

## Chapter 6

# Correlates of mental health and psychological well-being of European youth: evidence from the European Quality of Life Survey

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*Haridhan Goswami and Gary Pollock*

### **INTRODUCTION**

**Y**outh well-being is fundamental to that of society as a whole. Promoting youth well-being is not only vital in order for young people during their years of youth, but also as a firm basis for their future well-being as adults (Rees et al. 2012). How young people fare through critical points of development affects their quality of life, their productivity, welfare dependency and the transmission of their later-life outcomes to their own children (Richardson 2012).

In recent years, youth well-being has become a priority for the European political agenda. As part of European co-operation on social protection and social inclusion, the EU has expressed strong political commitment to promoting well-being among young people, as is reflected in (among other initiatives) the establishment of an EU Task Force on Child Poverty and Child Well-Being in 2007 (TARKI Social Research Institute 2010).

The EU Task Force went on in 2008 to produce a report (EU Task Force 2008) spelling out recommendations for analysing, monitoring and assessing child poverty and well-being at EU, national and sub-national levels. The Task Force report, together with its recommendations, was formally endorsed by the Social Protection Committee (SPC) and the European Commission and is now part of the EU *acquis* (Social Protection Committee 2012).

Although EU co-operation on social issues (in particular through the Social Open Method of Coordination) has provided the main framework for addressing child poverty and child well-being in an EU context, many other policies have touched upon the issue: education and training policies (in particular in relation to early school leaving, early childhood education); the EU Agenda for the Rights of the Child; reconciliation, work and family policy (among others in the framework of the European Alliance for Families); health policy; and cohesion policy (through the development of childcare and/or housing infrastructures and support for deinstitutionalisation) (Social Protection Committee 2012).

The Europe 2020 strategy gives a new impetus to efforts addressing child poverty and social exclusion in the EU. A number of member states have set specific targets or sub-targets relating to child poverty/social exclusion as their contribution to the headline European target to reduce the number of people at risk of poverty and social exclusion by at least 20 million by 2020 (Council of the European Union 2012). Therefore, Europe 2020 has given priority to fighting poverty and social exclusion and improving the well-being of children and young people.

In the context of these European policy developments, one of the biggest challenges for the EU is to improve youth well-being using robust empirical evidence. Fortunately, there are a number of pan-European surveys which contain invaluable data on well-being. Researchers across Europe are now analysing these data and publishing results. These findings provide valuable insights into the overall state of well-being and allow the EU to map out its different member states and regions in relation to various domains of well-being. In addition, these studies have collected data on a number of factors which are commonly believed to be associated with well-being. Although most of these studies identify age as an important factor in well-being, they appear to be reluctant to accept that young people's well-being is distinct from that of the general adult population. In this regard, Fattore et al. (2007) argue that the concepts of well-being developed for adults are not directly transferable to the measurement of youth well-being. Moreover, Bradshaw (2009) argues that the limited number of well-being domains prepared for adults do not provide the full picture on the state of well-being for young people.

This paradigm shift of research on youth well-being is reinforced by the socially structured transitions that young people face on their journey to adulthood, trajectories that themselves have increasingly become non-linear (Pollock 2008). Furthermore, Croxford et al. (2006) argue that for over a decade, we have observed a transformation in the nature of young people's transitions in the wake of changes in the labour market, in compulsory and post-compulsory education and in higher education. Today, the EU is experiencing major economic, environmental, political and social changes that directly affect children and young people. Children in the EU face a higher risk of relative poverty than the population as a whole (20% for children aged 0 to 15 and 21% for those aged 16 to 24, compared to 16% for adults) (Commission of the European Communities 2006). Moreover, the percentage of children living in poverty or social exclusion is on the rise in a number of member states as a result of the impact of the economic crisis (Council of the European Union 2012). Demographic changes, for example higher life expectancy and lower fertility rates, together with changing gender roles in relation to childcare and employment are factors that

influence the family context in which children grow up. New challenges arise due to the higher mobility demands of the labour market, which may complicate and reduce the possibility and/or frequency of intergenerational familial contacts.

New family structures have arisen as a result of an increase in divorce rates: single-parent families, step-families and patchwork families. In addition, more and more children are growing up in migrant families throughout European countries (Perrig-Chiello 2009). In order to understand how these factors (and others) are linked to youth well-being, further analysis focusing specially on subgroups of youth is essential. This paper therefore focuses on the well-being of European youth and aims to identify the demographic and psychosocial factors which are related to their well-being. These findings are a useful starting point in identifying specific Europe-wide similarities and differences and as such should help to inform the policy processes which aim to improve youth well-being across the whole of Europe.

## **WELL-BEING: PSYCHOLOGICAL AND MENTAL HEALTH ASPECTS**

Despite substantial academic and policy interest in well-being over the decades, there is no universally accepted definition of the concept. In academic literature, it is used as an overarching concept to refer to the quality of life of people in society (Rees et al. 2010).

In defining the concept of well-being, a distinction is also made between the hedonic and eudaemonic approaches (Ryan and Deci 2001). Scholars influenced by the hedonic approach view well-being in terms of subjective happiness and the experience of pleasure versus displeasure broadly construed to include all judgments about the good or bad elements of life. Although there are many ways to evaluate the pleasure/pain continuum in human experience, most research within the new hedonic psychology has used assessment of subjective well-being (SWB) (Diener and Lucas 1999). SWB consists of three components: life satisfaction, the presence of positive mood and the absence of negative mood, together often summarised as happiness.

