



Work Engagement in Europe

Relations with National Economy, Governance and Culture¹

Version 1.0
February 2017

Prof. dr. Wilmar Schaufeli

KU Leuven, Belgium

&

Utrecht University, The Netherlands



¹ Please cite as: Schaufeli, W.B. (2017). *Work engagement in Europe: Relations with national economy, governance, and culture*. Research Unit Occupational & Organizational Psychology and Professional Learning (internal report). KU Leuven, Belgium.
DOI: 10.13140/RG.2.2.10491.31520

Summary

This study uncovers the relationships between work engagement at country level on the one hand, and a variety of national economic, governance, and cultural indicators on the other hand. Work engagement data were used from the 6th *European Working Conditions Survey* (2015) that includes 43,850 employees from thirty-five European countries. These engagement data were complimented with various economic, governance, and cultural indicators from other sources, such as the World Bank, Eurostat, and the United Nations.

The most engaged countries can be found in Northwestern Europe (the Benelux countries, Ireland, Norway, Denmark) and in the Alpine states (Austria, Switzerland), with the Netherlands ranking first with 19% highly engaged employees. In addition to Turkey, the least engaged countries are found in Southern Europe (Portugal, Greece) and on the Balkans (Montenegro, Serbia, Croatia, Albania). In countries where employees are engaged, people also feel happy and satisfied with their jobs. Moreover, work engagement is positively – and curvilinear – related to the nation's economic activity and productivity.

It was found that the level of work engagement is higher: (a) in countries with lower work centrality that value leisure over work; (b) in well-governed countries with a strong a democracy, which are high in integrity, and low in corruption and gender inequality; (c) in individualistic countries with less power distance and uncertainty avoidance where the gratification of human needs is valued.

Taken together, the analyses show that work engagement at country level is associated with various economic, governance, and cultural indicators. The results of the current study agree with the literature on happiness that shows similar associations with these indicators, which confirms the validity of the findings of this study.

The results of this unique study, which is the first cross-national study that uses a validated measure of work engagement and large, random national samples, should be interpreted with caution though. The fact that mere associations have been studied precludes causal interpretations; such as that work engagement leads to economic activity. The reverse might just as well be true. Also, so-called the ecological fallacy should be avoided; that is, no inferences about individual work engagement should be made based on findings at county level.

The current study illustrates that work engagement may not only be studied at the individual, psychological level, but also at the collective, national level as it relates in meaningful ways with various economic and socio-cultural indicators.

Contents

	Page
Summary	1
1. Aim	3
2. Engagement and its relationship with happiness and job satisfaction	4
3. Work engagement, happiness, and job satisfaction across countries	5
4. Work engagement and the economy	14
5. Work engagement and governance	16
6. Work engagement and culture	18
7. Wrap-up	20
8. Conclusions	20
References	23
Appendix 1: Sample sizes and work engagement levels across countries	24
Appendix 2: Overview of economic, governance, and cultural indicators	25

1. Aim

This paper is the first to analyze differences in work engagement across Europe using a well-validated measure and representative national samples. Rather than *individual* levels of work engagement, mean levels of work engagement of the workforce of *countries* are analyzed. So far, only large consultancy firms performed such national comparisons. However, these comparisons are either based on proprietary measures of engagement with unknown reliability and validity or on non-representative national samples, and mostly on both.

In contrast, the current paper uses work engagement data from the [6th European Working Conditions Survey \(EWCS\) – 2015](#). The EWCS assesses and quantifies the working conditions of employees and the self-employed, analyses relationships between different aspects of working conditions, identifies groups at risk and issues of concern, and monitors progress and trends. [Eurofound](#) carries out the EWCS and the market research company Ipsos did the fieldwork between February and December 2015. In total 43,850 workers were interviewed in thirty-five countries: the twenty-eight member-states of the European Union, the five candidate countries for EU membership – Albania, the former Yugoslav Republic of Macedonia, Montenegro, Serbia, and Turkey – as well as Norway and Switzerland. The target population for the EWCS consists of all residents from these countries aged above 15 or older and in employment at the time of the survey. A multi-stage, stratified, random sample was drawn in each country (see Appendix 1).

The aim of the current paper is to link work engagement at country level to economic and governance indicators, as well as to cultural values. To this end, data of multiple sources were used. In addition to work engagement from the EWCS-2015 economic and governance indicators from the *World Bank*, *EUROSTAT*, and various NGO's are used. Cultural values are taken from the *European Values Survey* and from Hofstede's national culture database. Appendix 2 includes more information about these indicators.

Work engagement is defined as ‘... *a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption*’ (Schaufeli, Salanova, González-Romá & Bakker, 2002; p. 74). Vigor is characterized by high levels of energy and mental resilience while working, the willingness to invest effort in one's work, and persistence also in the face of difficulties. Dedication refers to being strongly involved in one's work, and experiencing a sense of significance, enthusiasm, inspiration, pride and challenge. Finally, absorption is characterized in terms of being fully concentrated on and happily engrossed in one's work, whereby time passes quickly and one has difficulties with detaching oneself from work. In short, engaged workers work hard (vigor), are deeply involved (dedication) and happily engrossed (absorption) in their work. For an overview about work engagement, its measurement, antecedents, consequences, and explanations see Schaufeli (2014).

Work engagement can be measured by the Utrecht Work Engagement Scale (UWES), which is worldwide the most often used questionnaire (Schaufeli, Bakker & Salanova, 2006). The UWES is a valid and reliable instrument to assess work engagement that has excellent psychometric properties (Schaufeli, 2012). Recently, an

ultra-short version of the UWES has been introduced that includes only three items (Schaufeli, Shimazu, Hakanen, Salanova & De Witte, 2017). The EWCS-2015 also uses a 3-item version of the UWES²:

- 'At my work I feel full of energy' (vigor)
- 'I am enthusiastic about my job' (dedication)
- 'Time flies when I am working' (absorption)

The reliability (internal consistency) of the UWES-3 of the EWCS is good with a value of Cronbach's α of .73 for the entire sample. A value of $\alpha \geq .60$ is considered as a minimum, whereas $\alpha \geq .70$ is good. Values of internal consistency for the UWES-3 vary between .60 and .81 across countries. In four countries values of α were lower than .70: Romania (.60), Ireland (.66), Sweden (.68), and Denmark (.69). Hence in *no* country values of α dropped below the critical value of .60. Please note that the size of coefficient α depends on the length of the questionnaire; by definition short questionnaires have lower values. In conclusion, work engagement is measured in a reliable way in the EWCS-2015. For the current study, mean work engagement scores for each country were computed.

2. Engagement and its relationship with happiness and job satisfaction

Work engagement is moderately positively related with happiness ($r = .47$; $p < .01$) and job satisfaction ($r = .61$; $p < .01$) at country level. Happiness is a context-free measure that taps the subjective enjoyment of one's *life as a whole*. Clearly, this not only includes work but also other areas of life, such as leisure and social relationships as well as the physical environment, people's financial situation, and so on. So happiness is a general, omnibus measure of well-being. National levels of happiness were taken from the [World Database of Happiness](#) and refer to *all* inhabitants of a particular country and not only to the working population like work engagement and job satisfaction.

Job satisfaction, in contrast, is a work-related measure and is therefore somewhat stronger related with work engagement than with happiness. Although job satisfaction and work engagement are both positive states of mind, they differ in levels of activation (Salanova, del Libano, Llorens & Schaufeli, 2014). Engaged employees are proactive, feel more challenged, and have a stronger drive than their satisfied colleagues, who are reactive, feel less challenged and more satiated. So work engagement is a high activation and job satisfaction is a low activation psychological state. For that very reason work engagement is stronger related to work performance than job satisfaction (Christian, Garza & Slaughter, 2011).

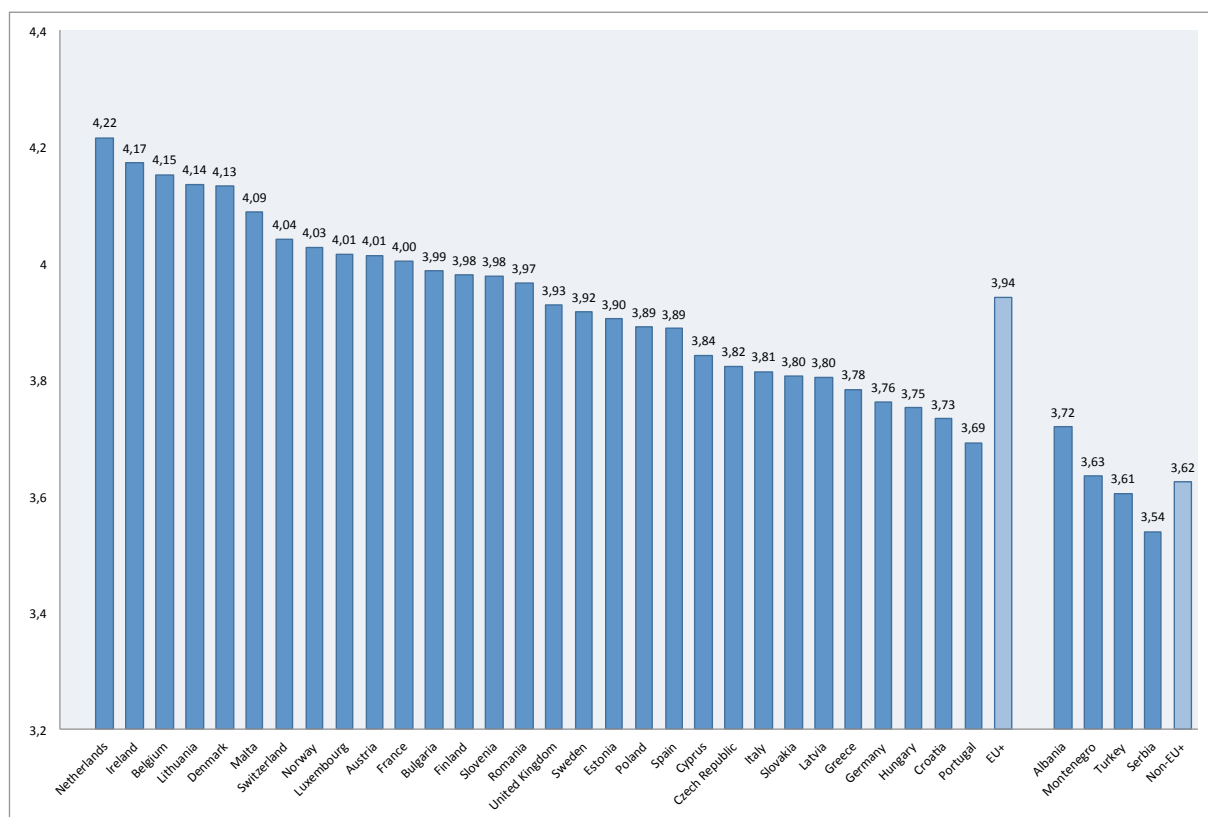
Conclusion. Relations with happiness and job satisfaction confirm the validity of the work engagement measure. As expected, and in line with previous research (*cf.* Alarcon & Lyons, 2011) relations are strong, particular with job satisfaction, but not so strong that both concepts can be considered identical.

