# The Economics of Happiness: A Brief Review

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# Abstract

Research in subjective wellbeing and happiness has rarely been as prominent as nowadays. We seek to evaluate the composition and definitions of happiness, using a literature review format as our guiding structure. After defining happiness and wellbeing, this article provides a brief overview of happiness measurement, before delving into the relation between policy, structure, and subjective wellbeing levels. Finally, this article concludes with a look into the future of happiness research, developing anticipations and requirements for effective happiness research and maximization.

*Keywords*: Subjective wellbeing, SWB, economics of happiness, happiness, happiness review, modelling happiness, eudaimonia, environmentalism, affect

Introduction: The Economics of Happiness "Economy is the art of making the most of life" (George Bernard Shaw, 1903)

In 1789, Bentham proclaimed that as a people we derived all utility from our happiness, and that as of such, happiness must be the penultimate goal for society. Since then, our principles of utility and happiness have much evolved, and economists have amalgamated utility as a being derived from observed choices (Thaler, 1992) and as stemming from a variety of different sources (Kapteyn, 1985).

This article argues that when considering decision making, observed choices (i.e., *revealed preferences*) aren't necessarily the best indicator of utility, and that when studying economics, one should rather seek to understand happiness as the primary factor of experienced utility: a unique factor in which more is always desirable and better. There is hence a shift from "observed well-being" to "subjective well-being".

Furthermore, as one delves deeper into the realm of *happiness research*, one realizes that many of our institutions and apparatuses aren't necessarily geared towards maximizing happiness and therefore, utility. It would seem relevant to consider an *alternative*, a new balance of happiness and equilibrium in which happiness can be maximised.

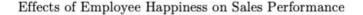
We here treat happiness as a *consequence of our acts* and *universal resource* like no other. It is infinite, both *public* and *private*, qualitative and subjective, yet at the same time, measurable and quantifiable.

# Why study happiness?

The most apparent reason for which one must measure and study happiness is in such evident: in order to maximise happiness in a given population, we must understand it, along with its links, dynamics and evolutions. More importantly, we must measure its growth, quantify its extent and reach, and deduce its variables and factors. All of this eventually culminates under a great happiness equation, of which many discovery attempts have been made (over 317 mentions of "Happiness equations" in the economics article RePEc database, from 1993 to 2022, averaging 11 attempts per annum).

Yet what exactly are the effects of happiness on a person and on society to make it so worth of analysis from an economic point of view?

Research proves that happiness has numerous behavioural and physiological benefits: increased productivity at work (Oswald et al., 2015, or Bellet et al., 2019), higher incomes at a later stage (De Neve & Oswald, 2012), better purported health and longevity (Frey, 2011), increased social intelligence and consideration such as donating or volunteering (Ifcher & Zarghamee, 2011), reduced risk-taking or even more propensity to save money (De Neve et al., 2013). Happiness thus has important implications on our behaviour as individuals and, both directly and indirectly, in the choices we make.



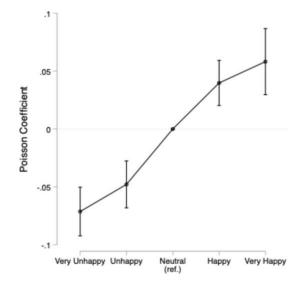


FIGURE 1. Effects of Employee Happiness on Sales Performance, taken from Bellet et al., (2019). This figure demonstrates the relation between happiness

levels (taken from a 5. scale) to *likelihood* of relative performance in a surveyed multinational telecommunications company using Poisson regression.

On a larger scale, happiness is proven to have positive macroeconomic implications due to changes in behaviour, such as delayed gratification, higher levels of employment (De Neve, 2013) and has a positive multiplier force, spreading from one happy individual to another (Fowler & Christakis, 2008).

Alex Edmans, in his 2012 article *The Link Between Job Satisfaction and Firm Value, with Implications for Corporate Social Responsibility* quantitatively and qualitatively demonstrates that happier employees lead to increased comparative stock market capitalisation, showing that corporate social responsibility, employee retainment and worker motivation are intrinsically linked to job satisfaction and therefore market performance.

Thus, happiness undoubtedly has important ramifications in the way humans think, compare, and exchange, on an individual and societal scale. The study of happiness is of foremost relevance: not only to our wellbeing as a society, but to our efficiency and understanding of human interactions and societal evolutions.

# Happiness: A Multivariable Equation

Whilst an entire field of study could be dedicated to the reported behavioural and physiological benefits of happiness, understanding the variables which make up *happiness* is specifically interesting from an economist's point of view. Due to the ambiguity and wildly different conceptions of the word *happiness* (originally coming from the Old Norse term *happ*, identifying luck or chance), it is, however, easier to refer to what is commonly identified as *subjective well-being*: a combination of affective, cognitive, eudemonic, and retrospective dimensions. The author here identifies 4 main happiness variables in mainstream subjective wellbeing research: life satisfaction, affect, eudaimonia, and culture.

### Life Satisfaction

Subjective well-being is characterized by an important state-like property: *life satisfaction*, which is conditioned by self-evaluation of one's condition and means. Life satisfaction is an all-encompassing variable, which is influenced by both macro-level changes (policy, environment, education, etc.) and individual perception (status, self-esteem, job satisfaction, etc.). Thus, life satisfaction is evaluated over a longer time period (the extent of our *recollection*) and is subject to recollective bias (Kahneman, 1999).

