

The determinants of a happy life: the evidence

This article is the second half of a two-part series where we study some of the main determinants that make up a happy life. In the first part we discussed the main foundations of the topic and we aimed to outline as clearly as possible that these determinants mean more to some people and less to others. By this we mean that earning a higher income can mean a lot more to one person than it does another. Therefore, a wage increase for these two individuals will have different effects on their happiness. In section 1 of this article we aim to illustrate this point by showing distributions of happiness scores in a broader context, and we touch on what this can mean for a policymaker or a government. Next, in section 2 we display some of the results from the literature relating to the determinants of happy lives. In the final section, we discuss the quality of some of these results and how these results could be improved as more data comes available.

Section 1: Averages and Distributions

Figure 1: Population-weighted distributions of happiness scores

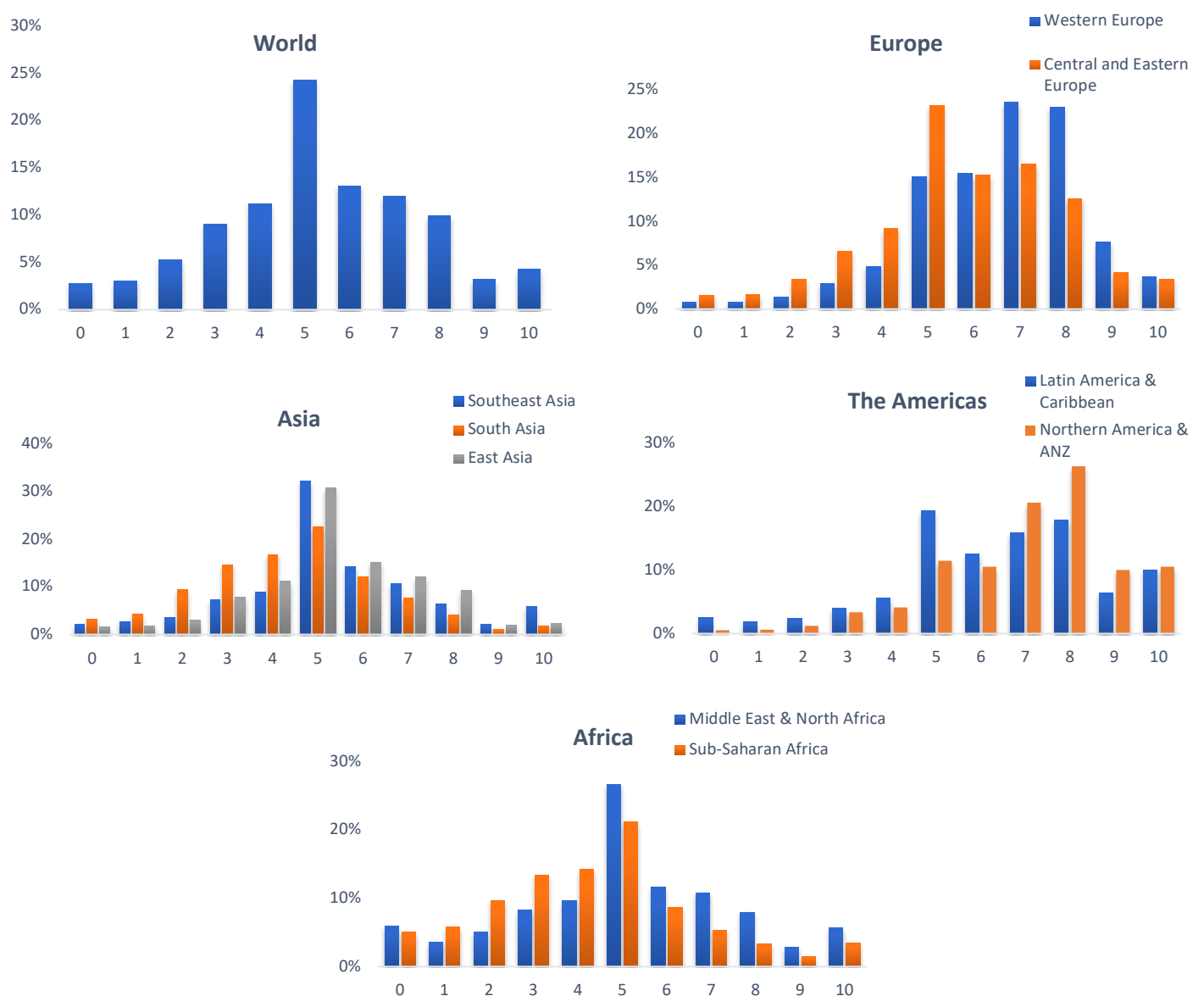


Table 1: Mean and standard deviations of happiness scores across regions (population-weighted)

	World	Western Europe	Central & Eastern Europe	Southeast Asia	South Asia	East Asia	Latin America & Caribbean	Northern America & ANZ	Middle East & North Africa	Sub-Saharan Africa
Mean (μ)	5.310	6.593	5.736	5.369	4.442	5.346	6.432	7.046	5.117	4.242
Standard Deviation (σ)	2.284	1.865	2.097	2.118	2.097	1.963	2.386	1.980	2.496	2.349

Figure 1 provides data from the UN's 2018 World Happiness Report to show population-weighted distributions of happiness scores across regions. Table 1 displays the mean and standard deviation for each of these regions, also on a population-weighted basis. These results are very good examples to show that the distributions in happiness scores can be very broad, therefore just because you live in Denmark or Finland doesn't necessarily mean you're happy. We use these countries as an example because based on the data from the UN report these countries are deemed to be the happiest in the world, on average. This is useful information because a policymaker could then look to break down what it is about these countries that makes them happier than others. The standard deviation also provides us with useful information regarding how happiness is distributed across a country or region. The data provided in Table 1 shows that typically countries with lower mean happiness scores tend to have a greater variation in scores, which is shown by a larger standard deviation.

In terms of developing our understanding on the determinants of happy lives, at the societal level, it is necessary for policymakers to consider both the mean and the standard deviation and adjust policies according to the information that this provides. As we discussed in the previous article, at the individual level, it's important to begin to understand where you personally sit within the distribution and use this information in your daily decision making.

Section 2: Results from the literature