² The EWCS-2015 uses two items that differ from the UWES-3 (Schaufeli, et al., 2017). However, using a database of 109,975 employees from 25 countries, both slightly different 3-item UWES versions correlate .88, which means that they share 77% of their variance. Across countries correlations vary between .68 and .92. In eight countries correlations are .90 or higher (> 80% shared variance). In short, both ultra-short versions of the UWES are similar.

3. Work engagement, happiness, and job satisfaction across countries

Levels of engagement differ systematically between countries ($F_{(43686, 34)} = 69.99; p < .0001$). Yet, only a modest 3% of the variance in work engagement is explained at country-level. This means that many other factors may also play a role, such as type of profession and working conditions. These factors will be considered in a future, separate study.

Figure 1: Mean levels of work engagement (scale 1-5)³



Source: 6th EWCS - 2015

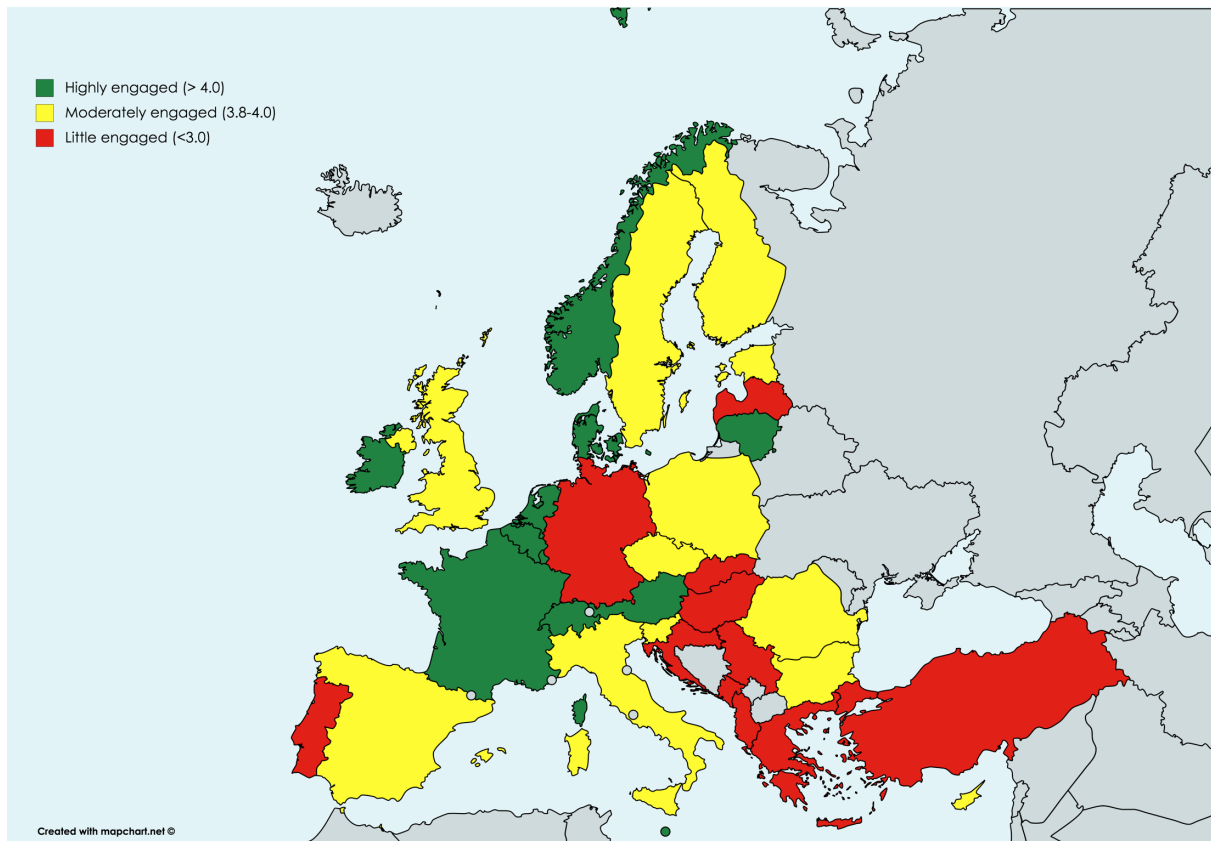
As can be seen in figure 1, Dutch employees feel most engaged, whereas Serbian employees feel least engaged at work. Because of their economic similarity, Norway and Switzerland are clustered together with the EU-countries, thus constituting the EU+ group. The level of engagement is much higher among EU+ countries than among non-EU candidate countries ($F_{(32,1)} = 18.65; p < .0001$).

As displayed in figure 2 below most countries with work engagement scores equal to above 4 are located in Northwestern Europe (the Netherlands, Belgium, Luxemburg, France, Ireland, Denmark, Norway) or in the Alpine region (Austria, Switzerland). There are also two exceptions: Malta (Southern Europe) and Lithuania

³ In the EWCS survey engagement is scored on a scale ranging from 1=always to 5=never, which implies that low scores indicate a *high* level of engagement. In order to avoid confusion, scores are reversed so that a *high* score indicates a *high* level of engagement.

(Eastern Europe), which also have high engagement levels. In contrast, countries with scores lower than 3.80 are located in Southern (Greece, Portugal) and Eastern Europe (Lithuania, Slovakia, Hungary), and on the Balkans (Croatia, Albania, Serbia, Montenegro). Also Turkish and German employees score relatively low on engagement. The latter might be caused by lower scores in Eastern Germany, the former GDR. Unfortunately East German employees cannot be identified in the EWCS-database, so that this hypothesis remains untested. As we shall see below, national levels of work engagement are positively related with prosperity.

Figure 2: Level of engagement (scale 1-5)

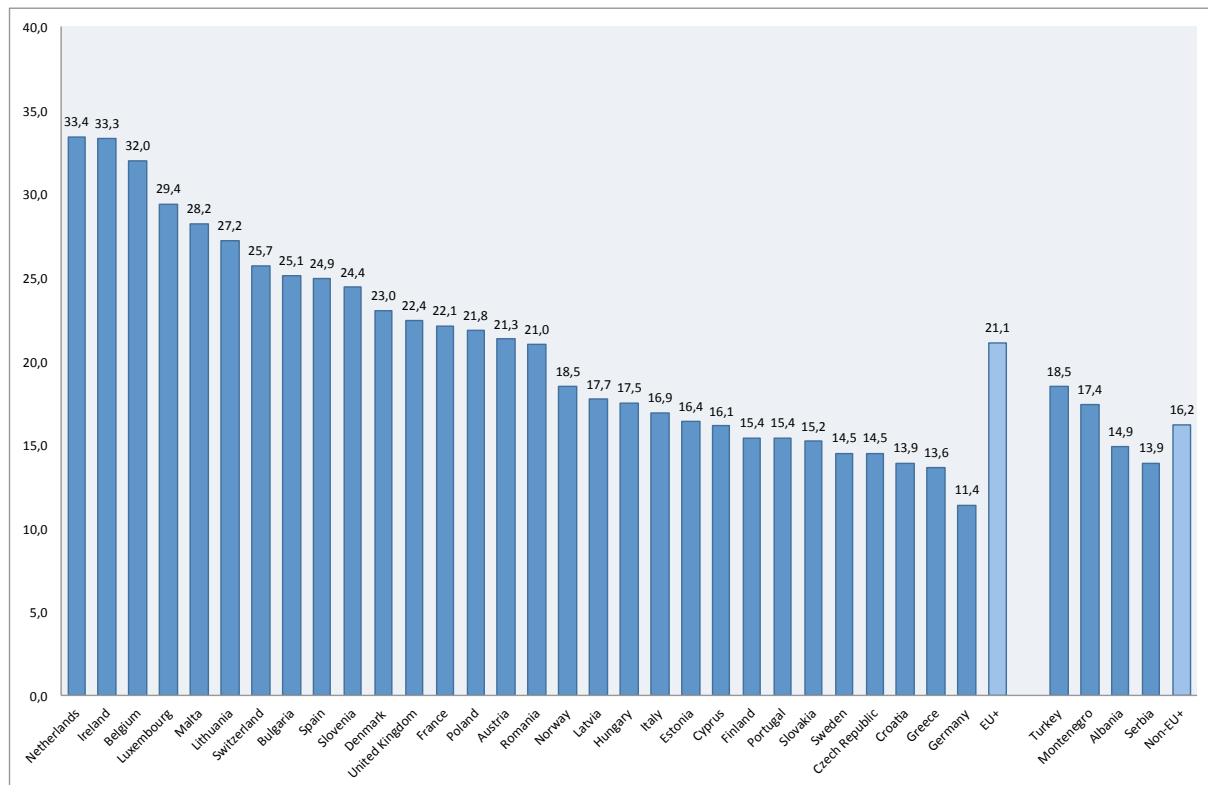


Source: 6th EWCS - 2015

Clearly, most highly engaged countries are located in Western Europe, whereas most little engaged countries are located in Southern and Southeastern Europe (particularly on the Balkans).

