European Quality of Life Survey Time Series, 2007 and 2011: Open Access

Waves Two and Three

2007-2011

User Guide

Contents

1. European Quality of Life Survey – background

The *European Quality of Life Survey* (EQLS) is one of key surveys carried out by the *European Foundation for the Improvement of Living and Working Conditions* (Eurofound), a European Union Agency that was established in 1975 to contribute to the planning and design of better living and working conditions. Eurofound carries out its role in partnership with governments, employers, trade unions and the European Union institutions.

The EQLS is a unique, pan-European survey that examines both the objective circumstances of European citizens' lives and how they feel about those circumstances and their lives in general. It looks at a range of issues, such as employment, income, education, housing, family, health and work-life balance. It also looks at subjective topics, such as people's levels of happiness, how satisfied they are with their lives, and how they perceive the quality of their societies.

Carried out every four years since 2003, the survey collects data on a range of issues, such as employment, income, education, housing, family, health and work-life balance. It also looks at subjective topics, such as people's levels of happiness, life satisfaction, and perceived quality of society. Over the years, the EQLS has developed into a valuable set of indicators which complements traditional indicators of economic growth and living standard such as GDP or income. These offer a unique source of comparative information on the quality of living and working conditions across the EU. The EQLS indicators are more inclusive of environmental and social aspects of progress and therefore are easily integrated into the decision-making process and taken up by public debate at EU and national levels in the European Union.

By running the survey regularly, it has also become possible to track key trends in the quality of people's lives over time and gain deeper insight in the issues central to European policy. The results provide a strong basis for policy makers to identify opportunities for improvement and to develop forward looking perspectives. Last survey round has shown, for instance, that people are having greater difficulty making ends meet since the economic crisis began. In many countries, they also feel that there is now more tension between people from different ethnic groups. And across Europe, people now trust their governments less than they did before. However, people still continue to get the greatest satisfaction from their family life and personal relationships.

Further information about the survey can be found on the *European Foundation for the Improvement of Living and Working Conditions* (Eurofound) [EQLS](#) web pages.

In each wave a sample of adult population is selected randomly for a face-to-face interview. In view of the prospective European enlargements the geographical coverage of the survey has expanded over time from 28 countries in 2003 to 34 countries in 2011-12.

- First EQLS in 2003 - 28 countries: 27 EU Member States and Turkey
- Second EQLS in 2007-2008 - 31 countries: 27 EU Member States, Croatia, FYR Macedonia, Turkey and Norway
- Third EQLS in 2011-2012 - 34 countries: 27 EU Member States and Croatia, Iceland, FYR Macedonia, Montenegro, Serbia, Turkey and Kosovo.

2. Open datasets

This study contain contains two recent waves of *the European Quality of Life Survey* (EQLS) prepared specifically for open access as part of the UK Data Service AppChallenge of summer 2015. Wave Two covers interviews carried out in years 2007-2008, whereas Wave Three includes years 2011-2012. The data files have been extracted from the EQLS Integrated Data File, 2003-2012 deposited at the UK Data Archive in July 2013 (2nd edition: January 2014). The full data are available to users under the following address:

http://discover.ukdataservice.ac.uk/catalogue/?sn=7348.

The integrated data files are available as Safeguarded data via user registration. These open data were reviewed and treated for disclosure risk, as set out in 2.3.1.

2.1 Sampling methodology

The universe to be represented in the EQLS datasets covers all people aged 18 and over whose usual place of residence is in the territory of the countries included in the survey. For the purposes of the survey, a person's usual residence is the place where they normally sleep.

In addition, they should have lived in the country for the last 6 months before the survey and should be able to speak the national language(s) well enough to respond to the questionnaire. People living in an institution (for example prisons, military barracks, hospitals and nursing homes) were not included in the survey.

Only one person per household could be selected for the survey. Metropolitan, urban and rural populations and all 'administrative regional units' were covered proportionally to the respective population aged 18 and over.

In each country, a strictly random sample of individuals was surveyed. Probability sampling procedures have been used for sample selection. Depending on the population size of each country, sample sizes varied from 1,000 to 3,000 respondents from each country of the survey.

More detailed information on sampling procedures can be obtained from documentation files of related studies archived at the UK Data Archive (please see section 3 of this guide).