Typically measured by life satisfaction surveys (*how satisfied are you with your life/condition...*), life satisfaction is intimately subjective and referential (Deaton, 2008). The notion that one's life satisfaction is based on reference is very important: as will be shown below, this means that life satisfaction measures are highly relative and adaptable. What is also of interest and only recently discussed in subjective well-being research is the idea of historical and anticipated reference points, as used in Krekel and Prati (2022), who additionally identify *recalled life satisfaction* and *expected life satisfaction* as important measures in their multidimensional approach to subjective well-being. Finally, as one of the most important predictors of happiness, policy aiming to improve life satisfaction is increasingly recommended by economists and institutions alike (OECD, 2013).

# Affect

Affect is considered as people's day-to-day fluctuations in emotions or hedonic experiences (pleasure and enjoyment). From this are identified two factors: emotions and moods, which are short-term and medium-term perceptions of day-to-day events making up one's affect.

Affect encompasses short-term spectrum evaluations of experiences one has had on an emotional scale, which includes arousal (induced and further inducing affect) and short-term impulsion to act. Hedonic analysis, i.e., considering the pleasure of an experience, are given as an affective reaction: what one must understand is that affect is intimately *experiential*.

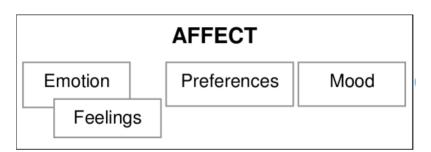


FIGURE 2. The Components of Affect according to *The Evaluation of Affective Quality in Social Software: Preliminary Thoughts* (Piccolo et al., 2010), identified from *Affect and proto-affect in effective functioning* (Ortony et al., 2004).

Affect can be measured using real-time data (such as Prescott and Csikszentmihalyi's Experience Sampling Method, which prompts surveyed individuals throughout the day for their affective status, essentially asking *how are you?*) or using retrospective time diaries. Alternatively, Daniel Kahneman has developed the Day Reconstruction Method which attempts to reconcile retrospective and real-time data by asking participants to divide their day into "episodes" which they then evaluate using as a basis their feelings, activities, and interactions.

Participants then evaluate these episodes using as a basis feelings, activities, and interactions.

Affect provides a key insight on subjective well-being on the greater scale: whilst being satisfied with one's life is an important measure of happiness, well-being should also include the short-term evaluations of one's condition, which, as Kahneman and Kruger (2006) prove, is an important component of overall subjective well-being.

# Eudaimonia

Eudaimonia, from the Greek  $\varepsilon \delta \delta \alpha \mu \omega v$  (eudaímōn) meaning "fortunate" or literally, "possessed by good spirit" refers to our capacity to live a *complete life*, which is fulfilling, purposeful and meaningful to both oneself and society. Stemming from Aristotelian philosophy, there is an important distinction between hedonic pleasure and eudaimonia: eudaimonia is not feeling "good" or "proud", but rather "living well" and attaining a higher-order perspective and way-of-life.

Eudaimonia shares a fine line with the principle of flourishing, or French *épanouissement*, characterized by engagement, purpose, selfesteem, optimism and resilience, along with vitality and positive relationships and functioning (Clark & Senik, 2011). In *Living Well: A Self-Determination Theory perspective on Eudaimonia* (Deci et al., 2008), eudemonic living is given by 3 requisites of self-determined lifestyle:

- 1) Pursuing goals for their own intrinsic sake instead of extrinsic objectives (i.e., engaging in acts for the sake of personal growth or communal commitment, instead of for wealth or status)
- 2) Behaving in a self-determined, aware manner: displaying physical and psychological volition and capacity
- 3) Satisfying basic psychological needs: competence, relatedness, and autonomy

In evaluating an act's conformity to eudemonic standards, first-order motivations are seen as being key to eudemonic living. A common example of motivation verticality can be found by questioning the motivation behind work (inspired by Deci & Ryan's 2008 example). In this example, workers are asked the question "Why do you work?", to which most answer "For income". This is of tertiary order, and the surveyor keeps asking questions; "Why do you want income?" to which an answer could be "To be wealthy and thus admired". This ensues until reaching a first-order motivation, which is not reducible, e.g. "Why do you want to be admired?" "To be loved". The quest for love cannot be reduced any further, and Kasser & Ryan (1993) prove that acting in following with first-order motivations.

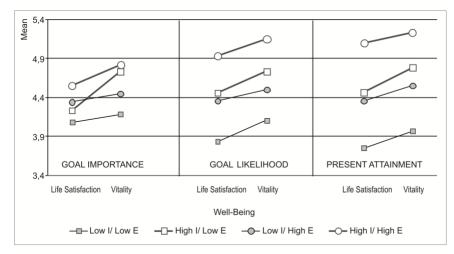


FIGURE 3. Well-being grouped across clusters in accordance with goal importance, future and present goal attainment. 'I' denotes intrinsic goals, 'E' denotes extrinsic goals. Taken from *Aspirations and well-being: Extrinsic vs. intrinsic life goals* (Brdar et al., 2011).

Eudemonia has important implications for policy, and it is shown that policies gearing towards environmental protection, pro-environmental education, and consideration of nature increase eudemonia in individuals (Krekel & Prati, 2022), indicating the success of "higher-order" policies in raising not only objective wellbeing, but subjective wellbeing too. Conversely, increased levels of happiness and eudemonia show a propensity to engage in pro-environmental behaviour, such as buying organic or eco-labelled products. Eudaimonia can therefore not only be considered as an indicator or state of happiness, but also as "a descriptor of character" (Deci et al., 2008).