Another way of comparing work engagement between countries is to classify employees as ‘engaged’ (figures 3 and 4) or ‘highly engaged’ (figures 5 and 6). The former corresponds with a score of 4.5 or higher, whereas the latter corresponds with a score of 5.0, the maximum score. This means that employees in the engaged group indicate that they feel engaged ‘*most of the time*’, whereas those in the highly engaged group indicate that they feel ‘*always*’ engaged.

Figure 3: Percentage of engaged employees



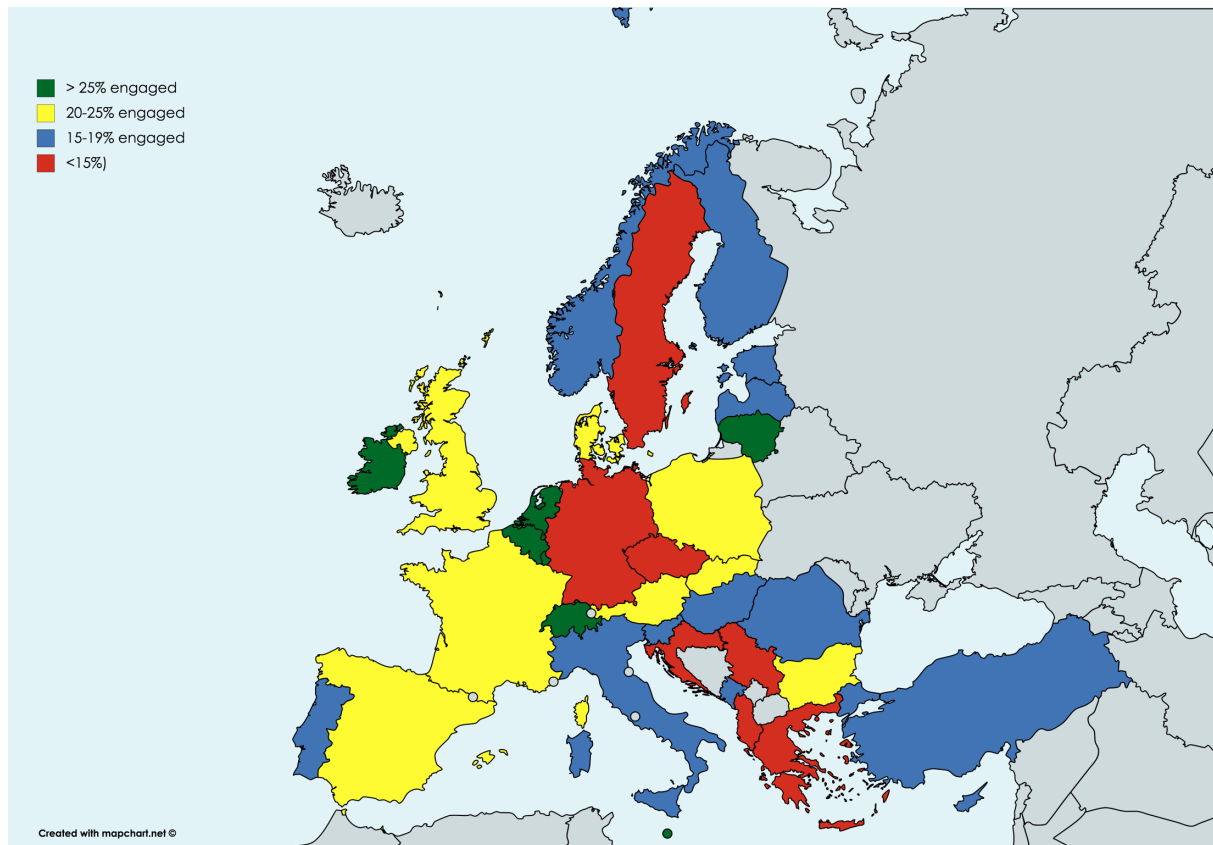
Source: 6th EWCS - 2015

It appears that 21% of the EU+ workforce feels engaged against only 16% of the candidate countries. In the EU+ group proportions of 'engaged' workers vary between 33% (Netherlands) and 11% (Germany). Which means that, roughly speaking, three times more employees feel engaged in the Netherlands as compared to Germany. Like Greek employees, German employees score lower than any of the candidate countries.

Essentially the rank-order between countries in figure 3 does not differ as compared to figure 1. For instance, the top-3 of figures 1 and 3 is identical. However, compared to figure 1, Denmark, Norway and Austria drop out from the top-10 of most engaged countries and are replaced by Bulgaria, Spain and Slovakia. Of the bottom-5 countries, only Croatia maintains its position, whereas Sweden and the Czech Republic replace Portugal and Hungary.

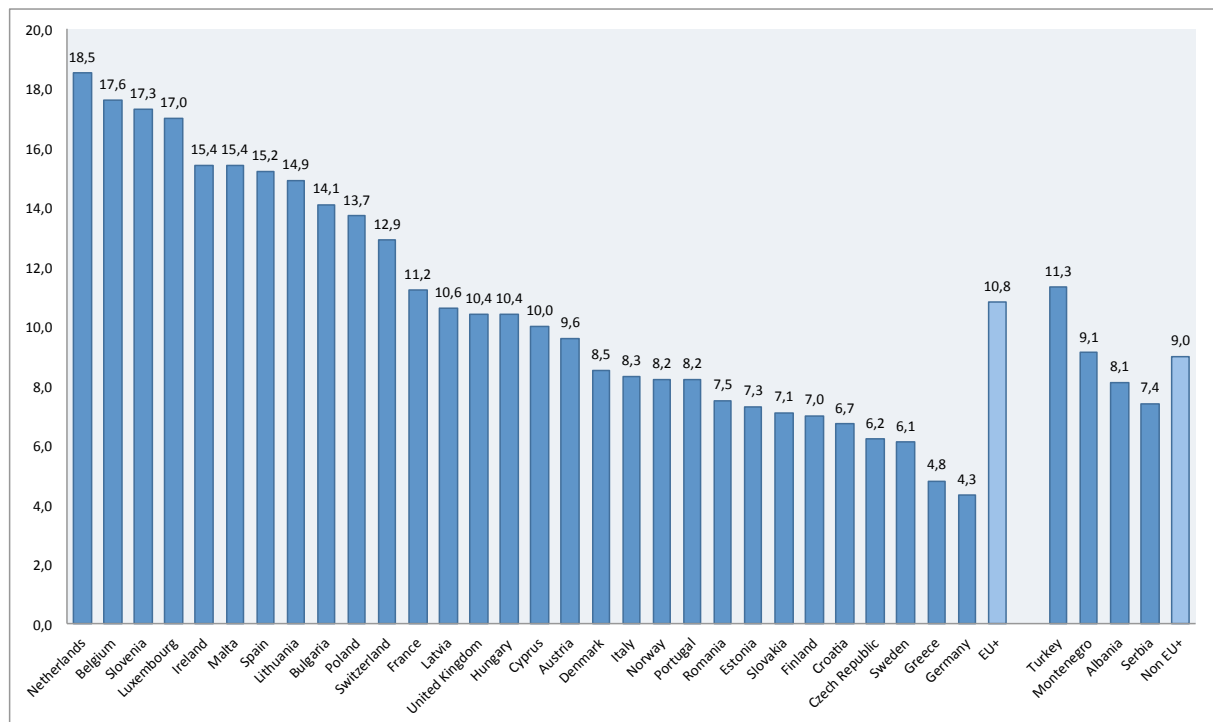
Taken together, the overall picture that employees in Northwestern Europe are more engaged than their Southern and Eastern European colleagues is corroborated, albeit that compared to figure 1 this seems somewhat less convincing. Figure 4 displays the percentage of 'engaged' employees across countries.