The determinants of a happy life is clearly a very broad topic, there are so many different inputs into our lives that impact how happy we are. To digest this information into something that is meaningful for us to understand we need to generalise these determinants into fairly broad categories. These can then be broken down further to understand each determinant a little better. For example, our working life is one of the main determinants of how happy we are and from the research we can say that being employed has on average has an X% increase in our overall happiness level. But this can then be broken down into sub-categories such as what industry the person works in, the company they work for, the culture at this firm and the type of role a person is doing. By doing this you would obtain a much more realistic estimate of on average the typical effect for this person of being employed on their happiness level.

There are however at least five broad categories that stand out as those that have a significant impact on how we feel: our family relationships, our financial situation, our work fulfilment, our community and our health. We will also touch on one other factor that we also think is very important: our leisure time. And we choose to abstain from referring to determinants that are more related to our external context for now such as, the level of income inequality, the welfare system and the degree of democracy or personal freedoms where you live. These are topics we will look at in a different context and they should help to explain some of the differences in the distributions shown in Figure 1. But for now, we will assume that we do not have direct control over these determinants and therefore their impact against your comparison group are not important.

Financial situation

We start with our financial situation as this gives us the opportunity to use the results from this section as a barometer for the results in the following sections. To obtain good estimates of how different life events impact our happiness we want to track how individual's happiness changes over time in response to these events. The World Values Survey offers some of the best currently available data, which have been analysed by John Helliwell of the

University of British Columbia. His results cover 90,000 people in 46 countries.¹ In the survey a person reports his happiness on a scale from 10 to 100 and then also reveals other various elements of their life, which we can then use to determine relationships through time.² Each effect is estimated whilst assuming there has been no change in any of the other variables, to avoid mistaken inferences. The only downside of this is that this means we don't take into account knock-on effects from other variables, meaning we don't necessarily get the full picture. **Helliwell's analysis shows that for a drop in income of one-third, whilst holding GDP constant, causes a fall of 2 points on the happiness scale, on average.** Clearly this is quite a small change in happiness and other papers find there to be greater impacts, but we can now use this result as a standard to judge against the other determinants.

