

# The Sad Truth about World Happiness

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**Abstract:** This paper is an attempt to explain how poverty, ecological footprint and literacy influence happiness or the lack of it at a global perspective. Data obtained from various online sources were treated using path analysis. It was found that the predictors can influence happiness in four ways. The findings were a clear indication that globally, environmental preservation has not been given adequate attention. People find pleasure in consuming extravagant amount of natural resources. This is a clear indication that Education for Sustainable Development needs to be strengthened among all economies.

**Keywords:** poverty, ecological footprint, literacy, path analysis, Education for Sustainable Development (ESD).

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## I. INTRODUCTION

Defining happiness has been a source of debates among social scientists since ancient times. It got a widespread attention due to the moral philosophy that the ultimate purpose of politics is to bring happiness to as much people as possible [10]. Among economists, there is growing interest in evaluating the public's perception of happiness to determine factors with significant impact on quality of life. These factors may be used to represent the "utility" that economists refer to in their pursuit of "utility maximization" [3].

Consequently, happiness research has gained significant attention and credibility in different sectors of many governments acknowledging that happiness and general well-being should be one of the bases in formulating national policies [14]. Examples of research on happiness include those investigating relationships between income and happiness, the influence of sex and marriage on happiness, the effect of air and noise pollution on happiness and many more [3].

In the issue of evaluating national development, Costanza, et al. (2009) argue that the Gross National Product (GNP) is far from sufficient. To obtain a more realistic picture of how a country is doing, the social scientists need indicators representing true sustainable development—development that promotes the quality of human life without going beyond the carrying capacity of the ecosystem [4]. Three decades ago, Bhutan's king expressed his affirmation to this contention when he asserted that Gross National Happiness (GNH) is a more appropriate indicator of well-being than Gross National Product [14]. Thus, a series of World Happiness Reports were launched.

In the World Happiness Report, data is collected from people in over 150 countries. Each variable measured reveals a populated-weighted average score on a scale running from 0 to 10 that is tracked over time and compared against other countries. Happiness is derived from the six components, namely, the GDP per capita, healthy years of life expectancy, social support (as measured by having someone to count on in times of trouble), trust (as measured by a perceived absence of corruption in government and business), perceived freedom to make life decisions, and generosity (as measured by recent donations) [22].

Intuitively, one would say that having the purchasing power should be directly proportional with happiness [10]. However, globally, the association of log income with happiness was found to be linear but convex with raw income, implying the decreasing marginal effects of income on happiness [4,5]. There is a steep rise in happiness as one moves from subsistence-level poverty to a modest level of economic security and then levels off. Among the wealthiest countries,

further increases in income are only weakly associated with higher levels of happiness, i.e. further gains in income bring relatively little or no change in wellbeing. For poorer countries, however, there is a clear impact of income on happiness [6,10].

Bhutan's leaders contend that true happiness can only be attained with a balance between a happy population and a happy environment [24]. O'Brien (2012) argues that happiness research will obtain its most significant impact when applied to sustainability efforts in all levels of society [13]. Sadly, our ecosystems will not be able to sustain the present levels of economic activity and material consumption [10,21]. There is a need to redirect the society's attention to look into sustainability initiatives.

Education is seen as one of the most aspects that may influence happiness. Freire (1970) asserts that becoming literate means far more than learning how to read and write [7]. It is truly an act of knowing, through which an individual can critically look at the culture shaping him, and enables him to react either positively or negatively upon his world. Literacy enables him to participate fully in decision-making promoting economic order and evade injustice [24]. However, in a study conducted by Simon & Bennett (2009), no significant relationship was found between happiness and literacy rates [20].

There is a great number of research articles on happiness. Yet little is known how poverty, ecological footprint and literacy play in influencing happiness. It is therefore the aim of this paper to investigate how these three identified predictors of happiness: poverty, ecological footprint and literacy contribute to a nation's happiness or the lack of it.

## II. THEORETICAL AND CONCEPTUAL FRAMEWORK OF THE STUDY

This study is anchored on Authentic Happiness Theory [19], asserting that there are three distinct criteria of happiness: the Pleasant Life (pleasures), the Good Life (engagement), and the Meaningful Life.

The Pleasant Life was derived from the Hedonism's point of view contending that happiness is a matter of *raw subjective feeling*; that a happy life maximizes feelings of pleasure and minimizes pain [1]. On the other hand, the Good Life was derived from the Desire Theory of Happiness with the assertion that happiness is a matter of *getting what you want* (may it be pleasure or pain) [8]. Lastly, the Meaningful Life was based on the Objective List Theory of Happiness which takes happiness outside of personal feeling and onto a list of things which are for the good of the majority [12].