# Culture

Finally, culture is shown to have a non-negligible role in predicting subjective wellbeing levels. For instance, the French, the Germans, and the Italians, despite presenting similar levels (on a relative scale) of human development, GDP per capita, political utility, and growth with their Swedish, Belgian, or Dutch counterparts, consistently report lower levels of subjective wellbeing. Claudia Senik specifically analyses this in *The French Unhappiness Puzzle: The Cultural Dimension of Happiness* (2011) and concludes that the French are naturally predisposed to unhappiness at a cultural level: through their circumstances (institutions) but more importantly, their mentality (shaped by education, citizenship status, origin and background).

Conversely, at an individual scale, *very happy people* for example don't seem to be particularly religious or experience more objectively good events for example, but rather, exhibit strong relationships and a

commitment to spending time with friends and family (Seligman & Diener, 2002). Thus, a mentality for happiness can be developed, or a culture, in which social relationships with friends and family play a more important role than individualism.

The author here hypothesizes that above life satisfaction, affective, and eudemonic components of happiness, there seems to be a cultural one too. Some countries seem to breed a culture of happiness, but how? The author decides to treat culture not only to achieve happiness, but additionally, as a form of happiness in of itself in constituting positive subjective wellbeing.

Through the world, immigrants present significantly lower happiness scores than their fellow citizens, and this even after adjusting for income, health, age, and unemployment (Senik, 2011). This lies both in their condition as an immigrant (being far from home, sometimes forcefully), but also in their environment as an immigrant: facing discrimination, lack of assimilation, and a cultural disconnect in their host country. This tends to show that happiness not only accepts a moderating "mentality of happiness", but as a concept, also accepts culture and environment as independent variables directly affecting happiness levels. The role of cultural 'comfort' thus reveals itself to be an important consideration when self-evaluating one's wellbeing and could prompt further research into the matter.

Culture can therefore both be an independent and moderating variable in happiness, affecting the strength and direction of other components of happiness variables, and as a variable in of its own.

Status is an interesting example of the cultural weight in subjective wellbeing, and a subject more thoroughly explored when examining the *relativity of happiness*. Not only does it play an important role in determining happiness levels (Robert Frank's *positional arms race*) through comparison, but as a cultural one too: countries consider and prioritize components of status differently. In India, *ceteris paribus*, the Brahmin caste (the highest in the Indian caste hierarchy) present higher levels of subjective wellbeing than all other castes by sole virtue of their status as Brahmins (van Landeghem & Vandeplas, 2017).

# Genes

The last component, which is only tangentially linked to the *economics of happiness* but far too often overlooked for its sake is the genetic component of happiness. It has been long-established by the great variety of specialists in human behaviour and biology that some are predisposed to happiness simply *because*. Each person secretes serotonin, dopamine, or endorphins in different amounts (amongst many other hormones and neurotransmitters necessary for *happiness*), which is largely contingent on genes. Mental health, and psychological effects such as disease or disorder are largely heritable and often genetically transmitted.

Lykken and Tellegen (1996) conduct a review in their paper *Personality similarity in twins reared apart and together* and identify a 40% variation in short-term well-being due to a genetic predisposition to happy affect, a study confirmed by Bartels et al., (2002), who record similar findings determining that subjective well-being is linked to genetic predisposition to a 40% extent.

What is therefore important to remember as we gradually seek to maximise our happiness equation is that unlike most economic considerations, happiness is inherently unequal, and to a certain measure, out of our control.

Measuring Happiness

# The accuracy of measurements

As briefly discussed previously, happiness has an important biological component and as such is also a well-studied biological phenomenon. For example, developments in technology and neurobiology – such as left prefrontal cortex activation (Davidson & Fox, 1982) or hormone detection allow for researchers to precisely determine whether a person is objectively happy or not at a given time. Physiologically, Duchenne smiles – also known as smiling with one's eyes, as measured by Ekman et al., (1988) prove to be a successful indicator of a state of happiness. Yet whilst determining given affect, the enjoyability of an action or state is reliable and useful across short time frames and samples, examining larger data, and "macro-level" components such as life satisfaction (one of the essences of subjective wellbeing) remains difficult.

Here, the OECD *Well-being Research* guidelines (2013) prove to be an interesting reference for further analysis of subjective wellbeing measurement. The OECD provides a reliable methodology and set of survey questions based on demographics, material conditions, objective quality of life (health, inequality, development indicators, etc.) and psychological measures, which, when amalgamated and adjusted, provide a handy insight into the various components and level of subjective wellbeing in each population, using inference and deduction. What is interesting is the combination of subjective analysis (typical "how satisfied are you?" survey questions) with objective data through relationship analysis, psychological outgoingness, and experience recollection which allow for the balancing out of "uneven" subjective data. The main issue, thereafter, lies in reliable and representative data collection, a major difficulty for current mainstream subjective wellbeing data providers such as the Gallup World Poll, World Value Survey and Eurobarometer survey.

