# Comprehensive Report: Relationship Between Internet Usage and Happiness Scores (2023)

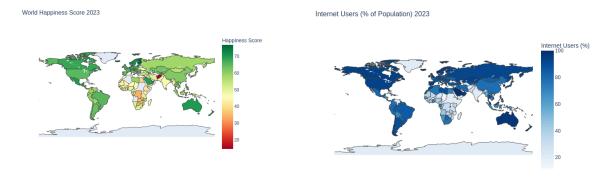
## **EXECUTIVE SUMMARY**

This report analyzes the relationship between internet usage (% of population) and happiness scores across 132 countries in 2023. The analysis reveals significant continental variations in both indicators and establishes a strong positive correlation (r = 0.74) between internet penetration and national happiness levels.

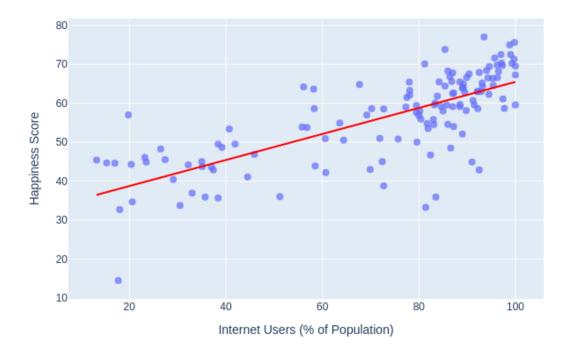
## **KEY GLOBAL FINDINGS**

- The correlation coefficient of 0.74 suggests that approximately 55% of the variance in happiness scores can be explained by internet usage rates
- