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Subjective Well-being and work – a Brief Review on International Surveys and Results

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Abstract

The research and policy impacts of subjective well-being (SWB) have gained more emphasis in the last decade as international agencies became aware of its importance. Governments have realised that besides the improvements of the economy, the overall life satisfaction of citizens are influenced by multiple other factors. An important part of SWB is work related well-being – often referred to simply as work satisfaction. The nature of work has changed a lot in the recent decades due to immense technological development, more people are behind desks than ever and in general the structure and policies of huge companies have evolved as well. Simply put: life has changed substantially, especially for white-collar workers. The way how people perceive work has also changed, hence the structure of work satisfaction is also different. This paper aims to give an overview on results in this domain and to highlight some possible directions in future research. First the paper gives an overview on SWB and the related research methodologies. Then some current international surveys are briefly described that may be used for SWB related research and finally recent results on work related well-being are shown and some research questions are presented.

Keywords: subjective well-being, work-related well-being, work satisfaction.

A brief overview of subjective well-being[1]

Happiness is more than money – Easterlin's paradox

How well a country performs could be measured by many indicators in many ways. The simplest, thus most often used indicators are pure economic indicators like overall GDP, GDP per capita, annual GDP growth or budget balance measures. These are measures demonstrating the output of the economy, the wealth of a nation giving an overall indicator about the country. In their simplicity they only indicate how well the country does in the economic sense as a whole, yet it does not really say much about how well-off the country's residents are. This weakness of purely economic measures was already recognised recognized in the late 1960s[2], yet even today, the leading comparison of countries is still based on these robust, yet not necessarily 'social' indicators[3].

The most important results emphasising this lack of correlation was that of Richard A. Easterlin analysing data in of the USA and other countries spanning several decades (Easterlin, 1974). While some results did support the intuitively positive relationship between wealth and happiness, some have shed light on interesting phenomena. Within the country the basic positive relationship was clearly presented by results, but cross-country comparisons didn't allow such straight forward conclusions. The difference in happiness between richer and poorer countries was not by far as emphasised as in case of people within the country. A similar phenomenon was observed in longitudinal data: despite the massive GDP (and thus income) growth, happiness did not increase proportionally in the US between the 1940s and the 1970s. The main conclusion derived from this – namely that the happiness of residents does not increase systematically with economic growth – later became known as the Easterlin Paradox. In his work Easterlin raised numerous important arguments trying to point at other directions in explaining this phenomenon. Some of his concerns were related to the concept and methodology of happiness measurements, but he also raised numerous points related to the behaviour and perception model of humans used by economists. He underlines that considering the differences in social experiences, underlying social norms and other non-economic features for richer and poorer classes and for different countries in general it is vital to understand the differences in happiness.

Later research however has led to interpret Easterlin's results differently – basically further agreeing with the points Easterlin raised about the need for further considering social factors, but mainly falsifying Easterlin's conclusion (Ruut

[1] I would like to thank the MTA TK "Lendület" RECENS research group at the Hungarian Academy of Science for the support of this work.
[2] One may refer to Robert Kennedy's historic speech of 18 March 1968
[3] In 2007 this was the prime topic of a conference entitled 'Beyond GDP' focusing on '... clarify which indices are most appropriate to measure progress, and how these can be best integrated into the decision-making process and taken up by public debate' (see http://ec.europa.eu/environment/beyond_gdp/background_en .html). The initiative has fulfilled its goals through its report in 2013 (European Commission, 2013) which served as a basis for improving various key indicators in the European statistical system.

Veenhoven & Vergunst, 2014). The argument of Veenhoven et.al. has been about the existence of positive correlation between happiness and GDP[4], yet the most important conclusion that can be drawn from their work was that indeed, there is much more to well-being than simple GDP, or income per head. In their work Veenhoven et al. have basically tried to control for the other factors influencing happiness to be able to clean the effect of GDP. For example one of their findings was regarding Easterlin's explanation of that happiness didn't increase over time in the US despite the massive GDP growth. Easterlin used this data to question the correlation between happiness and nation wealth, yet in this attempt – as pointed out by Veenhoven et al. – he basically supressed all other variables possibly explaining this phenomenon. One contributing factor in this case was the effect of the deterioration of family life clearly observable in this period.

Similar findings were reported by by other studies as well. In a more technical approach it was highlighted that absolute (log) household income is indeed correlated with well-being (Stevenson & Wolfers, 2008). It is interesting to note though that if the correlation gets weaker in higher GDP regions, taking the log of the income could partially mask this decrease of correlation. Supporting this, Diener and Suh also find that this correlation disappears at richer countries (Diener & Suh, 2000). To put it another way, there is a clear, but diminishing marginal effect of GDP on happiness – above a certain limit of household income.

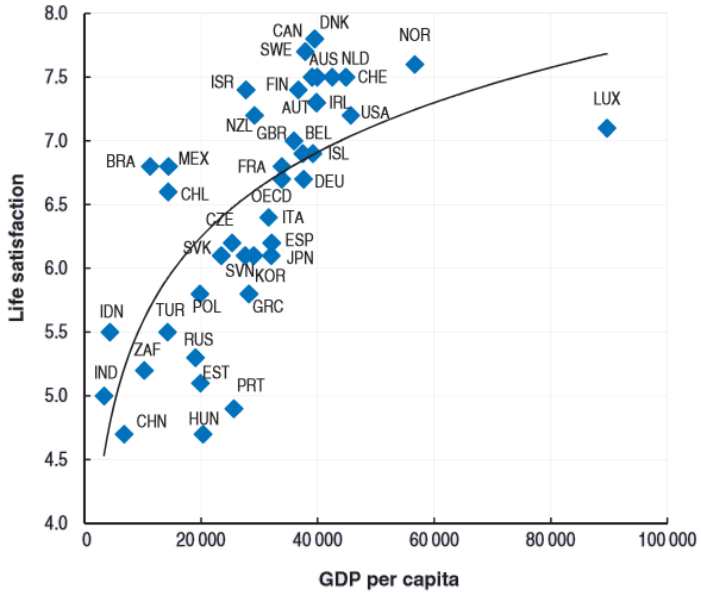

Figure 1: Life satisfaction (Cantril ladder 2010 – see later) and GDP/capita (source: Fig 12.3 (OECD, 2011))

[4] In his works Veenhoven presents numerous convincing results to support his claim. However it cannot be overemphasised that the measurement methodology and the data available to Easterlin was by far not as advanced as newly developed happiness measures. He used a 3 level scale to measure happiness and in other questions, plus the other items were measured by asking about best and worst life possibilities and not happiness explicitly. In his study he also reflected on these drawbacks of the happiness measurements used.

The concept of subjective well being

So while main economic indicators were still the prime measures used, social scientists have designed various measures to monitor people's well-being or satisfaction (Larsen, Diener, & Emmons, 1985). Well-being as a whole however is a far more complex phenomenon than simple satisfaction. The term used to capture its complexity is 'subjective well-being' (SWB) and it is widely used since its proposal by Diener (Diener, 1984). As Diener – following numerous earlier studies spanning decades of related work – suggests, subjective well-being is defined through multiple dimensions. It is not only about satisfaction with life in general, but also includes the everyday positive and negative effects people experience in various domains of their lives (this adds the 'subjective' element). A brief definition given in a later work summarises the notion perfectly: 'a person's cognitive and affective evaluations of his or her life' (Diener, Oishi, & Lucas, 2003). While the formalisation and operationalisation can take various directions this brief definition describes the notion of SWB the most accurately[5].

