

# Is There a Predominance of Suffering?

An Empirical Study on the Human Condition

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## Abstract

In 2022 a group of researchers published an empirical study on population ethical intuitions, which remained largely unnoticed, but has the potential to revolutionize the hedonist account of global well-being. The study disclosed that – in valuing entire populations – the majority’s intuitions are *asymmetric* about happiness and suffering. If this asymmetry is applied to the life evaluations of the World Happiness Report, then the aggregated total turns *negative*.

## 1. Introduction

### *Starting point*

Traditional Buddhism and negative utilitarianism share the intuition that the human suffering in this world cannot be compensated by happiness (Contestabile 2014). Surveys on subjective life satisfaction, however, consistently report that the majority is satisfied with their lives. In *Enlightenment Now* Steven Pinker uses statistics to argue that health, prosperity, safety, peace, and happiness are on the rise, both in the West and worldwide (Pinker 2018).

### *Type of problem*

Is the hypothetical *predominance of suffering* refuted by surveys on subjective life satisfaction?

### *Method*

1. The World Happiness Report is used to measure the different levels of human happiness and suffering on a global scale.
2. An empirical study on population ethical intuitions is consulted to explore the relation between human happiness and suffering. The result of this study is then applied to the World Happiness Report.

Negative utilitarianism considers the suffering of all sentient beings. We restrict the analysis to the human condition because we do not dispose of the necessary data to make statements about the animal kingdom. But we are aware that the number of suffering animals exceeds the number of suffering humans by far.

## 2. The Asymmetry between Happiness and Suffering

*Negative utilitarianism* (NU) is an *umbrella term* for all types of utilitarianism which model the asymmetry between suffering and happiness (Fricke 2002, 14). It is usually associated with Karl Popper's notes on ethics (Popper 1945) and R.N.Smart's criticism of these notes (Smart 1958). But the intuition of a hedonic asymmetry is much older. It can already be found in the philosophy of ancient India, more than 2500 years ago. Buddha was convinced that the asymmetry between happiness and suffering has a basis in natural law (Beckwith 2015, 26-32).

What does contemporary science say about the topic?

- First of all, there is a fundamental asymmetry in physics, which undermines the human pursuit of happiness. Life is subordinated to the laws of thermodynamics and destined to decay. Suffering is unavoidable because of accidents, diseases, aging, and death. Happiness is avoidable; it can be terminated at any point in time.
- Asymmetries can also be found in biology. There are genetic defects which cause immense suffering, like the sickle-cell disease. No corresponding phenomenon is known which causes immense happiness.
- Furthermore, there are numerous asymmetries in psychology. "For most humans the worst suffering – either experienced or imagined – is likely more intense than the best happiness. This may have neurobiological and evolutionary causes (...). Failing to avoid harmful actions could lead to death, whereas failing to avoid beneficial actions doesn't have similarly bad consequences" (Caviola 2022, 20). Psychometrics confirms the asymmetric nature of the hedonic scale (Diener 1984) (Gallup 2009).

Let us assume that the predominance of suffering was a realistic worldview for thousands of years in the past. Can we conclude that this predominance has the character of a truth? According to contemporary science evolution is not predictable enough to make such a statement. We live in a unique period of history, a period of previously unknown technological and social changes.

- In *The Better Angels of Nature* Steven Pinker argues that homicide, cruel punishments, child abuse, domestic violence, as well as civil and international wars, have decreased over multiple scales of time and magnitude (Pinker 2011).
- In *Enlightenment Now* he uses statistics to argue that health, prosperity, safety, peace, and happiness are on the rise, both in the West and worldwide (Pinker 2018).

The claim that happiness is on the rise, is of special interest in our context. It can be checked by surveys on subjective life satisfaction. That is what we will do now.

## 3. The World Happiness Report

The World Happiness Report is a publication of the United Nations Sustainable Development Solutions Network. It contains rankings of national happiness, based on evaluations of survey respondents about their own life. The report then correlates these rankings with objective measurable indices on the quality of life like wealth, employment, health, education, security, freedom etc.

How can happiness and suffering be measured?

According to the World Happiness Report there are basically two approaches:

1. Questions about the ups and downs of daily emotions, represented by a range of positive and negative affect. The corresponding reports are simply descriptions of emotional states.
2. Cognitive life evaluations, asking how happy or satisfied people are with their lives as a whole. An evaluation is more than a description, it implies a judgment.

