South American Development Society Journal
Vol.: 11| Nº.: 32| **Ano:** 2025 | **ISSN:** 2446-5763 | **DOI:** 10.24325/issn.2446-5763.v11i32p396-420
Data de Submissão: 25/04/2025 | **Data de Publicação:** 24/08/2025

BEM-ESTAR DA POPULAÇÃO: A INFLUÊNCIA DA COMPETITIVIDADE GLOBAL NO ÍNDICE DE FELICIDADE DAS NAÇÕES

POPULATION WELL-BEING: THE INFLUENCE OF GLOBAL COMPETITIVENESS ON THE HAPPINESS SCORE OF NATIONS

Seimor Walchhutter, PhD
Professor Doutor
ORCID: https://orcid.org/0000-0002-7136-7390
Lattes: http://lattes.cnpq.br/7714262057936175
Departamento Acadêmico de Administração
UNIR - Universidade Federal de Rondônia
E-mail: wseimor@uol.com.br

Alcides Barrichello, PhD*
Professor Doutor
ORCID: https://orcid.org/0000-0003-1531-3651
Lattes: http://lattes.cnpq.br/2216801941988746
Centro de Ciências Sociais Aplicadas
Universidade Presbiteriana Mackenzie
E-mail: alcidesbarrichel@uol.com.br

Rogerio Scabim Morano, PhD
Professor Doutor
ORCID: https://orcid.org/0000-0002-3233-0843
Lattes: http://lattes.cnpq.br/3332707718785621
Instituto de Ciências Ambientais, Químicas e Farmacêuticas
Instituto de Ciência e Tecnologia
UNIFESP - Universidade Federal de São Paulo
Programa de Pós-Graduação em Política Científica e Tecnológica
UNICAMP – Universidade Estadual de Campinas
E-mail: r.morano@unifesp.br

Abstract

This study aims to explore global competitiveness's influence on countries' Happiness Score. Research on global competitiveness underscores the role of innovation in driving productivity, economic growth, and overall improvements. However, criticism has emerged regarding the incomplete nature of this model,

which overlooks the aspect of assessing economic success in the happiness and well-being of populations. Multivariate analysis techniques were employed for data analysis, encompassing data from 141 countries. Findings indicate a positive correlation between Global Competitiveness and the Happiness Score. Analyses of the determinants of this score revealed a positive influence of Global Competitiveness on GDP per Capita, Healthy Life Expectancy, Social Support, and Freedom to Make Life Choices. However, there was a negative impact on Corruption Perception. Through a unique analytical approach, this research emphasizes that people's happiness and well-being are significant for public policy and organizational strategy. Economic development should not be divorced from considerations of happiness, having a balanced approach that prioritizes economic growth and enhances people's lives. The study highlights that global competitiveness has a limited impact on the freedom to make life choices, indicating that economic factors may hold more significant sway over individuals' daily lives.

Keywords: Global Competitiveness, Happiness, Well-being, Global Competitiveness Report, World Happiness Report.

Resumo

Este estudo tem como objetivo explorar a influência da competitividade global no Índice de Felicidade dos países. Pesquisas sobre competitividade global ressaltam o papel da inovação na condução da produtividade, crescimento econômico e melhorias gerais. No entanto, existem críticas quanto à natureza incompleta deste modelo, que ignora o aspecto do impacto do sucesso econômico na felicidade e bem-estar das populações. Técnicas de análise multivariada de dados foram utilizadas no estudo, abrangendo dados de 141 países. As descobertas indicam uma correlação positiva entre a Competitividade Global e o Índice de Felicidade. As análises dos determinantes deste índice revelaram uma influência positiva da Competitividade Global no PIB per capita, Expectativa de Vida, Apoio Social e Liberdade para Fazer Escolhas de Vida. No entanto, houve um impacto negativo na Percepção de Corrupção. Por meio de uma abordagem analítica única, esta

pesquisa enfatiza que a felicidade e o bem-estar das pessoas são significativos para as políticas públicas e a estratégia organizacional. O desenvolvimento econômico não deve ser divorciado das considerações de felicidade, tendo uma abordagem equilibrada que priorize o crescimento econômico e melhore a vida das pessoas. O estudo destaca que a competitividade global tem um impacto limitado na liberdade de fazer escolhas de vida, indicando que fatores econômicos podem ter influência mais significativa sobre a vida diária dos indivíduos.

Palavras-chave: Competitividade Global, Felicidade, Bem-estar, Relatório de Competitividade Global, Relatório Mundial de Felicidade.

1. Introduction

Research on global competitiveness shows the role of technological innovation in driving productivity gains, economic growth, wealth accumulation, and enhanced living standards within nations (Gordon, 2016; Ichijo & Nonaka, 2007; Kalmakova et al., 2021; Nelson & Winter, 1982; Schumpeter, 1934). However, it has been criticized for being incomplete and neglecting other factors (Barrichello et al., 2020; Feldmann et al., 2019; Jacomossi et al., 2021; Morano et al., 2023; Santos et al., 2023). Some scholars argue that a comprehensive assessment of a country's economic success should include the subjective well-being of its population as an essential component (Bellet & Frijters, 2019; Dodds et al., 2011; Helliwell et al., 2019; Jaswal et al., 2020; Saida et al., 2021). Others contend that competitiveness is a pragmatic form of referring to productivity and does not necessarily imply international rivalry, positing that the growth rate of domestic productivity mirrors the growth rate of living standards, irrespective of global market dynamics (DeMartino et al., 2024; Krugman, 1994).

In any case, there is a growing consensus regarding measuring the happiness of countries' populations to evaluate success and development. The World Happiness Report (WHR) exemplifies this global trend, being published annually by

a consortium of independent experts who compute a Happiness Score for each country (Helliwell et al., 2019).

The General Council of the United Nations designated March 20 as the International Day of Happiness through Resolution 66/281 on July 12, 2012 (United Nations, 2013). Since then, there has been a gradual rise in the significance of happiness and well-being as universal objectives and aspirations in people's lives worldwide (Helliwell et al., 2019).