On the other hand, the eudaemonic approach maintains that not all desires – not all outcomes that a person might value – yield well-being when achieved (Ryan and Deci 2001). It focuses on meaning and self-realisation and defines well-being in terms of the degree to which a person is fully functioning. Ryff and Singer (1998, 2000) have explored the question of well-being in the context of developing a lifespan theory of human flourishing. Ryff and Keyes (1995) spoke of psychological well-being (PWB) as distinct from SWB and presented a multidimensional approach to the measurement of PWB that taps six distinct aspects of human actualisation: autonomy, personal growth, self-acceptance, life purpose, mastery and positive relatedness.

Self-determination theory (SDT) (Ryan and Deci 2000) is another perspective that has both embraced the concept of eudaemonia, or self-realisation, as a central definitional aspect of well-being and attempted to specify both what it means to realise oneself and how that can be accomplished. Specifically, SDT posits three basic psychological needs – autonomy, competence, and relatedness – and theorises that fulfilment of

these needs is essential for psychological growth (e.g. intrinsic motivation), integrity (e.g. internalisation and assimilation of cultural practices) and well-being (e.g. life satisfaction and psychological or mental health) (Ryan and Deci 2001).

If we look at the progress that has been made so far on well-being research following these two paradigms, it appears that research on youth SWB (hedonic approach) is more dominant than research on youth PWB (eudaemonic approach) (Rees et al. 2013). Large-scale surveys less frequently include questions linked to this approach (Eurofound 2013). Rees et al. (2013) argues that the reason for this might be linked to the fact that in many cases traditional measures of PWB are not suitable for young people. This paper addresses this research gap on youth well-being by identifying the demographic and psychosocial factors which are associated with youth mental health and their PWB.

## DATA AND METHODS

Data for this paper were obtained from the third round of the European Quality of Life Survey (EQLS), which is run every four years by the European Foundation for the Improvement of Living and Working Conditions. The third wave of the EQLS, which was carried out in 2011 and 2012, included people aged 18 years and older from 34 countries (EU-27 plus Croatia, Iceland, Montenegro, “the former Yugoslav Republic of Macedonia”, Serbia, Turkey and Kosovo<sup>1</sup>). In all countries, data were collected via face-to-face interviews and respondents were selected by multistage random sampling. The overall response rate was 41%. For a more detailed description of the survey, see Eurofound (2012). This paper uses data from just under 5 000 young people aged 18 to 25 who took part in the third wave of the survey.

## MEASURES

### Dependent variables

#### Psychological well-being

The EQLS included three items, focusing on feeling worthwhile, autonomy and optimism. These items were *a.* “I generally feel that what I do in life is worthwhile”, *b.* “I feel I am free to decide how to live my life” and *c.* “I am optimistic about the future”. Respondents replied using a five-point scale from “Strongly agree” (score = 4) to “Strongly disagree” (score = 0). A principal component analysis with orthogonal (varimax) rotation extracts one factor (total initial eigenvalue 1.84) explaining 61.33% of the total variance. Therefore, these items measure a single construct of “PWB”. Internal consistency analysis of these three items obtains a Cronbach alpha of 0.68, which indicates moderate reliability of the scale. Scores for these items are added to create a summated scale ranging from 0 to 12, a higher score indicating a greater level of PWB.

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1. All reference to Kosovo, whether to the territory, institutions or population, in this text shall be understood in full compliance with United Nations Security Council Resolution 1244 and without prejudice to the status of Kosovo.

## Mental health

Mental health was measured using five items that the World Health Organization originally developed (Bech 1998). Respondents were asked how close they felt to each of these statements over the last two weeks. The statements were: *a.* "I have felt calm and relaxed", *b.* "I have felt cheerful and in good spirits", *c.* "I have felt active and vigorous", *d.* "I woke up feeling fresh and rested" and *e.* "My daily life has been filled with things that interest me". Responses were recoded as "All of the time" (score = 5), "Most of the time" (score = 4), "More than half of the time" (score = 3), "Less than half of the time" (score = 2), "Some of the time" (score = 1) or "At no time" (score = 0). The results of a factor analysis suggest that these items load under one factor (eigenvalue of 3.18 explaining 63.69% variance) indicating a unidimensional nature of the construct of "mental health". A Cronbach alpha value of 0.85 suggests strong reliability of these items for a scale. Scores for each item were added to create a summated scale of "mental health" ranging from 0 to 25, where a higher score indicates greater quality of mental health.