Finally, a new form of data collection has emerged which seeks to bridge the middle ground between short-term, largely affective subjective wellbeing data and long-term, largely recollective subjective wellbeing data: time diaries, who prompt subjects at different intervals during the day with subjective wellbeing evaluations. Their application to subjective wellbeing research has proved to be immensely useful, and whilst resource intensive, give a true overview of daily, weekly, or monthly wellbeing and evolution, with precise insight into wellbeing change. The Day Reconstruction Method, as formulated by Kahneman (2006) further develops the idea of time diaries as subjective wellbeing insight by removing their obtrusiveness and focusing on the recollection of happiness by instead asking subjects to reflect and evaluate their day on a scale afterwards, using recollective "chapters" to catalogue their evaluations. Not only does this allow for increased subject input, but it also allows for the rebalancing and rescaling of data in the aftermath to compensate for overzealous evaluation.

# Relativity of happiness

When using happiness measurements, it is imperative to bear in mind that happiness is largely relative. People base their happiness relative to the perceived happiness of others around them (Kahneman & Krueger, 2006) and often only express a degree of satisfaction with their life comparative to their immediate surroundings.

A famous article in the field of happiness economics (Solnick & Hemenway, 1998) tells the following: in 1995, 257 faculty, students and staff at the Harvard School of Public Health were asked for their preference between two scenarios relating to income: the first scenario stated that they initially would earn \$50,000 whilst their peers would all earn \$25,000. They were then given the opportunity to "earn" \$100,000, whilst their peers would earn \$200,000. In this hypothetical scenario, after consideration, less than 56% of respondents chose to move to the second scenario, which would (ceteris paribus), have led to an objectively better situation for everyone. This is explained by Frank's "positional treadmill" (1991), which states that people seek a better *position* (i.e., ranking) in the world rather than an *objectively better state*.

This has important implications in the way we treat happiness: as a theoretically infinite and non-competitive good, it suddenly becomes a zero-sum race (Layard, 2005) in which the reality of happiness *relativity* means that not everyone can be satisfied at a given moment. Increasingly, there is a trend amongst academics that happiness isn't contingent on objective experiences, but entirely based on perspective (Veenhoven, 1991), which opens up the debate for "positional treadmill"-defeating action.

The importance of status, position, and ranking in determining happiness levels cannot be understated, and must be remembered when analysing wide-ranging policy.

### Adaptation

The last consideration when looking at happiness or subjective wellbeing is the ability of humans to adapt to their condition at incredible pace. People in countries who have endured poverty or exploitation for centuries without change can dangerously adapt to their circumstances and exhibit higher levels of subjective wellbeing than would otherwise be expected, including satisfaction with their diminished income levels. Rapid adaptation to one's condition makes measuring happiness relations a difficult task, with the very measure of happiness rapidly evolving naturally over time.

The capacity for humans to adapt to misfortune and sometimes accept it as a natural occurrence can be seen as a terrible predicament. This also means that unless subjective wellbeing components rise faster than a population adapts, the population will not feel "better off" despite growth. This is the premise behind the "hedonic treadmill", stipulating that humans are confined to a constant quest for growth as they repeatedly adapt to their new levels of growth.

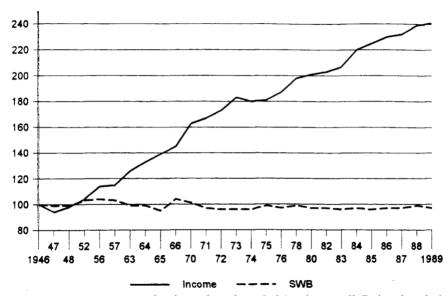


FIGURE 4. Income growth plotted against Subjective Well-Being levels in the USA from 1946-1989. Taken from *Subjective Well-Being, Three Decades of Progress* (Diener, 1999). This figure shows the adaptation to income rise (an important factor of life satisfaction) over the years.

A common example in psychology is given of lottery winners and recently paralysed accident victims (Brickman et al., 1978). After their accident, the paralysed victims reported an important decrease in happiness, whilst lottery winners had an opposite increase in happiness following their win. However, after a few years had gone by, the lottery winners gradually lost their newfound happiness and returned to their previous happiness levels, whilst the paralysed accident victims gradually regained happiness and returned to their previously high levels of happiness, making the lottery winners no happier than the paralysed victims in the long run.

This raises a theoretical conundrum for happiness research: is there a baseline level of happiness to which we all eventually adapt to, and is this baseline evolutive?

# Happiness and Society

#### The macroeconomics behind subjective wellbeing

Subjective wellbeing, as demonstrated, is largely tied to one's environment, and as such, macroeconomic changes can have an important impact on wellbeing levels. Traditionally, economists have calculated social welfare based on direct unemployment and inflation rates — but how do these affect wellbeing levels, our social welfare measure?

# **Recession and Inflation Rates**

Recessions and inflations are measured and considered by the loss of potential output and value by neoclassical economists. But what about the wellbeing costs of these fluctuations?

Recessions have been shown to have important psychological costs on people: emotional costs due to rising inequalities, job loss, and a general atmosphere of unconducive degrowth (Di Tella et al., 2003). Inflation has a comparable cost on subjective wellbeing, causing worry and concern about cost of living, and contributing to the spread of anxiety and decline in faith of financial and governmental institutions (Tenaglia, 2022). As inflation rates rise, prices increase and people report lower levels of life satisfaction, with a regression coefficient of -1.2 (Di Tella et al., 2001) in regard to life satisfaction, i.e., a 1% increase in inflation leads to a 1.2% decrease in life satisfaction. Inflation is therefore a negative subjective wellbeing multiplier — spread very unevenly, with poorer people expressing lower levels of subjective wellbeing following inflation rate growth than anyone else (Di Tella et al., 2006), mimicking the regressive effect of inflation and the insecurity (both psychological and physical) of the disadvantaged.