In recent years, there has been a growing recognition of the necessity for an improved knowledge foundation to assess human progress (Jaswal et al., 2020). Additionally, public administrators are increasingly emphasizing well-being (Helliwell et al., 2019). Many international organizations have urged their members to prioritize the population and their well-being in public policy agendas (Flavin et al., 2011; Frijters & Krekel, 2021).

The nations' pursuit of heightened global competitiveness as a means to boost productivity, economic development levels, and subsequent enhancements in the well-being of their populations, alongside the increasing interest and relevance of happiness within national contexts, underscores the significance of studies aiming to ascertain whether improvements in a country's global competitiveness correlate with rises in their Happiness Scores. Therefore, this study aims to investigate whether global competitiveness influences the Happiness Score of nations through multivariate data analysis. Additionally, it strives to determine whether the factors that contribute to the Happiness Score are similarly affected by global competitiveness.

2. Global Competitiveness

Innovation and markets engage in a cyclical process aimed at driving economic development. Within global strategic planning, innovation and technology are recognized as pivotal factors for achieving competitive advantage among

nations, facilitating superior economic growth by leveraging diverse resources (Kalmakova et al., 2021; Moss, 1996; Schumpeter, 1934).

On one hand, a nation's competitive prowess hinges on its capacity for innovation. On the other hand, it is intricately linked to microeconomics – the countries' competitive potential is intertwined with the competitive capabilities of the organizations operating within their borders. These organizations are nurtured through a combination of public and private incentive policies, which, among other factors, dictate the levels of investment in research and development, foster collaboration between universities and enterprises, and influence the number of patents filed. Collectively, these determinants shape a nation's level of global competitiveness (Porter, 1990; Schumpeter, 1934; Schwab et al., 2017).

Highly developed nations rely on their innovative and organizational absorptive capacities to assimilate knowledge, enabling them to establish businesses and reach markets more swiftly than their counterparts, enhancing their global competitive edge (Armstrong & Lengnick-Hall, 2013; Feldmann et al., 2019).

However, global competitiveness is not achieved solely on innovation and technology. While research findings (Gordon, 2016; Nelson & Winter, 1982; Porter, 1990; Schumpeter, 1934) suggest that a country's productivity metrics are essential in enhancing its competitiveness, this may not necessarily correlate with its well-being or happiness, underscoring the need for further exploration of this relationship (Bellet et al., 2024; Olczyk et al., 2022; Saida et al., 2021). Consequently, the theme of happiness emerges as a significant consideration in the discourse on global competitiveness (Aghion et al., 2015; Bellet et al., 2024; Saida et al., 2021).

Few well-defined studies relate the concepts of happiness and competitiveness of countries (Helliwell et al., 2019). Thus, achieving a competitive economy and market generally stems from the desire to fulfill economic objectives and ensure increasing social well-being. Governments and organizations that invest more in research in terms of innovation to increase the competitiveness of their products and services have demonstrated GDP growth and a higher level of well-being among the population (Saida et al., 2021). Therefore, the competitiveness

of a country at a global level supports population well-being buoyed by GDP growth and economic development through competitive opportunities in global markets (Belas et al., 2018, 2020; Bilan et al., 2020; Schwab, 2019).

Therefore, authors such as Androniceanu et al. (2020), Cieślik and Michałek (2018), and Saida et al. (2021), among others, state that happiness and competitiveness are related to economic growth. They argue that a country's competitiveness and happiness level can be enhanced with an increase in productivity. Jaswal et al. (2020) corroborate this concept by claiming that the notion of happiness is as old as civilization. However, its advancement could only be better understood from the beginning of the 20th century.

Thus, based on the literature presented, the following research hypothesis was developed:

H1 – A country's competitiveness positively influences its happiness score.

3. Happiness and well-being of countries, and determinant factors

The concern for happiness and the alleviation of suffering can be traced back to ancient figures such as Buddha, Confucius, and Socrates. However, there has been a recent surge in public interest in happiness and well-being (Aknin et al., 2018), as evidenced by the proliferation of newspaper articles, books, online searches, and academic research (Helliwell et al., 2019).

Well-being encompasses optimal psychological experience and functioning and has been a subject of study in psychology for a significant period (Deci & Ryan, 2008). From this perspective, well-being is considered subjective, as individuals evaluate the extent to which they experience a sense of well-being. Subjective well-being (SWB), often operationally defined as experiencing high levels of positive affect, low levels of negative affect, and high life satisfaction, is frequently used interchangeably with happiness. Consequently, maximizing an individual's well-being

is equated with maximizing their happiness. In SWB research, emphasis is placed on identifying the factors contributing to SWB, including personal, socio-environmental, and cultural influences (Deci & Ryan, 2008; Ryan et al., 2021; Ryan & Ryan, 2019).

A natural approach to measuring people's well-being is to inquire about their satisfaction with life. However, this prompts the question of which habits, institutions, and material conditions foster societies with higher levels of well-being. Additionally, it is essential to explore how individuals can develop the skills necessary to promote their own well-being over the long term (Helliwell et al., 2019; Jaswal et al., 2020; Krekel & MacKerron, 2020).

The world happiness reports have explored these issues yearly, partly by comparing people's life satisfaction across different countries and examining the population characteristics that account for these differences (Helliwell et al., 2019; IPSOS, 2024). A society characterized by virtuous citizens will likely also exhibit high levels of life satisfaction. Therefore, fostering virtuous citizens and supportive institutions is essential for cultivating a society with a high average life satisfaction. Effective institutions promote character development, while virtuous citizens, in turn, contribute to the effectiveness of institutions (Bellet et al., 2024; Bellet & Frijters, 2019; Helliwell et al., 2019; Krekel & MacKerron, 2020).

