**What Makes People in a Country Happy?**

CSE 519 Final Project

1. Introduction & Background

Happiness is a difficult concept to measure, and there is a large body of research dedicated to finding adequate ways of conceptualizing happiness [1][2]. Much research is also dedicated to figuring out exactly what makes people happy. Chief among this body of work is the World Happiness Report (WHR) [3], which attempts to create a happiness ranking for each country around the world. Published by an international group of researchers in collaboration with the United Nations, this report relies on a combination of self-reported well-being indicators and objective measures. Each country is assigned a happiness score, and the countries of the world are then ranked according to how happy their citizens are. Data for the WHR is sourced from a combination of the World Bank, the World Health Organization, and the Gallup World Poll.

The WHR remains an authoritative voice in the field of cross-national research, and it’s rankings are widely cited by scholars and policy-makers. Each year, the WHR provides a thorough analysis of what makes the citizens of the world happy, discussing happiness as it relates to a variety of different factors. Despite the in-depth analyses contained within the report, the rankings themselves are very simple to calculate. Eight metrics are used to calculate the Happiness Index of a given nation: Log GDP per capita (provided by the World Bank), life expectancy at birth (provided by the World Health Organization), and the following self-reported well-being indicators: social support, freedom to make life choices, generosity, perceptions of corruption, positive affect, and negative affect.

However, there are a number of potential problems with the WHR as it currently exists. For one thing, Gallup World Poll data is highly expensive to access (getting access to that data requires a lot of money and institutional backing), thus it is difficult for researchers to independently validate it and point out potential problems. Self-reported measurements are notoriously changeable, and a self-report measurement that is difficult to validate makes it hard to detect potential problems with the data or measurements. There are potential substantive problems with the report as well, and there has been some debate among scholars as to how accurate the WHR’s indices are. The report has been subjected to a range of methodological critiques. Some have argued that the methods used to calculate their indices are flawed [4][5] , while others have attempted to create measurements of happiness that focus on marginalized citizens [6][7].

Our work attempts to create a better metric to measure the happiness of citizens around the world, by incorporating variables that the WHR overlooks in calculating their rankings. We also utilize different methods of calculating happiness rankings and seek to understand if the inclusion of different variables illuminate any new patterns in what effects cross-national happiness. In the subsequent sections, we discuss our data sources, cleaning and preprocessing steps, followed by our methodological approach and results.

1. Data
2. Methods
3. Results
4. Discussion/Conclusion

References

[1] Linley, P. Alex, John Maltby, Alex M. Wood, Gabrielle Osborne, and Robert Hurling. 2009. “Measuring Happiness: The Higher Order Factor Structure of Subjective and Psychological Well-Being Measures.” *Personality and Individual Differences* 47(8):878–84. doi: [10.1016/j.paid.2009.07.010](https://doi.org/10.1016/j.paid.2009.07.010).

[2] Dambrun, Michaël, Matthieu Ricard, Gérard Després, Emilie Drelon, Eva Gibelin, Marion Gibelin, Mélanie Loubeyre, Delphine Py, Aurore Delpy, Céline Garibbo, Elise Bray, Gérard Lac, and Odile Michaux. 2012. “Measuring Happiness: From Fluctuating Happiness to Authentic–Durable Happiness.” *Frontiers in Psychology* 3. doi: [10.3389/fpsyg.2012.00016](https://doi.org/10.3389/fpsyg.2012.00016).

[3] Helliwell, John F., Richard Layard, Jeffrey Sachs, and Jan-Emmanuel De Neve, eds. 2020. World

Happiness Report 2020. New York: Sustainable Development Solutions Network

<https://worldhappiness.report/ed/2020/>

[4] Carlsen, L. (2018). Happiness as a sustainability factor. The world happiness index: A posetic-

based data analysis. Sustainability Science, 13(2), 549–571. https://doi.org/10.1007/s11625-017-0482-9

[5] Carlsen, L. (2020). How Happy Are we Actually? A Posetic Analysis of the World Happiness Index

2016–2019 Denmark as an Exemplary Case. International Journal of Community Well-Being, 3(3),

311–322. <https://doi.org/10.1007/s42413-019-00044-8>

[6] Berggren, N., Bjørnskov, C., & Nilsson, T. (2017). What Aspects of Society Matter for the Quality

of Life of a Minority? Global Evidence from the New Gay Happiness Index. Social Indicators

Research, 132(3), 1163–1192. https://doi.org/10.1007/s11205-016-1340-3

[7] Kabene, S., Baadel, S., Jiwani, Z., & Lobo, V. (2017). Women in Political Positions and Countries’

Level of Happiness. 18(4), 10. https://vc.bridgew.edu/jiws/vol18/iss4/15/

[8]