### Unemployment

Unemployment rates are also shown to be an important wellbeing glass wall, or tax on society: Di Tella et al., (2001) highlight a -2.8 regressive coefficient between unemployment rate and life satisfaction. Di Tella, MacCulloch, and Oswald explain this by the loss of national prestige, a feeling of inequality and insecurity, and a sentiment of being taken advantage of leading to morale loss amongst those unemployed and those fearful of becoming so. Like inflation, unemployment rates are a negative multiplier of subjective wellbeing: as people lose their jobs, more become fearful, leading to increased insecurity and exponentializing the cost of unemployment rate growth.

### The Unemployment Tradeoff

Looking at unemployment and inflation, we realise that both do not impact subjective wellbeing at similar levels, with unemployment being significantly more costly for society than inflation. Di Tella and MacCulloch (2006) even argue that unemployment lowers *happiness* 4.7 times more than the equivalent rise in inflation rate, establishing a base unemployment-inflation tradeoff rate.

Analysing the unemployment-inflation tradeoff opens an entirely new world for decision-makers and policy-drafters: that of looking at policy from the perspective of true utility (happiness), instead of output-based relations (i.e., arbitrary Phillips Curve-based policy when measuring the unemployment-inflation tradeoff). In *Should Central Banks Maximise Happiness* (Di Tella and MacCulloch, 2007), the authors go so far as to offer happiness-based monetary policy, inviting central banks to integrate social welfare costs into their decisions.

Finally, unemployment-inflation wellbeing research reinforce the idea that most macroeconomic changes do not affect the population nominally: i.e., rising prices do not in of themselves lower the happiness level of individuals, but rather the overall environment, anxiety, and loss of income created by inflation leads to happiness decrease. The idea that the negative impact of inflation growth can be simply counterbalanced by an equivalent increase in income is therefore largely debunked, as the inflationary *environment* is not addressed.

### Policy

Looking at the role monetary policy can have in influencing happiness levels through inflation and unemployment checks, it follows through that understanding and reforming other forms of policy is essential to maximising happiness levels and changing the structure in which happiness and society operate.

# Healthcare

Good health is shown to play an important role in determining life satisfaction and is a key component in eudemonic pursuit. Looking back at the cultural dimension of happiness, one of the reasons Senik gives for the exceptionally low "happiness culture" of French population is its remarkably low ranking on mental health indicators – topping a 2011 WHO-sponsored countrywide mental health report with a whopping 21% life prevalence of major depressive episodes (Bromet et al., 2011) – further indicating the importance of health in maintaining happiness (Senik, 2011).

Better healthcare services are an excellent way to improve a country's overall health, with leading scholars in happiness research agreeing that increased investment in general healthcare and mental health is beneficial to society on the long-term (Kahneman, Layard, Deaton) – looking at wealthy nations, the happiest are those with the highest level of welfare ("ultra-welfare states") encompassing comprehensive healthcare services (Easterlin, 2012).

Kim and Koh (2018) further state that health insurance coverage, lowering the cost of healthcare (ultimately helping improve health and reducing health-related anxiety) increased life-satisfaction by one standard deviation in their sample size, emphasising the need to complement good healthcare services with good financial coverage.

When contrasting age-distributed subjective wellbeing with health satisfaction levels, one realises that as people age, they generally become less satisfied with their health and their subjective wellbeing levels decrease. This is not the case in wealthier European countries, where subjective wellbeing levels trend upwards from the 60s stemming from equally distributed healthcare and providing senior-specific services (Deaton, 2008).

When it comes to health, there is a three-pronged approach policymakers must therefore take should they wish to improve happiness levels:

- 1) Seek to improve healthcare services, with hefty investment in psychological and psychiatric domains, and endowing research of wellbeing-enhancing medicalization.
- 2) Aim for better financial coverage of healthcare, often a source of anxiety and stress especially skewed towards the less fortunate.
- 3) Minimise health service disparities and strive for better senior-focused treatments.

# **Unemployment Benefits**

As has been discussed, unemployment is especially hurtful when it comes to subjective wellbeing on a macroeconomic scale. But what about the individual scale?

Employment not only provides income, social landscape, and security, but also provides purpose and a means to flourish (Ryan et al., 2006). Loss of employment therefore represents not only a loss in life satisfaction (social, income-related satisfaction), but also a loss in capacity to pursue eudemonic living translating to abnormally low levels of happiness amongst the unemployed, who are some of the most miserable people in society (Clark, 2003). Di Tella et al., (2003) compare the decrease in happiness with unemployment as being equivalent to dropping from the top income-earning quartile to the bottom quartile.

The loss of incentive, purpose, and progress, and subsequent loss of eudemonia also means that it is near impossible to adapt to unemployment (Clark & Oswald, 1994). According to the same study, "voluntary" joblessness does not lead to higher levels of happiness either, debunking the myth of the happy, voluntary, jobless person.

Unemployment-related unhappiness can be mitigated or accentuated by other conditions: for example, Clark (2003) reports unemployment-correlated unhappiness as being lower the higher the unemployment rate is. Di Tella et al., (2003) also theorize that the more a person is educated, the more that person suffers from unemployment, a consequence of the relativity of happiness and the importance retrospective (such as looking back at one's education) has in determining wellbeing.

The conditions and consequences of unemployment explained by subjective wellbeing studies offer a fresh new perspective on unemployment policy. In *The Macroeconomics of Happiness* (Di Tella et al., 2003), the authors claim that the eudemonic impact of unemployment is so high that unemployment bonuses have little comparative effect on boosting morale and happiness amongst the unemployment, rebuking the idea of unemployment benefits being incentives for the unemployed to remain jobless.

Unemployment policy needn't be uncomfortable or discriminatory to the unemployed, as they are already miserable by virtue of their own condition, and landmark policies, such as the idea of universal basic income, shouldn't be discarded under the pretext of making the unemployed more comfortable. There should instead be a clear-cut focus on offering skill-matching employment opportunities (ILO, 2015), on providing psychological support (Layard, 2005), and flanking those seeking employment throughout the job-search process to ensure steadiness, continuity, and ultimately, happiness for all.

# Income

An additional explanation for loss of happiness due to unemployment can also be loss of income. But does money truly buy happiness? And if so, are income-pursuing policies effective?

The Easterlin Paradox (Easterlin, 1974) tells us that the answer is much more complex than it seems. Essentially, wealthier countries are happier than poorer ones, and richer people are happier than poorer people in these countries – it would seem that money does buy happiness. Yet *ceteris paribus*, when looking at income *growth*, Easterlin realised that neither people nor countries truly became happier as their income grew. The tentative explanation of this paradox is that the relative and adaptable nature of happiness mean that people are not satisfied with their income but are instead satisfied by earning more than their *peers*, and that people adapt to income growth very quickly. Easterlin (2005) goes beyond and offers the explanation that the reason with which high earners and wealthier countries are happier is due to indirectly linked factors, such as better healthcare, education, or stability (amongst others), along with higher status. However, the idea that happiness does not grow with income is increasingly contested: Stevenson and Wolfers (2008) argue that income is a non-satiable asset, and that Easterlin's flawed methodology led to the conclusion that income growth did not lead to higher levels of happiness.

#### Life Satisfaction and Per Capita GDP around the World

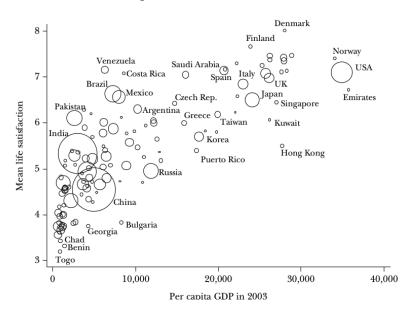


FIGURE 5. GDP plotted against life satisfaction in a 2003 Gallup World Poll dataset. Taken from *Income, Health, and Well-Being around the World: Evidence from the Gallup World Poll* (Deaton, 2008).

Alternatively, Kahneman and Deaton (2010) argue that on an individual level, subjective wellbeing plotted to income is concave, and eventually reaches satiety, which they identify as being reached around \$75,000 per annum. This builds on the idea that subjective wellbeing plotted to income is logarithmic – subjective wellbeing only increases *until* certain basic needs are met (Veenhoven, 1991), after which income loses wellbeing value exponentially. This breaks with previous views that a person was only able to achieve happiness *after* reaching a certain amount of income (Robbins, 1938). Since then, however, a new study released by Killingsworth, Kahneman, and Mellers (2023) sheds further light on the income/emotional well-being relationship: whilst wellbeing-to-income is indeed logarithmic, the previously calculated \$75,000 plateau

is recanted as only applying to an unhappy minority, whereas for a happy majority, happiness continues to rise with income, albeit it in logarithmic fashion.

However, once more, the impact of income on happiness is not independent: moderating variables such as perceived social mobility, or the environmental importance of status (Di Tella et al., 2006) can make income satisfaction less relatively important, and much more adaptable – something which is interestingly correlated to political beliefs (Di Tella et al., 2010). Tangentially, sole pursuit of income can often lead to unhappiness, by setting unattainable goals or forgoing an aspiration for social and personal growth (building of relationships, communities) over an aspiration for income (Kasser & Ryan, 1993).

# Environmental policy and more

As we have seen, policy can adeptly steer happiness. From unemployment to healthcare to the pursuit of income, each action has a distinct and important impact on the well-being levels of citizens. So, is there a general rule policymakers can follow? Such a thing would be excessively difficult to determine, but a general guide could go along the following lines:

- 1) Policy needs to have a concrete positive impact on its population's life satisfaction and affect through equally distributed objective improvements.
- 2) Whilst also maintaining a subjective eudemonic balance and fostering a culture of happiness.

So which types of policies help fulfil such prerequisites? The answer partially lies in the problem which the policy aims to solve: does the policy respond to an equally distributed, pervasive issue, such as the global good that is climate change for example? And if so, is the policy enacted positively reinforced through education, adaptation measures, and a non-competitive application?

Looking back at climate change – a global public good – it has been shown that climate mitigation policies effectively fulfil and help a significant amount of the population flourish, both subconsciously and actively (Welsch, 2020). And not only is happiness a positive predictor when it comes to pro-environmental behaviour (Krekel & Prati, 2022), but pro-environmental behaviour is an excellent contributor to macro-level eudemonic well-being and expected life satisfaction. The fight against climate change, characterized by the important role of awareness, education, and in many countries, the effort being done to minimise the regressive nature of some environmental policies has led to widespread satisfaction with environmental policy across the globe (Bialik, 2016): a non-competitive, educationally-based policy targeting a global crisis.