Life evaluation consists of people's perceptions on various domains of their lives and some general questions about life. Starting with general satisfaction about life, life choices and perspectives the questions may narrow down to several areas. This may include evaluations of income, housing, job satisfaction, environment and other factors.

Positive and negative affect include the emotions people experience during everyday life. Usually such questions focus on recent events, as these have an immediate effect on emotional well-being It is important to note that positive and negative affect are not complimentary – the absence of positive affect does not necessarily mean negative affect and vice versa. Moreover people are more sensitive to negative affect in the short run than to positive affect. However, people can make an judgement to describe the overall 'balance' of these affects (Kahneman, Diener, & Schwarz, 1999), so it is indeed possible to use a single 'affect balance' measure.

To distinguish life evaluation and affect, well-being can also be classified temporarily. 'Hedonic' well-being refers to short term well-being, mainly associated to affect and 'eudaimonic'[6] well-being is used in the sense of long term well-being, associated with life evaluation. Here the terms of life evaluation and affect are used.

Besides these subjective measures the objectively measurable items – related to the domains of life evaluation – are also prime topics in SWB research. Often these are referred to as 'quality of life' (QoL) measures. These include – among others – income, housing properties, social status, employment status and conditions, environmental conditions and health. These factors are important when deriving policy implications from SWB data and when country level comparison is done – also these are the domains that can be improved with various policies.

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[5] Of course it is important to note that the logic of well-being is based on the human needs. The easiest way to approach this is referring to Maslow's pyramid of needs (Maslow, 1943). Although numerous works on the field of psychology discuss well-being (for a good review see Diener's various works referred here), the main focus of this paper is rather on measurement aspects and results.

[6] This may also found as 'eudamonic' or 'eudemonic' well-being in the literature.

Often the literature refers to 'happiness' as 'well-being' which is a misconception in some sense. Happiness – being a much 'older' notion in both practical and psychological sense – may mean multiple things. It can be used to describe a temporal emotional state as a result of recent affections and also a general emotional state resulting from more stable factors. On the contrary well-being tends to be referred to being more 'stable' over time as it is influenced by the individual's affect, environment and future expectations as well. To avoid confusion in this paper the notion of happiness is avoided – unless used explicitly in a referred work.

Similarly the literature also uses 'quality of life' in relation to subjective well-being. As mentioned above quality of life is usually meant the exogenous factors – income, environment, housing, job etc. – of well-being rather than the perception of well-being. Quality of life data and its importance will be discussed later and for clarity reasons, it is always specified if QoL questions are discussed.

Measurement methods and scales of subjective well-being

Defining a proper measure for well-being has been a prime topic already in the 1960s, even though the proper theoretical foundations were not present at the time. Mostly the scientific community attributed people's well-being directly to their happiness. One of the first widely known works on this field (in sociology) was done by Wilson, discussing the relationship between social factors – age, gender, family status, income etc. – and happiness (Wilson, 1967). At this point time happiness was considered not too different from the notion defined in Greek philosophy, hence the conclusions drawn from data were vague from the vantage point of today's approach. Wilson has given a clear description on an 'average happy person' by his social traits: young, healthy, well-educated, extroverted, well-paid, religious, married, having high self-esteem and work morale. His second main conclusion concerned the notion of happiness itself – namely that it didn't develop too much.

Along Wilson's measurement there were numerous scales used in the 1960s and 1970s using both single item and multi-item measures. The single item scales mostly aimed at asking about happiness in general ('how happy do you feel' or similar) and multi item scales were measuring several aspects of satisfaction and emotional affect (for a brief review, see (Diener, 1984). The drawbacks of some of these was that they were developed not in a generic way, but to investigate the relationship of satisfaction and a specific area.

A relevant measure from this era is Cantril's Self-anchoring Striving Scale, or as simply known – due to the 'ladder' in the question – as Cantril's ladder (Cantril, 1965)[7]. This scale basically asks for a general life evaluation (abstracted to steps on a ladder, which allows personal interpretations of course) for the present and the close future on a 10 level scale. Although it is simple and tempting to be used, it does not uncover the underlying factors, yet when this is used the goal is in general not the discussion of these, just an overall indication of life satisfaction. Hence it has limited use, but due to its robustness it is still in practice today – used as a measure for life satisfaction.

[7] See the appendix on the questions in Cantril's ladder.

The first really widely used measure – also used nowadays as remarked later – is the 'Satisfaction With Life Scale' (Diener, Emmons, Larsen, & Griffin, 1985; Pavot, Diener, Colvin, & Sandvik, 1991). It is a very simple measure directly asking respondents about life satisfaction on different aspects per se[8]. This multi-item measure consists of 5 questions each of which can be evaluated on a 7 level scale, resulting in 35 points in total. The responses are equally weighted (points are summed up practically) to produce the SWLS index of a person that is classified to seven categories. Diener et al. claim that the factor loadings in the SWLS scale components are relatively even (0.61-0.84) and the overall SWLS correlations with other previous measures are also significant.

These measures have been used to survey well-being in various countries with different economies and social structures. The results obviously being different, it may be important to investigate the impact of the inter-country differences on the validity of the measures. There are numerous points where asking about satisfaction and happiness in different countries may lead to significantly different opinions when controlling for other factors. Two important factors are the wording of the survey questions[9] and the approach to happiness in the given culture.

Diener has reported on studies exploring samples of Asian students reporting on happiness (Diener, Suh, Smith, & Shao, 1995). He has found that indeed in the Asian sample, different SWB was reported compared to USA samples. Ouwenheel and Veenhoven on the other hand have analysed several studies and concluded that the differences in SWB are indeed due to the well-being provided by the states to their citizens (Ouweneel & Veenhoven, 1991). Two decades later Veenhoven revisited this question with more recent data and he reached similar conclusions (Ruut Veenhoven, 2012). Hence here we may thus assume that the SWB results are not significantly distorted by the differences in the cultural background of Western countries and post-socialist countries.

General findings on subjective well-being and social factors

In one of their works Diener et al. have numerous findings about SWB (Diener, Suh, Lucas, & Smith, 1999). They concluded based on results from the preceding decades that a substantial part of an individual's SWB is attributable to the personality and it is also heritable. Naturally both social and cultural environment are contributing factors, but they also conclude that those pursuing materialistic goals attain lower SWB levels due to the interference of these goals with other prosocial and self-actualisation goals. The latter conclusion also supports Easterlin's paradox on the micro scale.

Further evidence on the questionable direct effect of income was presented as well (Diener & Suh, 1997). In general the time series of the US, Japan and France have shown very small deviations between 1946 and 1990 (slightly decreasing for the US in this period). The data obtained did not cover the entire period, so the post-world war effects were not observable for France and Japan, but a few data points

[8] See the appendix on the questions in the SWLS scale
[9] There are many connotations of 'happiness' in different languages. It may mean hedonistic happiness, or it may be closer to satisfaction.

show a recovery from a lower level of SWB (as the war waged on in the country as well as opposed to the US).

