

Human Development and Happiness: Are the Two Interlinked?

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ABSTRACT

The present paper attempts to explore the relationship between human development, and happiness. Whereas the concept of human development emphasizes the material well-being in terms of improving human capabilities, happiness focuses on life satisfaction and well-being of individuals and nations. By comparing Human Development Index (HDI) and its components with Happiness Index, the paper explores inter-linkages between them. India's position among 188 countries in the world in human development index (HDI) is 130 when measured through the composite index of three separate indicators of health, education, and income. India ranks 117 among 158 countries in World Happiness Index, which uses factors such as GDP per capita, healthy life expectancy, social support and perceived freedom to make life choices, the perception of corruption, and generosity to measure happiness. The paper has compared India's position with some South Asian neighbors like Bhutan, Bangladesh and Sri Lanka on human development and human happiness. Sri Lanka, which ranks high in HDI, lags behind in happiness whereas countries like Bhutan and Pakistan, which score relatively low in HDI rank high in happiness index. Overall negative correlations are found between the Human Development Index (HDI), its components i.e. life expectancy, education, income and Happiness Index in these countries. The paper argues that whereas HDI is universally applicable, happiness and its perceptions are better understood in a specific cultural context. The probable difference could be in the understanding of happiness or life satisfaction from the standpoint of broader development and human development as offering people the opportunity to lead lives they value.

Keywords: Human Development, Happiness, GDP, HDI.

Today's world is torn in a dilemma human development or human happiness or both? Human development index is a measure of a country's progress in terms of gross income per capita. But it is increasingly felt that achievement in human development front may not guarantee that the people of the country are satisfied or happy. There is now a rising worldwide demand that policy be more closely aligned with what really matters to people as

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they themselves characterize their lives. Economists typically claim that the answer is higher income and consumption. Sociologists emphasize the quality of social support such as one's network of family and friends ("social capital"). Psychologists stress the importance of personality, mental health, and an individual's state of mind (e.g. "positive psychology" or "mindfulness"). World Happiness Reports (2012, 2013 and 2015) support the efforts to bring the study of happiness into public awareness and public policy. Happiness and human development share, to some extent, a common lineage. Both have been driven partly by an interest in understanding and measuring human progress and wellbeing in ways that go beyond economic metrics like the gross domestic product (GDP). Indeed, there is a growing global interest in developing better metrics of human progress.

Measuring Human Development

The United Nations Development Programme (UNDP, 1999) has, through its Human Development Reports (HDRs), attempted to bring together a number of universally applicable measures in order to enable countries' development status to be compared temporally, and with other countries. It is a tool used to measure a country's overall achievement in its social and economic dimensions. Economists Mahbub-ul-Haq and Amartya Sen worked upon the capabilities and functioning which provided the conceptual framework for human development (UNDP, 1990). Access to resources, health and education are the key areas in human development. Indeed, as development thinking progresses, there is a concomitant increase in the number of different measures given in the HDRs. In recent years, a formula has been devised, through which a number of key development indicators are compiled into a single measure known as Human Development Index (HDI). The Human Development Index is constructed using three dimensions, a long and healthy life, knowledge, and a decent standard of living. These dimensions are measured through a composite index of life expectancy at birth, the adult literacy rate and gross enrolment rate and per capita income (PPP US\$). This has become a much-used tool to categorize countries into four tiers ranging from very high, high, medium, and low human development. The quality of life people enjoy in a country, the opportunities they have and the freedoms they enjoy, are important aspects of human development.

However, there are some challenges to the HDI and its component parts. Firstly, HDI by its very nature focuses on more on quantitative aspects of development than qualitative components of development. Secondly, the selection of those components and the development of the formula through which HDI is inferred have been carried out by main economists belonging to Western countries. Moreover, HDI being a universally applicable measuring tool is unable to accommodate regional or cultural variations, in terms of development priorities; traditional values systems etc. (Whitehouse and Windrel, 2004).

Measuring Happiness

Happiness is an aspiration of every human being, and can also be a measure of social progress. There are increasing efforts worldwide to measure subjective happiness (or 'satisfaction with life as a whole') and to compare national averages of countries. It has been

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argued that money cannot effectively "buy" much happiness unless it is used in certain ways. "Beyond the point at which people have enough to comfortably feed, clothe, and house themselves, having more money" - even a lot more money makes them only a little bit happier." A Harvard Business School study found that "spending money on others actually makes us happier than spending it on ourselves" (Dunn et. al. 2008).

