (99 is the highest, and one is the lowest possible level of well-being), which allows interpreting regression coefficients as percentage points. Using percentile scores instead of standardized values also reduces the skewness on the left side of the distribution. I additionally validate my results using the original happiness and life satisfaction variables.

Employment status is coded as a set of dummy variables and consists of the following categories: unemployed, housewife, retired, other. The status of employment is self-defined by the respondent which implies that the respondents are forced to solve the problem of multiple statuses (e.g. being student and employed); they also decide themselves whether to classify themselves as housewives (are the formally employed women on a parental leave housewives?) or unemployed (is being registered in an unemployment office a precondition? is active search for a job or availability to start working during next weeks a precondition for self-classifying as unemployed?). The “other” category includes students, as well as those who classified themselves as having “other” employment status.

In the analysis I treat employed persons as the reference category. I combine and do not differentiate between full-time, part-time and self-employment.

Family support is an individual-level measure based on three questions concerning the appropriate relationships and obligations between parents and children.

1. “Which of these two statements do you tend to agree with? (a) Regardless of what the qualities and faults of one’s parents are, one must always love and respect them; (b) One does not have the duty to respect and love parents who have not earned it by their behaviour and attitudes.”,

2. “Which of the following statements best describes your views about parents’ responsibilities to their children? (a) Parents’ duty is to do their best for their children even at the expense of their own well-being; (b) Parents have a life of their own and should not be asked to sacrifice their own well-being for the sake of their children.”, and
3. “Which of the following statements best describes your views about responsibilities of adult children towards their parents when their parents are in need of long-term care? (a) Adult children have the duty to provide long-term care for their parents even at the expense of their own well-being; (b) Adult children have a life of their own and should not be asked to sacrifice their own well-being for the sake of their parents”.

For each individual I compute a sum of answers supporting the family obligations: belief that one must always love and respect one’s parents, that parents should sacrifice their well-being for their children and children—for parents. The Cronbach’s alpha coefficient for these three variables is relatively low [about 0.55 in total sample; in particular countries it varies between 21–23 % (Norway and the Netherlands) and over 65 % (Germany, Czech and Slovakia)], therefore this measure is a sum of scores which does not reflect single latent factor. This measure defines family support through the child–parent relationships; other measures are possible, therefore I test the robustness of my main results using also some alternative measurement (see Sect. 4.2).

Family support norm is a country-level variable constructed from the EVS data as a percentage of adult (aged 18–50) unemployed who co-reside with their parents. Co-residence is a very important source of economic and emotional support for the unemployed and their families. The construction of this measure rests on the idea that the typical patterns of behaviour closely correlate with social norms: in countries where the unemployed more frequently live with their parents, social acceptance for (and expectation of) receiving support from one’s family is stronger.

The great advantage of this measure is its demonstrated validity as a good indicator of strength of family ties in a country (Kalmijn and Saraceno 2008). However, other measures are also possible, such as the country averages of individual family support as defined above; an additional analysis using this measure will be used to check the robustness of the results.

This measure reflects situation of young unemployed, who are a large part of the unemployed co-residing with their parents. To check the validity of this measure, I replicate the final multivariate model separately for younger and older respondents (see Sect. 4.2).

Self-reliance is an individual-level measure capturing the belief that individuals (and not the state) should take more responsibility for providing themselves, and that competition is good by stimulating people to work hard and develop new ideas (and not bad by bringing out the worst in people). The variable is constructed as an average of the two variables, each measured on a 10-points scale, reversed so that higher values correspond to higher self-reliance. Again, the two items are weakly correlated ($\rho = 0.27$) therefore this variable should be considered a sum score and not a measure of underlying latent factor.

Self-reliance norm is a country-level variable constructed as a country average of individual self-reliance.