Diener and Suh also investigate other findings of Wilson finding that religion explains only a very small ratio of SWB and is probably correlated to the cognitive affect and marriage is – as expected – positively correlated to SWB. An important conclusion corresponds to the age effect, which was again put into question. First of all, the differences in the emotional sensitivity of the elderly was not considered at all in the SWB measurements, hence the positive (and negative) affect scores were not properly calculated. As with age the affect's influence on satisfaction decreases, the measured SWB will also decrease unless the data is controlled for this effect. Moreover, a generic satisfaction measure (overall satisfaction) did not support Wilson's conclusion that a happy person is young.

Gender didn't have a remarkable effect on SWB either (although it is important to note that affects are more intense in the case of women than men), neither does intelligence. In terms of job satisfaction an opposite relation was suggested by Diener and Suh, namely that people more satisfied with their lives tend to have higher satisfaction in their work as well. Education was also correlated to SWB, but in this case probably the direct effects of being educated (higher income and social status) have to do more with the increased SWB.

Another interesting phenomenon about income was noted by Kahneman and Deaton, who concluded based on their results, that there is a given limit of income for emotional affect and hence for SWB. Under a certain income negative emotional well-being is experienced, but above that limit positive affect is not observable either, only the negative affect diminishes. This subjective limit is individual and relates to the minimal needs of emotional well-being (Kahneman & Deaton, 2010). This is similar to the figure of GDP and overall satisfaction, in the lower regions of income a clear correlation can be observed, but as it reaches a certain level, it largely decreases, or disappears even. All this evidence shows that although the Easterlin's paradox is not unfounded, the question of happiness or well-being is indeed much more complex than how much is in one's wallet.

The relationship between the components of SWB is also interesting. Ideal measures would be completely independent, but of course as was already noted this is not the case, as affect does have an effect on life satisfaction and vice versa. According to OECD data (collected between 2006 and 2010) life satisfaction, positive and negative affect are also correlated (OECD, 2013a)[10]. As it is expected, negative and positive affect are negatively correlated, which is in line with the results of Kahneman and Deaton. More importantly though, life satisfaction is also correlated to positive and negative affect, but the correlation is weak[11]. Hence although they are not ideal measures, they are not correlated to the extent to significantly distort results.

Besides the life satisfaction, affect and social variables, the objective and perceived quality of life measures are also very important. Quality of life measures

[10] Data used in this analysis derived from using Gallup World Poll results. The positive and negative affect was obtained by creating indices from questions related to affect and life satisfaction was measured using the Cantril ladder.

[11] The correlation is ~0.23 between life satisfaction and affect (both positive and negative)

include numerous items (some of which may also be classified as social factors): direct financial status, housing, living environment, health conditions, work conditions etc. Some of these items can be measured objectively providing a good basis for comparison, but their perception is also often recorded in the surveys. Using the perceived QoL data enables a more accurate mapping of factors influencing overall life satisfaction as well.

In terms of international surveys the importance of quality of life measures is that it provides basis for the cross-country comparison and also it provides context for interpreting the SWB results in general. When considering a cross-country or cross-regional comparison also generic QoL data can be used – for example information on the average income at a region, regional specifics about the environment and housing conditions. As shown later, numerous relationships were investigated using such data that allowed to establish some general trends and conclusions.

When the QoL data is recorded in the surveys it is often used to create indices – both objective and perceived data. As SWB has a high dimensionality, such indices ease the analysis – of course the structure of the various indices strongly influences the results. It is particularly important in case of cross-country comparisons to make sure that indices with similar meaning are used.

Also temporal and contextual effects are to be taken into account. The best example of this is the effect of major life events (both personal, and ones affecting a huge portion of the population). Such a recent event is the 2008 crisis, which had a clearly measurable effect on SWB (Deaton, 2012; Welsch & Kühling, 2011)[12]. It had a direct effect on income and other social factors (housing, job loss, etc.) that affected the perception of safety and then satisfaction in general.

Contextual effects also include the cultural differences as well. Similarly to the influence of personality the cultural traits also determinants of the structure of SWB. It was found in numerous studies that SWB results differ significantly between different nations (or minorities). While these results can partially be explained by the different economic status of nations and minorities, a key determinant was their culture (Diener et al., 2003).

[12] Deaton has investigated the issue also analysing the stock market and has found that it moves very much together with the SWB results. A reason for this – besides the direct relationship to other economic factors – is that the stock market also 'calculates' future expectations in prices similarly to how such event influences one's life satisfaction and expectations.

Measuring SWB – international surveys

Along with the scientific progress on the issue of well-being, more and more questions about well-being were included in international surveys. Most importantly these surveys aimed at gathering information for comparative analysis of the participating countries. Some major international surveys to mention are the World Value Survey (WVS), the surveys run by OECD, EU sponsored surveys (Eurostat, Eurobarometer and Eurofound surveys), the Gallup World Poll aimed at well-being[13] and the European Social Survey (ESS)[14].

The purpose of these surveys is different, hence the quality-of-life related questions targeted different domains as well. The WVS was indeed focusing on values, so well-being was only lightly emphasised. Surveys by the OECD and Eurostat on the other hand were strongly focusing on SWB, as their purpose was policy oriented. The Gallup World Poll also has a wide scope both in terms of well-being and background variables and the ESS has good coverage on many SWB domains as well. In the following these will be briefly analysed, while their results are briefly discussed. The results will focus on Hungarian data where available.

EU funded surveys

a. Eurobarometer

The Eurobarometer is the earliest survey run including life satisfaction related questions having a long timespan (it has entered into its fifth decade) and was mainly run in EU countries along with the expansion of the EU. Its big advantage is that it is run twice a year, hence very dense longitudinal data are available. The drawback of the survey is that it focuses on opinions and attitudes towards EU related or in general politics related variables, but does not include the variables required for detailed analysis – questions on perceptions and QoL related questions, except for a few basic ones. The survey includes however an explicit question on life satisfaction measured on a 4 level scale (Not satisfied at all, to Very satisfied) that enables a brief longitudinal analysis.

b. Eurostat surveys

Among the other surveys run by the EC, Eurostat focuses on Quality of life indicators in their survey – similarly to OECD, they based their indicators on the recommendations of the Stiglitz/Sen/Fitoussi Comission. The first (and so far only)

[13] The Gallup poll is also worth mentioning. It is also referred to in OECD publications and the well-being related research is only a small part of Gallup's activities. Although some results will be referred too, the Gallup World Poll will not be analysed in this paper in detail.

[14] There are of course other initiatives as well about measuring well-being, for example the New Economic Foundation (http://www.nationalaccountsofwellbeing.org/), whose goal is proposing international measures for well-being. However as no longitudinal data is available and there are no details on the samples used (responses collected on-line) it is not considered here.

implementation of these indicators was done in the 2013 EU-SILC[15] survey. The survey itself is being used since 2004 and the last available dataset is dated 2013, the results are gathered by the statistical agencies of the EU member countries.