The World Happiness Report of 2012 (Helliwell et al., 2012) stated that in subjective well-being measures, the primary distinction is between cognitive life evaluations and emotional reports. Happiness is used in both life evaluation, as in "How happy are you with your life as a whole?", and in emotional reports, as in "How happy are you now?" and people seem able to use happiness as appropriate in these verbal contexts. Using these measures, the World Happiness Report identified the countries with the highest levels of happiness. It drew international attention as the world's first global happiness survey. The Report outlined the state of world happiness, causes of happiness and misery, and policy implications; along with case studies included from Bhutan which has pioneered the concept of Gross National Happiness (GNH). **Bhutan (GNH Survey, 2010) carried out a survey on a sample of 8700 which became a basis for future happiness surveys with key areas falling within the domains of psychological well-being, health, education, culture good governance, ecology, community vitality and living standards.**

A series of reports on happiness (2012, 2013 and 2015) based on Gallup World poll experts from fields of economics, psychology, survey analysis, national statistics, described how measurements of well-being can be used effectively to assess the progress of nations. Happiness Index is computed based on scores obtained from six areas income, social support, and healthy life expectancy at birth, freedom to make life choices, generosity, and perception of corruption.

Happiness and Human Development

A number of studies have revealed that the relationship between happiness and human development is not straightforward. Whereas human development is a conceptual approach happiness is measured empirically. Inglehart and Klingemann, (2000) stated that "Difference in income, education, occupation, gender, marital status and other demographic characteristics explain surprisingly little of the variation in people's level of subjective well-being". Gross National Happiness (GNH, 2010) emphasized the quality of a country in a more holistic way and that the beneficial development of human society took place when material and spiritual development occurs side by side to complement and reinforce each other.

It is on the basis of the HDI data of 2014 computed for 188 countries and the world happiness data of 2012-14 computed for 158 countries an attempt has been made to compare the happiness of countries with the Human Development Index (HDI) and its components to explore the inter-linkages between these two measures. By comparing Human Development Index with Happiness Index (HI) and its components, the paper explores the differences between them. The paper attempts to answer the question 'are HDI and HI interlinked? What

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is the strength of these linkages and in which direction? South Asian countries have a special cultural ethos. The present paper compares India's relative position on these two measures with neighboring states Bhutan, Bangladesh, Nepal, Pakistan and Sri Lanka. Does a country like Sri Lanka with higher human development according to the HDI actually report higher happiness? The present paper attempts to answer these questions.

METHODOLOGY

The paper proposesto explore the interrelationship between HumanDevelopment and Human Happiness. The specific objectives of the study are to:

1. Compare the relative position of South Asian countries, viz. India, Bhutan, Bangladesh, Pakistan, Nepal and Sri Lanka on Human Development Index.
2. Compare the relative position and ranks of the six countries on Happiness Index.
3. Compare HI with development measures like HDI, and its components.
4. Identify the type of correlation ship between Happiness and Human Development measures.

Data And Sample

The paper is based on secondary data drawn from the UNDP Human Development Report (HDR, 2015) for HDI and its various components computed in the year 2014 for 188 countries across the world. Happiness Index has been obtained from the World Happiness Report 2015. Happiness Index has been computed for the survey period 2012-14. It is computed based on Gallup Poll survey of 3000 respondents per country over a three-year period (sample of 1000 per year) for 158 countries. Data for comparison of HDI and HI for six South Asian countries Sri Lanka, India, Bhutan, Bangladesh Nepal and Pakistan have been obtained from the above data sets.

Statistics

Pearson's product moment correlation coefficient 'R' which measures the strength and direction of the linear relationship between two variables has been used.

The formula for ρ is:

$$\rho_{X,Y} = \frac{\text{cov}(X,Y)}{\sigma_X \sigma_Y}$$

- cov is the covariance
- σ_x is the standard deviation of X

RESULTS AND DISCUSSION

Data are analyzed using descriptive statistics and the results are presented graphically.