Subjective well-being can be influenced and improved by policy, but it can more ambitiously be improved by changing the overall structure of things: factors such as inequality, status, or political participation all play a role in determining happiness, one way or the other.

# Inequality

Inequality is a prime structural obstacle to happiness, and one which is heavily documented: not only is it a source of *relative* discomfort, but it is unconducive to essentially every prime measure of happiness we have overviewed. Happiness inequality is in of itself a contributor to unhappiness, as Veenhoven (2005) establishes by arguing that as standard deviation in happiness distribution decreased, overall happiness levels rose in surveyed countries.

Whether income affects happiness positively or not, financial inequality can have a serious impact on life satisfaction, with Pugno and Sarracino (2019) showing significant correlation between life satisfaction and Gini index in their well-being examination of Italy.

Sustainable economic development is a significant target for policymakers keen on improving happiness and must be done carefully: if policy aims at GDP growth without consideration of distribution, the resulting inequality and unhappiness can lead to loss of faith in property rights, rule of law, enterprise and skill-based allocation: key components of economic degrowth (Causa et al., 2014).

However, Ifcher and Zarghamee (2016) argue that as a general rule, income growth leads to lower subjective well-being inequality, with growth generally leading to lessened inequalities in other well-being-providing services if not household income.

Inequality can also lead to important social disparities: with rich social relationships being integral to high happiness as individuals (Diener & Seligman, 2002) and societies (Clark & Senik, 2011), studies have observed that poorer people have a heightened sense of empathy, interdependence and focus on social relationships compared to people from middle and upper classes who instead are often shown to prioritise independence and individual-driven goals rather than community aims (Manstead, 2018), leading to a net social loss.

In regard to gender, many studies (Mesenberg & Woodley, 2015) demonstrate that men exhibit higher levels of overall subjective well-being than their female counterparts, with men showing higher levels of life satisfaction and social well-being whilst females manifested higher levels of emotional being (Abdullahi et al., 2019), a trend that the author here hypothesizes as being structurally-skewed and explained by gender history.

Meisenberg and Woodley (2015) identify gender inequality as being a significant predictor of subjective well-being disparities between men and women, a factor which they attribute in part to religious prevalence and communist history (the latter being detrimental). In the same article, European countries exhibit significant levels of gender-based subjective

well-being inequality whilst African countries and other developing countries exhibit surprisingly low levels of gender-based subjective wellbeing inequality, a trend which the author here identifies as potentially based on gender inequality awareness and education initiatives.

What is often unjustly forgotten in happiness research is the idea of capacity as formulated by Sen's Capability Approach: instead of focusing on raw inequalities, happiness research should also focus on developing and analysing the capacity of people to choose the life they want to, a source of inequality itself. Such can be treated structural disparities in cultural access, linguistic, or political integration which can amongst others be key indicators in the creation of well-being models.

# Status

Status is another significant structural component to subjective well-being, largely playing into its relativity, e.g., "being better than another".

Castes in India, a form of culturally and historically legitimated status play a significant role in determining subjective well-being. This is not only due to the objective inequalities derived from caste (higher income, education, or religious standing), but due to psychological effects too (van Landeghem & Vandeplas, 2017): higher castes feel fulfilled by their status, leading to increased risk-taking and self-confidence, whilst middle castes suffer from conservatism and upwards comparison, and lower castes, *ceteris paribus*, are shown to express much less ambition and desire than those above. This leads to "status insecurity", as middle and lower castes often attempt to emulate "higher caste behaviour" in a strive for social recognition, an attitude often associated with lesser subjective well-being (Kasser & Ryan, 1993).

The way people adapt to different changes is also related to their status level and the manner in which their status is construed. Di Tella et al., (2010) show for example that German left-wingers, whilst easily adapting to income change, had difficulty adapting to status change. This could potentially indicate a dissociation between income and status for German left-wingers, along with a different determination of "status" than their right-wing counterparts, who exhibited low adaptation to income and status change.

Robert Frank's idea of a *status market*, succinctly exposed in Elster and Loewenstein (1992) forms the basis of our critique of the role structure and status play in subjective well-being: unlike happiness or well-being, status is not infinite and is a zero-sum game, meaning that as someone rises in status, another necessarily falls. Status is therefore not beneficial to society, especially considering the increased importance income has in determining status worldwide, another zero-sum game which can potentially lower subjective well-being adjacently (see above). Factoring the role of background, employment, education, or age into status can lead to seriously detrimental structural blows to a society's subjective well-being, emphasising the need to focus on developing wellbeing-favourable mentalities.

# Political participation

Using the general principles behind Sen's Capability Approach, one can reasonably infer that political participation or utility (a form of capacity) are important aspects of subjective well-being improvement. Research such as that done by Senik (2011), focusing on the inequality of subjective well-being between generations of immigrants could pave the way towards the study of citizenship (defined by access to political power) and its relation to happiness. Stutzer and Frey (2006) conceive a landmark model establishing that higher political utility in Switzerland (e.g., access to Swiss means of democracy such as referendums) led to higher levels of subjective well-being, using a cross-sectional analysis between Swiss cantons, ranked by political opportunity.

Bentham's neologism of *ipse dixitism*, contending for the irrelevance of all non-utilitarian arguments (i.e., not striving for increased societal happiness) complements the view that political utility must be offered and directed towards utilitarian goals through structure.