The SWB module of the survey includes numerous questions about the psychological side of SWB (emotional affect) alongside questions aimed at satisfaction. The psychological questions include questions ranging from anxiety and calmness to more abstract topics – like the meaning of life. Many questions focus on satisfaction with different domains (accommodation, job etc.), but there are only general questions about overall satisfaction on the domain. Hence this survey will not be used further.

c. European Quality of Life Surveys

The EQLS survey is run by Eurofound and is a European cross-national household survey having been run in 3 waves so far. Run every 4 years, it was started in 2003 and it is at its next run in 2016. It contains complex question blocks on all aspects of subjective well-being putting emphasis on perceived and actual quality of life. The blocks include questions about housing conditions, health conditions, family conditions (and family life), time usage and work-life balance.

Obviously the main focus of the EQLS surveys is a European comparison rather than producing country specific analysis. The results concerning Hungary are in line with the Eurobarometer data for life satisfaction.

The model of subjective well-being in the EQLS consists of 5 areas adding 'psychological functioning' and 'social well-being' to the three commonly mentioned components life satisfaction, positive and negative affect.

World Value Survey (1982-)

One of the earliest international surveys including SWB questions is the World Value Survey (WVS). Already in its first wave of 1982, questions on happiness and satisfaction on various aspects (World Values Survey, 2014) were found. There were in total 6 waves so far with expanding scope as more and more countries joined in. Hungary was present in the first wave (1982), wave 3 (1995-1998) and wave 5 (2005-2009), but did not take part in the other three waves.

The questions concerning satisfaction in the WVS did not follow the structure of the SWB questions as mentioned explicitly. The questions resembled Cantril's ladder – although the formulation of the question didn't mention 'ladder' – asking for satisfaction on a 10 level scale. In the first wave numerous similar questions were raised. They related to past comparisons, future expectations, job satisfaction, household income satisfaction and 'home life' satisfaction (this notion allowed some free interpretations, but it resembled satisfaction with family life). In the following waves however, fewer and fewer questions concerned these matters, leaving only life satisfaction and household income satisfaction in the latest survey of 2014.

[15] SILC refers to 'Statistics on Income and Living Conditions'

On the other hand another important aspect, emotional affect is included in many questions. Happiness is surveyed explicitly, measured on a 4 level scale and on many domains (including job and family). There were always questions regarding the current emotional state of respondents and the affect experienced in the recent past.

So while the questions in the WVS are not completely in line with the structure outlined in the literature, the multi-item scales proposed by Diener et al. can be derived from the survey. Moreover the surveys contain questions mapping the contributing factors – namely surveying the importance of the various fields – hence more complex relations can be directly investigated.

The biggest drawback of the WVS is that it does not survey quality of life measures. So while happiness and satisfaction can indeed be investigated, there is no good way to really see connections to exogenous or some social variables (social status).

Currently the WVS is preparing its seventh wave, which is scheduled to be surveyed in the period of 2017-2018. Although the questionnaire has not been finalised yet, it is already clear, that SWB and happiness will be among the topics of the survey.

European Social Survey (2002-)

The European Social Survey (ESS) is cross national survey run biennially since 2002 in European (not necessary EU) countries (plus Israel). The surveys focus on many areas that are mainly related to attitudes (various domains including politics, media, human values etc.), behaviour (media consumption) and well-being. These topics were common in each round, but besides them there was always a specific topic recorded in a 'rotating' block of questions – these include attitudes towards immigration, welfare state, personal and social well-being etc.

The SWB block is in the 'core' block of the survey, which means that it was included in each round of the survey – currently included in 7 waves already. Both life satisfaction and happiness is recorded explicitly in the survey using an 11 level scale (0 to 10). Besides these perceptions there are also a number of QoL related questions and attitudes towards other domains relevant for SWB. The 'human values' block of this questionnaire provides better insight on the structure of well-being as well, as it is composed of queries on the importance of various life domains.

Considering the questions present in the ESS, its frequency and the range of responders (covering a relatively stable set of European countries), the ESS provides a solid dataset for investigating SWB from various aspects.

OECD Surveys (2011-)

Well-being and life satisfaction has been measured specifically by the OECD only since the past decade[16] – as scientific and mainstream interest started focusing more

[16] The research of well-being is conducted by the Better Life Initiative within OECD. The framework used in well-being research was established based on results produced in 2009 together with the Commission on the Measurement of Economic Performance and Social Progress (including Joseph E.

and more on these issues. The research conducted by the OECD focuses entirely on well-being, hence questions spanning all domains may be found in the OECD survey. A considerable part of the survey focuses on environmental and natural issues – this is due to the interest of OECD in sustainable development in general and is indeed gaining importance based on latest results.

The OECD framework is show in Figure 2 (from an earlier OECD publication), this already outlines the complexity of the OECD surveys. Different domains of well-being are described along 11 indicators in total, each consisting of multiple items. These include both objective and subjective measures, included in both self-reported and exogenous (country specific) variables.

There were three reports published by the OECD (OECD, 2011, 2013b, 2015) spanning the OECD countries with their data. In this aspect the OECD data is much broader than the VWS, yet since this initiative is relatively new, no long-term analysis may be done using that data[17]. Being an OECD country, Hungary has participated in each wave.

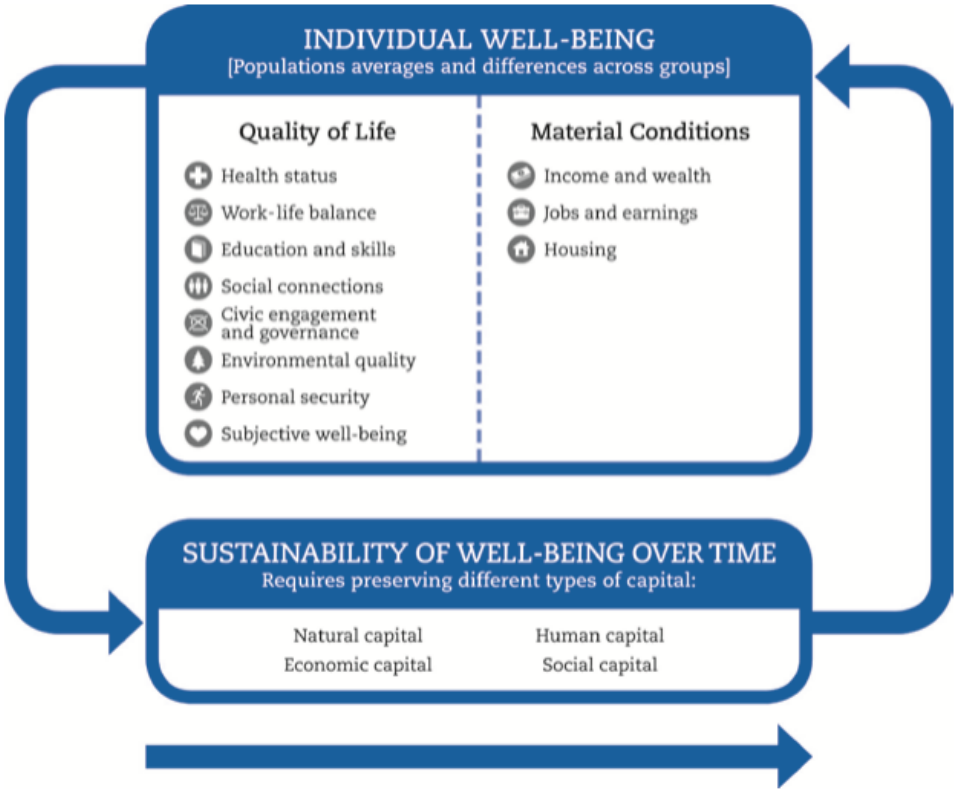

Figure 2: the OECD framework for measuring well-being (OECD, 2011)

Stiglitz – a strong critic of Easterlin's paradox – and Amartya Sen), also known as the Stiglitz/Sen/Fitoussy Commission.

