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Elevating Happiness by Analyzing Socioeconomic Factors

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Abstract

The significance of happiness in the realm of national development cannot be underestimated. While economic growth and material progress remain essential markers of a nation's advancement, the overall happiness and well-being of its citizens play a pivotal role in achieving sustainable development. This research study probes into the complex relationships among a wide spectrum of socio-economic, environmental, and psychological factors, exploring their collective influence on individual and societal happiness within the broader context of sustainable development. Aim of this study is to focus on the level of influence due to different factors such as economic factors like GDP and social factors like corruption levels, generosity, freedom indices, and life expectancy across different parts of the globe. The study will emphasis on the detection of happiness and well-being within the context of sustainable development by applying different multidisciplinary approaches and quantitative techniques. The findings will further uncover that while numerous factors significantly influence happiness and well-being, generosity will emerge as a variable that does not have statistically significant influence on happiness degrees. The findings in this paper will provide valuable guidance for researchers and policymakers who are working for improving overall quality of life for individuals and societies across the world in order to have sustainable development.

Keywords: Correlation, Happiness, Hypothesis, Regression, Statistical.

Introduction

For evaluating human progress, happiness and wellbeing have moved from the periphery to the centre of public policy around the world. Finding the association of composite relationships between different variables that contribute to happiness within the framework of sustainable development serves as an important directional tool that will guide societies toward achieving universal well-being. Moreover, these understandings have significant implications for community empowerment, policy-making, and the promotion of reliable society progress. An interdependent relationship between environmental sustainability and human prosperity, with a special focus on development for future generations is further promoted by this understanding of different factors effecting happiness (1).

Usage of these understandings into decision-making processes will help in formulation of strategies that will increase quality of life of people and also safeguard the long-term sustainability of ecosystems. In this way, the happiness study will promote the principles of sustainability, creating a future where both humans and nature can flourish mutually. This approach further highlights the necessity of viewing progress, not as a linear path of economic growth but as a multidimensional journey towards a sustainable and enjoyable human survival (2).

Earlier, paradigms of happiness study often focus on economic indicators, ignoring the essential worth of social connections, ecological strength and human experiences. This inaccuracy raises unsustainable exercises that compromise both present and future. The importance of these studies lies in the recognition that happiness is a complex theory and is not solely derived from material accumulation or economic progress. It covers a relationship between psychological, sociocultural, and environmental factors that are greatly influenced by the values of sustainable progression (3). In reality, understanding the relationships between variables contributing to happiness should suggest holistic journey where

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societal well-being and environmental flexibility mingle. The understanding of happiness perspective emphasises the necessity of integrating social and emotional dimensions with economic plans, acknowledging that true progress that involves enhancing the quality of life in synchronisation with nature (4). It further highlights a shift towards development models that prioritize psychological well-being, community strength, and ecological sustainability, creating environments where people can find accomplishment and societies can also bloom (5).

Sustainable development also ensures that our actions today do not compromise the prospects of future generations. In order to implement same, understanding the relationships between variables plays a significant role. By identifying how factors like clean air, access to education, and community cohesion influence well-being, societies can surpass short-term gains for lasting progress (6). This forward-looking perspective demands innovative and context-sensitive policies that emerge from understanding of local dynamics, resources, and cultural differences. Hence it can be observed such understanding becomes a toolkit for informed decision-making, allowing policy interventions that boom with the unique needs of a society (7).

Furthermore, the relationships between different variables initiates a much-needed cycle of refinement and knowledge generation. As researchers explore into the connections between variables contributing to happiness, they often adopt interdisciplinary approaches. This interconnection of ideas encourages original thinking, supports the creation of novel methodologies that blend quantitative and qualitative data. This pioneering spirit of interdisciplinary relationship is the solution to unproductivity, pushing the field of sustainable development forward with fresh perspectives that avoid standardized frameworks. It will safeguards against the risk of recycling generic solutions that might inadvertently intensify differences (8). At the community level, understanding these new relationships offers a transformative narrative. Societies become architects of their own development, directing their path based on an elaborated understanding of their strengths and needs. The empowerment derived from this knowledge focus on new initiatives consisting on social cohesion and localized results. When individuals are prepared with insights into how their environment, relationships, and personal well-being interconnect, a sense of connection develops. This will further result in collective action, enabling societies to innovate, adapt, and survive even in the face of trials. Significantly, these understanding are also promoter for developing societal values (9).

Traditional indicators of success, such as GDP growth, are re-examined within the framework of well-being. Instead of using a singular metric dimension, societies broaden their horizons to encompass multiple dimensions like mental health, environmental integrity, and social inclusion. Such a shift is a much needed change from the agreements of the past, indicating a future where expansion is defined by balance rather than surplus, and harmony rather than disagreement (10).