It is therefore viewed in this study that happiness may be derived from different things and ideals by different people. This may be influenced by a number of factors such as culture, religious beliefs and value systems. The diagram below depicts how ideas and arguments are arranged in this study.

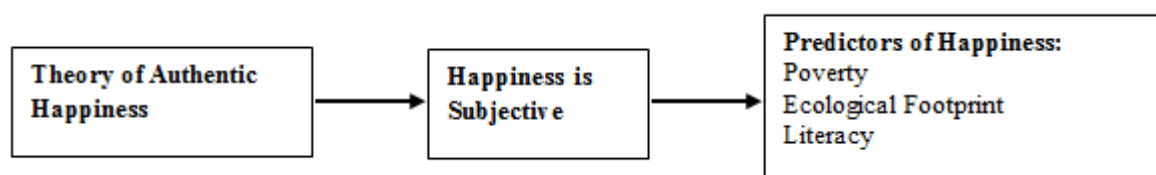


Figure 1: Schematic Diagram of the Theoretical and Conceptual Framework of the Study

## III. RESEARCH DESIGN AND METHODS

The study used path analysis to investigate how poverty, ecological footprint and literacy influence happiness. Data of 125 countries in terms of Happiness [22], Poverty [15], Ecological Footprint [9] and Literacy Rate [17] were obtained from various online sources. Since these data do not cover the same time period, it is assumed that no substantial changes occurred to these values over a short period of time.

## IV. RESULTS AND DISCUSSION

In order to find out whether or not the selected variables are worth investigating, correlation between pairs have been derived. The matrix below shows the results of this computation:

TABLE 1: CORRELATION MATRIX OF THE IDENTIFIED VARIABLES

Variables		Poverty	Footprint	Literacy	Happiness
Poverty	Correlation Coefficient	1.000			
	p-value	0.000***			
Footprint	Correlation Coefficient	-0.557	1.000		
	p-value	0.000***	0.000***		
Literacy	Correlation Coefficient	-0.549	0.500	1.000	
	p-value	0.000***	0.000***	0.000***	
Happiness	Correlation Coefficient	-0.506	0.680	0.571	1.000
	p-value	0.000***	0.000***	0.000***	0.000***

\*\*\* Relationship is significant at  $\alpha = 0.01$  probability level

Results show that each variable is significantly related to the rest. Initially, it was assumed that all three identified predictors of happiness have direct effects to the said response variable. This assumption leads to the equation

$$\text{Happiness} = b_1\text{Poverty} + b_2\text{Footprint} + b_3\text{Literacy}.$$

After standardizing values, regression coefficients and the corresponding p-values were obtained. These results are depicted in the figure below.

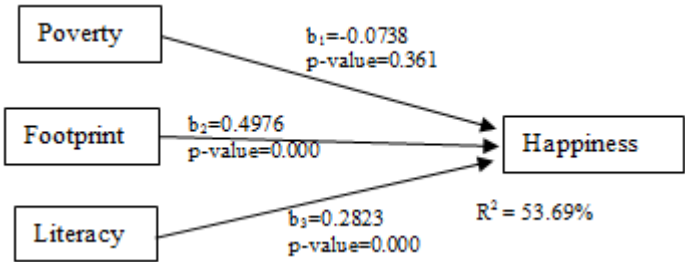


Figure 2: Direct Effects of the Predictors to the Response Variable

The computation revealed that 53.69% of the variability in happiness may be attributed to the variability in the three predictors. However, it was also found that of the three predictors, poverty has no significant direct influence to happiness ( $p$ -value > 0.05). Cohen & Vandenberg (2008) also have found that although generally, income is positively associated with life satisfaction, it was also discovered that while absolute income rose in western economies in the last 50 years or more, happiness has not [3]. Three partial explanations of this phenomenon were formulated, which they said might co-exist. First, money appears to be most vital only at the early stages of development that is when the basic necessities of life is at top priority; thus, the marginal utility of wealth diminish over time. Second, people are more concerned about how much they have relative to the rest of the society; hence, an increase of income for everyone will have very little effect on average happiness. Lastly, it seems that people adapt to their conditions after some time meaning the effect on happiness after receiving a significant raise soon wears off as lifestyles change [3].

Another computation was done where Poverty was omitted. The results are indicated in the following figure.