Our financial situation can be subject to a great degree of variation depending on our circumstances. We know from extensive studies on this topic,³ that typically the effect of an increase in income on our happiness is positive but diminishing. There are many factors that play a role in this relationship, such as the current size of the "safety net" we have available to ourselves and how this is impacted should a financial shock occur such as becoming unemployed. If becoming unemployed severely impacts your ability to meet your mortgage payments in the coming months then it's likely to have a bigger impact on your happiness, through increased stress, than for someone with a large safety net. Expectations matter too, if you already anticipated your wage increasing then this is likely to have a small impact on your overall happiness. Studies that have included relative income suggest that your happiness is strongly affected by who you compare yourself to. If your comparison group also receive a pay increase when you do, the impact on your happiness from this increase in income is very limited.

Family relationships

In almost every study of the determinants of happy lives, your family relationships and your close private life are deemed to have the greatest impact on your overall happiness. **If someone is divorced then this will lead to a 5-point drop in a person's happiness score and if someone is separated, meaning a more recent break-up of the relationship, the data shows an 8-point drop.** This is four times the effect of losing a third of one's income. We should note that there can be some causation issues in this analysis. Potentially it is the case that less happy people are likely to get divorced or separated. Often it has been shown that the impact of a divorce may be negative in the short run but in the long run, if it was the right decision for the people involved, then this can lead to an increase in how happy they are. This also makes intuitive sense to most of us but for the purposes of this analysis it doesn't matter so much. We are simply trying to tell whether these are important determinants for a happy life and this analysis suggests that the quality of our close personal relationships matters a lot – as you would expect.

The effect of having children on your happiness is a very interesting topic, one that we will cover in more detail in the future but put simply – the evidence is very mixed. Having children can increase the level of purpose in one's life but often it leads to less pleasure due to having less free time. Some happiness studies have shown that the happiness of parents tends to increase around the time of having children but then falls back the previous level thereafter. Studies have also shown it matters quite a lot how much help the parents receive from other family members or through their community in bringing up their children – allowing the parents to have some more free time for themselves.

Typically, marriage or cohabitation increases your happiness level and there are many knock-on effects that benefit both of your lives: you share resources, you give love towards one another, you have better sex lives than single people (more of it and more satisfying)⁴ and you tend to be healthier and live longer, on average. As we have mentioned many times, these results are averages and there will be a lot variation around these results. The variation in relationships tends to depend on the quality and stability of the relationship and this matters a lot more than just being involved in one.

¹ The results from this paper are broadly consistent with the results using different surveys such as the General Social Survey in the US or the Eurobarometer Survey. See Di Tella et al. (2003).

² The scale is actually 1-10 but it's easier to explain the relationships when they are multiplied by 10. From this, the mean happiness score is 68 across the sample and the standard deviation is 24.

³ See Clark, Frijters and Shields (2007) for an extensive literature review of the income-happiness gradient.

⁴ See Waite (1995).

Work fulfilment

In our previous articles we have referenced the impact of work on how we feel so we will keep this section fairly brief. Employment increases our sense of purpose and makes us feel happier. In most cases it offers an opportunity for social interaction, it increases our feeling of worthwhileness and gives us a reason to get up in the morning. Therefore, it is unsurprising to find that in most studies it stands out as one of the most important determinants of how happy our lives are. **The data shows that a person that is unemployed is 6 points lower than person that it is in work, on average.** In addition, we mentioned previously we wouldn't touch on external context but to offer some further insight in this topic: when the unemployment rate has increased by at least 10 percentage points, this will lead to a 3-point decrease in happiness, on average, regardless of whether you are employed or not. So therefore, even people in work fear unemployment when they see others all around them becoming unemployed; this added stress decreases their happiness. Consequently, making low and stable unemployment should be an important societal objective.