Control variables on the individual level include age and age squared, sex, being married, having children, living with children in the household, education (secondary and tertiary, with primary and vocational education as a reference category), social trust, subjective health and household income (in logarithmic form). I measure social trust as an

average of answers to two questions, each using 10-points answering scale.² Subjective health is measured on a 5-points scale, with higher values indicating more health problems.³ Household income in the EVS is an ordinal variable that assigns income range to each respondent. Using the country-specific variables (which are more precise than the common Euro-adjusted variable), I replace each range with its middle value and correct the values for purchasing power to guarantee their cross-country comparability (consequently the values are expressed in international PPP dollars).⁴ Missing income data are replaced with country mean and answers “don’t know” and “refusal” are flagged with two separate dummy variables.⁵ I further test the robustness of the results by (a) completely excluding the income variable, and (b) excluding missing data on income.

Because individualism characterizes richer and more economically stable countries of Northern Europe (Hofstede et al. 2010; Inglehart and Oyserman 2004; Oyserman et al. 2002), in order to ensure that the observed effects capture cultural individualism and not the economic standing of a country, I include country unemployment rate (for year 2008) and GDP per capita (PPP corrected, for year 2007) as country-level control variables.⁶ Country unemployment rate is also included in interaction with unemployment status, thus allowing the well-being cost of own unemployment to vary with the unemployment rate (as analysed, among others, by: Bonini (2008); Clark (2003); Shields and Price (2005)).

3.3 Statistical Method

I use multilevel regression which models the individual-level dependent variable as a function of both individual and country characteristics. I use multilevel, rather than ordinary OLS regression, because hierarchical data (such as the multi-country EVS with individuals nested within countries) do not satisfy the basic assumption of independence of observations. This may lead to biased estimates of parameters and their standard errors, which in turn can result in wrongly rejecting or supporting theoretically important conclusions (Luke 2004; Bryk and Raudenbush 1992).

Multilevel models have important advantages in the context of the study. First, they properly account for the hierarchical structure of the data. Second, they allow the simultaneous estimation of the variation within and between countries and attribute the variation unexplained by the model with the specific levels of the data.

I test a two-level model with individuals (level 1) nested within countries (level 2). The average subjective well-being is allowed to vary randomly across countries (varying

² “Do you think that most people would try to take advantage of you if they got the chance, or would they try to be fair?” and “Would you say that most of the time people try to be helpful or that they are mostly looking out for themselves?”

³ “All in all, how would you describe your state of health these days? Would you say it is (1) very good ... (5) very poor?”

⁴ Because at the time of writing the paper PPP exchange rates were available only for 2005 (and income data come from 2008/9), before PPP conversion I also deflate the incomes to the 2005 values.

⁵ In some countries missing data on income is common: it reaches value of over 30 % in Ireland, Italy, Malta, Portugal, Slovenia and Spain.

⁶ Both unemployment rate and GDP come from the United Nations database: <http://data.un.org/>.

intercept, Eq. 2), as well as the effect of own unemployment on well-being (varying slope, Eq. 3). Formally, the model is presented in Eqs. 1–4.

Individual-level equation:

$$wb_{ij} = \alpha_{0j} + \alpha_{1j} \cdot Unempl_{ij} + \alpha_2 \cdot Unempl_{ij} \cdot FamSupport_{ij} + \alpha_3 \cdot Unempl_{ij} \cdot SelfReliance_{ij} + \alpha_4 \cdot FamSupport_{ij} + \alpha_5 \cdot SelfReliance_{ij} + \alpha_6 \cdot x_{6,ij} + \dots + \alpha_k \cdot x_{k,ij} + \epsilon_{ij} \quad (1)$$

Country-level equations:

$$\alpha_{0j} = \beta_{00} + \beta_{01} \cdot NormFamSupp_j + \beta_{02} \cdot NormSelfRel_j + \beta_{03} \cdot UnRate_j + \beta_{04} \cdot lnGDP_j + \mu_j \quad (2)$$

$$\alpha_{1j} = \beta_{10} + \beta_{11} \cdot NormFamSupp_j + \beta_{12} \cdot NormSelfRel_j + \beta_{13} \cdot UnRate_j + v_j \quad (3)$$