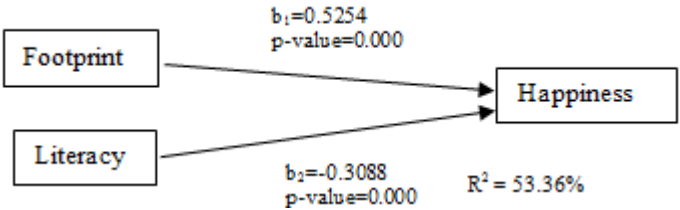


Figure 3: Direct Effects of the Predictors to the Response Variable (revised)

It can be seen from the preceding analysis that both ecological footprint and literacy have positive significant influence to happiness. The variability in these two predictors explain 53.36% of the variability in happiness.

The more resources people consume, the happier they become. The Happy Planet Index (HPI) also demonstrated that a nation's increase in happiness may also be accompanied by a high Ecological Footprint [14]. It was also argued that for as long as environmental responsibility is framed in self-sacrificial terms, people would be reluctant to act since such behavior reduce happiness [2].

On the other hand, it is not surprising that the more educated people become, the happier they are. Mahatma Gandhi also asserted that education is a means to obtaining freedom. By being literate, people will learn to read and utilize information on health, environmental preservation (as a moral obligation) and economic activity and be able to do business. Above all these, they will be aware of the changes that are taking place around them and be able to act accordingly [24]

These initial findings then lead to the hypothetical structural model shown below.

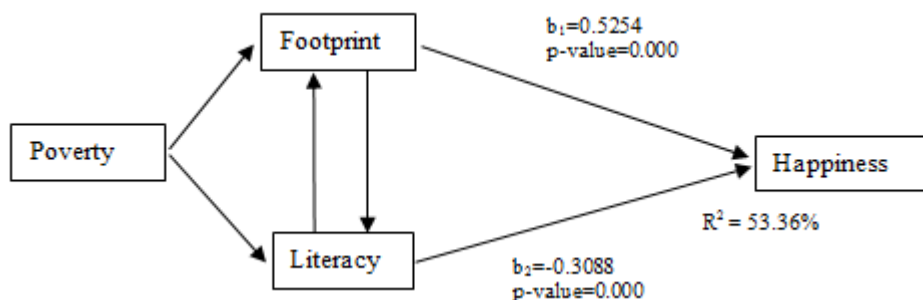


Figure 4: Hypothetical Structural Model

Coefficients for the two remaining structural equations; Footprint =  $b_3$ Poverty +  $b_4$ Literacy and Literacy =  $b_5$ Poverty +  $b_6$ Footprint were then computed and the final model below was obtained.

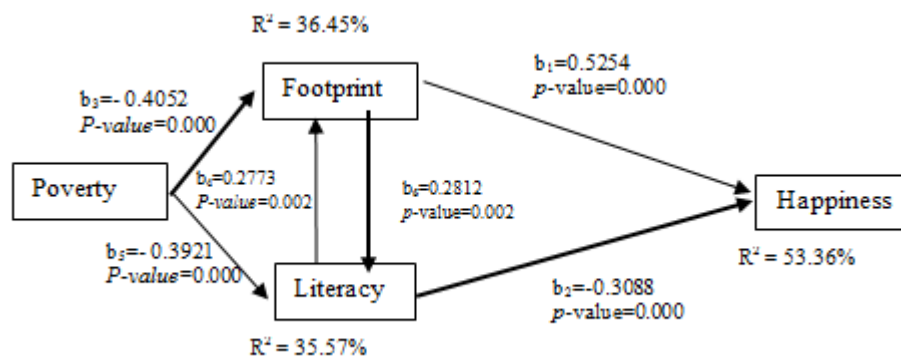


Figure 5: Final Structural Model

Both Poverty and Literacy have significant effect on Ecological Footprint and 36.45% of the variability in the Footprint is explained by the variability of these other two variables. In addition, it is also found that Literacy contributes positively while Poverty appears to be a deterrent to Ecological Footprint. Also, both Poverty and Ecological Footprint significantly influence Literacy where 35.57% of its variability is attributed to the variability in the other two variables.

To sum it all up, the direct, indirect and total effects were then computed and shown in the next table.

TABLE 2: DIRECT, INDIRECT AND TOTAL EFFECTS OF THE PREDICTORS TO THE RESPONSE VARIABLE

Effect	Paths	Coefficient	Total
Direct	Footprint→Happiness	0.5254	
	Literacy→Happiness	0.3088	0.8334
Indirect	Poverty→Footprint→Happiness	$-0.4052 \times 0.5254 = -0.2129$	
	Poverty→Footprint→Literacy→Happiness	$-0.4052 \times 0.2812 \times 0.3088 = -0.0352$	
	Poverty→Literacy→Happiness	$-0.3921 \times 0.3088 = -0.1211$	
	Poverty→Literacy→Footprint→Happiness	$-0.3921 \times 0.2773 \times 0.5254 = -0.0571$	-0.4263
Total			0.4071

The analysis revealed that in all, an increase of 1 standard deviation in all predictors shall result to 0.4071 standard deviation in happiness. However, only ecological footprint and literacy were found to have direct effects to happiness. These effects were both positive implying that the more resources people consume, and the more educated they become, the happier they tend to be.

