





A STUDY OF MACRO FACTORS INFLUENCING HAPPINESS INDEX OF EASTERN EUROPEAN COUNTRIES

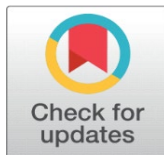
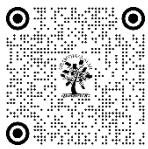
Dr. Maulik Dave ¹, Dr. Tejas Dave ², Dr. Ashwin Parwani ³, Dr. Ashish Rami ⁴

¹ Manager HR & Admin Sysnocri Information Technology Solutions Private Limited

² Associate Professor, School of Liberal Studies, Pandit Deendayal Petroleum University, Gandhinagar, Gujarat, India

³ Assistant Professor, School of Liberal Studies, Pandit Deendayal Petroleum University, Gandhinagar, Gujarat, India

⁴ Dean – Faculty of Commerce and Management, Swaminarayan University, Kalol, Gandhinagar, Gujarat, India



ABSTRACT

Happiness has been of importance for individuals, organisations and even for the nations primarily due to its influence on productivity and prosperity of the respective entities. There are plethora of micro and macro factors affecting happiness. This research study aims to investigate the association of macro factors viz. gross domestic product and per capita gross domestic product with happiness level and the extent to which they exercise their influence on happiness. Gross domestic product, per capita gross domestic product and happiness index of east European countries have been examined. Various statistical techniques including multiple regression equation have been used to analyze the data. The study revealed that per capita gross domestic product is an important variable influencing happiness index of a nation signaling that any government trying to achieve higher happiness index will have to pay adequate attention to per capita gross domestic product.

Keywords: Happiness, Gross Domestic Product, Eastern Europe

Corresponding Author

Dr. Maulik Dave, maul4ik@yahoo.com

DOI

[10.29121/shodhkosh.v5.i4.2024.3468](https://doi.org/10.29121/shodhkosh.v5.i4.2024.3468)

Funding: This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Copyright: © 2024 The Author(s). This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/).

With the license CC-BY, authors retain the copyright, allowing anyone to download, reuse, re-print, modify, distribute, and/or copy their contribution. The work must be properly attributed to its author.



1. INTRODUCTION

Happiness is generally confused with a form of mood or emotion or satisfaction; also, both these terms are used interchangeably by many authors. Happiness has been termed as positive emotions by various psychologists. National happiness is the result of strategies, principles, rules and regulations made by the government. Happiness is at times described as state of mind and is very subjective, i.e. a feeling of well-being experienced by an individual, specially featured by the presence of affirmative emotions and the nonappearance of negative emotions. It may be distinct as the experience of recurrent positive effect, infrequent negative effect and, on the whole, a sense of satisfaction with life. However, Happiness is commonly mistaken with a particular attitude, feeling, or level of pleasure. Happiness has been classified as a positive feeling by a number of psychologists. According to Merriam Webster Dictionary Happiness means

“a state of well-being and contentment” and “a pleasurable or satisfying experience”. According to Longman's Dictionary (2005), happiness is a “state of being happy,” which indicates “a sense of pleasure, i.e. something is excellent or correct, like being content with something, not worried about being lucky and performing well.” Happy citizens tend to have higher productivity as compared to the citizens who are not happy. It is generally believed that when citizens are happy they contribute more to national prosperity. Many nations therefore through various measures try to achieve higher happiness index. Happiness of citizens is treated as an important aspect for national productivity and growth across the globe.

2. LITERATURE REVIEW

The research scholars have extensively visited the area of happiness. The important research are described below:

According to earlier empirical research, contented workers are more productive than their dissatisfied counterparts. Rego & Pina e Cunha (2008) in their study revealed that due to the fact that discontent at work causes unhappiness, which in turn reduces productivity. For humans, who are continuously seeking happiness, it is vitally necessary. Fisher, (2010) revealed that a person's subjective well-being at work and their level of job and life satisfaction are both considered aspects of happiness at work. According to Al-Hawari, M.A., Bani-Melhem, S. and Shamsudin, F.M. (2019) workplace engagement and satisfaction are found to be significant determinants influencing employee service innovative behavior, according to a study on “Determinants of frontline employee service innovative behavior: The moderating role of co worker socializing and service climate.” Both directly and indirectly, through job engagement, employee service innovative behavior is influenced by workplace pleasure. The association between work engagement and innovative service behavior among frontline staff is significantly moderated by both the service climate and coworker socializing. Arampatzi, E. and Burger, M. (2020) studied “Facility management services and employee well-being,” the four well-being proxies and the FM index have a favorable correlation. The results also show that soft FM has a usually smaller impact on employee well-being than hard FM, particularly when it comes to job affect and engagement. Arora, R. (2020) conducted a study titled “Happiness among higher education academicians: a demographic analysis” and discovered that, aside from work-life balance, research activities, and working environment, academicians have access to all other factors based on the relative importance that has been assigned to them. Ziba Abdi, Babamiri & Noori N (2024) in their study demonstrated that the model accurately identifies a pathway for fostering nurses' job satisfaction. Additionally, it was discovered that through the mediating function of nurses, psychological capital, interactional fairness, and supervisor support resulted in increased job happiness.