Full model:

$$wb_{ij} = \beta_{00} + \beta_{10} \cdot Unempl_{ij} + \alpha_4 \cdot FamSupport_{ij} + \alpha_5 \cdot SelfReliance_{ij} + \alpha_6 \cdot x_{6,ij} + \dots + \alpha_k \cdot x_{k,ij} + \alpha_2 \cdot Unempl_{ij} \cdot FamSupport_{ij} + \alpha_3 \cdot Unempl_{ij} \cdot SelfReliance_{ij} + \beta_{11} \cdot Unempl_{ij} \cdot NormFamSupp_j + \beta_{12} \cdot Unempl_{ij} \cdot NormSelfRel_j + \beta_{13} \cdot Unempl_{ij} \cdot UnRate_j + \beta_{01} \cdot NormFamSupp_j + \beta_{02} \cdot NormSelfRel_j + \beta_{03} \cdot UnRate_j + \beta_{04} \cdot lnGDP_j + \epsilon_{ij} + \mu_j + Unempl_{ij} \cdot v_j \quad (4)$$

Equation 1 shows the individual-level model for individual i in country j . The dependent variable, wb_{ij} , is the subjective well-being of individual ij . The intercept α_{0j} contains subscript j which indicates that different intercepts are estimated for various countries. The coefficient α_{1j} associated with the variable $Unempl_{ij}$ informs about the *ceteris paribus* effect of unemployment on individual's well-being. Again, the subscript j indicates that the effect of unemployment may differ across countries. Subsequent terms, $\alpha_2 \cdot Unempl_{ij} \cdot FamilySupp_{ij}$ and $\alpha_3 \cdot Unempl_{ij} \cdot SelfReliance_{ij}$ are the interactions describing the effect of the individual family support and self-reliance of the unemployed on their well-being. The terms $\alpha_4 \cdot FamSupport_{ij}$ and $\alpha_5 \cdot SelfReliance_{ij}$ describe the direct effect of individual's family support and self-reliance orientation on subjective well-being. Finally, the terms $\alpha_6 \cdot x_{6,ij} + \dots + \alpha_k \cdot x_{k,ij}$ refer to the control variables. I assume that their effects are constant across countries, therefore the coefficients contain no j subscript. The last element, ϵ_{ij} , is the individual-level error, i.e. residuals which cannot be attributed to the cross-country variation.

Equation 2 models α_{0j} (the country-specific intercept from Eq. 1) as a function of country level variables: family support norm ($NormFamSupp_j$), self-reliance norm ($NormSelfRel_j$), country unemployment rate ($UnRate_j$), and GDP ($lnGDP_j$). The subscript j indicates that the values are country-specific. The error term μ_j corresponds to the varying intercept.

Equation 3 defines the well-being cost of own unemployment as a function of country-level variables: family support norm, self-reliance norm and country unemployment rate. Element v_j captures the random cross-country variation of the well-being cost of unemployment, i.e. the varying slope.

Finally, the Eq. 4 presents the full model that will be empirically tested in the Results section. It substitutes Eqs. 2 and 3 into Eq. 1; for clarity, the terms are ordered as in Table 1 that presents the results.

3.4 Empirical Strategy

In the analysis I focus on the interactions of own unemployment with the individual and country-level factors as determinants of well-being. This method has an advantage over inspecting well-being determinants on a sample limited to the unemployed, because the average well-being of the unemployed and employed individuals in a country are strongly correlated (country-level correlation coefficient of $\rho = 0.71$ for 42 countries). Limiting the sample to the unemployed would therefore capture the determinants of well-being in general instead of focusing on the factors affecting the well-being cost of own unemployment.

4 Results

4.1 Multilevel Model

Table 1 shows the estimation results of four models: (1) the null model, as well as the three varying-intercept varying-slope models: (2) including individual predictors, (3) including country-level controls, and (4) the full model including also the cross-level interactions of unemployment status with the self-reliance norm and family support norm.⁷ The strategy of testing subsequent models allows me to check if each additional group of variables indeed increases the explanatory power.

The null model is a basically empty model, containing only the constant and the varying intercept. Its significant intercept (var_cons) justifies using multilevel methodology: the country-level variation accounts for 12 % of the total variation unexplained by the model (ρ statistics).