Research indicates that virtuous behavior often enhances individuals' well-being (Bitektine, 2011; Eriksson & Lindgren, 2005; Xia & Wang, 2021). For instance, studies have shown that individuals who receive money to give to others, as opposed to keeping it for themselves, report greater happiness. This demonstrates that happier individuals are more inclined to help others. Moreover, in dynamics such as Prisoner's Dilemma games, cooperative behavior not only activates the brain's reward centers but also leads to higher levels of material success for the participants at the end of interactions (Gotts et al., 2003; Morano & Moraes, 2013).

Tîmbalari (2021) introduces various concepts of competitiveness, some of which are indirectly linked to the population's well-being. According to the author, an economy is considered competitive if its population enjoys high living standards and sustainable employment rates. Economic activities should not jeopardize future

generations' well-being by creating an unsustainable external balance. Aiginger (2006) offers a simple definition of competitiveness, stating that it entails creating well-being. Similarly, the World Economic Forum (Schwab, 2019) defines global competitiveness as a combination of institutions, policies, and factors that determine an economy's productivity level, which, in turn, defines the country's potential prosperity. However, these definitions do not explicitly associate a population's prosperity with a specific degree of well-being or happiness.

Another aspect Tîmbalari (2021) addresses is the level of corruption and its impact on a country's competitiveness. As a phenomenon within public institutions, corruption significantly influences economic outcomes, leading to decreased growth, stability, well-being, and quality of life. Consequently, corruption adversely affects a nation's progress and well-being, increasing injustice and suffering while fostering distrust, frustration, and uncertainty across social, economic, technological, political, and cultural spheres. These findings underscore the correlation between a country's competitiveness and the well-being of its population. Tîmbalari (2021) thus links the concept of competitiveness with well-being, prosperity, and performance.

Authors such as Jaswal et al. (2020) support the findings of Tîmbalari (2021) concerning the significance of certain determinants, such as GDP per capita, life expectancy, freedom, and generosity.

According to Helliwell et al. (2019), the measurement of happiness is based on specific determinants outlined in Table 1, along with their definitions.

Table 1 – Definitions of Happiness Score and its determinants

Variable	Definition
Happiness Score	Average of the country's responses to the question regarding life evaluations. The respondent assigns each grade based on the question: "On a scale of zero to 10, where zero represents the worst possible life, and 10 represents the best possible life for you, on which rung of the ladder would you say you feel personally right now?" This measure is also known as the Cantril life ladder or just "life ladder."

GDP per Capita	People's purchasing power is based on the Economic Outlook of the OECD, the World Bank, and the Penn World Table.
Healthy Life Expectancy at Birth	Healthy life expectancy at birth is based on data extracted from the World Health Organization (WHO) Global Health Observatory data repository
Social Support	Having someone to count on in times of difficulty is calculated by the national average of binary answers (0 or 1) to the question: "If you were in trouble, do you have relatives or friends who you can count on to help whenever you need?"
Freedom to Make Life Choices	People's freedom to make life choices is calculated by the national average of responses to the question: "Are you satisfied or dissatisfied with your freedom to choose what to do with your life?"
Generosity	People's degree of generosity is calculated by the regression residual of the national average of responses to the question: "Did you donate money to a charity in the last month?" in relation to the GDP per capita variable.
Corruption Perception	The perception of corruption that people have of their country is calculated by the national average of the answers to two questions: "Is corruption widespread throughout the government?" and "Is corruption widespread in companies?" The overall perception is just the average of the two answers, 0 or 1.

Source: Adapted from Helliwell et al. (2019)

Drawing from the literature on happiness and its potential determinants, as outlined in the WHR (2019), the following research hypothesis was formulated:

H2 – Country competitiveness positively influences GDP per Capita, Healthy Life Expectancy, Social Support, Freedom to Make Life Choices, and Generosity while negatively impacting Corruption Perception.

4. Methodology

The data used in this study to test the proposed hypotheses were obtained from the Global Competitiveness Report – GCR 2019 (Schwab, 2019), specifically the Global Competitiveness Index (GCI) variable, and the World Happiness Report – WHR 2019 (Helliwell et al., 2019), which includes variables such as Happiness Score, Log GDP per Capita, Healthy Life Expectancy, Social Support, Freedom to

Make Life Choices, Generosity, and Corruption Perception. The choice of the 2019 reports was deliberate, as they were the most recent versions of the GCR published by the World Economic Forum containing individual data from the listed countries, facilitating comparison with the data in the WHR and ensuring temporal equivalence between the two reports. Additionally, both reports were published before the COVID-19 pandemic, an event that could potentially influence the Happiness Score and its perceived determinants. The logarithmic form of GDP per Capita was selected over its standard form to maintain a dimensional balance between the variables when analyzing their relationships, as was done in the WHR analyses.

Only data from countries included in both reports were considered, resulting in 141 research items. To test the hypotheses (H1 – A country's competitiveness positively influences its happiness score; H2 – Country competitiveness positively influences GDP per Capita, Healthy Life Expectancy, Social Support, Freedom to Make Life Choices, and Generosity while negatively impacting Corruption Perception), two relationship models were created, as depicted in Figure 1 and 2, models A and B, respectively. The analyses were conducted using IBM SPSS AMOS® 22.0 software, employing multivariate techniques analysis.

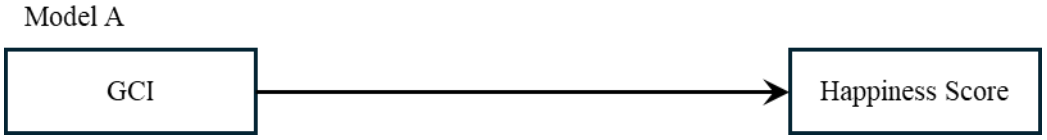

Figure 1 – Theoretical Model A – Relationship between Global Competitiveness Index and Happiness Score
Search: Elaborated by the authors.