2.2 Demographics

In total 79,270 adult (18 years old and over) respondents were interviewed in both waves (35,634 in Wave Two, and 43,636 in Wave Three) of the EQLS. A detailed summary of gender frequencies for each age category of respondents is shown in Table 1 (for Wave Two) and Table 2 (for Wave Three) below:

Table 1

EQLS, Wave 2 (2007-2008) – Summaries of respondents

| Age category | Gender of the respondent *(% of each age category)* | | Total *(% of all respondents)* |
	Males	*Females*	
18-24	1,604 *(48.2%)*	1,722 *(51.8%)*	3,326 *(9.3%)*
25-34	2,363 *(42.7%)*	3,170 *(57.3%)*	5,533 *(15.5%)*
35-49	4,120 *(42.1%)*	5,675 *(57.9%)*	9,795 *(27.5%)*
50-64	3,938 *(43.1%)*	5,207 *(56.9%)*	9,145 *(25.7%)*
65+	3,337 *(42.6%)*	4,498 *(57.4%)*	7,835 *(22.0%)*
Total	**15,362 *(43.1%)***	**20,272 *(56.9%)***	**35,634 *(100.0%)***

Table 2

EQLS, Wave 3 (2011-2012) – Summaries of respondents

| Age category | Gender of the respondent *(% of each age category)* | | Total *(% of all respondents)* |
	Males	*Females*	
18-24	1,966 *(47.2%)*	2,200 *(52.8%)*	4,166 *(9.5%)*
25-34	2,929 *(44.2%)*	3,701 *(55.8%)*	6,630 *(15.2%)*
35-49	4,767 *(42.3%)*	6,498 *(57.7%)*	11,265 *(25.8%)*
50-64	4,934 *(44.1%)*	6,244 *(55.9%)*	11,178 *(25.6%)*
65+	4,192 *(40.3%)*	6,205 *(59.7%)*	10,397 *(23.8%)*
Total	**18,788 *(43.1%)***	**24,848 *(56.9%)***	**43,636 *(100.0%)***

2.3 Topics and variables

Both waves cover multiple dimensions of quality of life in European countries. These dimensions include: employment and work-life balance, income and deprivation, housing and local environment, family and social contacts, health and mental well-being, subjective well-being (e.g. happiness, life satisfaction), social exclusion, perceived quality of society (e.g. tensions, trust in institutions) as well as access to and perceived quality of public services.

Each EQLS dataset comprises of 195 variables – most of them were included in both waves of the EQLS, however there is a number of variables that were only included in the Wave Three of the EQLS carried out in 2011-2012 (for more details please see the EQLS Concordance Grid

spreadsheet included in the documentation). Users of this open dataset will find the variables grouped into the following primary and secondary topics:

- Geographies
- Social stratification and groupings:
    - General (e.g. age, gender, household size, citizenship etc.)
    - Family life and marriage (e.g. marital status)
- Education:
    - General (e.g. education background)
    - Higher and further (e.g. education levels)
- Environment, conservation and land use:
    - Land use and planning (e.g. urban/rural living, degree of urbanisation etc.)
- Society and culture:
    - Social attitudes and behaviour (e.g. neighbourhood problems, local community facilities, public services, child care, disadvantaged groups, lifestyle choices, voluntary work, social exclusion)
    - Social indicators and quality of life (e.g. subjective well-being, life satisfaction, happiness, emotional states etc.)
- Employment and labour:
    - General (e.g. employment status, work-life balance)
- Transport (e.g. average travelling time to/from work/study)
- Economics:
    - Income, property and investment (e.g. income quartiles, financial difficulties, financial resources)
- Health:
    - General (e.g. health status)
    - Health services and medical (e.g. access to medical services)
    - Specific diseases and medical conditions (e.g. chronic health problems)
- Housing (e.g. housing tenure, housing conditions etc.)
- Politics:
    - Political behaviour and attitudes.

Moreover, all 195 variables have been grouped into broad variable groups as follows:

- Administrative variables
- Citizenship
- Economic situation of household
- Education
- Employment and work-life balance
- Family and social life
- Health
- Household grid and country

- Housing
- Local environment
- Mental well-being
- Public services (access and quality)
- Quality of society
- Social exclusion
- Social participation
- Subjective well-being
- Derived variables (please see section 2.3.1 for details)
- Weighting variables (please see section 2.3.2 for details)

A full list of names and labels for all variables along with the classification by topics, variable groups and keywords is available in the EQLS Concordance Grid document (Microsoft Excel spreadsheet).