3. RESEARCH GAP

Many studies have been undertaken to examine happiness of individuals in various sectors across the society considering micro factors. However few research studies have looked into happiness with special reference to macro factors such as gross domestic product (GDP) and per capita gross domestic (Per Capita GDP) product etc. in continental or sub continental context. This paper aims to bridge the gap to some extent.

4. RESEARCH OBJECTIVES

The study aims to examine association of macro factors viz. gross domestic product and per capita gross domestic product with happiness level and the extent to which they exercise their influence happiness in east European countries.

5. HYPOTHESIS DEVELOPMENT

The following hypothesis have been formed for this research paper:

- 1) Ho: Gross Domestic Product does not influence Happiness Index
Ha: Gross Domestic Product does influence Happiness Index
- 2) Ho: Per Capita Gross Domestic Product does not influence Happiness Index
Ha: Per Capita Gross Domestic Product does influence Happiness Index

6. RESEARCH METHODOLOGY

Research methodology is all about examining the pertinent topic in scientific manner ensuring validity and reliability of research findings besides contributing valuable knowledge in the field of study. In this research only east European nations are considered viz. Russia, Ukraine, Poland, Romania, Czech Republic, Hungary, Belarus, Bulgaria, Slovakia and Moldova. The nations for which data were not available have been dropped. The data pertaining to Gross Domestic Product (GDP), per capita gross domestic product (Per Capita GDP) and Happiness Index were collected for period of nine years. Gross Domestic Product and Per Capita Gross Domestic Product were treated as independent variables while Happiness Index was treated as dependent variable. The data was then analyzed using various statistical techniques such as ANNOVA, Descriptive statistics and Multiple Regression. F Test and Multi Co Linearity tests viz. Variance Inflation Factor (VIF) were carried out to check dependability of results.

7. ANALYSIS AND INTERPRETATION

(1) The standardized regression co-efficients of the independent variables with their direction, values and significance level are given in the Table- 1. The standardized regression coefficient of GDP, as given in Table -1, is + 0.079. This means GDP has positive relationship with Happiness Index. In other words if GDP increases Happiness Index will also increase. However its significance level of 0.345 makes it statistically not important at all. The evidence therefore points out that null hypothesis H_0 (GDP) be accepted and the alternate hypothesis H_a (GDP) be rejected. This clearly suggests that GDP per se does not influence Happiness Index.

(2) The standardized regression coefficient of Per Capita GDP is +0.723. This means Per Capita GDP has positive relationship with Happiness Index. In other words if Per Capita GDP increases Happiness Index will also increase. It has a significance level of 0.001. This makes Per Capita GDP a very important variable affecting Happiness Index. The evidence therefore suggests that null hypothesis H_0 (Per Capita GDP) be rejected and the alternate hypothesis H_a (Per Capita GDP) be accepted. This clearly suggests that Per Capita GDP has important role in influencing Happiness Index.

(3) Table – 2 shows results of F Test. Here $F = 39.441$ and its significance level is 0.001 with $df (2, 67)$. Thus all regression coefficients will be non zero.

(4) The VIF (Variance Inflation Factor) statistics are given in Table-1. The VIF statistics for GDP and Per Capita GDP are less than 10. Therefore there is no issue from view point of multi co linearity amongst the independent variables.

(5) The test outputs elaborated at points (3) and (4) above provide substantial reliability to the results.

The resulting Multiple Regression Model is as under:

$$\text{Happiness Index} = + 4.680 + 0.079 (\text{GDP}) + 0.723 (\text{Per Capita GDP})$$

(6) The co-efficient of determination as signaled by adjusted R^2 given in Table-1, is 0.527. This means that this model can explain 52.7 % variations in Happiness Index. Some other variables are responsible for the unexplained variations.