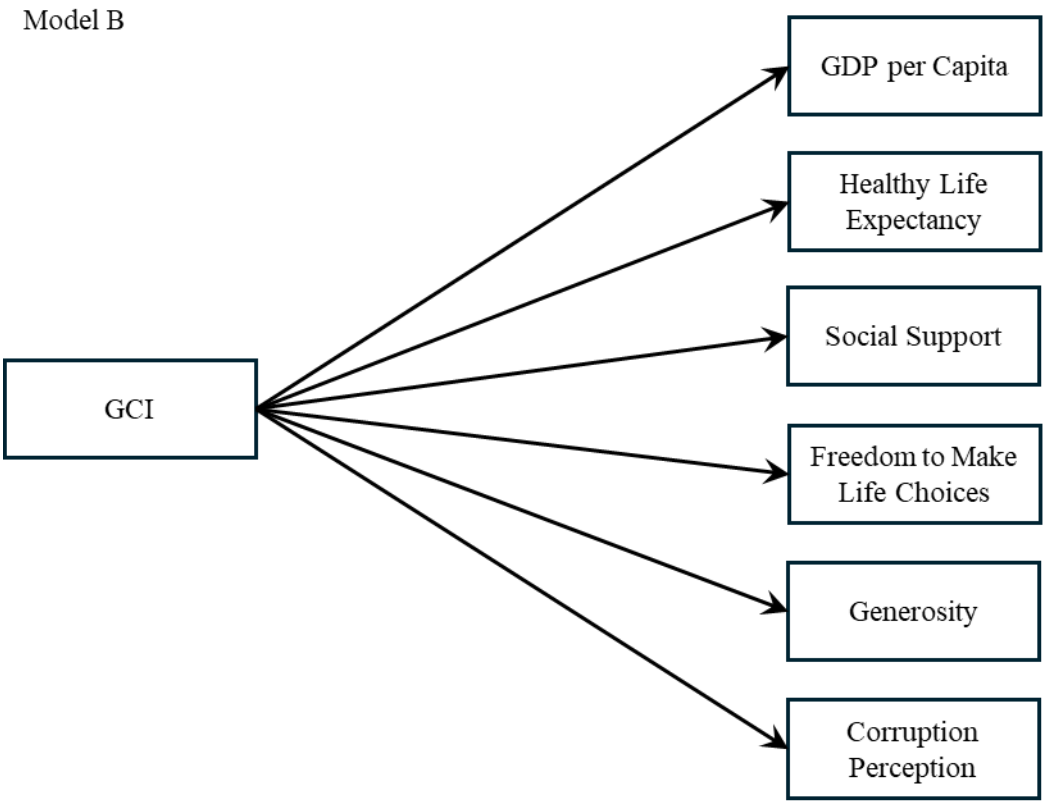

Figure 2 – Theoretical Model B – Relationship between Global Competitiveness Index and the determinants of Happiness Score

Search: Elaborated by the authors.

Multivariate techniques analysis comprises a set of data analysis techniques with significant practical advantages in the social sciences, yielding more valid results than alternative methods (Noja et al., 2021; Rivera et al., 2018).

5. Analysis and discussion of results

Before examining the relationships between the variables, normality tests were conducted as a prerequisite for continuing the analyses. The results of the univariate normality tests indicated values of asymmetry ([-1.674 : 0.874]) and kurtosis ([-0.846 : 2.397]) that were deemed acceptable and did not violate the assumption of normal data distribution (Marôco, 2014).

To validate the assumed relationships in the World Happiness Report – WHR 2019 (Helliwell et al., 2019), an initial auxiliary model was proposed (Figure 3). This model considers Log GDP per Capita, Healthy Life Expectancy, Social Support, Freedom to Make Life Choices, Generosity, and Corruption Perception as determinants of the Happiness Score, with the first five variables assumed to have positive relationships and the last one to have a negative relationship with this score.

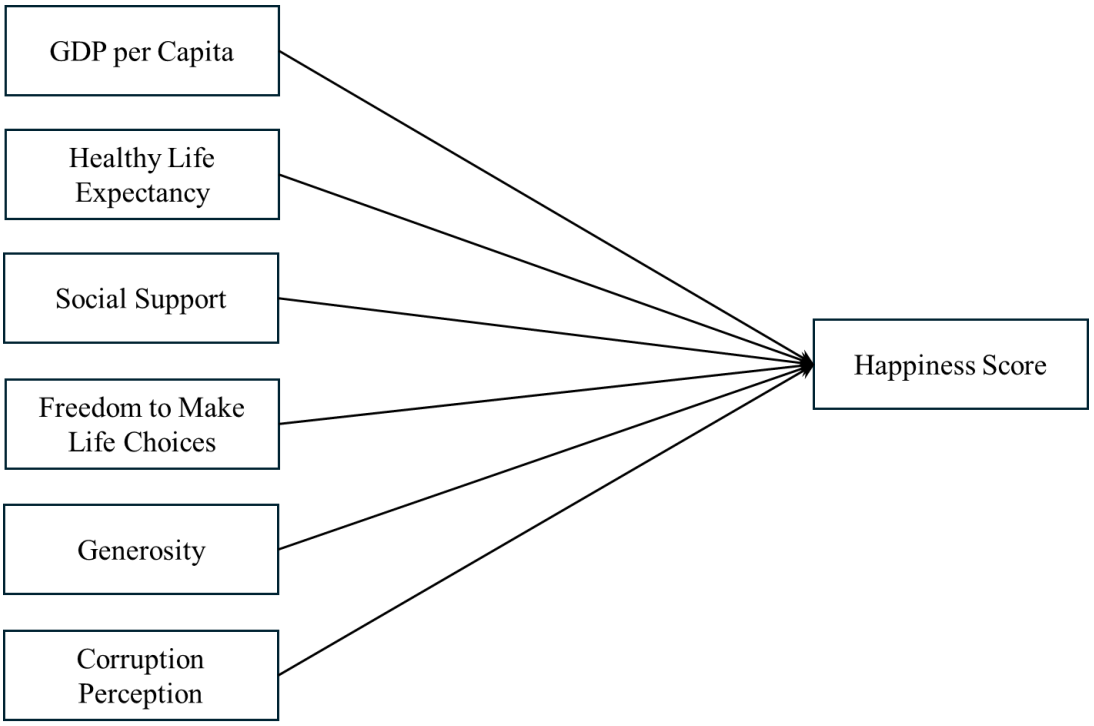

Figure 3 – Auxiliary model – Relationship of Happiness Score with its determinants

Search: Elaborated by the authors.

Table 2 shows the results obtained from the model's auxiliary test.

Table 2 – Relationships between the Happiness Score and its determinants

Relationships		β	SE	p
LogGDP per Capita	→ Happiness Score	0.343	0.084	<0.001

Social Support	→ Happiness Score	0.224	0.690	0.002
Healthy Life Expectancy	→ Happiness Score	0.203	0.015	0.016
Freedom to Make Life Choices	→ Happiness Score	0.173	0.519	0.002
Generosity	→ Happiness Score	0.047	0.355	0.359
Corruption Perception	→ Happiness Score	-0.127	0.321	0.020

Search: Elaborated by the authors.

Except for Corruption Perception, which exhibited a negative and significant relationship, all other variables demonstrated positive and significant relationships with the Happiness Score, except Generosity ($p = 0.359$), contrary to what was indicated in the WHR (Helliwell et al., 2019). To comprehend this discrepancy, research conducted at the National University of Singapore exploring the relationship between generosity and happiness was consulted, utilizing data from the WHR (Hui, 2020; Medina, 2020a, 2020b). The authors contend that individuals assess generosity based on their observations of the world, personal values, and life experiences. They raise concerns about the WHR data collection methodology and propose improvements to obtain a more precise and representative dataset that elucidates the relationship between generosity and happiness.

The authors acknowledge that the method employed in the WHR can isolate the impact of each country's wealth ("Generosity measured is the residual of regressing national average response to the Gallup World Poll question 'Have you donated money to a charity in the past month?' on GDP per capita"). However, they argue that this approach may introduce additional sources of error since "It would not be fair to compare generosity in Finland and Sri Lanka based on the proportion of respondents that have donated to charity in the last month" (Medina, 2020b). The statistical findings of these studies revealed a non-significant regression ($p = 0.060$) and low explanatory power of the Happiness Score by Generosity Score ($R^2 = 0.027$) (Medina, 2020b), consistent with the non-significant relationship between the two variables observed in Table 2 of the present study. Thus, it is evident that generosity should not be regarded as a false predictor of happiness, but underscoring the necessity for a more appropriate method of measuring it in the WHR. Similar results,

demonstrating non-significance in the relationship between Generosity and Happiness Score, were reported by Jaswal et al. (2020).

In turn, Corruption Perception exhibited a negative and significant relationship (β = -0.127) with the Happiness Score, indicating that a lower perception of corruption among citizens, whether in the government or business sector, correlates with a greater sense of well-being and happiness.

While the Happiness Score is associated with the perception of happiness and well-being ("The top of the ladder represents the best possible life for you and the bottom of the ladder represents the worst possible life for you"), there is a robust association between this sentiment and the country's level of wealth. This is evident in the highest standardized path coefficient (β) observed between the variables, which occurred with LogGDP per Capita (β = 0.343), underscoring the notion that a country's competitiveness can strongly influence the Happiness Score.

Social Support and Healthy Life Expectancy are also significant factors, with coefficients of β = 0.224 and β = 0.203, respectively, indicating that the Happiness Score is linked to environmental factors affecting individuals (such as education, health, sanitation, violence rates, and the presence of wars or internal conflicts) and life expectancy, as well as the support received from family and friends during times of material or emotional challenges (Bellet et al., 2024; Bellet & Frijters, 2019; Helliwell et al., 2019; Krekel & MacKerron, 2020; Morano & Moraes, 2013).

The last significant element influencing the Happiness Score is Freedom to Make Life Choices (β = 0.173), indicating that while it plays a role in the well-being and happiness of citizens, other factors hold greater importance. This prompts to question whether individuals truly perceive freedom of choice as crucial to their happiness, as philosophers and sociologists suggest (Helliwell et al., 2019; Jaswal et al., 2020; Tîmbalari, 2021), or if having other elements outweighs the significance of freedom. While this discussion is beyond the scope of this study, it remains a topic for future research.

In terms of the ability to explain the dependent variable using the independent variables, the coefficient of determination (R^2) obtained was 0.713, indicating an explanatory power of over 70%, which is considered high in the literature (Hair et al.,

2019). Multicollinearity tests revealed variance inflation factor (VIF) values below 5, which are within the accepted levels in the literature (Hair et al., 2009).

Subsequently, the relationship between the Global Competitiveness Index (GCI) and the Happiness Score was examined to test hypothesis 1. The results showed a positive and significant path coefficient ($\beta = 0.224$, SE = 0.005; $p < 0.001$), indicating that a higher competitiveness index in a country corresponds to a greater sense of well-being and happiness among its citizens. The coefficient of determination (R^2) for this relationship was 0.634, indicating that the Global Competitiveness Index explains 63.4% of the variance in the Happiness Score.

Finally, the relationship between the Global Competitiveness Index and the alleged determinants of Happiness Score (Helliwell et al., 2019) was verified. The results are presented in Table 3.

Table 3 – Relationships between Global Competitiveness Index and the determinants of Happiness Score

Relationships	β	SE	p	R^2
GCI $\longrightarrow$ LogGDP per Capita	0.912	0.003	<0.001	0.832
GCI $\longrightarrow$ Social Support	0.727	0.001	<0.001	0.529
GCI $\longrightarrow$ Healthy Life Expectancy	0.850	0.022	<0.001	0.723
GCI $\longrightarrow$ Freedom to Make Life Choices	0.462	0.001	<0.001	0.213
GCI $\longrightarrow$ Generosity	-0.120	0.001	0.156	0.014
GCI $\longrightarrow$ Corruption Perception	-0.442	0.001	<0.001	0.195

Search: Elaborated by the authors.