The former is sometimes called “affective happiness” and the latter “evaluative happiness” (World Happiness Report 2012, 6, 11).

Since our aim is to compare the survey’s outcomes with the Buddhist view, we refer to the second approach. If not mentioned otherwise in this paper, the term *happiness* stands for a positive life evaluation and is a synonym for *life satisfaction*. The term *suffering* stands for a negative life evaluation, respectively *uncompensated* suffering (Fricke 2002, 18).

The most important global surveys used in the World Happiness Report are the Gallup World Poll and the World Values Survey. We will focus on the Gallup World Poll because it includes more than 150 countries, representing more than 98% of the world’s population (Gallup 2009). The World Values Survey covers fewer countries (World Values Survey), and correlates highly with the Gallup World Poll (Diener 2013, 500).

The Gallup World Poll uses the so-called Cantril scale (Cantril 1965). Respondents are asked to rate their own current lives on a 0 to 10 scale (Table 1, col.1), with

- the best possible life being at 10 and
- the worst possible life being at 0.

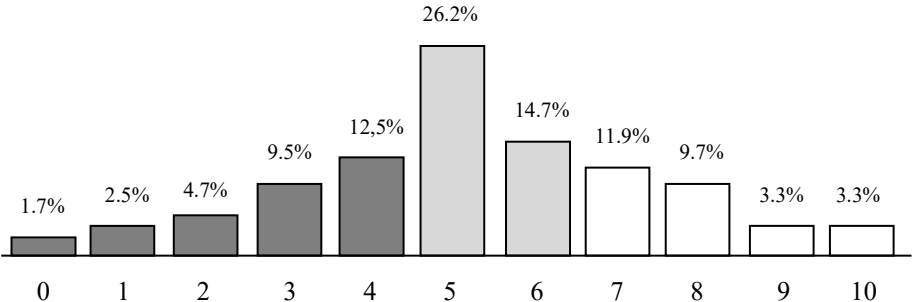
Table 1 Hedonic Scale

| Cantril Scale | Gallup Category | Classical Utilitarianism |
|---------------|-----------------|--------------------------|
| 10            | Thriving        | +5                       |
| 9             | “               | +4                       |
| 8             | “               | +3                       |
| 7             | “               | +2                       |
| 6             | Struggling      | +1                       |
| 5             | “               | 0                        |
| 4             | Suffering       | -1                       |
| 3             | “               | -2                       |
| 2             | “               | -3                       |
| 1             | “               | -4                       |
| 0             | “               | -5                       |

Gallup formed distinct categories for summary purposes. Grouping is useful when a scale involves many response options, as is the case with an 11-level scale. While every respondent has his/her own unique perspective, the patterns in the data suggest that the scale can be meaningfully grouped into three distinct categories: “thriving”, “struggling” and “suffering” (Table 1, col.2). The labels were chosen based on empirical relationships. The label “suffering”, for example, was chosen for the Cantril levels 0-4 because these levels strongly correlate with determinants of suffering like negative affect, health problems etc. (Gallup 2009).

Fig.1 gathers together the responses from all available Gallup World Polls, from 2005 through mid-2011, and weights them by each country’s population (aged 15 and up) to show the state of world happiness among humans. There are 11 columns in the figure, one for each possible answer to the question. The height of the bars is proportional to the frequency of answers at each score. Because of the large number of countries covered, Fig.1 provides the broadest measure of the level and distribution of world happiness among humans in the period 2005-2011 (World Happiness Report 2012, 25, Figure 2.1).

Fig.1 World Distribution of Cantril Scale



For the purpose of this paper, we need a category “happy” in order to compare it with the category “suffering”. There is, however, no obvious definition of this category. Based on the Gallup categories (Table 1, col.2) we could associate

- level 0-4 with suffering (30.9%),
- level 5-6 with intermediate states (40.9%) and
- level 7-10 with happiness (28.2%).

However, since the population ethical studies which we consult in this paper only work with two categories, we apply the classical utilitarian scale (Table 1, col.3). By dividing the frequency statistics in two halves, we get 56% happy and 44% suffering people.