## Independent variables

### Demographics

In the survey, respondents were asked to self-report their age and from this the youth segment (18 to 25) was identified for this paper. Using equivalised income, four income quartiles were derived each reflecting a particular household income group (1 signifying the lowest and 4 signifying the highest). The lowest income quartile is used as a reference category. In order to measure household income, respondents were also asked to compare their own household financial situation with most people in their country and position themselves among the following categories: "Better", "Same", or "Worse". "Better" is used as a reference category. In order to measure household solvency, respondents were asked to describe the level of difficulty the household faced in making ends meet. Responses were grouped into one of two categories: "Easily" or "With difficulty". In order to measure respondents' expectations on future changes in household finances, they were asked whether their financial situation would be "Better", "Worse" or the "Same" in the next 12 months. Citizenship status was measured by asking respondents whether or not they were a citizen of the country they lived in. Respondents defined themselves as being "Disabled" or "Not disabled". To measure urban density, respondents described their area of living as being one of four response options: "Open country", "Village", "Medium-sized town" or "City". The European countries that took part in the survey were grouped into one of five categories based on their geographical position: Nordic (reference category), UK and Ireland, central Europe, Mediterranean and eastern Europe.

### Psychosocial factors

#### Accommodation quality

To measure accommodation quality, respondents were asked whether they had any of the following problems with their accommodation: (a) shortage of space; (b) rot in the windows, doors or floors; (c) damp or leaks in the walls or roof; (d) lack

of an indoor flushing toilet; (e) lack of a bath or shower; or (f) lack of a place to sit outside (e.g. garden, balcony, terrace). Respondents who said “No” to any of these six problems were counted and this produced an index ranging from 0 to 6 (higher scores indicating a better quality of accommodation).

### Support network

The EQLS asked respondents from whom they got support in the following five situations: (1) help around the house when ill; (2) advice about a serious personal or family matter; (3) help when looking for a job; (4) feeling a bit depressed and wanting someone to talk to; and (5) an urgent need to raise money in an emergency. Respondents chose answers from four options: family or relative; friend or neighbour; a service provider; or none. Respondents who said family or relative, friend or neighbour, or a service provider were counted, which resulted in an index ranging from 0 to 5 (higher scores indicating a greater support network).

### Social tension between old and young people

In order to measure social tension, respondents were asked how great they thought the tension was between old and young people in their own country. Responses were collected on a three-point scale and were scored as follows: “No tension” (score = 0); “Some tension” (score = 1); or “A lot of tension” (score = 2).

### Interaction with friends and neighbours

To measure interaction, respondents were asked how often they had contact with their friends or neighbours. Responses were collected on a five-point scale and were scored as follows: “Every day or almost every day” (score = 4); “At least once a week” (score = 3); “One to three times a month” (score = 2); “Less often” (score = 1); and “Never” (score = 0).

### Caring responsibility

To measure the degree of caring responsibility that young people have, they were asked how often they were involved (outside of their work) in caring for elderly or disabled relatives. Answers were collected on a five-point scale and were scored as follows: “Every day” (score = 4); “Several days a week” (score = 3); “One or twice a week” (score = 2); “Less often” (score = 1); “Never” (score = 0). Higher scores indicate a greater caring role for young people.

### Satisfaction with the economic situation of the country

To measure satisfaction with a country’s economic situation, respondents were asked to score on a 10-point rating scale ranging from 1 (very dissatisfied) to 10 (very satisfied).

### Public service facilities scale

To assess public service facilities, respondents were asked to describe their level of difficulty in getting access to the following services: (a) postal services; (b) banking;

(c) public transport; (d) cinema, theatre or cultural centre; and (e) recreational or green areas. The level of difficulty for each service was measured on a four-point scale (from “very easy” to “with great difficulty”). A principal component analysis with orthogonal (varimax) rotation extracts one factor (total initial eigenvalue of 2.83) explaining 56.65% of the total variance. Therefore, these items are taken to measure a single construct of “public service facilities”. Internal consistency analysis of these five items obtains a Cronbach alpha of 0.81, which indicates a very high consistency of the scale. A summated scale is developed by adding the scores. The scale ranges from 5 to 20; a higher score indicates a higher quality of public service facilities.

### Quality of neighbourhood

Respondents were asked to report the degree of problems (major, moderate or no problems) of the following six aspects in their immediate neighbourhood: (a) noise; (b) air quality; (c) quality of drinking water; (d) crime, violence or vandalism; (e) litter or rubbish on the street; and (f) traffic congestion. The results of a factor analysis suggest that these items load under one factor (eigenvalue of 3.04 explaining 50.63% variance) indicating a unidimensional nature of the construct of “neighbourhood quality”. A Cronbach alpha value of 0.80 suggests very strong reliability of these items for a scale. Scores for each item were added to create a summated scale on the “quality of neighbourhood”, ranging from 6 to 18 where higher scores indicate a higher quality of neighbourhood.

### Religiosity

To measure the level of religiosity, young people were asked how often they attended religious services (not including weddings, funerals or christenings). They provided their responses on a five-point scale ranging from 0 (“Never”) to 4 (“Every day or almost every day”).

### Physical activity

A five-point scale ranging from 0 (“Never”) to 4 (“Every day or almost every day”) was developed to measure the amount of physical activity undertaken by young people.

## **Data analysis**

As can be seen above, factor analysis along with the Cronbach alpha was used to evaluate the psychometric properties of scales. The univariate analysis consisted of percentages as well as mean and standard deviation. For bivariate analysis the t-test, ANOVA and Pearson correlation coefficients were calculated.