On the other hand, poverty has a negative effect to happiness. The analysis tells us that this effect can occur in four ways. Poor people have smaller footprint and in turn are less happy. Secondly, poor people can only consume less, become less educated resulting to being less happy. Third, poor people don't have access to education which makes them less happy. And lastly, poor people become less literate which results to smaller footprints which make them less happy.

It is sad to note that people take pleasure in consuming more and give less concern on environmental preservation. Happiness is said to be at the heart of who people are and what they do but in a consumer society, where consumption is tightly associated with happiness, people may confuse the "path to the 'good life' as the 'goods life'" [11]. People seem to be oblivious of the consequences of over consumption. About 2 tons of oil equivalent (toe) per capita is needed per year to make people happy. Compared to the present situation, the forecasted scenario (2 toe pc, 9 billion people by 2050) results to an increase of the ecological footprint from today's 1.3 to 2 planet Earths [10]. Hence a very vital question needs to be answered: "How can one planet sustain this?".

It is even sadder to note that literacy contributes to an increase in ecological footprint. This is a clear indication that educational systems around the world has very little, if there is any, to do in increasing environmental awareness. Even worse, at current levels of unsustainable practice and over consumption it could be concluded that education is part of the problem [23]. Formal education itself is not showing adequate initiative in promoting sustainability. Although there more than enough resources for Education for Sustainable Development (ESD), it seems that the educational systems are not adequately training teachers to model and practice the ideals of ESD. And more often than not, environmental education is being viewed as simply a subject and our schools seldom teach the applied, experiential learning that promotes sustainable lifestyles [14].

## V. CONCLUSION

Happiness is defined by the lifestyle people follow, usually by the things they have and can acquire, irrespective of the consequences the future generation might face. It is sadder to note that literacy tend to lead people to consume more resources increasing their ecological footprint in pursuit of happiness.

## REFERENCES

- [1] Bentham, J. (1978). *The Principles of Morals and Legislation*. Buffalo: Prometheus.
- [2] Brown, K., & Kasser, T. (2005). Are psychological and ecological wellbeing compatible? The role of values, mindfulness and lifestyle. *Social Indicators Research*, 74, 349-368.
- [3] Cohen, M. A., & Vandenbergh, M. P. (2008). Consumption, happiness, and climate change. Retrieved from: [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1288638](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1288638)
- [4] Costanza, R., Hart, M., Talberth, J., & Posner, S. (2009). Beyond GDP: The need for new measures of progress. Retrieved from: [http://pdxscholar.library.pdx.edu/cgi/viewcontent.cgi?article=1010&context=iss\\_pub](http://pdxscholar.library.pdx.edu/cgi/viewcontent.cgi?article=1010&context=iss_pub)
- [5] Diener, E., Ng, W., Harter, J., & Arora, R. (2010). Wealth and happiness across the world: material prosperity predicts life evaluation, whereas psychosocial prosperity predicts positive feeling. *Journal of personality and social psychology*, 99(1), 52. Retrieved from: <http://dx.doi.org/10.1037/a0018066>
- [6] Easterlin, R. A.; Angelescu, L. (2009) : Happiness and growth the world over: time series evidence on the happiness-income paradox, IZA discussion papers, No. 4060. Retrieved from: <http://nbn-resolving.de/urn:nbn:de:101:1-20090327277>
- [7] Freire, P. (1970). The adult literacy process as cultural action for freedom. *Harvard educational review*, 40(2), 205-225. Retrieved from: <http://www.hepgjournals.org/doi/abs/10.17763/haer.40.2.q7n227021n148p26?code=hepg-site>
- [8] Griffin, J. (1986). *Well-being: Its meaning, measurement, and moral importance*. Oxford, England: Clarendon Press.