Figure 4: Engaged employees



Source: 6th EWCS - 2015

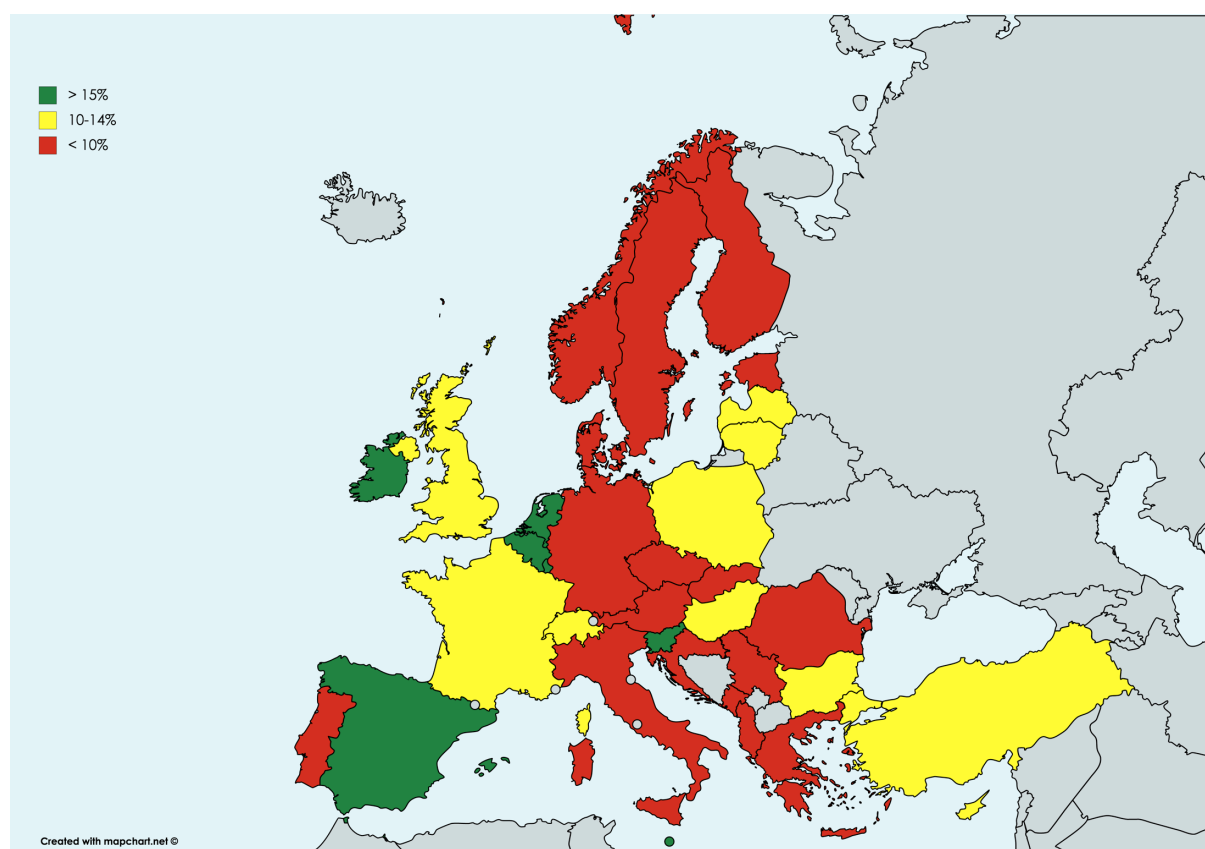
Figure 5: Percentage of highly engaged employees



Source: 6th EWCS - 2015

Of course the proportion of highly engaged employees, who endorsed the maximum score, is lower than that of merely engaged employees. This ranges from 18% in the Netherlands to 4% in Germany, which means that the rate of highly engaged Dutch employees is roughly 4 times larger than in Germany. Again, non-EU+ countries score lower than EU+ countries, although the difference is only about 2%. Yet the rank-order remains virtually the same. The top-10 of figures 3 and 5 is identical, except that in figure 5 Switzerland is replaced by Poland. The bottom-5 countries are also identical in both figures. Figure 6 displays the percentage of ‘highly engaged’ employees per country.

Figure 6: Highly engaged employees

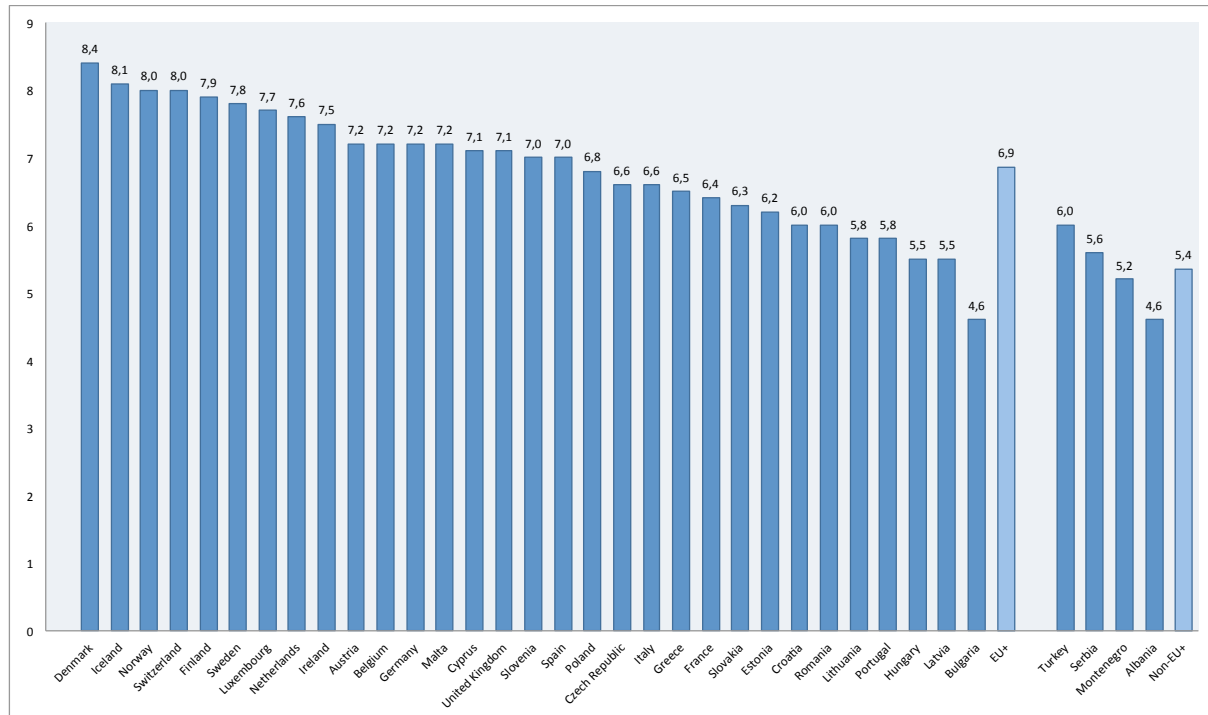


Source: 6th EWCS - 2015

In sum: levels of engagement vary considerably between countries, particularly for the proportions of engaged and highly engaged employees. Associated countries have lower work engagement scores than EU+ countries. Generally speaking, employees in Northwestern Europe (the Netherlands, Belgium, Luxembourg, Ireland, Denmark, Norway) and in the Alpine region (Austria and Switzerland) are more engaged than their fellows in Southern (Greece, Portugal) and Eastern Europe (Czech Republic, Slovakia), on the Balkans (Croatia, Serbia, Albania, Montenegro), and in Turkey. However, there are also some exceptions to this rule; for instance, Lithuania and Malta score relatively high, whereas Germany and Sweden score relatively low. By all means the Netherlands is the most engaged European country with almost 1 in every 5 employees feeling highly engaged.

Similar differences between countries are also observed for happiness (figures 7 and 8) and job satisfaction (figures 9 and 10).

Figure 7: Mean level of happiness (scale 0-10)