However, the path towards understanding these relationships comes up with lots of challenges. It needs withdrawal from traditional and reductionist thinking that deals with all variables in isolation. Instead, it demands for a holistic inclusion of complexity, recognizing that all identified variables are important for the well-being of individuals. This requires a multidisciplinary approach that merges expertise from economics, psychology, environmental science, sociology, and many more (11). A holistic view acknowledges that the impact of any single variable on happiness is not straightforward but is influenced by its interactions with many other factors. Evolving a deeper understanding of happiness, therefore, needs creation of advanced analytical models and methodologies that are capable of accurately reflecting the complex relationship of different factors and variables. Through these comprehensive approaches and interventions, policies can be formulated that are truly responsive to the complex nature of happiness within the framework of sustainable progress. This method focusses on the value of collaborative efforts across various fields of study, bringing together a diversity of expertise to disclose the layered influences on happiness, enabling emergence of more effective and reliable solutions (12).

In the subsequent sections, the research objectives, hypotheses, methodology, and findings of the study, with the aim to improve understanding of the difficult dynamics that results in happiness and wellbeing of human beings are presented. Progressively embarking on this exploration, it is

evident that embracing a holistic understanding of happiness factors is an essential step toward achieving a future where prosperity, equity, and environmental sustainability can be achieved. This research paper aims to find the complex relationship between social and economic factors and their collective influence on citizen well-being and happiness. Through rigorous statistical analysis, it endeavours to provide evidence-based insights that can guide policymakers and stakeholders in their efforts to enhance the overall quality of life for the citizens they serve (13).

This research and approach have made the following contributions:

- Comprehensive Approach to National Development: The research emphasizes that while economic growth is crucial, it alone is not sufficient for a nation's advancement. It focusses the pivotal role of overall happiness and well-being in achieving nations development.
- Holistic Analysis of Happiness Factors: The study explores into a wide range of socio-economic, environmental, and psychological factors like GDP, life expectancy, corruption, and social security, identifying that happiness is influenced by a complex relationship of these variables. This comprehensive approach goes beyond traditional methods.
- Policy Suggestions for Development: The findings of this paper is likely to have direct implications for policymakers. By understanding the multidimensional relationships between these variables, policy decisions can be incorporated to promote both economic development and citizens' well-being.
- Long-term Focus on Sustainable Development: The research places a significant emphasis on sustainable development, highlighting a forward-looking approach. It recognizes that promoting happiness and well-being is essential not just for the present, but also for the long-term prosperity of a country.
- Quantitative Assessment of different Factors: The research uses quantitative techniques to assess the extent of the impact of different variables. This empirical approach provides a solid foundation for depicting meaningful conclusions and making evidence-based policy recommendations.

The research findings of this work collectively contribute to a deeper understanding of the complex relationship between happiness, well-being, and sustainable development at the global level. It will offer valuable insights for both researchers and policymakers striving to enhance the prosperity and contentment of citizens (14).

A complete literature review on the topic of elevation nation happiness level involves quantification of the relationships between different variables contributing to happiness for sustainable development. It will also involve inspection of a range of scholarly works, research articles, and theories. Many theoretical frameworks, such as subjective well-being theory and positive psychology, highlight the importance of factors beyond materialistic things for overall happiness. All these frameworks highlight the role of health, social relationships, personal growth, and environmental quality in shaping people's well-being (15). It has been presented in literature that true satisfaction rises from balance between these elements which will further result in a sense of fulfilment and joy that is not dependent on material possessions. By focusing on the development of meaningful connections, maintaining mental and physical health, creating opportunities for personal development, and ensuring a sustainable environment, these theories suggest a comprehensive approach for achieving happiness (16).

Subjective well-being theory highlights on the individual's perception of their well-being as the primary indicator. It consists of three components: cognitive evaluation of life (life satisfaction), undergoing through positive emotions (positive affect), and undergoing through negative emotions (negative affect, 17). An individual's well-being is directly linked to subjective evaluation of their own life, including the balance between positive and negative emotions and their overall satisfaction with life is suggested by the framework presented in literature. It further highlights that happiness is a paradigm significantly influenced by how individuals interpret and respond to their life experiences. By focusing on both the emotional and cognitive aspects of well-being, theory stated in literature provides a comprehensive understanding of happiness, acknowledging the complexity and unpredictability of human emotions and perceptions (18).

The limitations of using GDP as the only measure of development have encouraged researchers to explore alternative indicators that include happiness and well-being. The idea of Gross National Happiness (GNH) in Bhutan and similar initiatives have generated global interest in measuring progress beyond economic growth (19). Strong social networks and community networks have been associated with increased happiness levels. It has been suggested that social support systems improve emotional flexibility, reduce feelings of isolation, and contribute to overall life contentment. A large part of literature indicates a positive correlation between good health and well-being. Longer life expectancies, easy access to quality healthcare, and the absence of chronic illnesses are related with higher levels of life satisfaction. Countries with higher levels of political stability and personal freedoms tend to exhibit greater happiness among their citizens. Autonomy, civil liberties, and political security contribute to an individual's sense of well-being (20). Generosity and engagement in prosocial behaviour, such as volunteering and charitable acts, are consistently linked to higher levels of happiness. Contributing to the well-being of others can enhance an individual's own sense of fulfilment (21). Education is recognized not only for its economic benefits but also for its contribution to happiness. Access to quality education equips individuals with the skills needed for personal growth, critical thinking, and active citizenship (22).