## **Results**

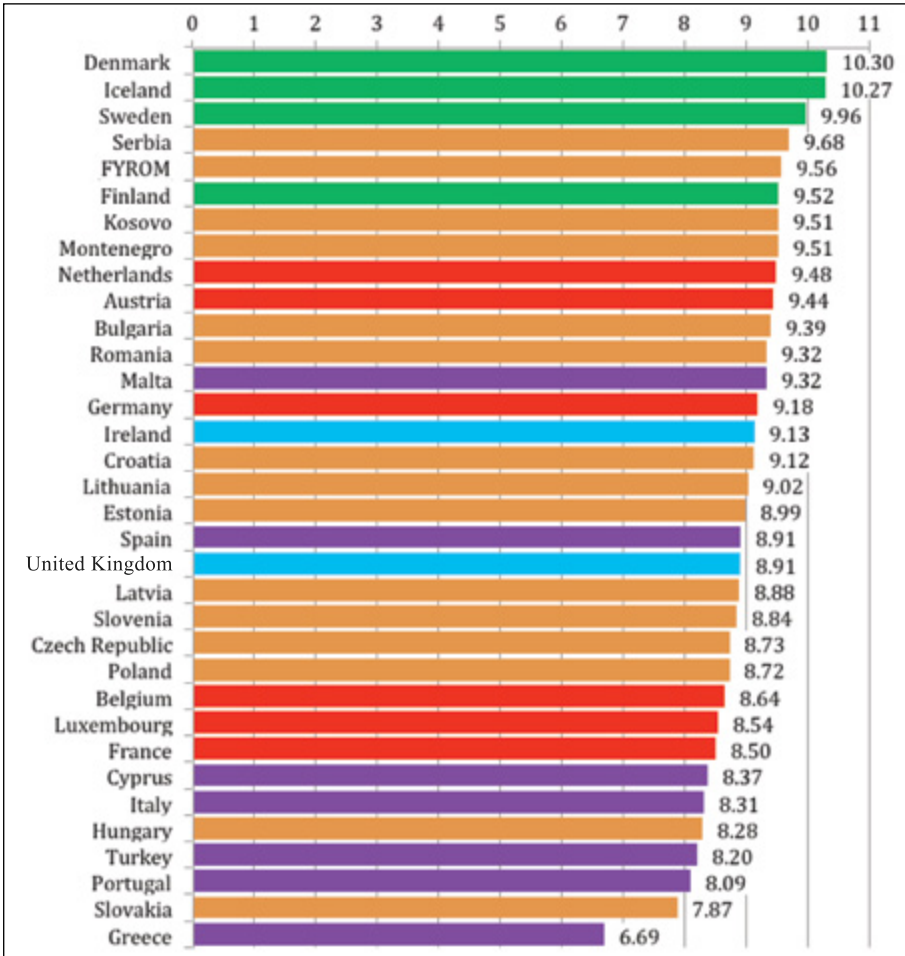
### **Background characteristics of the respondents**

The average age of the young people aged between 18 and 25 analysed here was 21.61 (standard deviation = 2.21). Females (53%) slightly outnumbered males. Slightly less than half (46%) and almost one quarter of them were in education and employment respectively. Almost one in six thought their household income was worse

than their fellow citizens. Slightly less than half of the respondents (46%) described how they had difficulty making ends meet with their household income. Almost all of the respondents (96%) were citizens of the country they lived in. Nearly one in 10 reported having a disability. Of those who responded, 61% lived in a medium-sized town or city and the rest lived in a village or open country.

### Youth psychological well-being by European country

Figure 1: Mean score on the PWB scale by European country



The average score for PWB for all young people in the survey was 8.98 (out of a maximum of 12). The results in Figure 1 suggest that this average varies widely across the countries surveyed. The bars in both Figures 1 and 2 are colour-coded in relation to the geographic region used as a covariate in tables 1 and 3 below (Nordic, central Europe, Mediterranean, UK and Ireland). Young people from Denmark, Iceland and Sweden reported the three highest average scores on the PWB scale, whereas their counterparts from Greece, Slovakia and Portugal scored the three lowest averages.



Indeed, there is a suggestion that there is a strong regional dimension to PWB with Nordic countries tending to score highly and Mediterranean countries the opposite.

### The association of demographic characteristics with youth PWB

Out of the 11 demographic characteristics in Table 1, nine have a statistically significant association with youth PWB. Although the degree of association was low, “older” young people reported having significantly lower PWB. Young people in education reported having higher PWB compared to those in employment. However, those unemployed reported significantly lower PWB than employed youth. Household income plays a significant role as the young people living in the highest quartile reported having higher PWB compared to those living in the lowest household income quartile.

PWB appeared to be significantly lower for those young people who felt that their household financial situation was worse than those citizens they felt were doing better. In this regard, young people who reported that their household made ends meet “with difficulty” had significantly lower PWB. Future financial concerns appear to play a key role in youth PWB because those who expected their household finances to get worse reported significantly lower PWB. Young people with a disability reported having significantly lower PWB. Moreover, compared to those young people living in the Nordic region, the PWB of young people living in all other regions in Europe (UK and Ireland, Mediterranean, central Europe and eastern Europe) was significantly lower. Gender and citizenship status did not show a significant association with PWB.

**Table 1: Demographic characteristics and youth PWB**

| Demographic characteristics (comparison group) | Number | Mean | Test statistic | Sig., two-tailed |
|--|--------|------|----------------|------------------|
| <b>Age</b>                                     | 4710   | 8.98 | $r = -0.04$    | 0.006            |
| <b>Gender</b>                                  |        |      | $t = 0.571$    | 0.568            |
| Male   | 2201   | 9.00 |                |                  |
| Female   | 2509   | 8.97 |                |                  |
| <b>Employment status (Employed)</b>            |        |      | $F=28.37$      | 0.000            |
| Employed                                       | 1609   | 8.97 |                | N/A              |
| Unemployed                                     | 627    | 8.26 |                | 0.000            |
| Student  | 2173   | 9.25 |                | 0.004            |
| Family care                                    | 215    | 8.58 |                | 0.166            |
| Other  | 86     | 8.67 |                | 0.811            |
| <b>Household income (Lowest quartile)</b>      |        |      | $F=5.42$       | 0.001            |
| Lowest quartile                                | 956    | 8.75 |                | N/A              |
| Q2   | 703    | 8.99 |                | 0.192            |
| Q3   | 738    | 9.03 |                | 0.087            |
| Highest quartile                               | 650    | 9.19 |                | 0.002            |

| Demographic characteristics<br>(comparison group)                    | Number | Mean  | Test<br>statistic | Sig.,<br>two-tailed |
|--|--------|-------|-------------------|---------------------|
| <b>Perceived income compared to others (Better)</b>                  |        |       | F=63.57           | 0.000               |
| Better   | 1184   | 9.39  |                   | N/A                 |
| Same   | 2688   | 8.99  |                   | 0.000               |
| Worse  | 735    | 8.25  |                   | 0.000               |
| <b>Ability of household to make ends meet</b>                        |        |       | t=14.51           | 0.000               |
| Easily   | 2476   | 9.40  |                   |                     |
| With difficulty  | 2084   | 8.48  |                   |                     |
| <b>Expectations for household finances<br/>in 12 months (Better)</b> |        |       | F=137.24          | 0.000               |
| Better   | 1315   | 9.38  |                   | N/A                 |
| Same   | 2164   | 9.16  |                   | 0.016               |
| Worse  | 817    | 7.90  |                   | 0.000               |
| <b>Citizen of county</b>   |        |       | t= -1.15          | 0.250               |
| Yes  | 4508   | 8.99  |                   |                     |
| No   | 202    | 8.81  |                   |                     |
| <b>Having some disabilities</b>                                      |        |       | t= -4.03          | 0.000               |
| Yes  | 438    | 8.81  |                   |                     |
| No   | 4247   | 9.10  |                   |                     |
| <b>Urban density (City)</b>  |        |       | F=7.03            | 0.000               |
| Open country   | 425    | 9.16  |                   | 0.355               |
| Village  | 1411   | 8.81  |                   | 0.436               |
| Medium-sized town  | 1421   | 9.15  |                   | 0.082               |
| City   | 1444   | 8.94  |                   | N/A                 |
| <b>Country regions (Nordic)</b>                                      |        |       | F=47.49           | 0.000               |
| Nordic   | 385    | 10.00 |                   | N/A                 |
| UK and Ireland   | 266    | 8.98  |                   | 0.000               |
| Central Europe   | 816    | 8.96  |                   | 0.000               |
| Mediterranean  | 1087   | 8.36  |                   | 0.000               |
| Eastern Europe   | 2156   | 9.13  |                   | 0.000               |

## Psychosocial factors and youth PWB

Apart from the intensity of the factors relating to a caring role and religiosity, the remaining eight psychosocial factors have a statistically significant association with youth PWB (Table 2). Higher accommodation quality, support networks, interaction with friends and neighbours, and satisfaction with one's own country's financial position are found to be significantly associated with higher PWB of young people. Moreover, young people who reported high for physical exercise, public service and neighbourhood quality appeared to have higher levels of PWB. Interestingly, lower PWB was associated with greater tension between young people and old people. The degree of association of these psychosocial factors suggests that satisfaction with one's own country's financial position is the most important factor, followed by public services, neighbourhood quality and support networks.