2.3.1 Disclosure review for fully open data

The core EQLS integrated data files on which these open data have been based are available as Safeguarded data (SN 7348) via user registration. The open data files were prepared and reviewed and treated for disclosure risk in collaboration with the data owners. The R tool **sdcMicro** was used to assess disclosure risk and treat variables based on specific combinations of key variables within each of the data files. The measurements involved computation and estimation of the sample and population frequency counts to determine unique observations violating 2-, and 3-anonymity assumptions ([Templ, Meindl & Kowarik, 2015](#)). Statistical Disclosure Control (SDC) reduces the risk of identity, attribute and/or inferential disclosure related to specific respondents and their personal characteristics to an acceptable level. As a result four variables were reduced in precision: Number of children was top-coded to 5 or more; Number of rooms was top-coded to 8 or more; Number of hours worked /partner worked per week was top-coded to 80 or more.

2.3.2 Derived variables

EQLS datasets contain a number of derived variables which have been created to group numeric responses of other related variables or to collapse groupings of related categorical variables into fewer categories. The main reasons for creating these derived variables were:

- To enhance the data quality by aggregating the responses into more usable and consistent format across both waves of the Survey,
- To provide a clearer structure of datasets by reducing the number of variables,
- To ensure confidentiality and anonymity of personal information and all respondents.

Table 3 below describes all derived variables within EQLS datasets for this open data, for Waves Two and Three (2007-2008 and 2011-2012).

Table 3

EQLS, Waves 2 & 3 (2007-2008 & 2011-2012) – List of derived variables

Variable name	Variable label	Wave of EQLS (Wave 2, 3 or both?)	Method of derivation
Y11_RuralUrban	DV: Rural/urban living	Both waves	Rural or urban area (2 categories) based on response to Y11_Q49 ('*The area in which you live is...?*' – 4 categories).
Y11_Accommproblems	Number of problems with accommodation	Both waves	Number of problems (scale) based on the number of *'Yes'* responses to variables Y11_Q19a - Y11_Q19f.
Y11_SocExIndex	Social Exclusion Index	Both waves	The perceived Social Exclusion Index (scale) refers to the overall average score from responses to the four statements: *'I feel left out of society'*, *'Life has become so complicated today that I almost can't find my way'*, *'I don't feel that the value of what I do is recognised by others'*, *'Some people look down on me because of my job situation or income'*, where 1 = *'strongly disagree'* and 5 = *'strongly agree'*. Derived from variables Y11_Q29e – Y11_Q29h.
Y11_Volunteering	Volunteering frequency	Wave 3 only	Volunteering frequency (3 categories) derived from responses to variables Y11_Q22a - Y11_Q22e.
Y11_Deprindex	Deprivation index: No. of items hhold can't afford	Both waves	The deprivation index measures the average number of items a household cannot afford based on Y11_Q59a – Y11_Q59f.
Y11_MWIndex	WHO-5 mental wellbeing index	Both waves	The WHO-5 mental wellbeing scale is derived from variables Y11_Q45a – Y11_Q45e and is composed of the following items, all measured on a six-point scale and referring to how the respondent felt over the previous two weeks: *'I have felt cheerful and in good spirits'*, *'I have felt calm and relaxed'*, *'I have felt active and vigorous'*, *'I woke up feeling fresh and rested'*, *'My daily life has been filled with things that interest me'*.
Y11_Strainbasedconflict	Work-life balance conflict?	Both waves	Work-life balance conflict (3 categories) derived from responses to variables Y11_Q12a – Y11_Q12c.
DV_Q7	DV: Total number of working hours	Both waves	No. of working hours (scale) derived from the sum of the number of working hours in main (variable Y11_Q7) and secondary employment (variable Y11_Q7b).
DV_Q67	DV: Citizenship	Wave 3 only	Citizenship (6 categories) based on responses to variables Y11_Q67_1 – Y11_Q67_5 (all 5 variables not included in the App Challenge datasets).