[17] Note however that another study of the OECD gives a broad longitudinal analysis on well-being (van Zanden et al., 2014) – obviously summarising only the evolution of living conditions (material and environmental)

This framework (and the structure of the survey) resembles that of the EQLS surveys in the aspect of individual well-being. The different types of capital mentioned in this framework are an improvement compared to the EQLS model, as they are treated as exogenous variables. Hence comparisons can be made not only based on perceived QoL variables.

The results of the SWB measurements are quantified in the 'Better Life Index', which basically implements this framework. The index consists of indices covering the areas identified by the framework: housing, income, jobs, community, education, environment, civic engagement, health, life satisfaction, safety and work-life balance. This covers the data that is required to investigate most SWB questions. The weakness of this framework lies in the complete absence of emotional affect (neither positive nor negative affect are surveyed) – this omits investigating hedonic SWB completely, but gives a wide range of QoL data to use.

Results on subjective well-being – trends in the past few decades

In the aforementioned surveys subjective well-being is measured in several ways in different surveys along multiple dimensions. Measurements have been using various scales (4, 7, 10 or 11 level) and the dimensions surveyed covered different areas with different weights depending on the purpose of the survey. Most notably, the quality of life variables have been treated differently. Here a short analysis is given on SWB trends in the past few decades with specific emphasis on results in Hungary in comparison to the other Visegrád countries – Poland, the Czech Republic and Slovakia. All of them being post-socialist countries they serve as a solid base of comparison.

First of all it is important to define important periods in Hungary. The first period before 1990 signifies the last decade of the communist regime; then the years 1990-1995 correspond to the recession after the regime change. The years following 1995 were characterised by a boost in the economy and this period ended in 2004 upon joining the EU. The next period are the first 4 years in the EU until the crisis in 2008. The crisis years were 2008-2010, which are followed by the cycles of the current government (2010-).

So, to cover these periods it is interesting to look at the trends obtained from various databases (mainly ESS, WVS, and databases of SRI[18]) showing results in Hungary. These numbers show an almost constant decline in SWB data since the regime change (the data in 1999 probably being an outlier – this unlikely change can probably be explained by sampling issues).

[18] SRI refers to TÁRKI

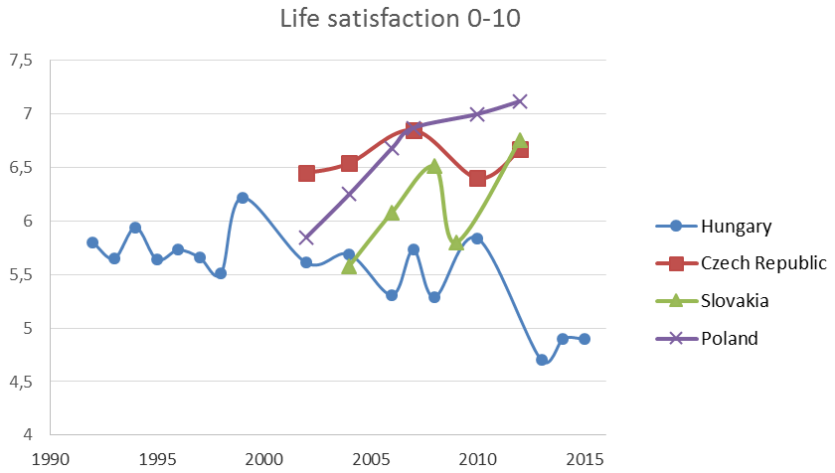

Figure 3: Mean life satisfaction in Hungary and the other Visegrád countries measured on a 11 level scale from various databases[19] – ESS, WVS (R. Veenhoven, 2016) and OECD data (Better Life Index[20])

These data show a steady, very slowly descending SWB value, which didn't change significantly until the 2008 crisis and the 2010 elections (after which it reached its negative peak). More interesting results can be seen if happiness data are also taken into account. The data in the following figure are from the WVS (on-line accessible) and we can draw somewhat different conclusions from these results – a reason for the difference could be the sampling methodology.

The other Visegrad countries did much better in the 2000s and are rapidly approaching the SWB level of the US. As the data shows, all these countries did benefit from joining the EU, in each country the SWB increased steeply after 2004. As expected the world crisis had its effect on them as well, with Poland being the only exception where the constant rise did not halt even temporarily.

[19] The data used here were obtained from the World Happiness Database using 11 level Life Satisfaction questions. See http://www1.eur.nl/fsw/happiness/hap_nat/nat_fp.php?cntry=53&name=Poland&mode=3&subjects=70&publics=4

[20] See http://www.oecdbetterlifeindex.org/countries/hungary/ for this data

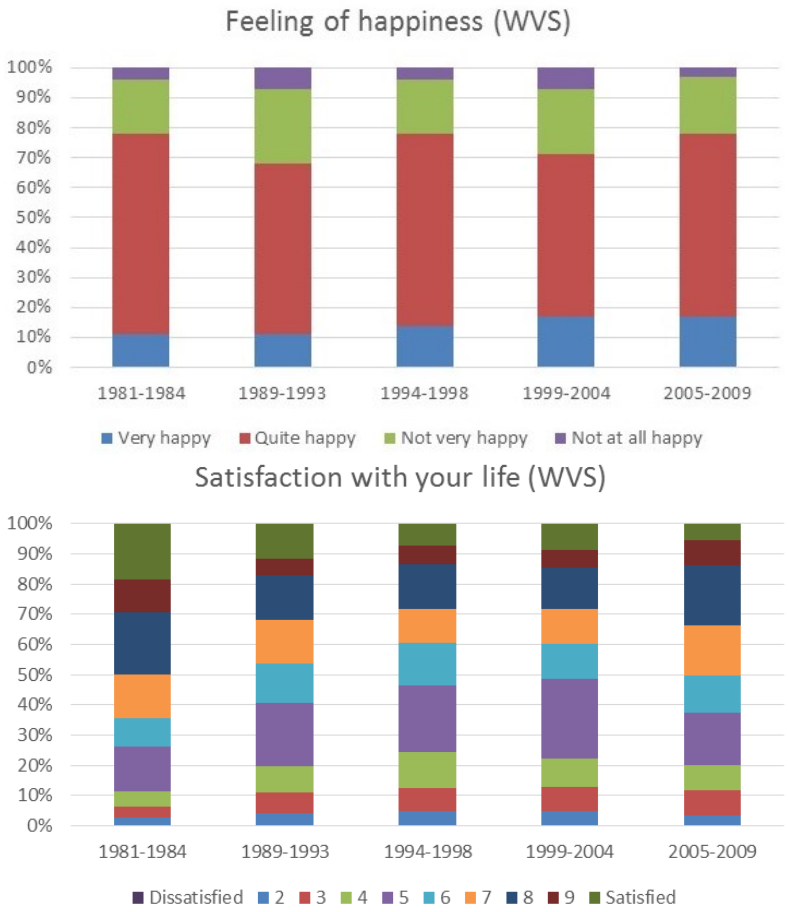

Figure 4: Happiness and life satisfaction in Hungary in the WVS data (1981-2009)[21]