Model 2 includes the individual-level variables, which considerably improve the fit of the model, indicated by a drop of the AIC value. It also reduces the variance of the individual residuals ($var(Residual)$) by about 20 %, and the variance of the random cross-country variation of subjective well-being (var_cons) by about 70 %. Including the country-level control variables in the model 3 further reduces the random cross-country variation. The full model, containing also the cross-level interactions, shows the best fit to the data (lowest AIC values), and on this model I will focus in the following sections.

Individual-level factors The well-being of the unemployed is on average about five percentage points lower than the one of the employed persons. The individualist orientation is related to the well-being in a complex way: whereas stronger self-reliance orientation corresponds to higher well-being, weak family support correlates with well-being negatively. Both these results are consistent with the theoretical predictions: both self-reliance and social support were expected to facilitate the individuals' subjective well-being (Diener et al. 1995; Helliwell and Putnam 2004; Shields and Price 2005).

Do these individual-level factors also moderate the relationship between unemployment and subjective well-being? The results of the full model are weak. The effect of self-reliance in interaction with own unemployment is statistically not significant. Also the effect of the interaction of family support with own unemployment is not significant after the country-level family support norm is controlled for. (This interaction was significant,

⁷ The estimates were performed with STATA software, with the restricted maximum likelihood estimation method.

Table 1 Multilevel regression of well-being on individual- and country-level predictors

	(1) Null model	(2) Individual-level variables	(3) Country-level controls	(4) Full model
<i>Individual-level variables</i>				
Unemployed ^a		-4.74 (0.000)***	-4.69 (0.000)***	-5.15 (0.000)***
Family support		0.89 (0.000)***	0.91 (0.000)***	0.94 (0.000)***
Self-reliance		0.69 (0.000)***	0.69 (0.000)***	0.69 (0.000)***
Individual-level control variables ^b	No	Yes	Yes	Yes
<i>Interactions with unemployed status</i>				
Unemployed × family support		0.88 (0.074) ⁺	0.84 (0.084) ⁺	0.54 (0.264)
Unemployed × self-reliance		-0.11 (0.515)	-0.11 (0.504)	-0.09 (0.570)
Unemployed × family support norm ^c				11.84 (0.000)***
Unemployed × self-reliance norm ^c				-0.33 (0.793)
Unemployed × unempl. rate ^c				0.29 (0.000)***
<i>Country-level variables</i>				
Unempl. rate ^c			-0.02 (0.874)	0.14 (0.357)
GDP (ppp,ln) ^c			3.68 (0.001)*	3.78 (0.002)*
Family support norm ^c			-7.31 (0.150)	-2.19 (0.682)
Self-reliance norm ^c			2.11 (0.232)	2.06 (0.274)
<i>Varying coefficients</i>				
var(_cons)	93.41	26.62	21.49	20.13
var(unemployed)		9.75	8.19	1.60
covar(_cons, unemployed)		0.02	8.45	3.67
var(residual)	685.22	540.46	540.50	540.48
Rho statistics	0.12	0.06	0.05	0.04
<i>Summary statistics</i>				
AIC	407,167	396,915	396,895	396,873
Log-likelihood	-203,580	-198,431	-198,417	-198,404
Model's df	0	21	25	28
Observations	43,443	43,443	43,443	43,443

⁺ $p < 0.10$; * $p < 0.05$; *** $p < 0.001$ (exact p values in parentheses)

^a Employment status, reference category: employed

^b Control variables include: employment status (housewife / retired / other), age and age², sex, family situation (married, married with children, children in the household), education (secondary / tertiary), social trust, health problems, household income (ln, mean substitution, control for *don't know* and *resusal*)

^c Country-level variables

and consistent with Hypothesis 2, in models 2 and 3, i.e. before including the cross-level interactions.) Summing up, neither Hypothesis 1 nor Hypothesis 2 find support in the data.

Cross-country variation of the effect of unemployment on well-being In order to better visualize the contribution of the country-level factors to the cross-country variation of well-being and the effect of unemployment on well-being, I begin with estimating the best linear unbiased predictions of the varying slope and intercept based on the model containing individual-level variables (model 2 in Table 1). Table 2 presents the correlations between these estimated country-specific slopes and intercepts and the country-level factors (country norm for family support, country norm for self-reliance, country unemployment rate and GDP). The best linear unbiased predictions of the varying intercepts may be interpreted as country-specific intercepts (i.e. how does the subjective well-being in a given country depart from the overall mean), whereas the predictions of country slopes represent the interactions between the country dummies and the effect of own unemployment on well-being.