There was no significant relationship between GCI and Generosity ($p = 0.156$). The rationale for this finding mirrors that discussed for the relationship between Generosity and Happiness Score: the questionable data collection method employed by the WHR regarding generosity could be enhanced to yield a more precise and representative dataset capable of elucidating the variable's significance.

Consequently, the inconsistencies identified in the previous analysis persist in this phase, impeding a thorough evaluation of the relationship between GCI and Generosity.

Conversely, the relationship between GCI and the other variables remained significant, with the sign of the path coefficient varying. The association with Corruption Perception was negative (β = -0.442), indicating that a country's competitiveness contributes to a reduced perception of corruption among its citizens. While competitiveness is not the sole determinant shaping corruption perception (Amorós et al., 2017; Anokhin & Schulze, 2009; Boudreaux et al., 2018; Dreher & Gassebner, 2011; Egger & Winner, 2005; Uribe-Toril et al., 2019), the coefficient of determination (R^2) of 0.195 suggests that approximately 20% of this perception can be explained by competitiveness, a significant contributory factor to the self-image that citizens form of the country in this regard.

The determinant most affected by competitiveness was GDP per capita (β = 0.912), which is understandable given the close relationship between the two factors. A country's higher competitiveness tends to correlate with increased productivity, consequently boosting its GDP. This result was not unexpected.

Social Support and Healthy Life Expectancy are influenced by the country's competitiveness in nearly identical ways (β = 0.727 and β = 0.850, respectively), suggesting that competitiveness can impact both environmental factors and personal relationships with relatives and friends. Thus, based on the analyses conducted in this study, it is possible to infer that these two variables transfer the effect they receive from the Global Competitiveness Index to the Happiness Score.

Lastly, the Global Competitiveness Index had the least effect on Freedom to Make Life Choices (β = 0.462), indicating a weaker association between competitiveness and freedom in individuals' perceptions.

Regarding the explanatory power of the GCI for the determinants of the Happiness Score, it appears to be proportional to the path coefficients (the higher the path coefficient β, the higher the R^2), with the highest coefficient related to GDP per capita and the lowest to the perception of corruption. Notably, the highest R^2 values are associated with tangible data (such as GDP per capita and life

expectancy), whereas the lowest values are associated with subjective sensations and perceptions. This discrepancy is acceptable, as it is generally easier to ascertain tangible data and establish relationships between them than to assess individuals' perceptions and emotions.

6. Conclusion

The literature on global competitiveness underscores its significance in enhancing productivity and economic development. Simultaneously, discussions have arisen regarding whether this translates into improved population well-being, thereby highlighting the importance of happiness. Therefore, this study aimed to examine whether global competitiveness influences the happiness levels of countries. Additionally, it was investigated whether factors determining population happiness are similarly influenced by global competitiveness.

To achieve this, data from the Global Competitiveness Report (GCR) and the World Happiness Report (WHR) were utilized to explore potential relationships between these variables adopting multivariate analysis techniques.

The findings reveal that global competitiveness positively impacts the overall happiness levels in countries. However, when assessing competitiveness in relation to the presumed determinants of happiness (GDP per Capita, Healthy Life Expectancy, Social Support, Freedom to Make Life Choices, Generosity, and Corruption Perception), it was observed that generosity does not exhibit a significant influence from global competitiveness. Furthermore, it was found that GDP per capita receives the highest level of influence from global competitiveness. Significant relationships of varying strengths were identified between global competitiveness and the other determinants.

In terms of theoretical contributions, this study confirmed the influence of global competitiveness on the overall happiness levels of countries. However, this influence was not evident across all determinants of happiness, as generosity did not exhibit a significant relationship. This finding appears to be associated with the data collection methodology employed by WHR, which may not adequately capture the

nuances of generosity in the context of happiness. Additionally, global competitiveness appears to exert minimal influence on freedom to make life choices, suggesting that economic factors may carry greater weight in people's daily lives than others.

From a practical standpoint, this research underscores that global competitiveness plays a significant role in shaping people's happiness and well-being. Therefore, it emphasizes the importance of focusing on global competitiveness in both public policies and organizational strategies, as it drives economic development and enhances people's quality of life.

However, this study has its limitations. It relied on data from the GCR and WHR reports and their defined variables, thereby precluding the exploration of other potential determinants of happiness and alternative data collection methods. This limitation presents an avenue for future research, as the topic remains pertinent and offers insights into the intersection of macroeconomic factors and their impact on individuals' daily lives.

References

Aghion, P., Akcigit, U., & Howitt, P. (2015). Lessons from Schumpeterian Growth Theory. *American Economic Review*, *105*(5), 94–99. https://doi.org/10.1257/aer.p20151067

Aiginger, K. (2006). Competitiveness: From a Dangerous Obsession to a Welfare Creating Ability with Positive Externalities. *Journal of Industry, Competition and Trade*, *6*(2), 161–177. https://doi.org/10.1007/s10842-006-9475-6

Aknin, L. B., Van de Vondervoort, J. W., & Hamlin, J. K. (2018). Positive feelings reward and promote prosocial behavior. *Current Opinion in Psychology*, *20*, 55–59. https://doi.org/10.1016/j.copsyc.2017.08.017

Amorós, J. E., Ciravegna, L., Mandakovic, V., & Stenholm, P. (2017). Necessity or Opportunity? The Effects of State Fragility and Economic Development on Entrepreneurial Efforts: *Entrepreneurship Theory and Practice*, *43*(4), 725–750. https://doi.org/10.1177/1042258717736857

Androniceanu, A.-M., Kinnunen, J., Georgescu, I., & Androniceanu, A. (2020). A Multidimensional Approach to Competitiveness, Innovation and Well-Being in the EU Using Canonical Correlation Analysis. *Journal of Competitiveness*, *12*(4), 5–21. https://doi.org/10.7441/joc.2020.04.01

Anokhin, S., & Schulze, W. S. (2009). Entrepreneurship, innovation, and corruption. *Journal of Business Venturing*, *24*(5), 465–476. https://doi.org/10.1016/J.JBUSVENT.2008.06.001

Armstrong, C. E., & Lengnick-Hall, C. A. (2013). The Pandora's box of social integration mechanisms. *Journal of Strategy and Management*, *6*(1), 4–26. https://doi.org/10.1108/17554251311296530

Barrichello, A., Morano, R. S., Feldmann, P. R., & Jacomossi, R. R. (2020). The importance of education in the context of innovation and competitiveness of nations. *International Journal of Education Economics and Development*, *11*(2), 204–224. https://doi.org/10.1504/IJEED.2020.106587

Belas, J., Gavurova, B., & Toth, P. (2018). Impact of selected characteristics of SMEs on the capital structure. *Journal of Business Economics and Management*, *19*(4), 592–608.