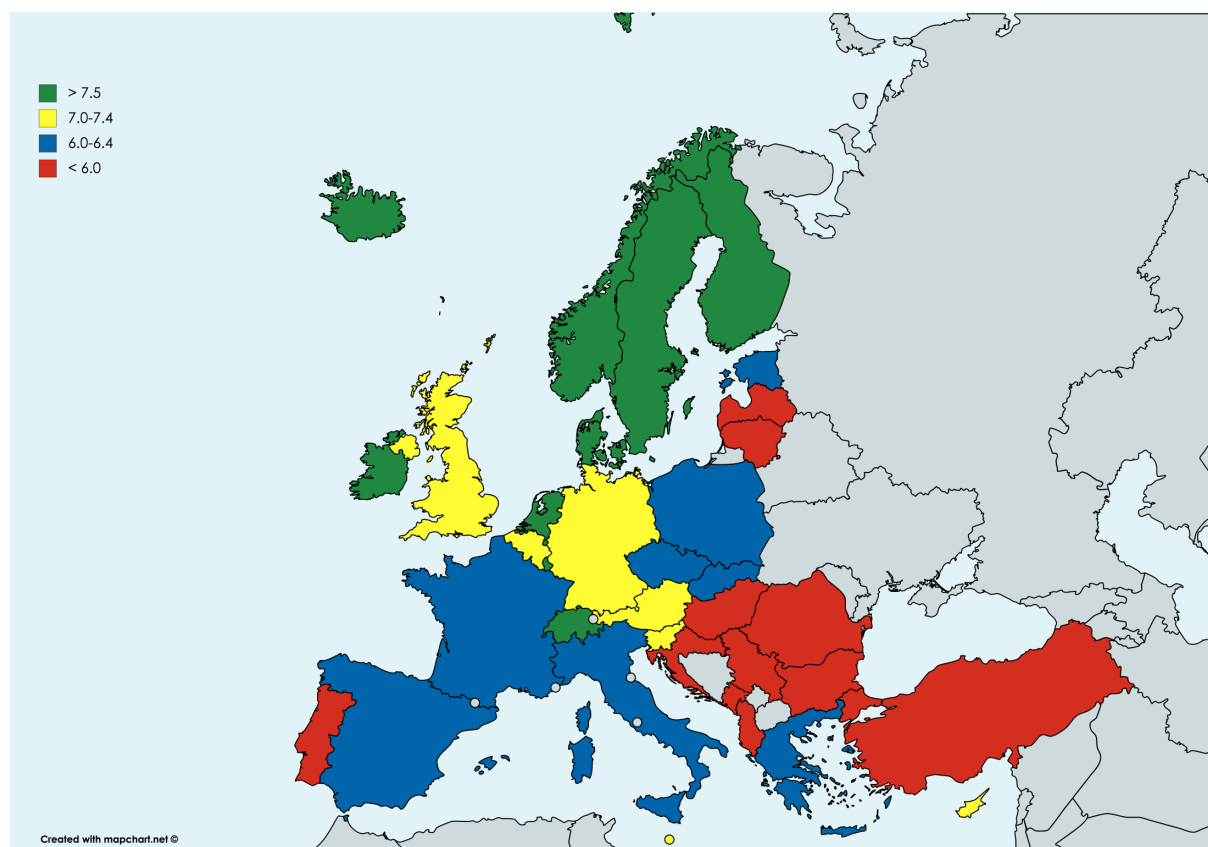


Source: World Database of Happiness

Seven of the ten highest scoring European countries on happiness also score very high on work engagement: The Netherlands, Ireland, Denmark, Switzerland, Norway, Luxemburg, and Austria. Furthermore, Iceland (not included in figure 1), Finland, and Sweden – all Nordic countries – count amongst the happiest countries in the world. Again, the lowest scores are particularly found in Eastern Europe: Bulgaria, Latvia, Hungary, Lithuania, Romania, and Estonia. With the exception of Portugal, people in other Southern Europe feel relatively happy. Finally, compared to EU+, people from candidate countries feel less happy. Please note that figure 4 refers to *all* inhabitants, also to those who are not working. Figure 8 displays the level of happiness per country.

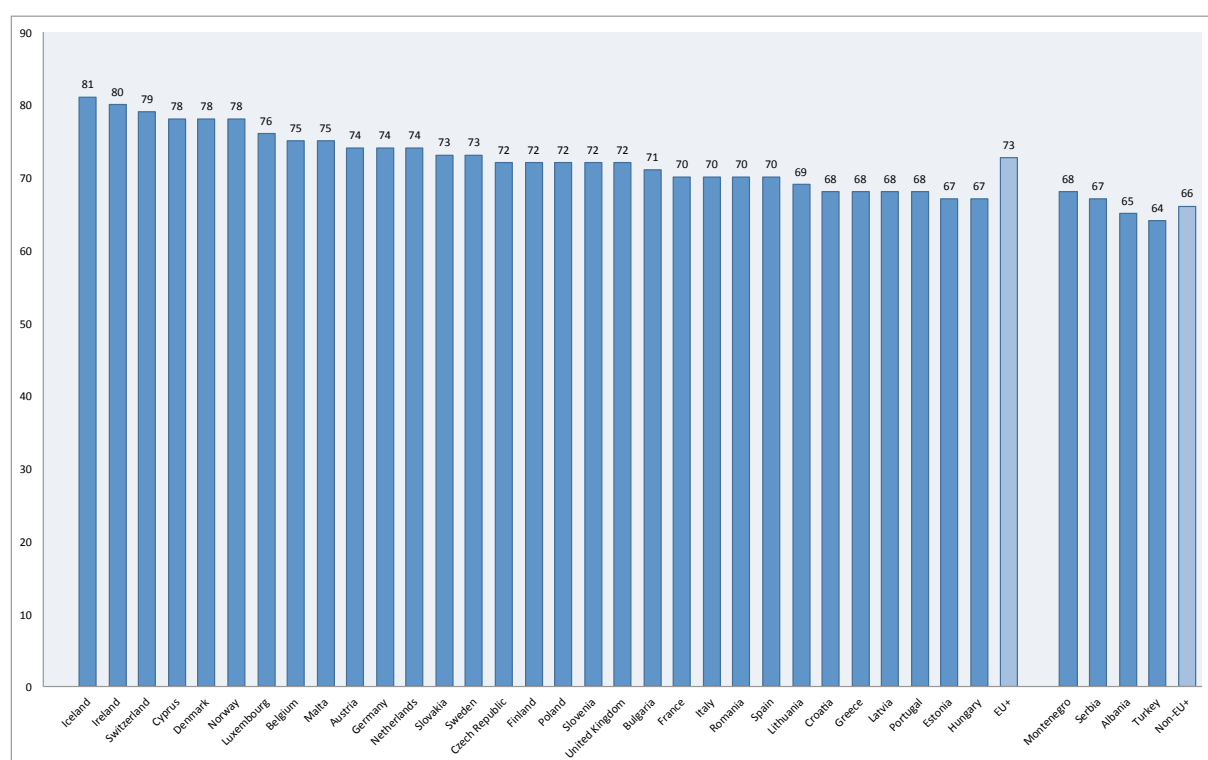
Evidently, the proportions of job satisfaction (figure 9) are much higher than the proportions of engaged or highly engaged employees. The reason is that engagement is a more intense experience than mere satisfaction (Salanova et al., 2014). Employees who feel engaged are also likely to feel satisfied with their jobs, whereas the reverse is not true; not all satisfied employees will also feel engaged.

Figure 8: Level of happiness



Source: World Database of Happiness

Figure 9: Percentage of satisfied employees

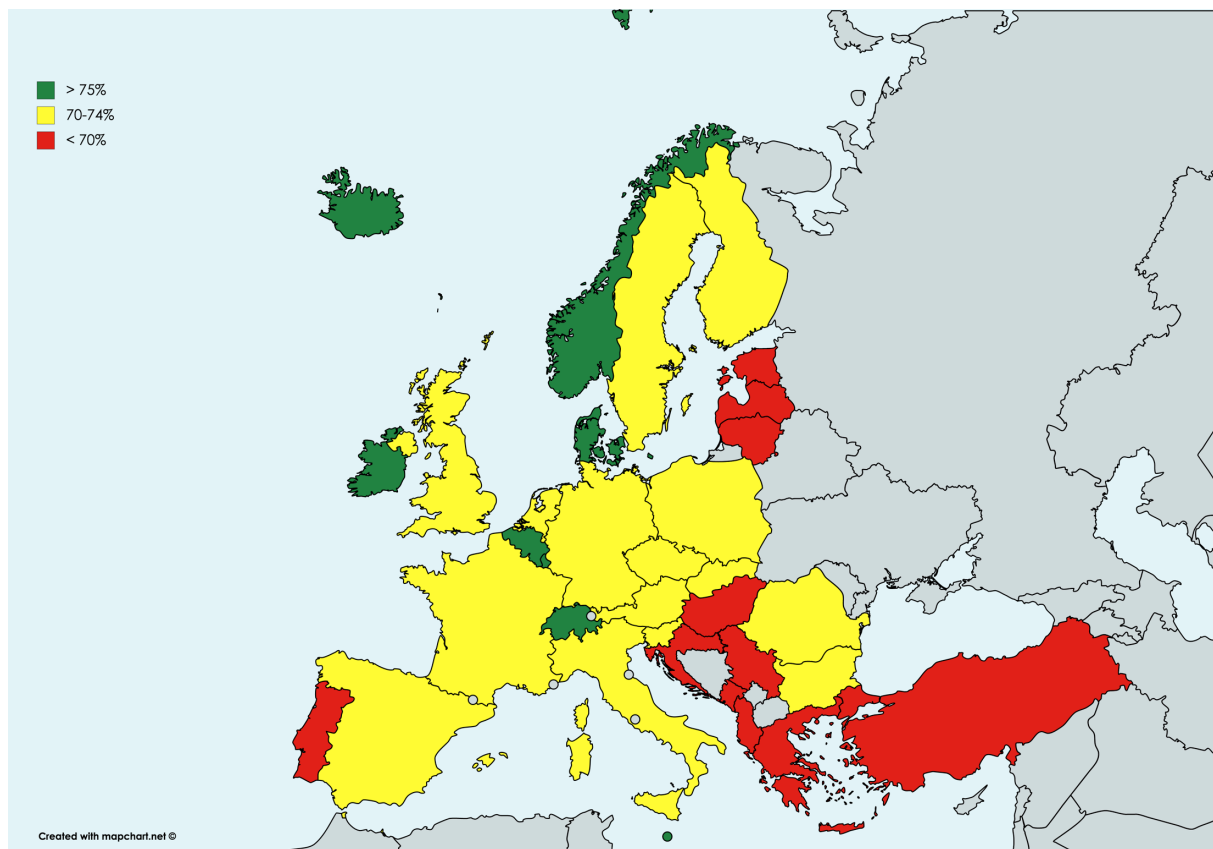


Source: European Values Survey - 2008

Except for Cyprus, the same ten countries score high on job satisfaction as well as happiness and work engagement. Dutch employees, who scored highest on work engagement rank together with Austria and Germany at place #10 on job satisfaction.

The lowest scoring countries are, in addition to Turkey, again located in Eastern (Hungary, Estonia, Latvia, Lithuania) and Southern Europe (Portugal, Greece), or on the Balkans (Croatia, Serbia, Albania, Montenegro). As usual, people from candidate countries score less favorable than those from the EU+ group. Figure 10 displays the proportion of employees that are satisfied with their jobs.