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Table 1. Human Development Index of selected South Asian Countries based on Indicators of Health, Education, and Income

Countries	Life expectancy at birth	Expected years of schooling	Mean years of schooling	Gross national income (GNI) per capita	Human Development Index (HDI)	HDI Ranks	HD Level
Sri Lanka	74.9	13.7	10.8	9,779	0.757	73	HHD
India	68.0	11.7	5.4	5,497	0.609	130	MHD
Bhutan	69.5	12.6	3.0	7,176	0.605	132	MHD
Bangladesh	71.6	10.0	5.1	3,191	0.57	142	MHD
Nepal	69.6	12.4	3.3	2,311	0.548	145	LHD
Pakistan	66.2	7.8	4.7	4,866	0.538	147	LHD
World	71.5	12.2	7.9	14,301	0.711		

HDI: A composite index measuring average achievement in three basic dimensions of human development—a long and healthy life, knowledge and a decent standard of living. Computed for 188 countries. HDI varies between 0 to 1, HDI close to zero shows the greater distance from the maximum to be achieved. HDI close to one indicating higher achievement. One-third of each dimension is taken to create a composite index.

Life expectancy at birth: Number of years a newborn infant could expect to live if prevailing patterns of age-specific mortality rates at the time of birth stay the same throughout the infant's life.

Expected years of schooling: Number of years of schooling that a child of school entrance age can expect to receive if prevailing patterns of age-specific enrolment rates persist throughout the child's life (enrolment ratio).

Mean years of schooling: Average number of years of education received by people ages 25 and older, converted from education attainment levels using official durations of each level (adult literacy rate).

Gross national income (GNI) per capita: Aggregate income of an economy generated by its production and its ownership of factors of production, less the incomes paid for the use of factors of production owned by the rest of the world, converted to international dollars using PPP rates, divided by midyear population.

Source; *HDR Report 2015

Table 1 and Figure 1 above highlight the HDI of Sri Lanka, India, Bhutan, Bangladesh, Nepal and Pakistan based on a composite index of three variables, life expectancy at birth, mean and expected years of schooling and GNI per capita. Sri Lanka is among the High Human Development (HHD) countries and has scored higher than the average (0.744) of High Human Development (HDD) group of countries and even higher than the world average (0.711).

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India, Bhutan, and Bangladesh represent the Medium Human Development category (MHD) but have scored lower than the average of MHD group of countries (0.633). Nepal and Pakistan belong to Low Human Development (LHD) category but have scored higher than the average of LHD countries (0.505) as seen in Table 1. It is seen that out of total 188 world countries, 49 countries belong to very HHD category with an average of 0.896 HDI, 56 countries in HHD category with an average of 0.744 HDI, 39 countries in an MHD category with an average of 0.633 HDI, 44 countries in LHD category with an average of 0.502 HDI (Table not presented).

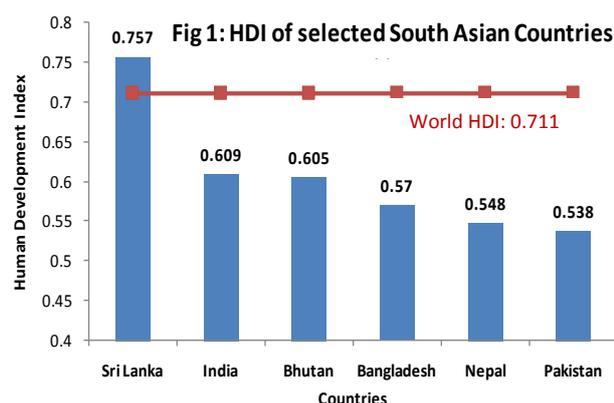


Table 2: Human Development Index for Males and Females of selected South Asian countries based on Indicators of Health, Education, and Income

Countries	Life expectancy at birth		Expected years of schooling		Mean years of schooling		Estimated gross national income per capita		HDI Value	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
Sri Lanka	78.2	71.5	14.2	13.3	10.7	10.9	5,452	14,307	0.730	0.769
India	69.5	66.6	11.3	11.8	3.6	7.2	2,116	8,656	0.525	0.660
Bhutan	69.7	69.2	12.8	12.6	2.0	4.1	5,733	8,418	0.572	0.638
Bangladesh	72.9	70.4	10.3	9.7	4.5	5.5	2,278	4,083	0.541	0.590
Nepal	71.1	68.2	12.5	12.2	2.3	4.5	1,956	2,690	0.521	0.574
Pakistan	67.2	65.3	7.0	8.5	3.1	6.2	1,450	8,100	0.436	0.601
World	73.7	69.5	12.2	12.4	6.2	7.9	10,296	18,373	0.670	0.725

The table contains HDI values estimated separately for women and men; the ratio of which is the GDI. The closer the ratio to 1, the smaller the gap between women and men. GDI adjusts average achievement to reflect inequalities between females and males on the following dimensions.