Table 2 suggests that the effect of own unemployment on well-being is *less negative* in countries with stronger family support norm (correlation of 0.49 between the varying slope and the norm for family support), in countries with weaker self-reliance norm (correlation of -0.30 between the varying slope and the self-reliance norm), in countries with higher unemployment rate (correlation of 0.53 between the varying slope and the country unemployment rate) and in countries with lower GDP (correlation of -0.41 between the varying slope and the GDP).

This is only partly confirmed by the results of the multilevel model (full model, Table 1). Consistently with Hypothesis 4, the well-being consequences of own unemployment are less negative in countries with stronger family support norm. The Hypothesis 3, concerning the self-reliance norm, is not supported by the data. Additionally, consistently with the literature, the well-being cost of own unemployment is lower in countries with higher unemployment rate. (The interaction of the country GDP and the individual's unemployment status is not included in the full model in Table 1 because additional analyses, available upon request, have shown that this interaction is not statistically significant and that including it does not improve the model's fit.)

Cross-country variation of the well-being Varying intercepts may be viewed as indicators of countries' residual subjective well-being. The correlation matrix of the predicted varying intercepts with the country-level variables (Table 2) informs that the subjective

Table 2 Country-level bivariate correlations between explanatory variables

	Varying slope	Varying intercept	Country norm for family support	Country average self-reliance	Country unempl rate	GDP (ppp,ln)
Varying slope (Unemployed)	1.00					
Varying intercept (_cons)	0.03	1.00				
Country norm for family support	0.49***	-0.35^*	1.00			
Country norm for self-reliance	-0.30^+	0.24	-0.32^*	1.00		
Country unemployment rate	0.53***	-0.10	0.13	-0.37^*	1.00	
GDP (ppp,ln) ^c	-0.41^*	0.51***	-0.51^{***}	0.22	-0.37^*	1.00

Source *European Values Study, 2008*

⁺ $p < 0.10$; * $p < 0.05$; *** $p < 0.001$

well-being is on average higher in countries with weaker family support norm (correlation coefficient of -0.35) and in countries with higher GDP (correlation coefficient of 0.51). The result for the GDP is confirmed by the full multilevel model (Table 1): well-being is on average higher in higher-GDP countries. The coefficients for the country family support norm and for country self-reliance norm are insignificant, which differs from the results previously reported by Diener et al. (1995) that people in individualist countries are happier.

The size of the effects The results shown in Table 1 do not allow easy understanding of the size of the effect in question, therefore I supplement the table with graphs showing well-being of the employed and of the unemployed predicted on the basis of country level norms (family support and self-reliance norms separately), country unemployment rate, individual self-reliance orientation and individual family support (Fig. 1). In each case, the predictions are plotted over the range of values of independent variable observed in the sample and assume the mean sample values of other variables.

Comparison of graphs in Fig. 1 makes clear that the size of the effect of family support norm is considerable and comparable in strength with the effect of country unemployment rate. As the family support norm weakens, the well-being gap between the employed and the unemployed grows from about two to about nine percentage points; in case of unemployment rate the well-being gap decreases from over seven percentage points (at unemployment rate close to zero) to almost zero at the unemployment rate of about 25 %. In contrast to that, the individual-level orientations and country norm for self reliance only slightly moderate the relationship between unemployment and well-being.

To better visualize the size of effect of both country-level factors, Fig. 2 shows the employed-unemployed well-being gap predicted on the basis of family support norm and country unemployment rate. Positioning of countries on the graph shows that the effect of own unemployment on well-being predicted on the basis of these two contextual factors ranges from about eight percentage points in Denmark and Switzerland to about zero in Bosnia and Herzegovina and Georgia, and reaches slightly positive value in Montenegro (These data do not account for the baseline, five percentage points well-being gap between employed and unemployed and only show the effect of family support norm and the unemployment rate.)