Figure 10: Percentage of satisfied employees

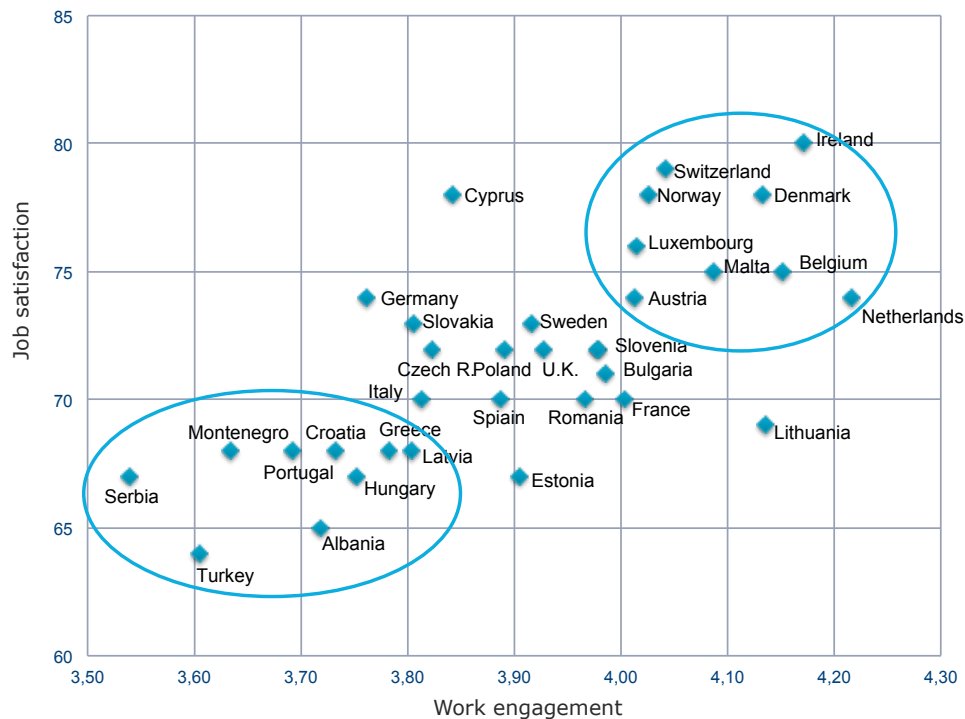


Source: European Values Survey - 2008

On conceptual grounds it can be expected that engagement and job satisfaction are positively related, also at country level. After all, both are positive work-related states that are related with the country's quality of work. Indeed, as noted above, engagement and job satisfaction are substantially related to each other. Figure 11 displays the scatterplot of the country's engagement (x-axis) and job satisfaction (y-axis) scores.

As can be seen, two clusters of countries emerge. In the upper-right corner countries are found with high levels of engagement *and* high levels of job satisfaction (Ireland, the Benelux countries, Switzerland, Norway, Malta, Denmark, Austria), whereas in the opposite left-lower corner countries are found with low levels of work engagement *and* job satisfaction (Turkey, Albania, Serbia, Montenegro, Greece, Portugal, Hungary, Croatia, Latvia).

Figure 11: The relationship between work engagement and job satisfaction



Source: European Values Survey - 2008 and 6th EWCS - 2015

Conclusion. A strong similarity exists between work engagement, happiness and job satisfaction in the sense that the same countries score either high or low on all three measures. This adds to the validity of the work engagement concept because it appears that in the same countries where employees feel engaged, they also feel happy and satisfied with their jobs. Generally speaking, scores from Northern and Northwestern Europe are most favorable, whereas those from Eastern and – to a somewhat lesser extend – Southern Europe are least favorable. Moreover, compared EU+ countries candidate countries score consistently lower on each of the three indicators of well-being.

To put this conclusion in a somewhat wider perspective: according to the [World Happiness Report 2016](#), six out of the ten happiest countries in the world also appear in figures 1-5 (Denmark, Switzerland, Norway, Finland, the Netherlands, Sweden). Moreover, this report found that people in the happiest countries, which are predominantly located in Northern and Northwestern Europe, have a higher per capita gross domestic product (GDP); live longer, healthier lives; have more social support; have freedom to make life choices; and experience less corruption, more generosity, and more equality of happiness. Below, we will investigate in how far this also holds for work engagement.

4. Work engagement and the economy

As can be seen from table 1 below, work engagement at national level is negatively related with the number of working hours per week. This means that in countries where employees work longer, engagement levels are *lower*.

In contrast, economic activity (Gross Domestic Product per capita) and productivity (Gross Domestic Product per capita and per hour) are strongly positively correlated with work engagement. Hence in more economic active and productive countries, work engagement is higher than in less active and productive countries.

The results that are displayed in table 1 can be explained by the fact that in counties where people work most hours (predominantly in Eastern and Southern Europe), economic activity is low because of poor productivity. Contrarily, in countries with high productivity, such as in Northern and Northwestern Europe, employees work less.

Table 1: Work engagement and the economy

<i>Economic indicator</i>	<i>Correlation</i>
• Working hours	-.53***
• Economic activity (GDP)	.49**
• Productivity	.51**

Note: *** $p < .001$; ** $p < .01$

A closer look at figure 12 reveals that rather than linear, the relationship between work engagement and economic activity (GDP) is curvilinear⁴. As can be seen from the figure, the relationship between work engagement and GDP is rather strong for countries with low GDP, which are predominantly associated countries and EU-countries located in Eastern and Southern Europe. However, the curve levels off when country's GDP increases. This is particularly true for Northwestern Europe and the Alpine region. Figure 12 also illustrates the exceptional positions of Germany (high GDP, low engagement), and Lithuania and Malta (low GDP, high engagement).

Also, as is displayed in figure 13, work engagement is curvilinear related with productivity, albeit that the logarithmic function is somewhat less clear-cut as in case of figure 12⁵. By and large the same countries as in figure 12 appear at the right upper corner, which are both productive and show high levels of work engagement, as well as at the left bottom corner, which are both low in productivity and work engagement.

⁴ $R^2 = .27$; $\beta = .51$; $p < .001$; the logarithmic function adds 3% variance to the linear function.

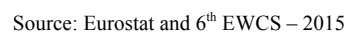
⁵ $R^2 = .22$; $\beta = .47$; $p < .01$; the logarithmic function adds 2% variance to the linear function.

The scatter plot displays the relationship between GDP (X-axis) and Work engagement (Y-axis) for 28 European countries. The X-axis ranges from 0 to 120,000, and the Y-axis ranges from 3.50 to 4.30. A blue regression line shows a positive correlation. Two red ellipses highlight specific clusters of countries:

- Cluster 1 (Lower GDP, Lower Work Engagement):** Includes countries like Serbia, Turkey, Montenegro, Albania, Hungary, Croatia, Portugal, Greece, Italy, Cyprus, Slovakia, Czech Republic, Latvia, Lithuania, Bulgaria, Romania, Slovenia, Estonia, Poland, Spain, and Malta.
- Cluster 2 (Higher GDP, Higher Work Engagement):** Includes countries like Netherlands, Belgium, Denmark, Ireland, France, Austria, Finland, UK, Sweden, Norway, Switzerland, and Luxembourg.

Country	GDP (approx.)	Work engagement (approx.)
Netherlands	45,000	4.22
Belgium	42,000	4.16
Denmark	52,000	4.14
Ireland	62,000	4.18
France	38,000	4.03
Austria	45,000	4.01
Finland	42,000	3.98
UK	45,000	3.93
Sweden	52,000	3.92
Norway	75,000	4.03
Switzerland	82,000	4.05
Luxembourg	102,000	4.02
Lithuania	15,000	4.14
Malta	22,000	4.09
Slovenia	20,000	3.98
Estonia	22,000	3.91
Poland	18,000	3.89
Spain	25,000	3.89
Cyprus	25,000	3.84
Czech Republic	22,000	3.83
Slovakia	25,000	3.82
Greece	22,000	3.79
Italy	28,000	3.82
Latvia	12,000	3.81
Bulgaria	8,000	3.99
Romania	10,000	3.97
Hungary	18,000	3.75
Croatia	15,000	3.74
Portugal	20,000	3.69
Albania	5,000	3.72
Montenegro	12,000	3.64
Turkey	10,000	3.61
Serbia	5,000	3.55
Germany	42,000	3.76

Figure 13: Work engagement and productivity (GDP/capita/hour)



15

Conclusion. Work engagement at country level is substantially and positively related to economic indicators such as economic activity and productivity. In more economically active and productive countries levels of work engagement are higher. Yet, this relationship is curvilinear instead of linear. This means that for countries with low levels of economic activity and productivity a relatively small increase is associated with a relatively large increase in work engagement. For countries with higher GDP and productivity the association with work engagement is less strong.

By definition, in productive countries employees work less to achieve a similar economic output as in less productive countries. This explains the findings that work hours and work engagement are *negatively* related, whilst economic activity and productivity are *positively* related with work engagement. For instance, in the Netherlands, – the most engaged country – employees work least (30.5 hours/week), whereas in Greece employees work most (42.2 hours/week) but feel least engaged. Not surprisingly, compared to Greece, productivity is about 33% higher in the Netherlands.

The economic findings of the current study agree with previous research that showed convincingly that happiness at country level is positively related to the nation's average income (Diener & Oishi, 2000) and GDP (Myers, 1992, pp. 34-36; Lykken, 1999, pp 9-12). And what is more, this relationship also appeared to be curvilinear with roughly the same countries that are both happy and economically active (Switzerland, Norway, Denmark, Luxemburg, the Netherlands) and countries, which are both less happy and less economically active (Portugal, Greece). The fact that these (curvilinear) relationships were replicated for work engagement in the current study adds to the validity of the findings.