**Table 2: Correlation matrix for the psychosocial factors and youth PWB**

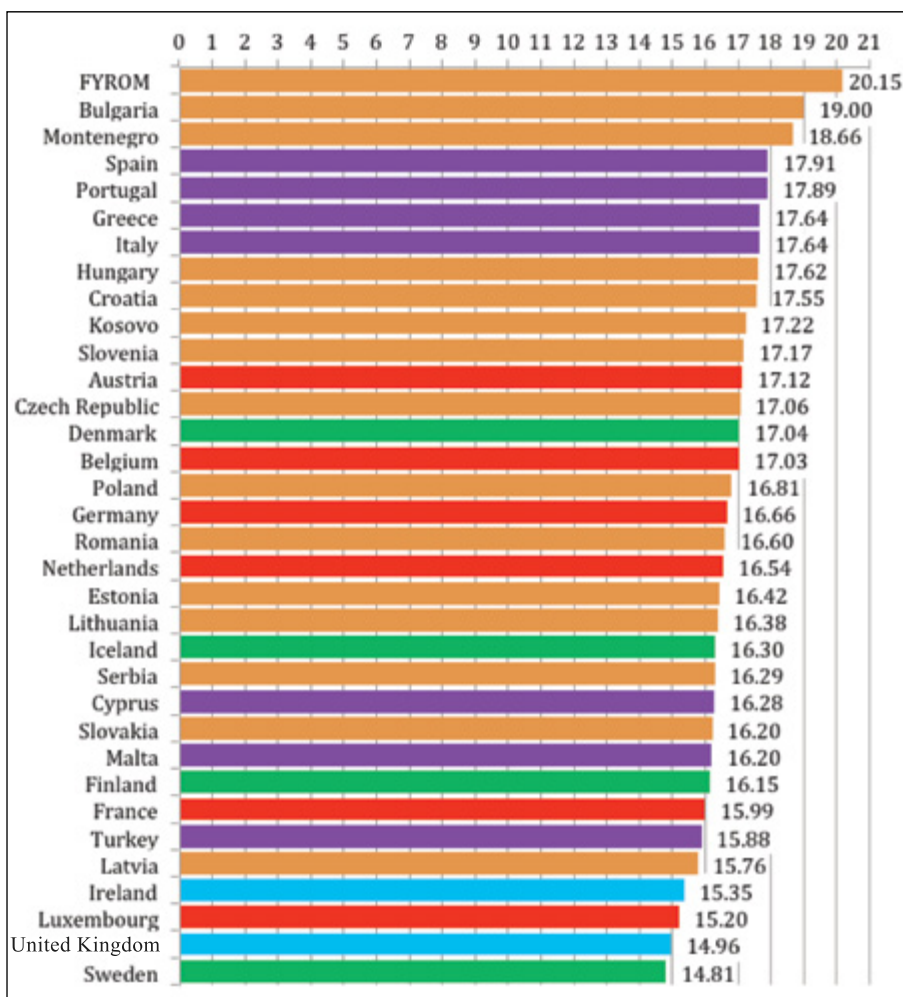
|  | 1        | 2       | 3        | 4        | 5        | 6       | 7        | 8        | 9       | 10      | 11   |
|--|----------|---------|----------|----------|----------|---------|----------|----------|---------|---------|------|
| Accommodation quality (1)                            | 1        |         |          |          |          |         |          |          |         |         |      |
| Support networks (2)                                 | 0.07***  | 1       |          |          |          |         |          |          |         |         |      |
| Tension between old and young people(3)              | -0.05*** | -0.03   | 1        |          |          |         |          |          |         |         |      |
| Interaction with friends and neighbours (4)          | 0.10***  | 0.04*   | -0.02    | 1        |          |         |          |          |         |         |      |
| Caring role (5)                                      | -0.10*** | -0.04** | 0.02     | -0.08*** | 1        |         |          |          |         |         |      |
| Satisfaction with a country's economic situation (6) | 0.10***  | 0.06*** | -0.08*** | 0.01     | -0.02    | 1       |          |          |         |         |      |
| Quality of public services (7)                       | 0.07***  | 0.06*** | -0.10*** | 0.14***  | -0.07*** | 0.09*** | 1        |          |         |         |      |
| Neighbourhood quality (8)                            | 0.19***  | 0.04**  | -0.10*** | 0.07***  | -0.09*** | 0.13*** | 0.15***  | 1        |         |         |      |
| Religiosity (9)                                      | -0.03*   | 0.05*** | 0.02     | -0.07*** | 0.13***  | -0.01   | -0.13*** | -0.12*** | 1       |         |      |
| Exercise/sports (10)                                 | 0.04**   | 0.05*** | -0.01    | 0.09***  | 0.08***  | 0.09*** | 0.01     | -0.02    | 0.10*** | 1       |      |
| PWB (11)   | 0.10***  | 0.11*** | -0.05*** | 0.09***  | -0.02    | 0.21*** | 0.12***  | 0.11***  | 0.02    | 0.10*** | 1    |
| Mean   | 5.30     | 4.87    | 0.83     | 3.27     | 0.41     | 4.28    | 15.38    | 15.45    | 0.92    | 0.99    | 8.98 |
| Standard deviation                                   | 1.09     | 0.48    | 0.69     | 1.06     | 0.94     | 2.37    | 3.05     | 2.74     | 1.04    | 1.26    | 2.17 |

\* p <.05; \*\* p <.01; \*\*\* p <.001.

## Youth mental health by European country

The average score for mental health for all young people in the survey was 16.82 (out of a maximum of 25). As with PWB, the mental health of young people differs widely between European countries (Figure 2). In this regard, young people in Macedonia, Bulgaria and Montenegro appeared to be doing well when compared to those in some other European countries, such as Iceland, the UK and Sweden. An interesting pattern is observed when the results in Figure 1 and Figure 2 are compared. Although young people from the Nordic countries placed themselves high on the PWB scale, on average they tended to report lower, relative to the other countries, on mental health (Pearson  $r = -0.023$ ).