Community and friends

The quality of our community is incredibly important for determining whether we make friends, the types of relationships we have with our friends, and whether we feel safe. It is not easy to measure this accurately so typically researchers tend to focus on asking questions to participants related to trust. If we have good relationships with our friends, we should be able to trust them, and we should also feel safe too. The variation in the answers to these types of questions is very high in the World Values Survey, with 5% of people saying most people can be trusted in Brazil, compared with 64% of people answering in the same way in Norway. **In terms of its effect on happiness, this is the smallest change across all the determinants, with a 1.5-point drop in happiness when the percentage of people responding "yes" to the statement "in general, people can be trusted" has dropped by 50 percentage points.** In addition, trust in key public institutions such as the government, police or legal system is also associated with greater happiness. Some interesting evidence relating to safety has come available from the OECD's better life index⁵. They have shown that despite the fact that many people feel very safe in Japan, they still rate it very highly as a priority for their country. In Japan, less than 2% of people have reported falling victim to an assault over the last 12 months, which is one of the lowest rates in OECD – despite this a large proportion of participants rated this as one of the main priorities for their country. This would tend to suggest that for people in Japan the effect of community and safety on their overall happiness is greater than for people in other parts of the world.

Health

Both physical health and mental health have significant impacts on our overall happiness. It is an important determinant of how happy we are. Having said this, healthy members of society do tend to over-estimate the loss of happiness that people actually experience from many of the main medical conditions. **The data shows that a 20% decrease on subjective health scale (this is how we feel about our health rather than our actual health, as the former tends to have a bigger impact on our overall happiness) leads to a 6-point drop in our happiness level.** Clearly this is fairly large impact when compared against some of the others mentioned so far, but the data has shown that we can adapt quite well to a drop in our physical health through changing what we tend to focus our attention on. We find other ways to obtain purpose and pleasure. Having said this, people tend to never adapt to chronic pain or to mental illness and this is why the effect of mental illnesses on overall happiness level always supersedes the affects from physical illnesses.

Leisure time / how we spend our time

This final section is one that we have added ourselves, typically the research tends to focus on five previous determinants as being the main ones that impact how happy lives are. Often this is the case because leisure time is broken down in several different activities such as exercising, reading, volunteering or caring for others etc. and to be expected all of these types of activities are positively associated with happiness. Most of us use our free time to do things that we enjoy, and this makes us happier. Having said this, and this is more related to the previous article

⁵ The Organisation for Economic Co-operation and Development's (OECD) Better Life Index is detailed in full in our second article relating to measures of happiness and wellbeing.

when we discussed preferences, often it is the case that there are many other activities that we would prefer to be doing during our free time but for one reason or another, we don't. Essentially, we aren't fully considering all our preferences towards different activities when we are making decisions about how to spend our free time and this leads to a sub-optimal outcome. This is why we feel that tracking your happiness through time, to get a better understanding of your preferences should lead to a better allocation of your time, therefore making you happier.

Section 3: Looking ahead

In all academic sciences the greater the quality of the data available to a researcher, the more likely they will be able to accurately estimate the true value of what they are looking to obtain. More data provides us with more information about how people behave and therefore we are more likely to converge closer to this true value, meaning we can understand how the world works a little better. Our current understanding of the determinants of happy lives is heavily impaired by the lack of data we have available to us. In an ideal world we would have similar charts to those in Figure 1, broken down by each determinant at a regional level within countries over time. We are a long way away from obtaining information like this but as more longitudinal data (this is data that tracks the same sample of people over time) comes available it should become possible to understand these relationships better. Consequently, when you interpret the results from the literature, focus more on the relative size of each estimate against another one, rather than what the number actually is (i.e. family relationships are more important determinant on your overall happiness than your community).