The environment plays a significant role in influencing happiness. Green spaces, clean air, safe drinking water, uncontaminated soil and sustainable practices contribute to both physical and mental well-being. Poor environmental conditions, such as air pollution or exposure to toxic substances, can lead to adverse health outcomes that will further result in decline of life satisfaction and overall well-being (23). This relationship between environment and happiness emphasises the importance of environmental sustainability in the overall happiness (24). Perceptions of corruption and lack of trust in institutions can also result in negative effects on societal well-being. This distrust arises from the weakening of any social organisation and the fading of community collaboration. As a result, individuals lose trust in the systems which is designed to serve and protect them. Moreover, these negative feedback as a result of citizen identifying their leaders and institutions as corrupt can lead to a general sense of injustice and helplessness which will further leads to diminishing effects on overall happiness and satisfaction within an institute. This feel of distrust will not only influences the psychological health of people but also hampers the effective functioning of societies, as cooperation and collective action become more challenging. Nations with low levels of corruption manages to have higher levels of happiness, as trust is a fundamental factor for social cooperation and effective governance (25).

Attempts to create comprehensive guides of happiness and well-being by producing different reports like World Happiness Report and Human Development Index (HDI) integrate a wide range of variables to provide a universal perspective on development which is beyond just economic progress (26). The factors available in these reports challenge the traditional trust on GDP as the only indicator of a country's success. Recognizing the fundamental value of health, education, and emotional well-being, these reports encourage policies and initiatives that aim not just for economic prosperity but for the improvement of all dimensions of human well-being. These reports also provide study about importance of a multidisciplinary approach for evaluating societal progress. This widened perspective highlight the complication of development and the need for actions required so that individuals and communities experienced true quality of life (27).

From above literature it can be justified that the calculation of happiness levels and its relationship with various factors has won substantial awareness in recent years. Hypothesis testing and the use of P-values play an important role in finding the statistical significance of different relations (28). Different statistical analysis reveals that there is a significant links between income and happiness (29). P-value plays a fundamental role in finding advantages and limitations of each relation associated with happiness (30). The researchers assessed the effectiveness of a government policy aimed at improving citizen well-being using different hypothesis testing. The researchers find out that a p-value below 0.05, supports the notion that the policy had a positive impact on happiness levels (31, 32). From different literature available this paper work identify the major factors that have positive and negative effects on happiness.

Finally, the literature review highlights the multi-dimensional nature of happiness and its strong connection to sustainable development. Researchers and policymakers increasingly recognize that a balanced consideration of various factors – economic, social, environmental, and psychological – is crucial for fostering both individual well-being and broader societal progress. This review sets the stage for further exploration of the relationships between these factors through quantitative analysis and empirical research.

Methodology

The methodology involved in this experimental study consists of data pre-processing and statistically exploring different hypotheses. It consists of finding the relationship between various social and economic factors of the country affecting the happiness level of its citizens.

The main source of data is the World Happiness Report which is an annual publication that ranks countries based on their inhabitants' self-reported happiness and well-being. The report is produced by the United Nations Sustainable Development Solutions Network (SDSN) and depends on data from various sources, including surveys conducted in the countries on various levels. The dataset used in the World Happiness Report typically includes a range of namely, GDP per capita (GDP), Social Support (SSUP), Life Expectancy (HLE), Freedom to make life choices (FRD), Generosity (GEN), Corruption (CORR, 33) .

Several factors have been studied affecting the happiness level of the citizens of various countries. Linear Regression is used to express the mathematical relationship between different variables. Here, linear regression analysis is used to quantify how each of the independent factors (CORR, SSUP, GDP, HLE, GEN, FRD) relates to happiness. Whereas, multiple regression analysis allows us to analyse how these multiple factors collectively impact happiness. The regression analysis assumes that multicollinearity and heteroscedasticity are not there among the variables chosen.

The results are interpreted using the following outcomes of regression analysis:

- The regression equation with coefficients for each independent variable and the intercept.
- R^2 value, which represents the proportion of the variance in happiness explained by the model.
- F-statistic and F-value, where a low p-value indicates the overall significance of the regression model.
- P-values for each independent variable, which indicate their significance.
- Look for statistically significant coefficients (p-value < 0.05) to identify which factors have a significant impact on happiness.

After regression analysis, hypothesis tests have been performed for specific combinations of factors. For example, to test whether the combination of GDP per capita and life expectancy significantly affects happiness, one can isolate those variables and rerun the regression analysis. Examine the p-value associated with this subset of factors to determine its significance. Scatter plots can be particularly useful to visualize how data points are distributed and fitting of the regression line. Based on the analysis and the significance of individual factors and combinations, several conclusions have been drawn about which factors have the most substantial influence on happiness levels. This information can inform policy decisions aimed at improving the well-being and growth of the nation.

The study will explore the following specific hypotheses:

H0: All the parameters of GDP, Social Support, Life Expectancy, Freedom, Generosity, and Corruption don't affect happiness when taken together.