The data on happiness show clear differences between the different eras in Hungary before, spanning the second economy decade, the regime change, and the pre/post European Union membership. Unfortunately no data is available from the post-crisis period in the WVS.

Starting from the last decade of the communist regime, Hungary was indeed the 'merriest barrack' among the post-socialist countries, with around 70% of people reporting being very happy or quite happy, and the same ratio reporting a life satisfaction of at least 6. After the change of the regime the immediate recession is clearly observable in the data, people reporting decreased happiness and much lower life satisfaction. Then life satisfaction moved together with happiness with the only exception of the 1994-1998 period, when despite the continuous decrease in life satisfaction, the happiness levels rose. In general the medium-term effects of the transformation from a socialist (with higher social and job security) to a capitalist-liberal (weakening of the welfare state) regime can be observed in life satisfaction data.

[21] The data presented here were obtained from the on-line data analysis of the WVS accessible at http://www.worldvaluessurvey.org/WVSOnline.jsp

The post EU period brought an improvement in the economy increasing both financial and social security and increasing life satisfaction as well to the post-regime change level.

To provide a short summary, we can conclude that in Hungary the collapse of the communist regime had the strongest effect on SWB among the recent major events in the country's history. Comparing Hungary to the other Visegrád countries based on this data we may see that EU membership did not have the expected positive impact on Hungary in this group. It is also notable that the GDP per person has increased the least in Hungary since 2004[22]

International results on work related well-being

Importance of work related well-being

Usually when referring to work related well-being, the objective outcomes of high job satisfaction are considered: the work output. While it has been proven before, high job satisfaction does indeed have a positive effect on productivity (Bryson, Forth, & Stokes, 2014; Judge, Thoresen, Bono, & Patton, 2001), such management oriented issues are not in the focus of this paper.

As was discussed in the previous sections, subjective well-being is composed of many factors, work satisfaction being one of them. Obviously since people spend at least a third of their day at work, the well-being during this period is a key contributing factor to overall well-being. In fact as Heliwell et. al found, the social aspects of work have a comparatively strong influence on overall life satisfaction (Heliwell & Huang, 2005).

Hence here not only 'job satisfaction' is addressed, but also its components as for example the social aspects of a job (responsibility perceived during work, creativity required for work) are also related to higher needs and influence life satisfaction directly.

The last few decades brought various changes on the field of labour. Not only did the employment rate increase in most OECD countries even despite the 2008 crisis (OECD, 2011), but there were huge changes in the contents and nature of work due to the boost in technology. The ratio of blue collar workers and jobs has decreased while the demand for skilled white collar workers has increased[23]. Besides this change another common phenomenon is related to globalisation – that is outsourcing and off-shoring white collar work. It has numerous impacts on the way of working, on people interacting each other and also on the role of work perceived by the worker.

The most important technical change that made this available was of course the introduction of computers into various fields of work. This completely changed the work done by the white collar workers and indirectly impacted on blue collar workers

[22] Based on World Bank data.
[23] In the case of the US the ratio of skilled white collar workers has doubled between 1920-1980 and then increased by another 50% until 2010 (Katz & Margo, 2013).

as well (Marteen Goos, 2013). It is probable that these changes will further speed up in the close future. There were numerous changes in the work and working conditions of white collar workers specifically; the work is less and less routine work, the office may or may not exist due to remote working and also with the sharing economy becoming an ever wider spreading trend (requiring highly developed technological infrastructure) and work contracts have also changed. All these affect how work is perceived by the workers and how it affects everyday life and general well-being, hence the work related well-being structure of white collar workers is an exciting topic.

The importance of work satisfaction and well-being perceived during work can be also demonstrated through its weight in everyday life. As also the WVS data shows, work is the second important domain in life behind family – in the last two decades in Hungary always at least half of the respondents has valued it 'very important' in life (on a 4 level scale) in the WVS surveys.

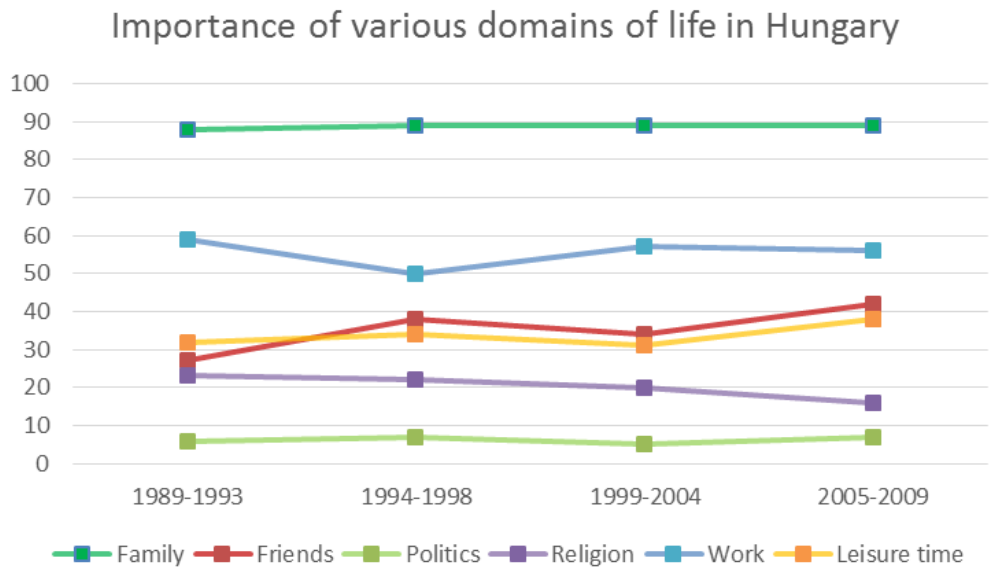

Figure 5: The importance of various life domains in Hungary using WVS data

Over the past decades work has not lost its second place in this ranking, being significantly more important than friends, leisure time or even religion. Hence it is highly relevant to further investigate the structure of job satisfaction and work related well-being.

Results on work related well-being

Although the main topic of this section is work related satisfaction, the purpose is to raise questions and inspire research about investigating work related well-being of white collar workers. The international surveys described earlier provide a wide range of data regarding work related well-being. Besides a short analysis, a recent study is highlighted here giving a good example on how these issues may be investigated and providing some interesting results.

A recent work by Hajdu and Hajdu presents a concise study on work satisfaction and its components on a European sample using the fifth wave (run in 2010) of the ESS (Hajdu & Hajdu, 2014). The sample size in Hungary in this wave was 521 and the country is ranked in the mid-range for work related satisfaction with the average of 7.21 on a 10 level scale. The authors have used the complete ESS dataset, where all relevant information (active-working responders, who also provided their income) was available (with a total of 15,875 responses used).

In their study Hajdu and Hajdu focused on eudaimonic well-being and consider the emotional affect also in the long term through properties indirectly (e.g. like help received from colleagues). They investigated the effect of objective and perceived (subjective) work properties on work related well-being. The ESS includes numerous questions on both objective and subjective work properties, and surveys the quality of life as well. In the paper the focus is on all these aspects besides numerous work properties – company size, contract type (fixed-term or indefinite), employment category (ISCO code[24]).

The main methodology of the study was OLS regression, but looking at the bivariate correlations between the different aspects of work and work satisfaction is already interesting. The ESS data shows that the variety of work done has the strongest correlation to work satisfaction followed by job security and learning new things during work[25]. These were followed by the help gotten from colleagues, possibility of advancement and influence on the work[26]. Although these correlations are not strong (0.33 being the strongest), it is interesting that health risks, leisure time and the ease of finding a new job were not correlated to work satisfaction (income was not included).

There were three models tested by Hajdu and Hajdu: one containing purely subjective measures, another containing only objective measures and a third one containing all subjective and objective variables. Clearly the subjective work properties have more effect on work satisfaction, with the coefficients being stronger for the properties mentioned before (variety of work, job security and learning new things). Higher income in general brings higher work satisfaction and the negative effect of overtime is due to worse evaluation of subjective work properties. Interestingly the employees at private enterprises are at a disadvantage in work satisfaction compared with governmental employees (despite the higher average income).

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[24] International Standard Classification of Occupations, it was encoded in 10 categories in the survey.
[25] Variety had a coefficient of 0.33 while the others were both around 0.27.
[26] Each three almost head to head with a correlation of 0.23.

Investigating the differential effects[27] shows somewhat different results, here the work-life balance has a strong effect together with work variety and advancement. Work security also has a stronger effect, but surprisingly the effect of flexible working hours is not relevant. Note, that 'flexible working hours' was not analysed in details[28]. Hajdu and Hajdu also compare the Western and Eastern European countries underlining several key differences[29]. Earnings are a much stronger factor in work satisfaction for Eastern European employees followed by the lack of advancement and work-life balance problems.

The data also highlight differences between graduate employees and employees not holding a degree. For degree holders the variety of work and learning new things has more impact on work satisfaction, while income had a higher impact for those without a degree. For our topic the former group is much more interesting as we can assume that degree holders are the group from which white collar workers are recruited. In the following conclusions the studies and surveys reviewed in this paper will be discussed from the vantage point of the impact on white collar workers.

Conclusion

In this paper a brief review was given on subjective well-being and the international surveys that could be used to investigate SWB. A particular focus was work-related well-being, more specifically the role of subjective and objective measures of well-being. The surveys reviewed here contained items focusing on hedonic and eudaimonic subjective well-being as well, hence the most important properties of SWB are well covered. Also they included various countries (mostly European) in the sample, hence cross-country comparisons are also feasible using the databases.

The variety of these surveys can provide insight into various aspects of well-being. The World Value Survey focuses mostly on attitudes towards certain properties of living, describing perception of attitudes, but it is short on quality of life related information.

The EU funded surveys (Eurobarometer, Eurostat, EQLS and ESS) cover wide areas and present a large scale of relevant information: explicit questions on both hedonic and eudaimonic properties SWB, broad QoL overview and often good details on specific SWB fields. Among these surveys the ESS is the easiest to access and already provides a good range of information enabling various topics for analysis. The EQLS gives more detailed QoL information than the other surveys, yet due to

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[27] Assuming that an independent variable jumps from the lowest to the highest category.
[28] In case of when flexibility means that the daily 8 hours of work may be shifted with an hour (from 9-17h to 8-16h), this may not be perceived as something significant as opposed to a flexibility which allows e.g. that some working hours are spread on different workdays to allow other types of activities (family, medical or governmental administration related) to be conducted during working hours.
[29] In Europe in general there is a significant difference in the work satisfaction between Western and Eastern European countries (basically post-socialist countries). It was previously found that although the 'iron curtain' was physically been destroyed, it still exists in terms of work satisfaction (and other properties) (Lelkes, 2003).

the lack of wider SWB blocks (it has blocks on different aspects of SWB) only a general SWB-QoL relationship can be investigated.

The OECD also provides a good framework for SWB research and the current waves already produced interesting results. It is already possible to do comparisons between the different waves, but with further waves it will be a good source for longitudinal studies. Since it includes non-European countries as well, even wider comparisons can be done.

In each of the aforementioned surveys at least some questions related to work-related satisfaction are included. Starting from the simplest explicit question various objective and subjective work properties are surveyed along which the different types of workers can be investigated.

The last few decades brought a change in the work itself as higher and higher proportions of managerial and technical professional work is done in the offices as white collar work. The tools of this work have also changed with technology and the geographic and language barriers are nowadays also disappearing. In these circumstances it is obvious that the attitude to work, the expectations of work and how work influences people's well-being is also changing, hence it is a relevant subject for research.

The data available now in these databases through these surveys can give insight to numerous features of this change. How is work itself valued in life? When deriving satisfaction from work, how important do we consider work-life balance, the advancement we can make in work, the variety of the jobs we do? Do we 'mix' our social life with work more frequently nowadays? How does the relationship between a company and an employee influence the employee's overall SWB?

While these questions have always been relevant, nowadays it will become more and more important to answer them both from managerial viewpoints and from the policy-maker's perspective. It serves so that both the employees' interests in enjoyable work and the companies' interests in a productive working environment can be considered when national governments or the management of companies are formulating work related policies.

References

Bryson, A., Forth, J., & Stokes, L. (2014, October). *Does Worker Wellbeing Affect Workplace Performance?* London.

Cantril, H. (1965). *The pattern of human concerns*. Rutgers University Press.

Deaton, A. (2012). The financial crisis and the well-being of Americans. *Oxford Economic Papers*, *64*(1), 1–26. http://doi.org/10.1093/oep/gpr051

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

Diener, E. (2016, February 20). The SWLS scale. Retrieved February 20, 2016, from http://internal.psychology.illinois.edu/~ediener/SWLS.html

Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction With Life Scale. *Journal of Personality Assessment*, *49*(1), 71–75. http://doi.org/10.1207/s15327752jpa4901_13

Diener, E., Oishi, S., & Lucas, R. E. (2003). Personality, culture, and subjective well-being: emotional and cognitive evaluations of life. *Annual Review of Psychology*, *54*, 403–425. http://doi.org/10.1146/annurev.psych.54.101601.145056

Diener, E., & Suh, E. (1997). MEASURING QUALITY OF LIFE: ECONOMIC, SOCIAL, AND SUBJECTIVE INDICATORS. *Social Indicators Research*, *40*(1-2), 189–216. http://doi.org/10.1023/A:1006859511756

Diener, E., & Suh, E. M. (2000). *Culture and Subjective Well-being*. MIT Press.