5. Work engagement and governance

Relationships of work engagement with five governance indicators were studied, the country's: (1) level of corruption; (2) level of public integrity; (3) state of democracy; (4) gender inequality; and (5) income equality. Countries are well governed when corruption, gender inequality and income inequality are low, and integrity and democracy are high. See Appendix 2 for a detailed description of each of these indicators.

Table 2 displays an overview of the relationships of work engagement with each of these five governance indicators, which, when taken together, indicate the overall quality of a country's governance and institutions.

Work engagement is negatively related with corruption and positively related with integrity and the state of democracy. It should be noted, though, that these three indices are highly correlated ($.94 < r < .84$)⁶, meaning that the more democratic countries are, the higher their level of integrity, and the less corruption is perceived by its inhabitants.

⁶ Because high correlations between predictors indicate multicollinearity no regression analysis was carried out.

Table 2: Work engagement and governance

Governance indicator	Correlation
• Corruption (CPI)	-.64***
• Integrity (IPI)	.55***
• Democracy (DIX)	.45**
• Gender inequality (GII)	-.38*
• Income inequality (Gini)	-.02

Note: *** $p < .001$; ** $p < .01$; * $p < .05$

Please note that the corruption index is based on *subjective* perceptions, whereas the indices for integrity and democracy are based on *objective*, administrative and archival data. So obviously, at country level, subjective perceptions and objective indices of governance are closely related.

Work engagement is weakly and negatively related with the country's level of gender inequality: the more gender inequality, the less engaged the workforce. Finally, *no* significant association was found for income inequality. Hence, the level of work engagement is independent from the country's income distribution.

The relationships between work engagement and governance indicators are linear rather than curvilinear with the strongest relationship for corruption⁷, followed by integrity⁸, democracy⁹, and gender inequality¹⁰, respectively.

Conclusion. Work engagement at country level is related to governance; in well-governed democratic countries of integrity without corruption and gender inequality, higher levels of work engagement are observed than in less well-governed countries. Tellingly, income inequality doesn't seem to be related to work engagement.

The findings displayed in table 2 agree with studies on happiness and governance. For instance, Diener and Biswas-Diener (2008) observed that the happiest countries in the world are economically developed but also democratic, high in human rights, and high in equal rights for women. In another study Diener, Diener and Diener (2009) investigated almost 1.5 million people from fifty-five countries around the globe and found negative correlations ($-.48 < r < -.52$) with gross human rights violation (e.g., detention without charge), civil rights, (e.g., independent courts), and political rights (e.g., freedom of the press). Interestingly, these correlations are of comparable size as those displayed in table 2. The authors also included the same income inequality indicator as used in the current study (Gini) and likewise found *no* significant association with national levels of happiness.

Diener and Biswas-Diener (2008; p.132) concluded from their seminal study; '*...good societies are absolutely necessary for providing the supportive structure in which pursuing happiness can be successful. Living in a well-off, stable, and well-governed society helps happiness*'. The same seems to be true for work engagement.

⁷ $R^2 = .40$; $\beta = .64$; $p < .001$.

⁸ $R^2 = .31$; $\beta = .56$; $p < .001$.

⁹ $R^2 = .20$; $\beta = .45$; $p < .01$.

¹⁰ $R^2 = .15$; $\beta = -.38$; $p < .05$.

6. Work engagement and culture

Two sets of culture indicators were related to work engagement: (1) work values that reflect the importance and the centrality of work and leisure and (2) national culture. The country's work values were retrieved from the [European Values Study](#) that was carried out in 2008 and included representative, stratified samples of the adult population of eighteen years old or older of forty-seven European countries.

Four different work values were included:

- Importance of work: *'Work is important in my life'*
- Importance of leisure: *'Leisure time is important in my life'*
- Work as a duty: *'Work is a duty towards society'*
- Work centrality: *'Work should always comes first, even if it means less spare time'*

Data about national culture were retrieved from the seminal work of [Geert Hofstede](#), who identified six basic dimensions of national culture (power distance, individualism, masculinity, uncertainty avoidance, long-term orientation, and indulgence). For a more detailed description of each of these dimensions see Appendix 2.

As can be seen from table 3, only work centrality is significantly and negatively related to work engagement: in countries with an engaged workforce, work does not come first and does not play a central role in people's lives.

In a similar vein, the importance of work is also negatively – albeit not significantly – related to work engagement. Finally, the correlation with the importance of leisure is positive and just lacks significance ($p = .07$). So taken together, in countries that value leisure more than work, levels of work engagement are higher than in countries with a strong work ethic.

Table 3: Work engagement and work values

<i>Work value indicator</i>	<i>Correlation</i>
• Importance of work	- .26
• Importance of leisure	.31
• Work as duty	.14
• Work centrality	-. 48**

Note: ** $p < .01$

Table 4 displays the relationships between work engagement and the Hofstede's six dimensions of national culture.

Table 4: Work engagement and national culture

<i>Culture indicator</i>	<i>Correlation</i>
• Power distance	-.48**
• Individualism	.50**
• Masculinity	-.26
• Uncertainty avoidance	-.37*
• Long-term orientation	.04
• Indulgence	.49**

Note: *** $p < .001$; ** $p < .01$; * $p < .05$

Individualism and indulgence are positively, and power distance and – to a somewhat lesser degree – uncertainty avoidance are negatively associated with work engagement. This means that employees feel more engaged in countries with loosely-knit social frameworks in which individuals are expected to take care of only themselves and their immediate families (individualism), and in countries where people are enjoying life and having fun (indulgence). In contrast, work engagement is low in countries where people accept a hierarchical order in which everybody has a place and which needs no further justification (power distance), as well as in countries that maintain rigid codes of belief and behavior and are intolerant of unorthodox behavior and ideas (uncertainty avoidance).

A regression analysis that includes all significant culture indicators as predictors of work engagement reveals that only individualism contributes to the prediction of work engagement¹¹. This means that individualism is the most important cultural dimension that is related to work engagement at country-level. Other dimensions such as indulgence, power distance and uncertainty avoidance are also related to work engagement, albeit not independently from individualism.

Conclusion. In addition to work centrality, three of the five national culture dimensions are significantly related to work engagement: individualism, masculinity and power distance. However, when all culture dimensions are simultaneously analyzed, only individualism appears to have a unique impact on work engagement.

Using data from fifty-five countries, Arrindell et al., (1997) carried out a similar regression analysis to predict subjective well-being using the original four culture dimensions of Hofstede (individualism, masculinity, uncertainty avoidance, and power distance). Like in the current study, individualism emerged as the strongest predictor. In addition, power distance and uncertainty avoidance predicted subjective well-being too. Interestingly, these two dimensions are also related significantly to work engagement in the current sample. Hence, the results of the current study seem to agree with the findings of Arrindell and his colleagues that were obtained two decades ago.

¹¹ $R^2 = .25$; $\beta = .50$; $p < .01$

7. Wrap-up

In the previous sections, the most important economic, governance, and cultural indicators that are related to work engagement have been identified. By way of final summary, these indicators from different domains are jointly analyzed in order to identify the most important overall indicator(s). For the economic domain productivity is selected because it comprises economic activity per capita per unit and thus includes both other economic indicators (GDP and work hours). For the domain of governance a combined index is used of corruption, integrity, democracy, and gender inequality¹². Finally for culture, work centrality and individualism were selected, the latter being the only cultural dimension that is uniquely related with work engagement.

From a regression analysis which included these four predictors (productivity, governance-index, work centrality, and individualism) productivity emerged as the only indicator that is significantly related to work engagement; the more productive a country, the higher the level of engagement of its workforce (and vice versa). This association is independent from the nation's governance, work centrality, and individualistic culture. Productivity explains 25% of the variance in work engagement ($\beta = .50, p < .01$). So it seems that, after all, *'it is the economy, stupid'*.

8. Conclusions

The current study set out to uncover the relationships between work engagement at country level on the one hand, and a variety of national economic, governance, and cultural indicators on the other hand. The study is unique because for the first time a valid and reliable work engagement questionnaire is used (the UWES-3; Schaufeli et al., 2017) that has been administered to thirty-five random, national samples across Europe. In addition, for each country various economic, governance, and cultural indicators from other, independent sources have been included in the study. The most important findings can be summarized as follows:

1. *Work engagement differs systematically between European countries.*
2. *In countries where employees are engaged, people also feel happy and satisfied with their jobs.*
3. *The Netherlands is the most engaged country; one in three (33%) employees feels engaged and almost one in five (19%) feels highly engaged. For the lowest scoring country – Germany – these rates are 11% and 4%, respectively. In the EU+ countries on average 21% feels engaged and 11% highly engaged.*

¹² In fact, this index is constituted by the linear combination (factor score) of the country's scores on each of these four indicators. A factor-analysis revealed that these indicators load on one common factor that explains 84% of the variance on which each of the indicators load .80 or higher.

4. *By and large, the same countries appear to have an engaged, satisfied and also happy population. These are the Benelux countries, Ireland, Norway, and Denmark (Northwestern Europe) and the Alpine countries (Austria and Switzerland). The opposite – low engagement, low job satisfaction, low happiness – is found in Southern Europe (Portugal and Greece) on the Balkans (Montenegro, Serbia, Croatia, Albania), and in Turkey.*
5. *In economically active and productive countries where people work less, engagement is high. Germany seems to be an exception to this rule. This country has an active and productive economy, but yet its workforce is little engaged.*
6. *The relationship of engagement with economic activity and productivity is curvilinear with strong associations at lower levels and weak associations at higher levels (see figures 12 and 13).*
7. *The country's level of work engagement is related with governance; in well-governed countries with a strong democracy, low corruption and gender inequality, and high levels of integrity the workforce is engaged.*
8. *Work engagement is higher in countries with lower work centrality that value leisure over work.*
9. *Work engagement is higher in individualistic countries with less power distance and uncertainty avoidance where the gratification of human needs is valued. Individualism stands out as the most significant culture dimension that is related to work engagement.*
10. *Overall, when taken all relevant indicators into consideration, productivity emerges as single most important factor that is associated with the nation's level of work engagement.*

Unfortunately, the results of the current study cannot be compared with other investigations because no other cross-national studies on work engagement exist. However, particularly the literature on cross-national differences in happiness and subjective well-being (often these terms are used interchangeably) is abundant.