Source: HDR Report 2015

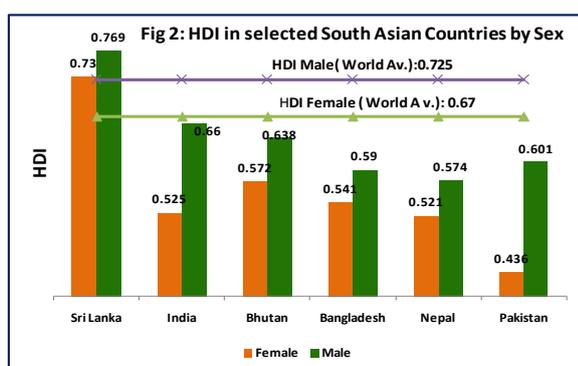


Table 2 shows the HDI values estimated separately for men and women the ratio of which is the Gender Development Index (GDI). Two things are observed from the Table. The first is that females in all the six South Asian countries lag behind in HDI in comparison to their male counterparts. It is seen that females have lower HDI values than males in all the six countries. Pakistan has the highest male-female difference in HDI (28 percent), followed by India (20 percent). Sri Lanka among these countries has shown minimum male-female disparity (6 percent) in HDI. Female-male

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differences in HDI also accounts for disparities and gender inequality in health, education, and income (Fig 2).

Table 3 and Figure 3 highlight the values of inequality-adjusted HDI for the six countries. The relative difference between the inequality-adjusted human development index (IHDI) and HDI is the loss due to inequality in the distribution of the HDI within the country. This is a more accurate measure of HDI because it takes inequality within a country into account.

Table 3. In Equality-Adjusted Human Development Index based on Indicators of Health, Education and Income and Happiness Index of selected South Asian countries

Countries	Inequality-adjusted LEI	Inequality-adjusted EI	Inequality-adjusted II	Inequality-adjusted HDI	Happiness Index (HI)	HI Rank
Sri Lanka	0.774	0.646	0.597	0.669	4.271	132
India	0.554	0.292	0.508	0.435	4.565	117
Bhutan	0.593	0.249	0.519	0.425	5.253	79
Bangladesh	0.634	0.274	0.375	0.403	4.694	109
Nepal	0.602	0.266	0.403	0.401	4.514	121
Pakistan	0.498	0.208	0.519	0.377	5.194	81
World	0.654	0.442	0.570	0.548		

IHDI: The loss in HDI due to inequality. The IHDI achievements are distributed within a country. The relative difference between the IHDI and HDI is the loss due to inequality in the distribution of the HDI within the country.

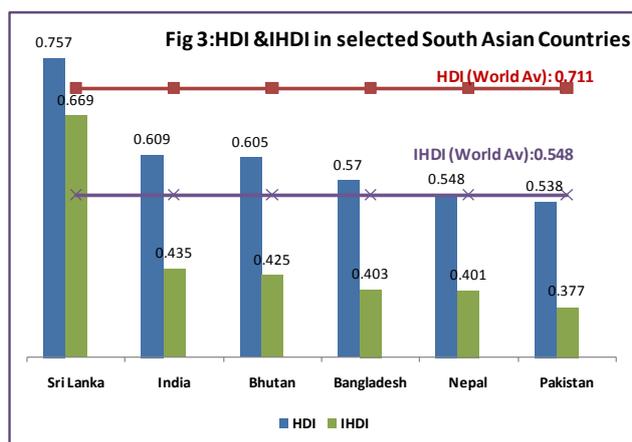
Happiness Index: computed on basis of national data of 158 countries' during 2012-14 based on income, social support, healthy life expectancy at birth, freedom to make life choices, generosity, and perception of corruption. A sample of 3000 based on Gallup World Poll survey (sample of 1000 per year for 3 years from nationally representative samples). Happiness index is measured on an a10 point scale of 0-10. Higher the score higher the life evaluations, best possible life being 10 and worst being 0.

*Source: * Human Development Report 2015, & World Happiness Report 2015*

Inequality in HDI is highest in Bhutan and Pakistan (30 percent each) followed by India and Bangladesh (29 percent each) and 27 percent in Nepal. Lowest inequality in HDI is observed in Sri Lanka (12 percent).