H1: Higher GDP per capita is positively linked with advanced levels of happiness.

H2: Stronger social support systems result in increased happiness among individuals.

H3: Longer life expectancy is certainly correlated with greater levels of happiness.

H4: Nationals 'freedom to make life choices is strongly linked with higher levels of happiness.

H5: Citizen's generosity is strongly connected with higher degrees of happiness.

H6: Corruption in society has an influence on the happiness level of citizens.

H7: Greater levels of GDP and personal freedom result into higher happiness levels.

H8: Higher GDP and social support will have a greater positive effect on happiness

H9: Higher life expectancy and social support will surge the level of happiness

H10: Longer life expectancy and freedom will add to high levels of happiness

H11: Personal freedom and generosity will result to positive happiness.
H12: Societies that show higher levels of citizen generosity and perception of corruption experience increased happiness.
H13: When GDP per capita, social support and Life expectancy are taken together, happiness will increase.
H14: A combination of Freedom, Generosity, and Corruption will have positive effects on happiness.
H15: Personal Freedom, citizen generosity, corruption and Healthy life expectancy will improve the happiness level.
The following equation can be used based on the above hypothesis H0:

$$\text{Happiness} = \alpha 0 + \alpha 1 * \text{GDP} + \alpha 2 * \text{Support} + \alpha 3 * \text{Life Expectancy} + \alpha 4 * \text{Freedom} + \alpha 5 * \text{Generosity} + \alpha 6 * \text{Corruption} + \varepsilon \quad \ldots[1]$$

Where: $\alpha 0$ is the intercept
$\alpha 1, \alpha 2, \ldots, \alpha 6$ are the coefficients for each independent variable and ε is the error term.

Results and Discussion

Interpreting the regression output uses information such as coefficients, P-values, Significance F, Multiple R (correlation coefficient), and R^2. The output from linear regression with one independent variable and multiple regression with more than one independent variable are depicted in Table 1 and Table 2. Following are the interpretations using different parameters of analysis.

Coefficients: Since most of the coefficients are positive, it implies that an increase in any of the independent variables is associated with an increase in happiness. This could indicate that the factors considered in the analysis are generally conducive to happiness. The magnitude of the coefficients indicates the strength of the relationship. Larger coefficients suggest a stronger influence on happiness compared to smaller coefficients. GEN has a weaker influence on happiness and GDP is the next in line in terms of strength. This suggests that changes in a country's economic prosperity, as measured by GDP, have a more substantial influence on happiness compared to GEN, but it's still not as impactful as other variables.

Multiple R (Correlation coefficient): Correlation coefficients range from -1 to 1, with -1 indicating a strong negative correlation, 1 indicating a strong positive correlation, and 0 indicating no linear correlation. It's important to note from Table 1 that the observed relationships between the independent variables (CORR, SSUP, GDP, HLE, and FRD) and happiness can be described by a straight-line trend. SSUP has the strongest linear relationship with happiness. CORR variable has a weaker linear relationship with happiness compared to social support. This means that changes in corruption are associated with smaller changes in happiness, compared to changes in social support. GDP, HLE and FRD variables also have linear relationships with happiness, but their strength of relationship falls between that of social support and corruption. The coefficient GEN is close to 0 suggesting that generosity has a very weak linear correlation with happiness. There is a notable improvement in the strength of the relationship when considering all combinations of factors except those involving generosity (Table 2). This implies that when combining multiple factors, the model's predictive power for happiness is generally enhanced, except when generosity is included. The strong correlation with social support might suggest the significance of interpersonal relationships for well-being.

R^2: R^2 measures the proportion of the variance in happiness explained by the independent variables. A high R^2 value close to 1 suggests a good fit. It was noted from Table 1 that the R^2 for generosity decreased drastically, implying that this variable doesn't contribute significantly to explaining the variance in happiness in the model. R^2 for social security is the highest among all factors. This indicates that social security is a powerful predictor of happiness. This might imply the importance of a robust social safety net for overall well-being. The combination of factors with social support (SSUP) leads to higher R^2 values. Table 2 demonstrates that when considering social support in conjunction with other factors, the model better explains the variance in happiness. This underscores the significance of social support in contributing to overall happiness.

P-values: P-values are associated with each independent variable. A p-value less than the chosen significance level (0.05) indicates that the variable has a statistically significant impact on the de-

pendent variable (Happiness). This helps to identify which factors are most strongly associated with happiness. As observed from Tables 1 and 2, all variables and variable combinations except GEN are statistically significant with a P-value less than 0.05. The P-value of GEN is 0.44 which is considerably higher than 0.05. This means that there is insufficient evidence to conclude that generosity has a statistically significant impact on happiness. The intercept represents the predicted happiness level when all independent variables are set to zero.

Significant F Value: The F-statistic tests the overall significance of the regression model. A low F-value suggests that at least one independent variable has a statistically significant effect on the dependent variable. If generosity was found to have a high F-value but a p-value above the significance level (0.05), it implies that while the overall model may be statistically significant, the variable GEN individually doesn't have a significant effect on the dependent variable in this specific model.