# Going Beyond

Taking subjective-wellbeing into account

Subjective well-being research has come a long way since the early days of happiness research and income study. Almost every week, researchers make incredible progress in well-being measurement together with behavioural and policy analysis, gaining precise knowledge on what leads to happy societies, and what diminishes happiness. More than ever, it is time to internalize these "happiness costs" into our decisions and policy, with taxation, subsidies, and restrictive policies providing valuable tools to concentrate our efforts on doing things which truly matter: increasing the well-being of those around us.

In Praag and Ferrer-i-Carbonell's *Happiness Quantified: A Satisfaction Calculus Approach* (2004), the authors develop a wide array of innovative happiness measures which could essentially culminate in a monetary system based on happiness. Ryff and Singer (1998) actively promote the consideration of psychological well-being from stress quantification to emotion assessment, to the questioning of purpose for policy appraisal. Some of these ideas are being integrated into projects such as the *Bhutan Gross Happiness Index*, used by the Bhutanese government as a prime indicator of success (instead of GDP) or policy specific research, such as Stutzer et al., (2009) and their case study of terrorism and life satisfaction. These measures, combined with internalization initiatives (such as the central bank reform Di Tella et al., promote) can ultimately lead to the marketing of happiness, not under the auspice of trendy "happiness shamanism", but as a genuine business development in which there could be no losers at all. This development can only be achieved by focusing our economies on a macroeconomic scale to take in account subjective well-being and promoting micro-level well-being-positive business initiatives, a process which often suffers from little media incentive and slow growth.

Finally, pursuing the work of Sid Bhushan, Oparina et al., (2022) show the promising work which can be achieved using neural networks and artificial intelligence as subjective well-being predictors, paving the way in combining technology and happiness theory for use in policy and organisation.

# Changing perspectives

What our research proves is the drastic need for a paradigm shift in our mentalities, as we need to refocus on not only improving our life satisfaction, but eudemonic capabilities and happiness culture too.

The hedonic treadmill and the continuous rise in the aspirations of people across the world, regarding both their surroundings and themselves proves to be a worrying evolution: not only can it lead to unhappy standards, but unhappy lifestyles too. Over the last decades, the importance of work and work culture has reached new heights, with more young graduates valuing income and prestige than an actual positive experience after studying: a ticking bomb waiting to go off (Woolley & Fishbach, 2015). And as the 30-hour work week gradually evolved into a 50 hour one, a 70 hour work week is now increasingly common: a change that is often volitional and stemming from self-inflicted aspirations. A famous study from John Pencavel indicates that productivity significantly declines after 50-hour work weeks, before dramatically falling after a 55 hour work week and essentially reaching a null state by the 70 hour work week, showing how counterproductive this overall evolution is (Pencavel, 2014).

The stigmas around unemployment and lack education have unjustly suffered because of these new aspirations, and instead of elevating an entire part society, have only contributed to making more people miserable. The importance attached to "professional" skills and mindsets has led to misguided educational structure, focused on providing purely academic opportunities instead of teaching children how to be happy.

There has however been some favourable perspective-changes in the world of happiness, as mental health has reached incredible prominence, and psychological help increasingly becomes democratized. Stakeholder capitalism (Edmans, 2012) has led to the demonstration that utility-focused leadership as opposed to purely profit-based leadership

(shareholder capitalism) can improve output and market returns too, helping redefine the impact our economy has on happiness.

# What the future holds for us

Our current and forthcoming scientific, technological, and societal advancements will be essential in determining our well-being levels. The use of social media may lead to the construction of a new social fibre, helping forge a variety of new social relationships: a key component in happiness prediction. The development of virtual reality and digital escapism, for the better or the worse, is likely to provide millions with outlets of freedom and creativity, and shelter from harsh conditions and reality. Trends such as the increased digitalization of our real world (augmented reality, digital art, or even remote lifestyles) may open a new dimension of happiness and pave the path for a new form of "digital wellbeing" that will be taken in account when evaluating subjective wellbeing. Yet, dangers are very much present in these virtual worlds and connections, which could also decrease purpose and self-determination in users (Marino et al., 2017) and present a significant challenge to overcome to self-development of other outlets.

With healthcare service development being at the frontline of wellbeing improvement and as drug synthesising technology evolve and our philosophy and political moulds become increasingly tolerant of drug use, the dilemma of well-being-enhancing drugs will soon be at the forefront of ethical and scientific discussion (Layard, 2005). Already, large campaigns have spurred in favour of the legalisation or decriminalization of recreational drugs such as marijuana, in the name of subjective wellbeing, with sparse but important successes across the world (Canada, Mexico, Argentina, Uruguay, Thailand, etc.)

Finally, recent movements such as the Black Lives Matter movement in the United States or the Pension Reform protests in France indicate a trend towards increased common political utility and desire to reduce inequalities, additionally showcasing our ability and desire to operate important structural changes: in 1971, the Stanford prison experiment demonstrated that structure was able to foment evil in people, so why not subvert our structures for happiness and goodness? The answer seems to reside in democracy and engagement, which has seen renewal under many new forms in the 21<sup>st</sup> century: could new forms of media-intensive, fast and frenzied politics be a solution and vessel to the structural change needed to improve happiness in society?

All in all, with proper direction and focus, our future doesn't seem so bleak at all. Just around the bend lies fantastic opportunities of social and economic prowess, and with new medical and psychiatric developments on well-being, all that remains is to seize these opportunities with ambition and care, paving the way for a happier future for all. References

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