4.2 Robustness Checks⁸

Analysis for age-subgroups of respondents has shown that the protective effect of family support norm is even stronger among the respondents over the age of 40. This result supports the validity of our measure of family support norm: although co-residence predominantly refers to the situation of the youngest unemployed, it remains a significant factor also for the older ones.

Influential countries I use DFbetas to detect countries that may be a source of instability of the coefficients of interest.⁹ DFbetas are highest for France ($DF\beta(\text{unemployed} \times \text{SUPPORT}$

⁸ The full results of the robustness checks are available upon request from the author.

⁹ DFbetas measure how much a given coefficient changes after excluding particular country from the sample. $DF\beta(j) = (b(j) - b(j)_i) / se(j)_i$, where b is the baseline coefficient for variable j , b_i —the coefficient for the same variable j after excluding country i , and se_i —the standard error of coefficient j after excluding country i . Since for DFbetas no formal statistical test exists, there is no strict cut-off value. As a rule, values above $2/\sqrt{n}$ or $3/\sqrt{n}$ are considered influential, and above 1—strongly so. In case of this analysis, cut-off values are 0.46 ($3/\sqrt{42}$) and 0.3 ($2/\sqrt{42}$)

NORM) ≈ -1.07), and considerable (albeit below 1) in Bosnia and Herzegovina, Croatia, Germany, Italy, Moldova and Serbia. After excluding these countries, the results of the full model hold.

Dependent variable I replicate the results using the original happiness and life satisfaction variables. The estimations confirm robustness of the full model: both happiness and life satisfaction of the unemployed are lower compared to employed persons, and the family support norm moderates the effect of unemployment on well-being. Additionally, for life satisfaction also the (positive) effect of individual family support on well-being of the unemployed is significant. However, the effect remains small compared to the effect of country norm for family support: overall, individual family support increases the employed-unemployed life satisfaction gap from 0.49 to 0.69, while family support norm—from 0.25 to 0.92 on a 1–10 points scale.

Excluding possibly problematic variables: health and income Additional estimations of the full model excluding health variable, household income and missing household income (in the last case I limit the sample to 36 countries where the percentage of missing values falls under 30 %) give results consistent with the results of the full model.¹⁰

Alternative specification of individual family support EVS provides an alternative measure of family support derived from assessment of importance of spheres of life (work, family, friends and acquaintances, leisure time, politics, religion) coded on a 4-point scale. I measure the value of the family for an individual as the difference between family importance and the average importance of remaining items.¹¹ Results of the full model hold, with the only difference that the newly-defined family support is not correlated with the subjective well-being.

Alternative specification of country family support norm It is also possible to measure the family support norm as a country average of family support that has been used in the analysis as an individual level variable. Results of such additional analysis are consistent with the full model in Table 1: the coefficient of interaction of own unemployment with the family support norm is positive ($p < 0.05$), whereas the results for other variables do not change.

Alternative specification of self-reliance orientation As the two variables combined to measure the self-reliance orientation are relatively weakly correlated, and one of the variables (“is competition good?”) may be considered not a very direct proxy of self-reliance orientation, I test the robustness of the results using only the second variable (“should individuals (and not the state) take more responsibility for providing themselves?”). The results are consistent with the full model in Table 1.¹²

5 Summary and Discussion of Results

My paper demonstrated that the well-being gap between employed and unemployed differs across European countries and that the size of this gap is moderated by the level of country individualism, in particular by family support norm. The effect is considerable, with the

¹⁰ The countries with percentage of missing income data over 30 % include: Ireland, Italy, Malta, Portugal, Slovenia and Spain.

¹¹ I use this method in order to achieve greater variation than the one offered by the original variable, where 85 % of the respondents declare that family is very important for them.

¹² The only difference being that the coefficient describing the effect of self-reliance orientation on subjective well-being is weaker: $+0.4$, $p < 0.000$.