Although a thorough review of this type research is beyond the scope of this paper, it seems that – at least at first glance – the findings reported here corroborate previous findings. For instance, (1) happiness is curvilinear related to the nation's GDP (Myers, 1992; Lykken, 1999); (2) happiness is high in well-governed countries where people have trust in institutions (Diener, Diener & Diener, 2009); (3) subjective well-being is highest in individualistic countries that are low in power distance and uncertainty avoidance (Arrindell et al., 1997). These converging results add to the validity of the findings of the current study on work engagement. It seems that, overall, similar relationships with economic, societal, and cultural indicators are found for engagement in the *working* population as for happiness in the *general* population.

However, some caution is also warranted when interpreting the results of the current study. First, using cut-off scores for work engagement, happiness and job satisfaction as is done in figures 4, 6, 8 and 10 is not without problems. Although it is very popular to identify 'engaged' employees, using cut-off scores is – by definition – arbitrary because no objective criteria exist. In this respect, the question '*Who is engaged?*' is similar to the

question ‘*Who is tall?*’ Clearly no objective criterion for tallness exists. Is a person of 185 cm., 190 cm., or 200 cm. ‘tall’? Ultimately the answer depends on an arbitrary choice.

Second, by classifying countries based on their engagement scores information is lost. For instance, with an engagement score of 4.0 France counts to the highly engaged countries, and Bulgaria with a score of 3.99 to the moderately engaged countries (see figures 1 and 2). Yet, the difference in engagement between both countries is not significant. So there is a price to be paid for classifying countries. This means that classifications presented above should not be taken too literally. Or put differently, rather than focusing on one particular figure and interpreting it in detail one should focus on the *pattern* of results across *multiple* figures.

Third, since *associations* between work engagement and economic, governance, and cultural indicators have been studied no causal order can be established; correlation does not imply causation. For instance, the fact that work engagement is associated with economic activity can either mean that higher levels of work engagement drive economic activity or, alternatively, that economic activity through the prosperity that it generates promotes engagement. Based on the current study, one cannot determine which causal interpretation is correct.

Fourth, the sample is rather small and consists of only thirty-five countries. Although the current study covers almost the entire European continent, this relative small sample causes problems because a lack of statistical power. This means that in smaller samples, statistical significant results are less likely to be found. However, aggregating measures at country level counterbalances this lack of statistical power to some extent since it leads to higher correlations because of greater reliability of aggregated measures¹³.

Last but not least, when interpreting the results of the current study one should be aware of the ecological fallacy. This is a logical fallacy in the interpretation of statistical data where inferences about the nature of individuals are deduced from the group to which those individuals belong. Although this fallacy applies to all results, it is particularly important to keep in mind when interpreting counter-intuitive results. For instance, a negative relationship between work engagement and working hours has been observed in the current study, indicating that in *countries* where people work less, engagement levels are higher. However, it would be wrong – the ecological fallacy – to infer from this that *individual* employees who work less are more engaged. Quite to the contrary, they work *more* hours (Schaufeli, Taris & Van Rhenen, 2008). The same applies for work centrality. The current study shows that in *countries* where work plays a less central role the workforce is more engaged. However, at the *individual* level work centrality is positively related with employee engagement (Bal & Kooij, 2011).

In essence, the ecological fallacy points out that economic, governance, and cultural processes at country level differ fundamentally from psychological processes at individual level. Despite the danger of this fallacy, the current study illustrates that work engagement may not only be studied at the individual level, but also at the national level. In other words, work engagement should not only be studied as an individual, psychological state, but also as a collective phenomenon with economic and socio-cultural ramifications at national level.

¹³ In addition to the Pearson’s product-moment correlations that are reported in this paper, also Spearman’s rank-order correlations have been computed that are often used in smaller samples. Results were virtually identical, which lends further credit to the obtained findings.

References¹⁴

- Arrindell, W.A., Hatzchristou, C., Wensink, J., Rosenberg, E., Van Twillert, B., Stedema, J., & Meijer, D. (1997). Dimensions of national culture as predictors of cross-national differences in subjective well-being. *Personality and Individual Differences*, 23, 37-55.
- Alarcon, G. M. & Lyons, J. B. (2011). The relationship of engagement and job satisfaction in working samples. *The Journal of Psychology*, 145, 463–80.
- Bal, P. M., & Kooij, D. (2011). The relations between work centrality, psychological contracts, and job attitudes: The influence of age. *European Journal of Work and Organizational Psychology*, 20, 497-523.
- Christian, M. S., Garza, A. S., & Slaughter, J. E. (2011). Work Engagement: a quantitative review and test of its relations with task and contextual performance. *Personnel Psychology*, 64, 89–136.
- Diener, E. & Biswas-Diener, R. (2008). *Happiness: Unlocking the mysteries of psychological wealth*. Malden, MA: Blackwell.
- Diener, E., Diener, M., & Diener, C. (2009). Factors predicting the subjective well-being of nations (pp. 43-70). In E. Diener (Ed.), *Culture and well-being*. New York: Springer.
- Diener, E. & Oishi, S. (2000). Money and happiness: Income and subjective well-being across nations; In E. Diener & E.M. Shuh (Eds.), *Culture and subjective well-being*. Cambridge, MA: MIT Press.
- Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions and organizations across nations* (2nd Ed.), Thousand Oaks CA: Sage Publications.
- Lykken, D. (1999). *Happiness: The nature and nurture of joy and contentment*. New York: St. Maritn's Griffin.
- Myers, G.G. (1992). *The pursuit of happiness*. New York: Avon Books.
- Salanova, M., del Libano, M., Llorens, S., & Schaufeli, W.B. (2014). Engaged, workaholic, burned-out or just 9-to-5? Toward a typology of employee well-being. *Stress & Health* 30, 71-81.
- Schaufeli, W.B. (2012). The measurement of work engagement. In R.R. Sinclair, M. Wang & L.E. Tetrick (Eds.), *Research methods in occupational health psychology: Measurement, design, and data analysis* (pp. 138-153). New York: Routledge.
- Schaufeli, W.B. (2014). What is engagement?. In C. Truss, R. Delbridge, K. Alfes, A. Shantz, & E. Soane. (Eds.). *Employee engagement in theory and practice* (pp. 15-35). London: Routledge.
- Schaufeli, W.B., Bakker, A.B. & Salanova, M. (2006). The measurement of work engagement with a short questionnaire: A cross-national study. *Educational and Psychological Measurement*, 66, 701-716.
- Schaufeli, W.B., Salanova, M., González-Romá, V., & Bakker, A.B. (2002). The measurement of engagement and burnout: A confirmatory factor-analytic approach. *Journal of Happiness Studies*, 3, 71–92.
- Schaufeli, W.B., Shimazu, A., Hakanen, J., Salanova, M., & De Witte, H. (2017). An ultra-short measure for work engagement: The UWES-3. Validation across five countries. *European Journal of Psychological Assessment*.
- Schaufeli, W.B., Taris, T.W., & Van Rhenen, W. (2008). Workaholism, burnout and engagement Three of a kind or three different kinds of employee well-being. *Applied Psychology: An International Review*, 57, 173-203.

¹⁴ The publications that have been (co-)authored by Schaufeli can be downloaded from www.wilmarschaufeli.nl.

Appendix 1

Sample sizes and work engagement - 6th EWCS-2015

<i>EU-countries</i>	<i>N</i>	<i>Mean</i>	<i>Standard deviation</i>
Austria	1,028	4.01	.66
Belgium	2,587	4.15	.67
Bulgaria	1,064	3.99	.75
Croatia	1,012	3.73	.77
Cyprus	1,003	3.84	.67
Czech Republic	1,002	3.82	.69
Denmark	1,002	4.13	.53
Estonia	1,015	3.90	.63
Finland	1,001	3.98	.57
France	1,527	4.00	.67
Germany	2,093	3.76	.66
Greece	1,007	3.78	.70
Hungary	1,023	3.75	.85
Ireland	1,057	4.17	.64
Italy	1,402	3.81	.72
Latvia	1,004	3.80	.68
Lithuania	1,004	4.14	.62
Luxembourg	1,003	4.01	.79
Malta	1,004	4.09	.70
The Netherlands	1,028	4.22	.64
Poland	1,203	3.89	.76
Portugal	1,037	3.69	.75
Romania	1,063	3.97	.66
Slovakia	1,000	3.80	.72
Slovenia	1,607	3.98	.74
Spain	3,364	3.89	.81
Sweden	1,002	3.92	.61
United Kingdom	1,623	3.93	.71
<i>Candidate countries</i>		3.93	.75
Albania	1,002	3.72	.72
Macedonia	1,011	4.15	.78
Montenegro	1,005	3.63	.87
Serbia	1,033	3.54	.90
Turkey	2,000	3.61	.93
<i>Associated countries</i>		3.73	.84
Switzerland	1,006	4.04	.67
Norway	1,028	4.03	.56
Total sample	43,850	4.04	.62