Hypothesis Testing: The results of hypothesis tests on each independent variable to determine if they have a statistically significant impact on happiness are shown in Table 1. The null hypothesis (H0) typically states that there is no effect (coefficient = 0), while the alternative hypothesis (Ha) suggests an effect (coefficient ≠ 0). Compare the P-values to the chosen significance level (0.05). If p < 0.05, one can reject the null hypothesis and conclude that the variable has a statistically significant impact on happiness. The H5 hypothesis stating generosity affects happiness is rejected as the P-value is 0.44 >0.05. Generosity is not a significant factor influencing happiness.

Table 1: Relationship of a Factor with Happiness Level

Hypothesis	MR	R^2	Coefficients		Significance F	P-Value	Inference (Significance level 0.05)	Results
			Factors	Value				
H1	0.76	0.58	Intercept GDP	2777.27 1.97	3.73E-29	1.23E-27 3.73E-29	P-Value<0.05 relationship is statistically significant and +ve	Accepted
H2	0.78	0.61	Intercept SSUP	2819.57 3.02	7.51E-31	2.66E-30 7.51E-31	P-Value<0.05 relationship is statistically significant and +ve	Accepted
H3	0.74	0.55	Intercept HLE	2879.13 4.56	1.32E-26	1.12E-27 1.32E-26	P-Value<0.05 relationship is statistically significant and +ve	Accepted
H4	0.62	0.39	Intercept FRD	3145.50 4.66	3.51E-17	1.25E-23 3.51E-17	P-Value<0.05 relationship is statistically significant and +ve	Accepted
H5	0.06	0.004	Intercept GEN	5430.18 0.83	0.44	8.02E-63 0.44	A P-value>0.05 relationship is statistically not significant.	Rejected
H6	0.42	0.17	Intercept CORR	5004.49 3.55	1.74E-07	5.65E-78 1.74E-07	P-Value<0.05 relationships is statistically significant and +ve	Accepted

The linear regression graph visually represents the relationship between the independent and dependent variables, while the equation provides a mathematical model that quantifies this relationship. The coefficients in the equation 1 offer spe-

cific information about the magnitude and direction of the impact of each independent variable on the dependent variable. Linear regression graph typically has a scatter plot where each data point represents values for an independent variable (x-axis) and the dependent variable (*y*-axis).

In this study, each subfigure in Figure 1(A, B, C, D) would represent one such scatter plot for SSUP, GDP, GEN and HLE respectively. The best-fit line is drawn through the scatter plot, attempting to minimize the overall distance between the observed data points and the line itself. This line represents the linear relationship that best describes the data. The equation 2 presents the linear regression model and is represented as:

$$Y=b0+b1*X+\varepsilon \quad \ldots.[2]$$

Y represents the dependent variable (Happiness).

X represents the independent variable (SSUP, GDP, HLE, or GEN).

b0 is the y-intercept, which is the value of Y when X is zero.

b1 is the slope, which represents the change in Y for a one-unit change in X.

ε represents the error term, which accounts for variability in Y that is not explained by the model.

For each independent variable (SSUP, GDP, HLE, GEN), there would be a separate linear regression equation. In the context of the study, it has been observed that the coefficient for generosity (Figure 1 (C)) demonstrates less impact on happiness as compared to other variables namely, health life expectancy (Figure 1 (D)), social support (Figure 1 (A)) and GDP of the country (Figure 1 (B)) in order. This means that for a one-unit change in generosity, the change in happiness is relatively smaller compared to other variables. This observation is crucial because it provides insights into which factors have a more substantial influence on happiness levels and which have a comparatively lesser impact.

The multidisciplinary approach and quantitative techniques used in this study have provided valuable understandings into the complex interdisciplinary study of socioeconomic, psychological, and environmental factors on overall happiness and well-being for sustainable development. The experiments conducted have resulted in several significant findings: Among the various data variables examined, GDP per capita, social support, corruption in society, generosity, citizens' freedom, and high life expectancy have been identified as factors influencing happiness levels. Social support emerged as the most influential independent variable, while generosity showed the least impact. Combining different independent variables, especially when paired with SSUP, significantly enhanced the statistical significance of affecting happiness levels. Pairing with generosity, on the other hand, reduces the statistical significance of influencing happiness levels. This suggests that a universal approach, reflecting multiple factors collectively, provides more accurate and reliable representation of the overall well-being of human being. The study's findings translate into practical recommendations for policymakers by recognizing key factors that impact happiness, such as GDP, social support, health, and freedom to make life choices. The relationship between scientific evidence and practical applications, are defined with the help of accepted hypothesis.