**Figure 2: Mean score on youth mental health scale by European country**



## The association of demographic factors with youth mental health

Older youth, females, those with a disability and young people living in a household that finds it difficult to make ends meet reported significantly lower levels of mental health (Table 3). Although students appeared to have higher mental health scores than those in employment, young people in charge of family care reported lower mental health scores. Compared to those in the lowest quartile of household income, young people living in the second, third and the highest quartiles had significantly higher mental health scores. Young people who evaluated their household finances to be worse than their fellow citizens reported significantly lower levels of mental health than those who reported being better off. Those who feared worse household finances over the next twelve months had significantly lower mental health scores. Young people living in open countryside (as opposed to city-dwelling youth) and those living in Mediterranean and east European countries (as opposed to the Nordic region) reported significantly higher mental health scores. However, the citizenship of young people did not have any significant relationship with mental health.

**Table 3: Demographic characteristics and youth mental health**

| Demographic characteristics (comparison group)      | Number | Mean  | Test statistic | Sig., two-tailed |
|---|--------|-------|----------------|------------------|
| <b>Age</b>  | 4724   | 16.82 | $r=-0.06$      | 0.000            |
| <b>Gender</b>                                       |        |       | $t=5.86$       | 0.000            |
| Male  | 2205   | 17.26 |                |                  |
| Female  | 2519   | 16.44 |                |                  |
| <b>Employment status (Employed)</b>                 |        |       | $F=15.26$      | 0.000            |
| Employed  | 1617   | 16.63 |                | N/A              |
| Unemployed  | 640    | 16.29 |                | 0.672            |
| Student   | 2158   | 17.32 |                | 0.001            |
| Family care   | 218    | 15.27 |                | 0.004            |
| Other   | 91     | 15.74 |                | 0.564            |
| <b>Household income (Lowest quartile)</b>           |        |       | $F=13.35$      | 0.000            |
| Lowest quartile                                     | 963    | 15.76 |                | N/A              |
| Q2  | 709    | 16.84 |                | 0.000            |
| Q3  | 745    | 16.89 |                | 0.000            |
| Highest quartile                                    | 655    | 17.11 |                | 0.000            |
| <b>Perceived income compared to others (Better)</b> |        |       | $F=44.76$      | 0.000            |
| Better  | 1183   | 17.45 |                | N/A              |
| Same  | 2691   | 16.91 |                | 0.006            |
| Worse   | 746    | 15.37 |                | 0.000            |

| Demographic characteristics<br>(comparison group)                    | Number | Mean  | Test<br>statistic | Sig.,<br>two-tailed |
|--|--------|-------|-------------------|---------------------|
| <b>Ability of household to make ends meet</b>                        |        |       | t=11.67           | 0.000               |
| Easily   | 2484   | 17.56 |                   |                     |
| With difficulty  | 2088   | 15.90 |                   |                     |
| <b>Expectations for household<br/>finances in 12 months (Better)</b> |        |       | F=31.7            | 0.000               |
| Better   | 1324   | 16.88 |                   | N/A                 |
| Same   | 2148   | 17.28 |                   | 0.055               |
| Worse  | 827    | 15.73 |                   | 0.000               |
| <b>Citizen of country</b>  |        |       | t=-0.84           | 0.399               |
| Yes  | 4519   | 16.83 |                   |                     |
| No   | 205    | 16.54 |                   |                     |
| <b>Having some disabilities</b>                                      |        |       | t=-12.19          | 0.000               |
| Yes  | 447    | 14.21 |                   |                     |
| No   | 4255   | 17.11 |                   |                     |
| <b>Urban density (City)</b>  |        |       | F=3.67            | 0.012               |
| Open country   | 423    | 17.41 |                   | 0.019               |
| Village  | 1417   | 16.81 |                   | 0.637               |
| Medium-sized town  | 1420   | 16.94 |                   | 0.253               |
| City   | 1452   | 16.57 |                   | N/A                 |
| <b>Country regions (Nordic)</b>                                      |        |       | F=20.46           | 0.000               |
| Nordic   | 386    | 15.87 |                   | N/A                 |
| UK and Ireland   | 268    | 15.10 |                   | 0.399               |
| Central Europe   | 819    | 16.46 |                   | 0.409               |
| Mediterranean  | 1094   | 16.77 |                   | 0.042               |
| Eastern Europe   | 2157   | 17.37 |                   | 0.000               |

## Psychosocial factors and youth mental health

Except for those in a caring role, nine psychosocial factors in Table 4 are significantly associated with young people's mental health. In this regard, better quality of accommodation, support networks, interaction with friends/neighbours, satisfaction with a country's economic situation, public service quality, neighbourhood quality, religiosity and physical exercise are all linked to better mental health in young people. However, higher tension between the young and old is significantly associated with poorer mental health among young people. Among those psychosocial factors, accommodation quality appears to have a stronger association, followed by satisfaction with a country's economic situation, support networks and public service quality.