DV_Q43Q44	DV: Any limiting/not limiting chronic health problem?	Both waves	Limiting/not limiting chronic health problem (3 categories) derived from responses to 2 variables: Y11_Q43 (*'Any chronic physical or mental health problem/illness/disability?'*) and Y11_Q44 (*'Are you limited in your daily activities by this physical or mental health problem/illness/disability?'*).
DV_Q54a	DV: Anyone used/would have like to use child care last 12 months?	Wave 3 only	A person, who used or would have liked to use child care services (6 categories, incl. duplicate answers and NA/Refusal groupings) based on responses to variables Y11_Q54a_1 – Y11_Q54a_5.
DV_Q54b	DV: Anyone used/would have like to use long term care last 12 months?	Wave 3 only	A person, who used or would have liked to use long term care services (6 categories, incl. duplicate answers and NA/Refusal groupings) based on responses to variables Y11_Q54b_1 – Y11_Q54b_5.
DV_Q55	DV: No. of factors which made it difficult to use child care?	Wave 3 only	Number of factors (scale) based on the frequency of responses *'Very difficult'* and *'A little difficult'* to variables Y11_Q55a – Y11_Q55d.
DV_Q56	DV: No. of factors which made it difficult to use long term care?	Wave 3 only	Number of factors (scale) based on the frequency of responses *'Very difficult'* and *'A little difficult'* to variables Y11_Q56a – Y11_Q56d
DV_Q8	DV: Preferred working hours? (3 groups)	Wave 3 only	Whether would prefer to work less, more or the same number of hours per week (4 categories, incl. NA/Refusal grouping) derived from the outcome of subtraction between values of 2 variables: Y11_Q8 – DV_Q7 (if lower than -2 = *'Would like to work LESS hours'*; if greater than or equal to -2 and lower than or equal to 2 = *'Would like to work THE SAME hours'*; if greater than 2 = *'Would like to work MORE hours'*).
DV_Q10	DV: Preferred working hours of respondent's partner? (3 groups)	Wave 3 only	Whether would prefer his/her partner to work less, more or the same number of hours per week (4 categories, incl. NA/Refusal grouping) derived from the outcome of subtraction between values of 2 variables: Y11_Q10 – Y11_Q9 (if lower than -2 = *'Would like to work LESS hours'*; if greater than or equal to -2 and lower than or equal to 2 = *'Would like to work THE SAME hours'*; if greater than 2 = *'Would like to work MORE hours'*).

IMPORTANT NOTE – *duplicate responses to variables: DV_Q67, DV_Q54a and DV_Q54b:*

Three derived variables (DV_Q67, DV_Q54a, and DV_Q54b) contain value 6 which denotes duplicate responses to categories 1 and 2. Respondents, who based on the specific derivation method used, would normally be assigned to both categories (1 and 2), were categorised as grouping 6 – '*Duplicate YES responses to Options 1 and 2*'. For example, if a respondent, who was asked the questions from variables Y11_Q54a_1 – Y11_Q54a_2 said *'Yes'* to 2 types of persons that used or would have liked to use child care services in the last 12 months (e.g. *'I or someone else in my household'* and *'Someone close to me outside the household'*), he/she would be assigned value 6 (*'Duplicate YES responses to Options 1 and 2'*) in DV_Q54a variable. Therefore, the users should be aware that when analysing data for these three variables they need to take into account all duplicate responses (category 6).

2.3.3 Weighting variables

The *European Quality of Life Survey* (EQLS) is a random probability survey of people aged 18 and over. The definition of the target of EQLS is the adult population (18+) living in private households. In order to be representative in terms of gender, age, urbanisation level, region and household size across all countries, three weighting coefficients were produced: **w4**, **w5_EU28**, and **w5_total**.

Please note that correct weightings have already been applied to the App Challenge API calls for users' convenience and in that case the following descriptions of weighting variables are for illustration purposes only. However, if users work with the EQLS raw data (of any format), the three weighting variables should be applied according to the instructions and scenarios given below:

a.) Final national weight – w4.

w4 – *'Final weight trimmed and standardised'* – this weight can be used for comparing any of the countries (both from EU and outside the EU) with each other and across different survey rounds (e.g. 2007 and 2011). However, this weight cannot be used to calculate an average for a group of countries. If **w4** is applied, the results always have to be presented by country (or social groups within country etc., but not for e.g. the whole Europe or all countries). For example, the **w4** weight will be used to:

- Compare all individuals in only 2 countries on a single attitudinal variable for one year only
- Compare all individuals in only 2 countries on a single attitudinal variable for both years
- Compare men only in 25 countries (on a country-by-country analysis) on a single attitudinal variable
- Return a mean calculation for all men across every country (on a country-by-country analysis) on a single attitudinal variable
- Calculate frequencies for number of children in the UK in 2007.

b.) Cross-national population weights: w5_EU28 and w5_total.