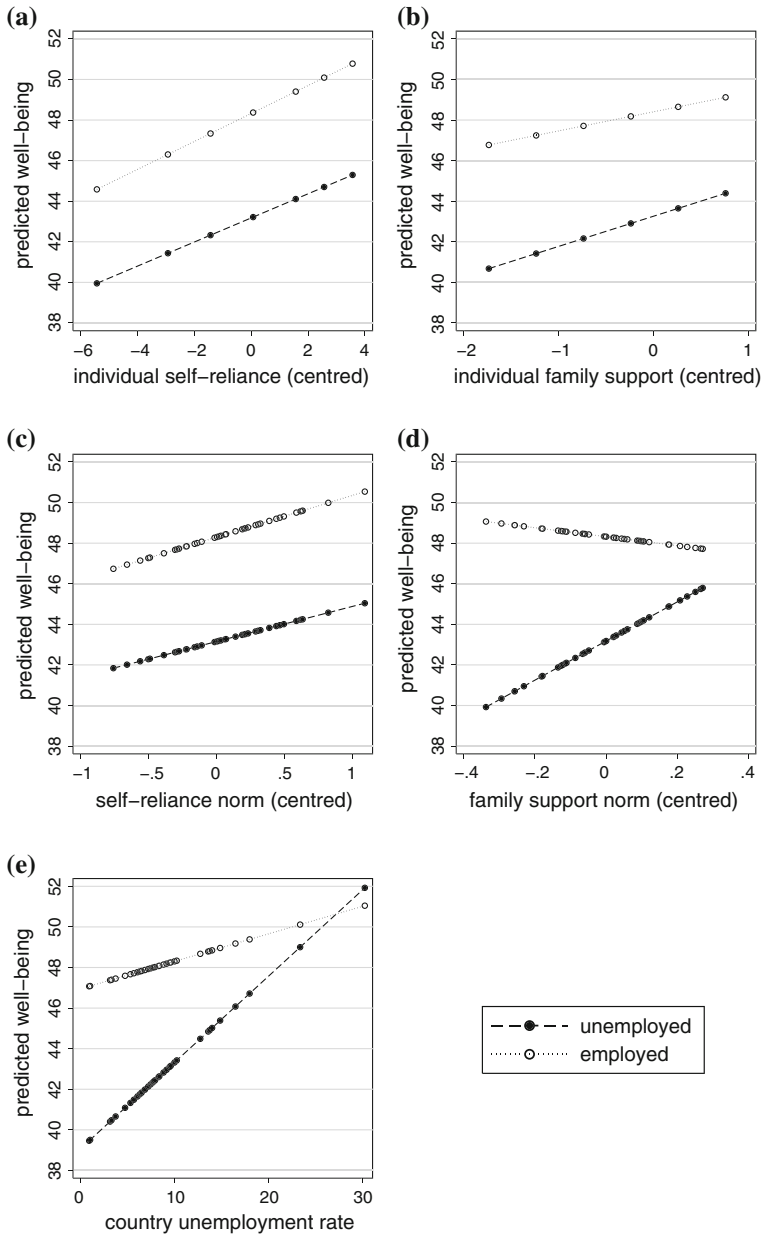


Fig. 1 The size of the effects of country- and individual-level variables on the well-being of unemployed and employed people. **a** Effect of individual self-reliance orientation, **b** effect of individual family support, **c** effect of self-reliance norm, **d** effect of family support norm, **e** effect of country unemployment rate. *Source* European Values Study, 2008 and UNStat data on country unemployment rates. *Notes* The predictions for country-level variables assume (overall sample) mean values of all variables, with the exception of employment status (employed vs. unemployed), country-norm variable/unemployment rate, and its interaction with the employment status. The predictions for individual-level values assume (overall sample) mean values of variables, with the exception of employment status (employed vs. unemployed), individual values variable, and its interaction with the employment status