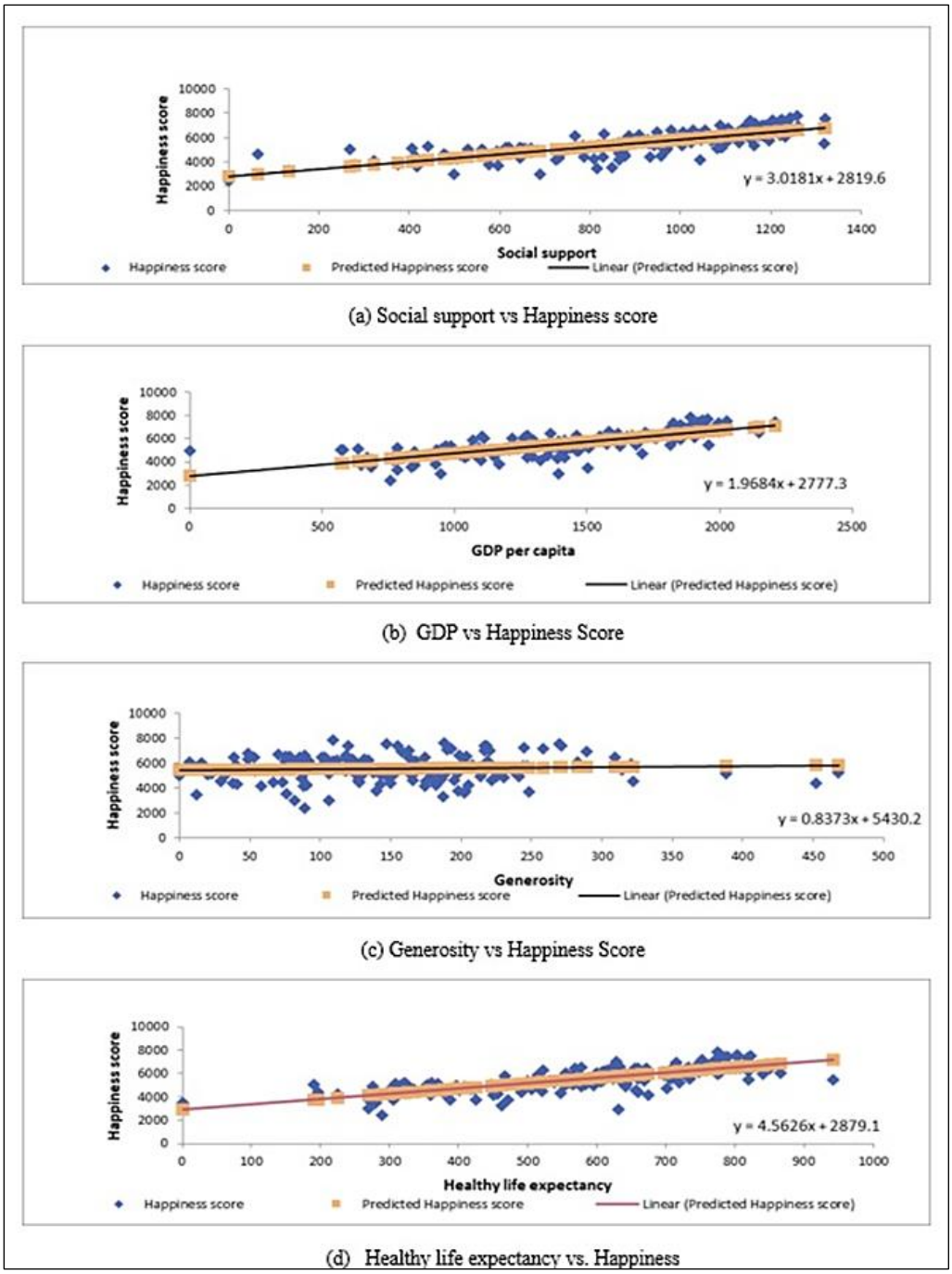

Figure 1: Regression Graphs, Relationship between Independent Variables and Happiness

Table 2: Relationship of Multiple Factors on Happiness Level

Hypothesis	MR	R^2	Coefficients		Significance F	P-Value	Inference (Significance level 0.05)	Results
			Factors	Value				
H0	0.99	0.99	Intercept GDP SSUP HLE FRD GEN CORR	0.038 1.00 0.99 0.99 1.00 1.00 0.997	0	0.92 0 0 0 8.34E-293 4.7E-302	P-Values<0.05 Statistically significant +ve relationship	Rejected