(7) Table -4 gives Descriptive Statistics. Accordingly predictive utility of the model will be more if their data pattern is more or less like the data set of east European countries.

8. FINDINGS

The important finding of this research is that Per Capita GDP has positive relation with Happiness Index. It has high power standardized regression coefficient standing at + 0.723. In addition its significance level is also 0.001 making it very acceptable. All these leads to making Per Capita GDP an important variable influencing Happiness Index. However at the same time GDP though has positive relationship with Happiness Index, its low value regression coefficient (+ 0.079) coupled with non acceptable level of significance (0.345) do not allow it to be an important variable influencing Happiness Index. Population parameters may have a role.

9. FUTURE RESEARCH DIRECTION

The present study has considered only east European nations only. A larger study covering more nations and more variables may be undertaken. A comparison of developing and developed nations may as well give some insights. A global study with more variables may as well be carried out.

Table No: 1

Regression Co-efficients , Significance Level & VIF Eastern Europe

	Standardised Regression Co-efficients (Beta)		Significance Level	Collinearity Statistics VIF
	Direction	Value		
Constant		4.680	0.001	
GDP (M.\$)	+	0.079	0.345	1.011
Per Capita GDP(\$)	+	0.723	0.001	1.011

Independent variables= GDP, Per Capita GDP

Dependent variable= Happiness Index N= 70 Adjusted R square= 0.527

Table - 2

ANNOVA Eastern Europe

Model	Sum of Square	df	Mean square	F	Significance
Regression	17.287	2	8.643	39.441	0.001
Residual	14.683	67	.219		
Total	31.969	69			

Table - 3

Descriptive Statistics -Eastern Europe

Parameters	Mean	Standard Deviation
Happiness Index	5.65191	.680680
GDP (M.\$)	300391.04	430293.272
Per Capita GDP (\$)	11270.44	5939.255

CONFLICT OF INTERESTS

None.

ACKNOWLEDGMENTS

None.

REFERENCES

- Al-Hawari, M.A., Bani-Melhem, S. and Shamsudin, F.M. (2019), "Determinants of frontline employee service innovative behavior: The moderating role of co-worker socializing and service climate", *Management Research Review*, Vol. 42 No. 9, pp. 1076-1094.
- Arampatzi, E. and Burger, M. (2020), "Facility management services and employee well-being", *Journal of Facilities Management*, Vol. 18 No. 2, pp. 109-130.
- Arora, R. (2020), "Happiness among higher education academicians: a demographic analysis", *Rajagiri Management Journal*, Vol. ahead-of-print No. ahead-of-print.
- Baran, B. E., Shanock, L. R., & Miller, L. R. (2012). Advancing organizational support theory into the twenty-first century world of work. *Journal of Business and Psychology*, 27(2), 123-147.
- Benrazavi, S. R., & Silong, A. D. (2013). Employees' job satisfaction and its influence on willingness to work in teams. *Journal of Management Policy and Practice*, 14(1), 127-140.
- Bhattacharjee, D., & Bhattacharjee, M. (2010), Measuring happiness at work place. *ASBM Journal of Management*, 3(1/2), 112-125.
- Connell, J., Gough, R., McDonnell, A., & Burgess, J. (2014). Technology, work organisation and job quality in the service sector: An introduction. *Labour and Industry*, 24(1), 1-8.
- Dulk, L. D., Groeneveld, S., Ollier-Malaterre, A., & Valcour, M. (2013). National context in work-life research: A multi-level cross-national analysis of the adoption of workplace work-life arrangements in Europe. *European Management Journal*, 31, 478-494.
- Fisher, C. D. (2010), Happiness at work. *International Journal of Management Reviews*, 12, 384-412.
- Koukoulaki, T. (2010). New trends in work environment-New effects on safety. *Safety Science*, 48, 936-942.
- Quinlan, M. (2012), The 'pre-invention' of precarious employment: The changing world of work context. *The Economic and Labour Relations Review*, 23(4), 3-24.
- Rego, A., & Cunha, M. P. (2008). Authentizotic climates and employee happiness: Pathways to individual performance? *Journal of Business Research*, 61, 739-752.
- Stiglbauer, B., & Batinic, B. (2012). The role of Jahoda's latent and financial benefits for work involvement: A longitudinal study. *Journal of Vocational Behavior*, 81, 259-268.
- Ziba Abdi, Babamiri M, Noori N (2021) Investigating the factors that influence Iranian nurses' workplace happiness. *Nursing Management*. doi: 10.7748/nm.2021.e1972