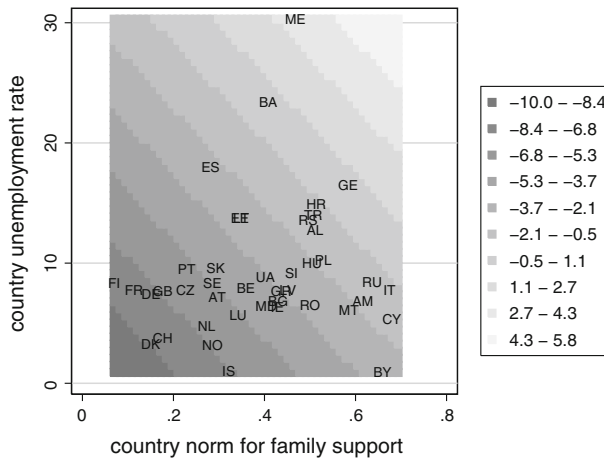


Fig. 2 The well-being effect of own unemployment as a function of family support norm and country unemployment rate. *Source* European Values Study, 2008 and UNStat data on country unemployment rates. *Notes* Shades of gray indicate the difference between well-being of the unemployed and the employed, predicted on the basis of family support norm and country unemployment rate. *Darkest* areas correspond to strongest negative effect of own unemployment on well-being. Country codes are placed on the *graph* for better visualization

gap growing from about two to about nine percentage points between countries with weakest and strongest family support norm.

The present analysis shows that the higher well-being cost of own unemployment in individualistic countries is moderated mainly by the family support norm. The second analysed aspect of individualism, self-reliance, does not explain the cross-country differences. Moreover, the relationship between individualism and well-being cost of own unemployment was observed mainly at the country level; on the individual level the coefficients are insignificant or (as in the case of life satisfaction) their effect is very small. These results suggest that the feeling of guilt and the individual access to support and resources, i.e. the mechanisms postulated by the literature, play a smaller role than normative concerns.

The conclusion that family support norm is more important than individual family obligations are consistent with the literature. Eggebeen and Davey (1998) showed that help offered within families does not depend on individual values and expectations, but is instead uniformly offered in case of need. They are also in line with those of Kalmijn and Saraceno (2008) who demonstrate that the responsiveness to parents' needs is stronger in countries with stronger support norm. Although works of Eggebeen and Davey (1998) and Kalmijn and Saraceno (2008) concern help offered by adult children to their parents, it is plausible that a similar mechanism plays a role also in other family relationships, and affects also the situation of the unemployed. Concluding, it seems that actual support available to family members in need depends rather on the level of support considered normal in a society than on the individual norm regarding family obligations.

The main theoretical implication of the study is the importance of the social context, also in analyses which look at the individual-level mechanisms. This stays in a striking opposition to the currently dominating stream of research focused either on individuals or on very large aggregates such as countries, which largely neglects the intermediate—and likely very important—mezzo level.

The presented results allow drawing some policy recommendations. The observation that in countries with weaker support norm the employed-unemployed well-being gap is larger is surprising, as in these countries the welfare support for the unemployed is typically more generous. The importance of the norm for family support suggests that the unemployed do not need more money, but they likely need the feeling of security, a support network in which they can share experiences, perhaps also to break the social isolation in the period of unemployment. Policies aiming at building or strengthening such networks could accompany the typical solutions, such as unemployment benefits, to make the experience of unemployment less disruptive for the unemployed and their families.

Unavoidably, the study suffers from some limitations. The first one concerns the measure of family support used. The presented analysis accounted for individuals' perceptions of the intra-family obligations, although probably more important are the obligations perceived by the members of their families, who could be a potential source of support. Unfortunately, the information on obligations perceived by family members was not available in the data. Future analyses focusing on the family groups might help clarifying this issue.

Another limitation pertains to the interpretation of the results. As they were produced using cross-sectional data, they do not allow causal interpretation. It is possible that mental problems (correlated to lower well-being) increase the individual risk of unemployment, therefore low well-being may be a cause rather than a consequence of unemployment. The risk of misinterpretation is however small because studies using longitudinal data have shown the causal link from unemployment to well-being (Clark 2003; Clark and Oswald 1994; Gerlach and Stephan 1996; Winkelmann and Winkelmann 1998).

The second causality-related issue concerns the link between the social norms and the size of well-being gap between the unemployed and the employed. Is it possible that well-being of the unemployed shapes the social norms traits? This is plausible on the individual level: personal values and attitudes may change in response to adverse life events. However, it is less probable that the well-being gap between employed and unemployed affects the norms in a society. Such effect would be more conceivable if the average well-being—and not the well-being gap—was the potential explanatory factor.

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