We have already produced an article on happiness measures so we don't wish to go into too much detail on this point, but the happiness measure used can also significantly change the result when considering the determinants of happy lives. For example, it has been widely shown through using life satisfaction data, where participants are asked to rank their life to date on a scale of 1-10, and these same individuals are then tracked through time, the effect of a wage increase is marginally diminishing up to a certain point, and after this threshold the effect is equal to zero. More recently, high frequency data asking people on a day to day or even moment to moment basis how they feel has shown that for higher earners this effect actually turns negative. You can speculate as to the reasons for this, perhaps the highest earners are more stressed or don't manage to maintain a good balance between work and life and these are also questions that could be answered with a greater quality of data available to us. Therefore, it is not only important to ensure that we obtain a greater quality and granularity of data but it also important to make sure that our measures and questions to participants are correct. Life satisfaction measures can often have an upward bias and for high earners this can be quite intuitive. High earners may be proud of the fact that they have reached a position of seniority and power in their firm and this will give them a greater sense of purpose – which will also increase how happy they are. But this is only one side of the equation. If their day to day lives have become more stressful and they have less time for the pleasurable parts of their life, due to their promotion, then this can make them feel less happy. If the effect of loss of pleasure in their life is greater than the effect of the increase in purpose, then this will lead to a decrease in their overall happiness level.

References

- Csikszentmihalyi, Mihaly. (1990) *Flow: The Psychology of Optimal Experience*. New York: Harper & Row, Print.
- Clark, A., Frijters, P., & Shields, M. A. (2007). *A survey of the income happiness gradient*. Journal of Economic Literature
- Darity, William and Goldsmith, Arthur (1996). *Social psychology, Unemployment and Macroeconomics*. Journal of Economic Perspectives. 10(1): 121-40.
- Diener, Ed and Robert Biswas-Diener (2000). *Will Money Increase Subjective Wellbeing? A Literature Review and Guide to Needed Research*. Mimeo. University of Illinois.
- Di Tella, Rafael, MacCulloch, Robert and Oswald, Andrew (1999). *How do macroeconomic fluctuations affect happiness?* Mimeo. Boston: Harvard Business School.
- Di Tella, MacCulloch, Robert and Oswald, Andrew (2003). "The macroeconomics of happiness". Review of economics and statistics 85(4), 809-27.
- Dolan, Paul (2014). *Happiness by Design: Finding Pleasure and Purpose in Everyday Life*. London. Allen Lane.
- Dolan, Paul and Metcalfe, Robert (2012) *Measuring subjective wellbeing: recommendations on measures for use by national governments*. Journal of social policy, 41 (2), pp. 409-427.
- Easterlin, Richard A (2000). *Income and Happiness: Towards a Unified Theory*. Mimeo. Los Angeles: University of Southern California.
- Esteban Ortiz-Ospina and Max Roser (2018). *Happiness and Life Satisfaction*. Published online at OurWorldInData.org. Retrieved from: '<https://ourworldindata.org/happiness-and-life-satisfaction>' [Online Resource]
- Ferrer-i-Carbonell, A. (2005). *Income and well-being: An empirical analysis of the comparison income effect*. Journal of Public Economics, 89, 997–1019.
- Helliwell, J. F. (2003). *How's life? Combining individual and national variables to explain subjective well-being*. Economic Modelling, 20, 331–360.
- Helliwell, J., Layard, R., & Sachs, J. (2018). *World Happiness Report 2018*, New York: Sustainable Development Solutions Network
- James, William (1898). *Does consciousness exist?*The William James reader: Vol. 1. Wilder Publications.
- Layard, Richard. (2011). *Happiness: lessons from a new science*. New York, N.Y: Penguin.
- Sandvik, E., Diener, E. and Seidlitz, L. (1993). 'Subjective well-being: the convergence and stability of self and non-self-report measures', Journal of Personality, vol. 61, pp. 317–42.
- Seligman, M. E. P. (2002). *Authentic happiness: Using the new positive psychology to realize your potential for lasting fulfillment*. New York: Free Press.
- Waite (1995). "Does marriage matter?". Demography, 32, 483-507.