Belas, J., Kmecova, I., & Cepel, M. (2020). Availability of human capital and the development of the public infrastructure in the context of business activities of SMEs. *Administratie Si Management Public*, *34*, 27–44. https://doi.org/10.24818/amp/2020.34-02

Bellet, C., De Neve, J.-E., & Ward, G. (2024). Does Employee Happiness Have an Impact on Productivity? *Management Science*, *70*(3), 1656–1679. https://doi.org/10.1287/mnsc.2023.4766

Bellet, C., & Frijters, P. (2019). Big Data and Well-being. In J. F. Helliwell, R. Layard, & J. D. Sachs (Eds.), *World Happiness Report*. Sustainable Development Solutions Network.

Bilan, Y., Hussain, H. I., Haseeb, M., & Kot, S. (2020). Sustainability and Economic Performance: Role of Organizational Learning and Innovation. *Engineering Economics*, *31*(1), 93–103. https://doi.org/10.5755/j01.ee.31.1.24045

Bitektine, A. (2011). Toward a Theory of Social Judgments of Organizations: The Case of Legitimacy, Reputation, and Status. *Academy of Management Review*, *36*(1), 151–179. https://doi.org/10.5465/amr.2009.0382

Boudreaux, C. J., Nikolaev, B. N., & Holcombe, R. G. (2018). Corruption and destructive entrepreneurship. *Small Business Economics*, *51*(1), 181–202. https://doi.org/10.1007/S11187-017-9927-X/TABLES/10

Cieślik, A., & Michałek, J. J. (2018). Firm-level determinants of direct and indirect exports: empirical evidence for CEE and MENA countries. *Economic Research-Ekonomska Istraživanja*, *31*(1), 982–996. https://doi.org/10.1080/1331677X.2018.1436452

Deci, E. L., & Ryan, R. M. (2008). Hedonia, eudaimonia, and well-being: An introduction. *Journal of Happiness Studies*, *9*(1), 1–11. https://doi.org/10.1007/s10902-006-9018-1

DeMartino, G., Grabel, I., & Scoones, I. (2024). Economics for an uncertain world. *World Development*, *173*, 106426. https://doi.org/10.1016/J.WORLDDEV.2023.106426

Dodds, P. S., Harris, K. D., Kloumann, I. M., Bliss, C. A., & Danforth, C. M. (2011). Temporal Patterns of Happiness and Information in a Global Social Network: Hedonometrics and Twitter. *PLoS ONE*, *6*(12), e26752. https://doi.org/10.1371/journal.pone.0026752

Dreher, A., & Gassebner, M. (2011). Greasing the wheels? The impact of regulations and corruption on firm entry. *Public Choice*, *155*(3), 413–432. https://doi.org/10.1007/S11127-011-9871-2

Egger, P., & Winner, H. (2005). Evidence on corruption as an incentive for foreign direct investment. *European Journal of Political Economy*, *21*(4), 932–952. https://doi.org/10.1016/J.EJPOLECO.2005.01.002

Eriksson, A., & Lindgren, K. (2005). Cooperation driven by mutations in multi-person Prisoner's Dilemma. *Journal of Theoretical Biology*, *232*(3), 399–409. https://doi.org/10.1016/j.jtbi.2004.08.020

Feldmann, P. R., Jacomossi, R. R., Barrichello, A., & Morano, R. S. (2019). The relationship between Innovation and Global Competitiveness: The mediating role of Management Practices evaluated by Structural Equation Modeling. *Revista Brasileira de Gestão de Negócios*, *21*(2), 195–212.

Flavin, P., Pacek, A. C., & Radcliff, B. (2011). State Intervention and Subjective Well-Being in Advanced Industrial Democracies. *Politics and Policy*, *39*(2), 251–269. https://doi.org/10.1111/J.1747-1346.2011.00290.X

Frijters, P., & Krekel, C. (2021). *A handbook for well-being policy-making in the UK: History, measurement, theory, implementation, and examples*. Oxford University Press.

Gordon, R. J. (2016). *The rise and fall of American growth : the US standard of living since the Civil War*. Princeton University Press.

Gotts, N. M., Polhill, J. G., & Law, A. N. R. (2003). Agent-Based Simulation in the Study of Social Dilemmas. *Artificial Intelligence Review*, *19*(1), 3–92. https://doi.org/10.1023/A:1022120928602

Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2009). *Análise Multivariada de Dados* (6th ed.). Bookman Editora.

Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, *31*(1), 2–24. https://doi.org/10.1108/EBR-11-2018-0203

Helliwell, J., Layard, R., & Sachs, J. (2019). *World Happiness Report*. Sustainable Development Solutions Network. http://worldhappiness.report/

Hui, K. L. (2020). *What is the generosty to people ? National University of Singapore.* https://medium.com/generosity-and-happiness/what-is-generosity-to-people-2026761486c5

Ichijo, K., & Nonaka, I. (2007). *Knowledge Creation and Management: New Challenges for Managers* (K. Ichijo & I. Nonaka, Eds.). Oxford University Press.