						8.2E-278 4.2E-299		
H7	0.82	0.68	Intercept GDP FRD	2016.82 1.56 2.59	5.56E-36	1.16E-16 1.25E-21 1.13E-09	P-Value<0.05 Statistically significant +ve relationship.	Accepted
H8	0.83	0.69	Intercept GDP SSUP	2357.00 1.08 1.84	4.08E-37	4.52E-25 4.07E-09 7.88E-11	P-Values<0.05 Statistically significant +ve relationship	Accepted
H9	0.83	0.69	Intercept SSUP HLE	2313.12 1.99 2.46	1.9E-37	3.03E-24 9.95E-14 1.86E-09	P-Values<0.05 Statistically significant +ve relationship	Accepted
H10	0.81	0.66	Intercept HLE FRD	2022.06 3.56 2.79	2.13E-34	5.44E-16 4.95E-20 1.26E-10	P-Values<0.05 Statistically significant +ve relationship	Accepted
H11	0.62	0.39	Intercept FRD GEN	3205.89 4.72 -0.63	3.28E-16	1.25E-22 4.63E-17 0.468	P-Values (FRD)<0.05 (GEN)>0.05, R^2 decreased. Generosity is not a significant factor compared to Freedom. The combined relationship is statistically less significant.	Accepted
H12	0.42	0.17	Intercept GEN CORR	4961.10 0.32 3.53	1.18E-06	2E-56 0.75 2.47E-07	P-Values (CORR)<0.05 (GEN)>0.05, R^2 decreased. Generosity is not a significant factor as compared to Corruption. The combined relationship is statistically less significant.	Accepted
H13	0.84	0.71	Intercept GDP SSUP HLE	2230.68 0.64 1.68 1.54	4.88E-38	1.87E-23 0.00456 1.3E-09 0.001985	P-Values<0.05 Statistically significant +ve relationship	Accepted
H14	0.65	0.43	Intercept FRD GEN CORR	3258.24 4.13 -0.70 1.68	5.09E-17	8.92E-24 7.43E-13 0.41 0.005	P-Values (FRD, CORR) <0.05 (GEN)>0.05, R^2 decreased. Generosity is not a significant factor as compared to Freedom and	Accepted

							Corruption. The combined relationship is statistically less significant.	
H15	0.82	0.67	Intercept HLE FRD GEN CORR	1977.32 3.54 2.53 0.70 0.56	7.57E-33	1.06E-13 1.51E-18 2.53E-08 0.29 0.22	P-Values (FRD, HLE) < 0.05, (GEN, CORR) > 0.05, R^2 decreased. Generosity is not a significant factor as compared to Freedom and Corruption.	Accepted

Conclusion

Collaborative efforts with experts from different fields such as environmental science, sociology, urban planning, and public health can lead to better and comprehensive understanding of well-being and sustainable development. The study suggest that social support is an essential factor for happiness and well-being. If this is further combined with other independent variable this can play a much more important role in global diplomacy. Governments and organizations can use this knowledge to implement different strategies. This interdisciplinary approach can disclose novel viewpoints and solutions; hence work can be done in this direction. The awareness gained from this research can assist in making policy decisions aimed at improving happiness and well-being at both individual and societal levels.

More research could explore into the specific aspects of factors like social support that have the most significant impact on happiness. This could consist of studying the role of factors like family, friends, institutional and community. Although generosity was found to have a quite lower impact on happiness levels, a deeper investigation into the degrees of different variable involved could produce valuable understandings. This might include studying behaviour of cultural, societal, and individual factors that impact generosity. Further, conducting detailed studies over extended period of time can provide a more comprehensive and detailed understanding of how different variables identified, evolve and interact. This can help in identifying trends and patterns of these variables that may not be immediately identified in shorter-term studies. Country-specific issues, data variability are some of gaps that need to be addressed in future work.

Abbreviations

CORR: Corruption, FRD: Freedom to make life choices, GDP: GDP per capita, GEN: Generosity, GNH: Gross National Happiness, HLE: Life Expectancy, SSUP: Social Support.

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Vandana Kalra: Methodology, Formal analysis, Writing, Investigation, validation. Supreet Kaur Sahi: Methodology, Conceptualization, Writing, Formal analysis. Manmeet Kaur: Writing, Review, Editing, Investigation, Validation.

Conflict of Interest

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References

1. Folk D, Dunn E. A systematic review of the strength of evidence for the most commonly recommended happiness strategies in mainstream media. Nature Human Behaviour. 2023 Oct;7(10):1697-707.
2. Chai J. Subjective happiness in behavioural contracts. Journal of Happiness Studies. 2023 Oct; 24(7):2245-60.
3. Ruggeri K, Garcia-Garzon E, Maguire Á, Matz S, Huppert FA. Well-being is more than happiness and life satisfaction: a multidimensional analysis of 21 countries. Health and quality of life outcomes. 2020 Dec;18:1-6.