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Table 3 also shows the Happiness Index and ranking of the six countries, with Bhutan leading with 5.25 on the HI scale followed by Pakistan (5.194) although both these countries have lower HDI when in IHDI is taken. Conversely, Sri Lanka has the lowest HI (4.271) but has the highest ranking in HDI. The correlations of Happiness with HDI, or any of the key sub-components of HDI, all appear to be negative, as shown in Table 4 below.



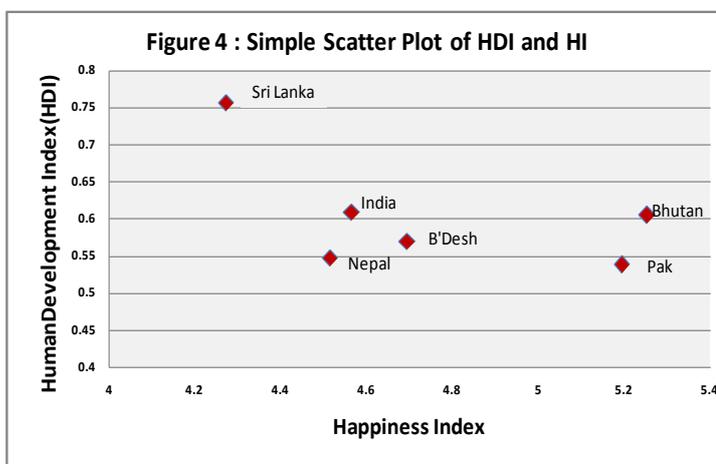
The correlations of Happiness with HDI, or any of the key sub-components of HDI, all appear to be negative, as shown in Table 4 below. The Human Development Index shows a negative correlation (-0.558) with happiness. The gender-related index also shows a negative correlation (-0.508) with happiness. The same can be said for its three components: both the education index and the life expectancy index correlate

negatively (-0.698 and -0.687 respectively) with HI. The GNI index has no correlation with HI at all.

Table 4. Correlations of Human Development Indices with Happiness

Human Development Indices (2014)	Correlation with a Happiness index
Human Development Index (2014)	-0.558
Gender Development Index (2014)	-0.508
Inequality-Adjusted Development Index (2014)	-0.624
Education Index (2014)	-0.698
Life Expectancy Index (2014)	-0.687
GNI (2014)	-0.001

Interestingly, a country like Pakistan at the low end of human development countries (below 0.55) tends to score higher on the happiness index and Sri Lanka with high HDI is low in HI when compared to other countries. Again, at the lower level of GNI (below 8,000), happiness does not correlate at all with human development. It can be assumed that factors other than GNP play a



dominant role. Except for Bhutan none of the other South Asian countries like India and Bangladesh with a medium-level of HDI have scored highly on happiness (Fig. 4).

CONCLUSION

The above findings have to be treated very cautiously. It is clarified, that access to data is severely limited. Correlations between Happiness and HDI, and the components of HDI are negative which implies that high HDI does not guarantee high national happiness (Sri Lanka). Countries with low levels of HDI have exhibited higher levels of happiness (Pakistan). It will also be useful to assess the extent to which there are disparities in happiness ratings within a country and human development. It might turn out that groupings within countries, separating e.g. the rich from the poor, males and females, urban-rural could be more valid division into sub-groups. It has been argued that economic indicators were extremely important in the early stages of economic development when the fulfillment of basic needs was the main issue. As societies grow wealthy, however, differences in well-being are less frequently due to income and are more frequently due to factors such as social relationships and enjoyment at work as seen in the Western Countries. Most of the South Asian countries are in different stages of development, therefore, development and happiness may be perceived differently by people of these countries. In South Asia, for example, there was a significant drop in average life evaluations, especially in Nepal and India. The positive contributions from continuing economic growth and greater generosity were more than offset by the effects of declining social support, and of less perceived freedom to make life choices. Inequality in the distribution of happiness also grew significantly within the region.

The paper argues that whereas HDI is universally applicable, happiness and its perceptions are better understood in a specific cultural context. The probable difference could be in the understanding of happiness or life satisfaction from the standpoint of broader development and human development as offering people the opportunity to lead lives they value.

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Conflict of Interest

The authors colorfully declare this paper to bear not a conflict of interests

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