IPSOS. (2024). *GLOBAL HAPPINESS 2024*. https://www.ipsos.com/en-sg/global-happiness-2024

Jacomossi, R. R., Feldmann, P. R., Barrichello, A., & Morano, R. S. (2021). Does ecological sustainability really matter? Evaluation of its mediating role in the relationship between innovation and competitiveness. *BAR - Brazilian Administration Review*, *18*(3). https://doi.org/10.1590/1807-7692BAR2021200126

Jaswal, V., Kishore, K., Muniraju, M., Jaswal, N., & Kapoor, R. (2020). Understanding the determinants of happiness through Gallup World Poll. *Journal of Family Medicine and Primary Care*, *9*(9), 4826. https://doi.org/10.4103/jfmpc.jfmpc_156_20

Kalmakova, D., Bilan, Y., Zhidebekkyzy, A., & Sagiyeva, R. (2021). Commercialization of conventional and sustainability-oriented innovations: A comparative systematic literature review. *Problems and Perspectives in Management*, *19*(1), 340–353. https://doi.org/10.21511/ppm.19(1).2021.29

Krekel, C., & MacKerron, G. (2020). How environmental quality affects our happiness. In J. Helliwell, R. Layard, & J. Sachs (Eds.), *World Happiness Report* (pp. 95–112). Sustainable Development Solutions Network.

Krugman, P. (1994). Competitiveness: A Dangerous Obsession. *Foreign Affairs*, *73*(2), 28–44.

Marôco, J. (2014). *Análise de Equações Estruturais: Fundamentos teóricos, software e aplicações* (2nd ed.). ReportNumber.

Medina, E. S. (2020a). *A Relationship Between Generosity and Happiness*. https://medium.com/generosity-and-happiness/a-relationship-between-generosity-and-happiness-98a10cb83c56

Medina, E. S. (2020b). *WHR20 and Generosity*. https://medium.com/generosity-and-happiness/whr20-and-generosity-c76d57b4922c

Morano, R. S., Jacomossi, R. R., Barrichello, A., & Feldmann, P. R. (2023). The Interdependence Between Ease of Doing Business, Innovation, and Competitiveness of Nations. *BAR - Brazilian Administration Review*, *20*(2), e220103. https://doi.org/10.1590/1807-7692bar2023220103

Morano, R. S., & Moraes, E. A. de. (2013). Conduta e cooperação entre empresas: um estudo através do dilema do prisioneiro e da simulação baseada em agentes. *Estudos Do ISCA*, *IV*(6).

Moss, L. S. (1996). *Joseph A. Schumpeter: Historian of economics: Perspectives on the history of economic thought*. Routledge.

Nelson, R. R., & Winter, S. G. (1982). *An Evolutionary Theory of Economic Change*. The Belknap Press of Harvard University Press.

Noja, G. G., Buglea, A., Lala-Popa, I., & Jurcut, C. N. (2021). The interplay between knowledge-based competitiveness, people's good health and well-being: new empirical evidence from Central and Eastern European countries. *Quality and Quantity*, *55*(2), 441–466. https://doi.org/10.1007/s11135-020-01015-4

Olczyk, M., Kuc-Czarnecka, M., & Saltelli, A. (2022). Changes in the Global Competitiveness Index 4.0 Methodology: The Improved Approach of Competitiveness Benchmarking. *Journal of Competitiveness*, *14*(1), 118–135. https://doi.org/10.7441/joc.2022.01.07

Porter, M. (1990). *The Competitive Advantage of Nations*. Free Press.

Rivera, J. R. D., Jacomossi, R. R., Barrichello, A., & Morano, R. S. (2018). Using structural equation modeling: patterns and trends of publications in Brazilian journals. *Revista de Gestão*, *25*(3), 291–302. https://doi.org/10.1108/REGE-05-2018-036

Ryan, R. M., Deci, E. L., Vansteenkiste, M., & Soenens, B. (2021). Building a science of motivated persons: Self-determination theory's empirical approach to human experience and the regulation of behavior. *Motivation Science*, *7*(2), 97.

Ryan, W. S., & Ryan, R. M. (2019). Toward a social psychology of authenticity: Exploring within-person variation in autonomy, congruence, and genuineness using self-determination theory. *Review of General Psychology*, *23*(1), 99–112.

Saida, Z. Z., Siti, A., Caisar, D. D., & Musdalifah, A. (2021). Spurring Economic Growth in Terms of Happiness, Human Development, Competitiveness and Global Innovation: the ASEAN Case. *ASEAN Journal on Science and Technology for Development*, *38*(1). https://doi.org/10.29037/ajstd.653

Santos, E. G. dos, Barrichello, A., & Morano, R. S. (2023). How important are institutions for innovation and global competitiveness? *International Journal of Business Innovation and Research*, *30*(4), 476–496. https://doi.org/10.1504/IJBIR.2021.10038603

Schumpeter, J. A. (1934). *The theory of economic development: An inquiry into profits, capital, credit, interest, and the business cycle*. Harvard University Press.

Schwab, K. (2019). The Global Competitiveness Report 2019. In *World Economic Forum*. World Economic Forum. https://doi.org/ISBN-13: 978-92-95044-73-9

Schwab, K., Sala-i-Martín, X., & Samans, R. (2017). *The Global Competitiveness Report 2017 - 2018*. World Economic Forum.

Tîmbalari, C. (2021). The Determinants of International Competitiveness. *Studies in Business and Economics*, *16*(3), 247–265. https://doi.org/10.2478/sbe-2021-0058

United Nations. (2013, March 13). *International Day of Happiness*. Resolution A/RES/66/281. https://www.un.org/en/academic-impact/international-day-happiness-20-march-2013

Uribe-Toril, J., Ruiz-Real, J. L., Ceresia, F., & Pablo Valenciano, J. (2019). Corruption and entrepreneurship: A bibliometric analysis. *Journal of Legal, Ethical and Regulatory Issues*, *22*(4), 1–11.

Xia, K., & Wang, X. (2021). The average abundance function with mutation of the multi-player snowdrift evolutionary game model. *Acta Mathematica Scientia*, *41*(1), 127–163. https://doi.org/10.1007/s10473-021-0108-2