- [9] Happy Planet Index 2016. Retrieved from: [https://static1.squarespace.com/static/5735c421e321402778ee0ce9/t/578cc52b2994ca114a67d81c/1468843308642/Methods+paper\\_2016.pdf](https://static1.squarespace.com/static/5735c421e321402778ee0ce9/t/578cc52b2994ca114a67d81c/1468843308642/Methods+paper_2016.pdf)
- [10] Jess, A. (2010). What might be the energy demand and energy mix to reconcile the world's pursuit of welfare and happiness with the necessity to preserve the integrity of the biosphere? *Energy Policy*, 38(8), 4663-4678. Retrieved from: [https://www.researchgate.net/profile/Andreas\\_Jess/publication/46496251\\_What\\_Might\\_be\\_the\\_Energy\\_Demand\\_and\\_Energy\\_Mix\\_to\\_Reconcile\\_the\\_World's\\_Pursuit\\_of\\_Welfare\\_and\\_Happiness\\_with\\_the\\_Necessity\\_to\\_Preserve\\_the\\_Integrity\\_of\\_the\\_Biosphere/links/54eb0e820cf27a6de11611f5.pdf](https://www.researchgate.net/profile/Andreas_Jess/publication/46496251_What_Might_be_the_Energy_Demand_and_Energy_Mix_to_Reconcile_the_World's_Pursuit_of_Welfare_and_Happiness_with_the_Necessity_to_Preserve_the_Integrity_of_the_Biosphere/links/54eb0e820cf27a6de11611f5.pdf)
- [11] Kasser, T. (2006). Materialism and its alternatives. In M. Csikszentmihalyi & I. Csikszentmihalyi (Eds.), *A life worth living: Contributions to positive psychology*. Toronto: Oxford University Press, (200-214).
- [12] Nussbaum, M. (1992). Human functioning and social justice: In defense of Aristotelian essentialism. *Political Theory*, 20, 202-246.
- [13] O'Brien, C. (2012). Sustainable happiness and well-being: Future directions for positive psychology. *Psychology*, 3(12), 1196. Retrieved from: <http://file.scirp.org/Html/26252.html>
- [14] O'Brien, C. (2013). Who is Teaching Us about Sustainable Happiness and Well-Being?. *Health, Culture and Society*, 5(1), 294. Retrieved from: <http://hcs.pitt.edu/ojs/index.php/hcs/article/viewFile/122/176>
- [15] Ospina, E. & Roser, M. (2016) – 'World Poverty'. *Published online at OurWorldInData.org*. Retrieved from: <https://ourworldindata.org/world-poverty/>
- [16] Roser, M. (2016) – 'Happiness and Life Satisfaction'. *Published online at OurWorldInData.org*. Retrieved from: <https://ourworldindata.org/happiness-and-life-satisfaction/>
- [17] Roser, M. & Ospina, E. (2016) – 'Literacy'. *Published online at OurWorldInData.org*. Retrieved from: <https://ourworldindata.org/literacy/>
- [18] Seager, A. (2009). Costa Rica is the world's greenest, happiest country. *The Guardian*. Retrieved from: <https://www.theguardian.com/environment/2009/jul/04/costa-rica-happy-planet-index/pr>
- [19] Seligman, M. E., & Royzman, E. (2003). Happiness: The three traditional theories. *Authentic happiness newsletter, July*. Retrieved from: [http://pq.2004.tripod.com/happiness\\_three\\_traditional\\_theories.pdf](http://pq.2004.tripod.com/happiness_three_traditional_theories.pdf)
- [20] Simon, R. J., & Bennett, A. (2009). Happiness the World Over. *Gender Issues*, 26(3-4), 183-204. Retrieved from: <http://link.springer.com/article/10.1007/s12147-009-9080-1>
- [21] Wackernagel, M., & Rees, W. (1998). *Our ecological footprint: reducing human impact on the earth* (No. 9). New Society Publishers. Retrieved from: [http://w.tboake.com/2013/EF\\_Reading\\_Assignment\\_1of2.pdf](http://w.tboake.com/2013/EF_Reading_Assignment_1of2.pdf)
- [22] World Happiness Report 2016. Retrieved from: [http://worldhappiness.report/wp-content/uploads/sites/2/2016/03/HR-V1\\_web.pdf](http://worldhappiness.report/wp-content/uploads/sites/2/2016/03/HR-V1_web.pdf)
- [23] UNESCO. (2005). *Guidelines and recommendations for reorienting teacher education to address sustainability*. Education for sustainable development in action. Technical paper No. 2. Retrieved from: <http://unesdoc.unesco.org/images/0014/001433/143370E.pdf>
- [24] Zangmo, T. (2004). Literacy for all: One of the means to Achieve Gross National Happiness. *The Centre for Bhutan Studies*, 629-636. Retrieved from: [http://crossasia-repository.ub.uni-heidelberg.de/1359/1/GNH\\_Literacy.pdf](http://crossasia-repository.ub.uni-heidelberg.de/1359/1/GNH_Literacy.pdf)