Diener, E., Suh, E. M., Lucas, R. E., & Smith, H. L. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin*, *125*(2), 276–302. http://doi.org/10.1037/0033-2909.125.2.276

Easterlin, R. A. (1974). Does economic growth improve the human lot? Some empirical evidence. *Nations and Households in Economic Growth*, *89*, 89–125.

European Commission. (2013). Progress on "GDP and beyond" actions. Retrieved from http://ec.europa.eu/environment/enveco/pdf/SWD_2013_303.pdf

Gallup Inc. (2016, February 20). Understanding How Gallup Uses the Cantril Scale. Retrieved February 20, 2016, from http://www.gallup.com/poll/122453/Understanding-Gallup-Uses-Cantril-Scale.aspx

Hajdu, G., & Hajdu, T. (2014). Szubjektív munkajellemzők és munkával való elégedettség Európában. *Socio.hu*, *2014*(4). http://doi.org/10.18030/socio.hu.2014.4.87

Heliwell, J. F., & Huang, H. (2005). *How's the Job? Well-Being and Social Capital in the Workplace* (Working Paper No. 11759). National Bureau of Economic Research. Retrieved from http://www.nber.org/papers/w11759

Judge, T. A., Thoresen, C. J., Bono, J. E., & Patton, G. K. (2001). The job satisfaction-job performance relationship: a qualitative and quantitative review. *Psychological Bulletin*, *127*(3), 376–407.

Kahneman, D., Diener, E., & Schwarz, N. (1999). *Well-Being: Foundations of Hedonic Psychology*. New York: Russell Sage Foundation.

Kahneman, & Deaton, A. (2010). High income improves evaluation of life but not emotional well-being. *Proceedings of the National Academy of Sciences*, *107*(38), 16489–16493.

Katz, L. F., & Margo, R. A. (2013). *Technical Change and the Relative Demand for Skilled Labor: The United States in Historical Perspective* (Working Paper No. 18752). National Bureau of Economic Research. Retrieved from http://www.nber.org/papers/w18752

Larsen, R. J., Diener, E., & Emmons, R. A. (1985). An evaluation of subjective well-being measures. *Social Indicators Research*, *17*(1), 1–17. http://doi.org/10.1007/BF00354108

Lelkes, O. (2003). A pénz boldogít? A jövedelem és hasznosság kapcsolatának empirikus elemzése
[Can money buy happiness? An empirical analysis of the relation between income and utility]. *Közgazdasági Szemle (Economic Review - Monthly of the Hungarian Academy of Sciences)*, *L* (5), 383–405.

Marteen Goos. (2013). How the world of work is changing: a review of the evidence. In *The Future of Work*. Geneva: International Labour Office.

Maslow, A. (1943). A theory of human motivation. *Psychological Review*, *50*(4), 370–396. http://doi.org/10.1037/h0054346

OECD. (2011). *How's Life? Measuring well-being*. Paris: Organisation for Economic Co-operation and Development. Retrieved from http://www.oecd-ilibrary.org/content/book/how_life-2015-en

OECD. (2013a). *Guidelines on Measuring Subjective Well-being*.

OECD. (2013b). How's Life? at a Glance. In *How's Life?* Organisation for Economic Co-operation and Development. Retrieved from http://www.oecd-ilibrary.org/content/chapter/how_life-2013-6-en

OECD. (2015). *How's Life? 2015*. Paris: Organisation for Economic Co-operation and Development. Retrieved from http://www.oecd-ilibrary.org/content/book/how_life-2015-en

Pavot, W., Diener, E., Colvin, C., & Sandvik, E. (1991). Further validation of the Satisfaction with Life Scale: evidence for the cross-method convergence of well-being measures. *J Pers Assess*, *57*(1), 161, 149.

Stevenson, B., & Wolfers, J. (2008). *Economic Growth and Subjective Well-Being: Reassessing the Easterlin Paradox* (Working Paper No. 14282). National Bureau of Economic Research. Retrieved from http://www.nber.org/papers/w14282

van Zanden, J. L., Baten, J., d'Ercole, M. M., Rijpma, A., Smith, C., & Timmer, M. (2014). *How Was Life?* Paris: Organisation for Economic Co-operation and Development. Retrieved from http://www.oecd-ilibrary.org/content/book/9789264214262-en

Veenhoven, R. (2016). *Distributional findings on Happiness in Hungary (HU)* (World Database of Happiness). Rotterdam, the Netherlands: Erasmus University Rotterdam. Retrieved from http://worlddatabaseofhappiness.eur.nl

Veenhoven, R., & Vergunst, F. (2014). The Easterlin illusion : economic growth does go with greater happiness. *International Journal of Happiness and Development*, *4*(1), 311–343.

Welsch, H., & Kühling, J. (2011). *How Has the Crisis of 2008-2009 Affected Subjective Well-Being?* (Working Paper No. V-330-11). University of Oldenburg, Department of Economics. Retrieved from https://ideas.repec.org/p/old/dpaper/330.html

Wilson, R. (1967). Corelates of awoved happyness. *Psychological Bulletin*, *67*(4), 294–306. http://doi.org/10.1037/h0024431

World Values Survey. (2014, April 29). Wave 1 1981-1984 Official aggregate v.20140429. World Values Survey Association Madrid, Spain.

Appendix

The Satisfaction With Life Scale (SWLS)

The following text is authored by Ed Diener and may be downloaded freely (Diener, 2016).

"Below are five statements that you may agree or disagree with. Using the 1 - 7 scale below, indicate your agreement with each item by placing the appropriate number on the line preceding that item. Please be open and honest in your responding.

7 - Strongly agree
6 - Agree
5 - Slightly agree
4 - Neither agree nor disagree
3 - Slightly disagree
2 - Disagree
1 - Strongly disagree
____ In most ways my life is close to my ideal.
____ The conditions of my life are excellent.
____ I am satisfied with my life.
____ So far I have gotten the important things I want in life.
____ If I could live my life over, I would change almost nothing.

- 31 - 35 Extremely satisfied
- 26 - 30 Satisfied
- 21 - 25 Slightly satisfied
- 20 Neutral
- 15 - 19 Slightly dissatisfied
- 10 - 14 Dissatisfied
- 5 - 9 Extremely dissatisfied"

Cantril's ladder

The following text describes how Cantril's ladder is implemented in the Gallup World Survey. It may be accessed freely (Gallup Inc, 2016).

"The Cantril Self-Anchoring Scale, developed by pioneering social researcher Dr. Hadley Cantril, consists of the following:

- Please imagine a ladder with steps numbered from zero at the bottom to 10 at the top.
- The top of the ladder represents the best possible life for you and the bottom of the ladder represents the worst possible life for you.
- On which step of the ladder would you say you personally feel you stand at this time? (ladder-present)

On which step do you think you will stand about five years from now? (ladder-future)"