It is suggested to use the EU average as a preferred reference point for comparisons (also for non-EU countries as it was done in recent Eurofound reports on Macedonia and Turkey: e.g. taking Turkey figure and comparing it to a figure of interest in the EU28). To calculate the EU average, please use:

w5_EU28 – *'Cross-national weight – EU28'* – to calculate averages for all EU (as of 2013, that is including Croatia). For example, the **w5_EU28** weight will be used to:

- Return a result for men only in 25 countries (as a group, e.g. calculate an average for a group of 25 countries, but only if all countries in this group are EU countries) on a single attitudinal variable
- Return a mean calculation for all men across every country (as a group, but only if all countries in this group are EU countries) on a single attitudinal variable

w5_total – *'Weight 5 total'* – a weight enabling any kind of grouping across different types of countries e.g. the Balkans, Nordic countries including Iceland or similar. The issue is that different countries were included in 2007 and in 2011, so it may not be possible to apply it for both years and the countries should be selected carefully.

For example, if a user is interested in a group including Denmark, Finland, Iceland, Norway and Sweden and uses **w5_total**, the results will show an average for Denmark, Finland, Norway and Sweden in 2007 and for Denmark, Finland, Iceland and Sweden for 2011 (given that Iceland was not included in 2007 and Norway not included in 2011).

2.3.4   Supplementary Open Data variable: ISO3166_Country.

In order to link the EQLS data sets with similar open data surveys available from other repositories, a variable named **ISO3166_Country** was added to both Waves of the open EQLS data files. The variable provides URLs to internationally recognised ISO 3166 country codes, allowing easy reference to countries and subdivisions across many open data surveys. More details on the ISO 3166 International Standard for country codes are available at the following URL: http://www.iso.org/iso/home/standards/country_codes.htm.

2.3.5   Supplementary Open Data variables: RowId and URIRowId.

In order to make these data fully 'open' as certified by the UK's Open Data Institute (theodi.uk), a unique web address, a URI, for each respondent row was added to the datasets. The variable is called **URIRowId.** It represents the root URL for a row (respondent) that, when appended with a unique user key, displays all data values for a single row via the UK Data Service open data API. It is in the form *https://api.ukdataservice.ac.uk/V1/datasets/eqls/rows/<number>* Users will need to append a User Key string to each value in this column. The User Key is a unique API key that can be freely obtained at the UK Data Service's public API, available at: https://ukdataservice.3scale.net/ .

For example, the completed format for row 1 would be:
https://api.ukdataservice.ac.uk/V1/datasets/eqls/rows/1?user_key=1a2b3c4d5e6f7g8h9ij10
Once you have obtained your own User Key, substitute the number string '1a2b3c4d5e6f7g8h9ij10' with your User Key number.

The numbered variable **RowID** corresponds to the respondent ID in the API dataset. It should not be confused with the variable **UniqueID**, which denotes the original unique respondent identifier used in the EQLS survey.

3. Related studies

More detailed information on each wave of the European Quality of Life Survey studies can be found in documentation files of each wave datasets deposited in the UK Data Archive under the following Study Numbers and URLs addresses:

- *SN 6299 – European Quality of Life Survey, Wave Two, 2007-2008*
  http://discover.ukdataservice.ac.uk/Catalogue/?sn=6299

- *SN 7316 – European Quality of Life Survey, Wave Three, 2011-2012*
  http://discover.ukdataservice.ac.uk/Catalogue/?sn=7316

- *SN 7348 – European Quality of Life Survey, Integrated Data File, 2003-2012*
  http://discover.ukdataservice.ac.uk/Catalogue/?sn=7348

The original questionnaires used for the Waves Two and Three of the *European Quality of Life Survey* (2007-2008 and 2011-2012) are available in all survey languages at the following addresses:

- *EQLS, Wave Two:*
  http://www.eurofound.europa.eu/surveys/eqls/2007/translated_versions

- *EQLS, Wave Three:*
  http://www.eurofound.europa.eu/eqls-2012-questionnaire-translation