**Table 4: Correlation matrix for the psychosocial factors and youth mental health**

|  | 1        | 2       | 3        | 4        | 5        | 6       | 7        | 8        | 9       | 10      | 11    |
|--|----------|---------|----------|----------|----------|---------|----------|----------|---------|---------|-------|
| Accommodation quality (1)                            | 1        |         |          |          |          |         |          |          |         |         |       |
| Support networks (2)                                 | 0.07***  | 1       |          |          |          |         |          |          |         |         |       |
| Tension between old and young people (3)             | -0.05*** | -0.03   | 1        |          |          |         |          |          |         |         |       |
| Interaction with friends and neighbours (4)          | 0.10***  | 0.04*   | -0.02    | 1        |          |         |          |          |         |         |       |
| Caring role (5)                                      | -0.10*** | -0.04** | 0.02     | -0.08*** | 1        |         |          |          |         |         |       |
| Satisfaction with a country's economic situation (6) | 0.10***  | 0.06*** | 0.08***  | 0.01     | -0.02    | 1       |          |          |         |         |       |
| Public service quality (7)                           | 0.07***  | 0.06*** | -0.10*** | 0.14***  | 0.07***  | 0.09*** | 1        |          |         |         |       |
| Neighbourhood quality (8)                            | 0.19***  | 0.04**  | -0.10*** | 0.06***  | -0.09*** | 0.13*** | 0.15***  | 1        |         |         |       |
| Religiosity (9)                                      | -0.03*   | 0.05*** | 0.03     | -0.07*** | 0.13***  | -0.01   | -0.13*** | -0.12*** | 1       |         |       |
| Exercise/sports (10)                                 | 0.04**   | 0.05*** | -0.01    | 0.09***  | 0.08***  | 0.09*** | 0.01     | -0.02    | 0.10*** | 1       |       |
| Mental health (11)                                   | 0.15***  | 0.10*** | -0.05**  | 0.08***  | -0.01    | 0.14*** | 0.10***  | 0.09***  | 0.07*** | 0.09*** | 1     |
| Mean   | 5.30     | 4.87    | 0.83     | 3.27     | 0.41     | 4.28    | 15.38    | 15.45    | 0.92    | 0.99    | 16.82 |
| Standard deviation                                   | 1.09     | 0.48    | 0.69     | 1.06     | 0.94     | 2.37    | 3.05     | 2.74     | 1.04    | 1.26    | 4.85  |

\* p < .05; \*\* p < .01; \*\*\* p < .001.

## **Main findings and their implications**

This paper identifies the demographic and psychosocial factors that are associated with mental health and the PWB of a representative sample of young people in Europe. This section highlights the main findings and discusses their implications both in terms of theories and youth policies in Europe.

Young people in European countries vary widely in terms of the level of both psychological and mental health. At the aggregate level, although some countries, in particular Nordic ones, are doing well on youth PWB, the youth mental health of some of these countries appears to be relatively low. Perhaps the negative association between PWB and mental health that we observe in aggregate terms can be explained by the popular psychological concept of “affluenza” which James (2007) uses to explain the prevalence of higher rates of mental disorders in wealth-seeking consumerist nations. At the individual level, however, both the mental health and PWB of young people are significantly related to a range of demographic factors, including age, employment status, household finances, disabilities and the area in which people live. Moreover, the mental health and PWB of European youth are significantly linked to accommodation quality, support networks, interaction with friends/neighbours, satisfaction with a country’s economic position, public service quality, neighbourhood quality and exercise/sports.

These findings have theoretical implications as they contribute to our knowledge of youth well-being using a eudaemonic approach that is relatively less well developed for research with children and young people. Apart from the theoretical significance of this, these findings have a number of implications for European youth policies.

Significant negative associations of age with both mental health and PWB suggest that more systematic interventions, targeting “older” young people, are required. Young people who have family care roles, are in unemployment or have a disability should arguably receive more support, since a lack of support is likely to contribute to worsening mental health and PWB. Macroeconomic policies, especially the policy of alleviating youth poverty, are essential for European countries. Maintaining high quality accommodation, neighbourhoods, public services, sports facilities and support networks are crucial because many of these services are affected by austerity. Policies both at the national and the EU level should identify regions or localities where more resources are required because of wide variations in youth mental health and PWB by country and residential area (rural, city, etc.). Overall, policies on social protection and care, local government, citizen engagement, education, health and finance should aim to improve youth mental health and PWB by considering the relations between these demographic and psychological factors.

## **Limitations and future directions**

Despite their theoretical and policy significance, the findings of this paper should be treated with some caution. This section identifies a number of limitations that future studies need to address.

1. This paper uses a correlational design. Therefore, causal connections cannot be established between demographic and psychosocial factors and youth mental health



and PWB. For identifying cause–effect relationships, longitudinal data are required and a Europe-wide longitudinal study of children and young people’s well-being is the only way of doing this.

2. This paper focuses on a specific youth cohort using data from the EQLS that collected data from those aged 18 and above. Therefore, the results do not reflect the views of younger cohorts (aged under 18). Although there are challenges, future studies should also aim to collect data on mental health and PWB from younger groups.

3. Results on the associations between demographic and psychosocial factors and youth well-being for this exploratory paper were drawn from bivariate analysis. These factors need to be examined more closely in the future using multivariate statistical techniques. In this regard, multilevel modelling may achieve more robust results because of the structured nature of the data (individual respondents nested in country).

4. To identify the demographic and psychosocial factors of young people’s mental health and PWB, this paper explored only individual-level variables. Although these are crucial factors, future studies should examine their associations taking into account a range of contextual/macro-level factors – such as youth unemployment of a country, population density, expenditure on education and health – at the time of the data collection.

5. This paper examines eudaemonic well-being focusing on PWB and one of its key domains – mental health. There are a number of other aspects of youth PWB, such as autonomy or personality, which future studies on youth well-being should explore in detail.

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