Let us assume that there is an assured majority of happy people. It still remains unclear how we achieve an overall evaluation. Can we simply subtract the number of suffering people from the number of happy people? Not only the Buddha, but most philosophers who reasoned about this topic came to the conclusion that we have to assign more weight to suffering than to happiness (Holtug 2004, 13), (Broome 2004, 224), (Arrhenius 2000, 138), etc. The intuitions about the degree of the asymmetry, however, are far apart. Until now there was almost no published psychological research on this topic (Caviola 2022, 3, 20, 21). The population ethical comparison of happiness and suffering was a matter of philosophical analyses (Contestabile 2016). In 2022, however, a team of researchers reported on a project to empirically investigate the degree of asymmetry. We will briefly discuss the result of this project and then apply it to the World Happiness Report.

## 4. Population Ethical Intuitions

The theoretical framework of the following studies is *hedonistic welfare theories*, i.e. theories about how to rank populations in virtue of their happiness and suffering (Caviola 2022, 2). The topic of the first study (1a) was the trading of happiness against suffering. Participants were asked to imagine a world that contains 1000 people, which comprises (only) extremely happy and extremely unhappy people. The people who are happy consistently have extremely positive experiences. The people who are unhappy consistently have extremely negative experiences. Participants were then asked the following question:

“Given this information, what percentage of happy and unhappy people would there have to be for you to think that this world is overall positive rather than negative (so that it would be better for the world to exist rather than not exist)?”

The average estimation of the participants was 75%. In other words: 3 times as many extremely happy people are required to compensate a given number of extremely suffering people. The authors of the study then discussed possible reasons for this asymmetry (Caviola 2022, 5). The participants could have imagined extreme suffering to be more *intense* than extreme happiness. But it is also possible that the asymmetry represents a normative evaluation. In the latter case people

- neither follow classical utilitarianism (weighing happiness and suffering equally)
- nor strict negative utilitarianism (only weighing suffering).

Their intuitions lie somewhere in between (Caviola 2022, 5, 20), i.e. they follow a *moderate* negative utilitarianism (taking into account both happiness and suffering but weighing suffering more than happiness).

In the first study (1a) happiness and suffering were described in their extreme manifestation. The second study (1b) investigated, if the intuitions are *sensitive to levels of intensity*. A symmetrical and linear happiness scale was introduced, analogous to [Table 1](#), col.3. This scale should clarify that each happiness unit has an equivalent suffering unit. It turned out that the asymmetry factor for mild intensities was about half of the factor for extreme intensities, i.e. about 1.5 times as many happy people are needed to outweigh a given number of suffering people (Caviola 2022, 6).

The third study (1c), finally, examined whether people continue to believe that more happiness is needed to outweigh suffering even when it is stated that the two are *equally intense*. The happiness and suffering levels were described as mild, which makes it easier to compare them. It turned out that the participants continued to believe that ca. 1.5 times as many happy people are needed to outweigh a given number of suffering people, although it was stated that the people within the population consider 1.0 times to be sufficient (Caviola 2022, 8). Obviously, the participants ignored the (fictive) symmetric norm within the population and applied their own, asymmetric intuition. Happiness and suffering are like two different currencies. Their relative value only reveals in free trades.

So far, the research seemed to provide a clear result, but then a pilot study disclosed that the framing of the question has a major influence on the asymmetry (Caviola 2022, 20).

Participants were asked (Caviola 2022, Supplementary Materials, 7):

“Suppose you could push a button that created a new world with  $X$  people who are generally happy and 10 people who generally suffer. How high would  $X$  have to be for you to push the button?”

Surprisingly the median responses were  $X=1000$ , i.e. the asymmetry factor jumped from the range between 1.5 and 3.0 to 100. How can this huge difference be explained? Probably there are several factors involved. Following two theses:

*Thesis 1:* The difference is caused by deontic intuitions.