4. Graciyal DG, Viswam D. social media and emotional well-being: pursuit of happiness or pleasure. Asia Pacific Media Educator. 2021 Jun;31(1):99-115.
5. Sender G, Carvalho F, Guedes G. The happy level: A new approach to measure happiness at work using mixed methods. International Journal of Qualitative Methods. 2021 Apr 7; 20:16094069211002413.
6. Frey BS. What are the opportunities for future happiness research? International Review of Economics. 2020 Mar; 67(1):5-12.
7. Choi H, Diener E, Sim JH, Oishi S. Happiness is associated with successful living across cultures. The Journal of Positive Psychology. 2023 Nov 2;18(6):958-77.
8. Ibnat F, Gyalmo J, Alom Z, Awal MA, Azim MA. Understanding world happiness using machine learning techniques. International Conference on Computer, Communication, Chemical, Materials and Electronic Engineering (IC4ME2). IEEE. 2021 Dec 26:1-4.
9. Dejonckheere E, Rhee JJ, Baguma PK, Barry O, Becker M, Bilewicz M, Castelain T, Costantini G, Dimdins G, Espinosa A, Finchilescu G. Perceiving societal pressure to be happy is linked to poor well-being, especially in happy nations. Scientific reports. 2022 Feb 17;12(1):1514.
10. Singh K, Bandyopadhyay S, Saxena G. An exploratory study on subjective perceptions of happiness from India. Frontiers in Psychology. 2022 Feb 3;13:823496.
11. Kar, Nilamadhab. Happiness and health: An intricate relationship. Understanding Happiness: An Explorative View. Singapore: Springer Nature Singapore. 2023:205-231.
12. Chakraborty B, Maji S, Sen A, Mallik I, Baidya S, Dwibedi E. A study on happiness and related factors among Indian college students. Journal of Quantitative Economics. 2019 Mar 13;17:215-36.
13. Lee S, Song T, Lim U. How are happy and unhappy people differently affected by their local environments? The heterogeneous relationship between happiness and local environments in Seoul, Korea. Cities. 2022 Aug 1;127:103768.
14. Rastelli C, Calabrese L, Miller C, Raffone A, De Pisapia N. The art of happiness: an explorative study of a contemplative program for subjective well-being. Frontiers in psychology. 2021 Feb 11;12:600982.
15. Welsch H. Implications of happiness research for environmental economics. Ecological Economics. 2009 Sep 15;68(11):2735-42.
16. Baek EC, Parkinson C. Shared understanding and social connection: Integrating approaches from social psychology, social network analysis, and neuroscience. Social and Personality Psychology Compass. 2022 Nov;16(11):e12710.
17. Dorasamy J, Bhagwan R. Social Wellness Approaches Used During the Covid-19 Pandemic. Journal for ReAttach Therapy and Developmental Diversities. 2023 Sep 4;6(10s (2)):145-66.
18. Tsujimoto M, Saito T, Matsuzaki Y, Kawashima R. Role of Positive and Negative Emotion Regulation in Well-being and Health: The Interplay between Positive and Negative Emotion Regulation Abilities is Linked to Mental and Physical Health. Journal of Happiness Studies. 2024 Feb;25(1):25.
19. Gyeltshen, J. Bhutan's sustainable development initiatives and Gross National Happiness. Sustainable Development: Asia-Pacific Perspectives. 2022:85–94. DOI:10.1017/9780511977961.014
20. Ahmadiani M, Ferreira S, Kessler J. What makes people happy? Evidence from international data. Journal of Happiness Studies. 2023 Jun; 23(5):2083-2111.
21. El Anshasy AA, Shamsuddin M, Katsaiti MS. Financial Wellbeing and International Migration Intentions: Evidence from Global Surveys. Journal of Happiness Studies. 2023 Oct; 24(7):2261-89.
22. Yirci R, Atalmis EH, Hasan E. Analyzing the Mediating Effect of Psychological Resilience on the Relationship between COVID-19 Fear and Happiness. Educational Process: International Journal. 2022;11(2):147-66.
23. Khare S, Chatterjee A. The relationship between urban built environment and happiness in Bhopal, India. Environment, Development and Sustainability. 2023 Jul; 26(8):1-16.
24. Gwise T, Rothmann MD, James Hung HM, Amatya A, Rothwell R, Wang SJ, Wu Y, Smith F, Weng YT, Andraca-Carrera E, Grosser S. Statement on P-values. Statistics in Biopharmaceutical Research. 2021 Feb 19;13(1):57-8.
25. Li Q, An L. Corruption takes away happiness: Evidence from a cross-national study. Journal of Happiness Studies. 2020 Feb;21:485-504.
26. Lomas T. Stranger than we can imagine: the possibility and potential significance of non-human forms of consciousness and wellbeing. The Journal of Positive Psychology. 2023 Nov 2;18(6):807-26.
27. Medvedev ON, Landhuis CE. Exploring constructs of well-being, happiness and quality of life. PeerJ. 2018 Jun 1;6:e4903.
28. Das D, Das T. The "P"-Value: The Primary Alphabet of Research Revisited. International Journal of Preventive Medicine. 2023 Apr 1;14(1):41.
29. Jebb AT, Tay L, Diener E, Oishi S. Happiness, income satiation and turning points around the world. Nature Human Behaviour. 2018 Jan;2(1):33-8.
30. Brown-Johnson C, Shaw JG, Safaeinili N, Chan GK, Mahoney M, Asch S, Winget M. Role definition is key—Rapid qualitative ethnography findings from a team-based primary care transformation. Learning health systems. 2019 Jul;3(3):e10188.
31. Kampkötter P, Mohrenweiser J, Sliwka D, Steffes S, Wolter S. Measuring the use of human resources practices and employee attitudes: The Linked Personnel Panel. InEvidence-based HRM: a Global Forum for Empirical Scholarship. Emerald Group Publishing Limited. 2016 Aug 1; 4(2):94-115.
32. Stahel WA. New relevance and significance measures to replace p-values. PLoS One. 2021 Jun 16;16(6):e0252991.
33. Helliwell JF, Huang H, Norton M, Goff L, Wang S. World happiness, trust and social connections in times of crisis. World happiness report. 2023.