- In the first three studies (1a-c) the participants evaluated just outcomes.
- In the pilot study they considered *actions* that need to be taken to achieve these outcomes. Participants who imagine taking an active role may follow a deontic rather than an axiological concept (Caviola 2022, 2, 21-22). An axiological concept tells us what has *value*; a deontic concept tells us what we *ought* to do. In deontology the rightness of an action is based on rules rather than consequences.
- There are indeed cases where the utilitarian evaluation is declined, for example the *Trolley Problem* (Thomson 1976), a moral dilemma where a trolley is on course to kill five people down the track, but a driver could intervene and divert the vehicle to kill just one person on a side track. In such a situation people tend to reject doing harm to a single person, even if this action could prevent doing the same harm to several other persons.
- If the harm done to a single person is compared with the *happiness* (and not with the prevented suffering) of several other persons, the situation is less clear. In a study on the negativity bias of moral judgments participants were asked to imagine that they could press a button that would give one minute of “intense pain” to one person and one minute of “similarly intense pleasure” to *ten* other people. Every participant refused to press the button. The participants were then asked to state the minimum number of people that would make them press the button. All participants except one stated that no number would be large enough (Rozin 2001, 307) (Caviola 2022, 3). We cannot know the motive of the person, who rejects doing harm. It could be deontic, but it could also be strict negative utilitarian. An example for the latter case is Karl Popper’s controversial statement “...*from the moral point of view, pain cannot be outweighed by pleasure and especially not one man’s pain by another man’s pleasure*” (Popper 1945/1966, 284), a statement which he wrote in the context of the Second World War and the Holocaust. Popper addressed a well-known discomfort with the classical utilitarian accumulation of suffering and happiness across different people.

Caviola’s pilot study is related to the Rozin study and not to the Trolley Problem. An argument for a moderate negative utilitarian interpretation (and against a deontic interpretation) is the fact, that the rejection is incomplete: 1000 happy people outweigh 10 suffering people, which means that the participants *weighed* happiness against suffering.

*Thesis 2:* The difference is caused by the emotional relationship with the assessed populations.

- In the studies 1a-c the participants are in the position of a viewer. Because of this distant role it is unclear to what extent they develop an empathic relationship with the assessed populations.
- In the pilot study, however, the participants take the position of a responsible designer. Responsibility deepens empathy and empathy improves the assessment of other people’s happiness and suffering.

No single person is responsible for human suffering, but there is a *collective* responsibility. The actual and future populations are not the result of an inevitable natural event; they are the result of procreating humans.

## 5. The Predominance of Suffering

Before we apply Caviola's studies to the World Happiness Report, we must take a critical look at the impartiality of the database:

- The Gallup World Polls are biased towards happiness because happy people can easily participate in surveys, whereas severely suffering people cannot. People who are directly involved in accidents, wars, crimes, severe diseases, strokes, natural catastrophes etc., as well as dying people do not participate in surveys. The absence of the worst cases is especially serious, because the asymmetry between happiness and suffering increases with the intensity of the experiences.
- Caviola's studies are biased as well, because the participants were selected in the USA via the crowdsourcing website *MTurk* (Caviola 2022, 4, 6, 7). The USA are among the happiest countries in the world (World Happiness Report 2012, 30), which means that US Americans make fewer experiences with the worst kinds of suffering than the global average. Participants who did not experience the worst cases tend to underestimate suffering. And those who are in the process of making such experiences are not among the crowdworkers.

We have seen that the World Happiness Report shows 56% happy people in the period 2005-2011 and that the database is biased towards happiness. Independent of this bias, the question about the predominance of suffering can be decided by the asymmetry between happiness and suffering:

- The first three studies (1a-c) require 60-75% happy people for a positive overall evaluation, corresponding to an asymmetry factor in the range of 1.5–3.0.
- The pilot study, however, suggests that the asymmetry factor could reach a value in the order of 100. Under such conditions the (relative) weight of happiness fades away, so that the overall picture is completely dominated by suffering.

Research on population ethical intuitions is at an early stage and future research will clarify which type of study is closer to an axiologically correct range. But even with the low asymmetry factors in the studies 1a-c, the overall evaluation turns negative.

A different question is the extent to which we can rely on folk intuitions in population ethics. Perhaps only empathetic and experienced participants are capable to assess other people's happiness and suffering. Perhaps most participants assign an *a priori* value to existence. The perception of suffering in folk intuitions may be distorted by evolutionary mechanisms (see Appendix). Despite of such open questions, the asymmetry factors found represent an *improvement* relative to the established indices of life satisfaction (OECD Better Life Index, Satisfaction with Life Index, World Happiness Report etc.). These indices suggest that the suffering of the minority can easily be compensated by the happiness of the majority. Caviola's research, however, discloses that compensation is not self-evident. The intuitions of traditional Buddhists, Schopenhauer, antinatalists and negative utilitarians are defensible, and not necessarily pessimistic, risk-averse, depressive, or even irrational.

Is the presumed predominance of suffering here to stay? Or will the problem soon be solved by a technological breakthrough (Bostrom 2005, 16)? We don't engage in speculations about the future in this paper, but one of the results in the World Happiness Report deserves to be mentioned. There was a population-weighted *decrease* of global happiness in the period 2006-2018 (World Happiness Report 2019, 13). The vision of a steady rise in happiness requires critical examination.

One last question: Would the participants of Caviola's studies tolerate a predominance of suffering, if they had to decide about the existence of their *own* population? Probably yes. If survival is at stake, people neither make strictly hedonistic nor impartial judgements (see Appendix).

## 6. Conclusion

In valuing entire populations, the majority's intuitions are *asymmetric* about happiness and suffering. If this asymmetry is applied to the life evaluations of the World Happiness Report, then the aggregated total turns *negative*. An unbiased evaluation would be even more negative, because the most suffering people don't participate in surveys. From a strictly hedonistic and impartial view the *predominance of suffering* is rather confirmed than refuted.

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## Appendix: Intuition and Interest

The axiologies discussed in this appendix document the conflict between the biological interest to survive and the cultural interest to reduce suffering. Each axiology revolves around an intuition, which is driven by one of these two interests or a compromise between them. In [Table 2](#) below the intuitions are ordered by increasing empathy and decreasing survival value (Contestabile 2014, 309-310).

Empathy improves the assessment of other people's happiness and suffering. Therefore, with a higher degree of empathy we expect a higher quality of the assessment. From an evolutionary point of view however, a higher quality is only useful, if it serves survival and procreation. An assessment that doesn't serve this purpose tends to be distorted, repressed, or ignored (Metzinger 2017, 243), (Metzinger 2009, 280-281).

- Classical utilitarianism (row 2 in [Table 2](#)) may use a more realistic hedonistic scale than utilitarianism excluding negative numbers (row 1), but in hospitals, where survival is the highest value, the latter is (still) used.
- Since there is an asymmetry between happiness and suffering, a moderate negative utilitarianism (row 3) may be closer to an impartial view than classical utilitarianism, but since the former assesses global welfare negative (chapter 5), it is ignored in practice.

- In cases of extreme suffering, we cannot exclude that radically asymmetric hedonistic scales (row 4 or 5) are the best approximation to an impartial view. But again, ethics which devaluates existence cannot survive in the competition with life-friendly ethics. To illustrate this mechanism, we use a metaphor. In her novel *The Ones Who Walk Away from Omelas* Ursula K. LeGuin describes a city where the good fortune of the citizens requires that an innocent child is tortured in a secret place. The child stands symbolically for the innocence of extreme sufferers. *The Ones Who Walk Away* are the people who deny the world, people like Buddhist monks and antinatalists. The majority prefers a silent agreement according to which the suffering of the child is tolerable (Contestabile 2016, 51).

Table 2 Intuitions and Axiologies

|   | Type of Study  | Intuition  | Asymmetry Factor<br>Degree of empathy | Axiology                                |
|---|--|--|---------------------------------------|---|
| 1 | The evaluation decides about the participants' <i>own</i> survival | Life has always positive value, even under the worst circumstances.                          | zero                                  | Utilitarianism without neg.numbers      |
| 2 | Studies 1a-c<br>Less empathic participants                         | Happiness and suffering have equal weight. The hedonic scale is symmetric                    | 1.0                                   | Classical utilitarianism                |
| 3 | Studies 1a-c<br>More empathic participants                         | Happiness and suffering both count, but suffering has <i>some</i> more weight than happiness | 1.5 -3.0                              | Moderate negative utilitarianism        |
| 4 | Pilot study:<br>Participants who feel responsible                  | Happiness and suffering both count, but suffering has <i>much</i> more weight than happiness | 100                                   | Close to strict negative utilitarianism |
| 5 | <i>The Ones Who Walk Away from Omelas</i> (LeGuin)                 | The extreme suffering of a <i>single</i> person is reason enough to deny the world.          | infinite                              | Strict negative utilitarianism          |

Further information on the topic of negative global well-being can be found at [www.socrethics.com](http://www.socrethics.com)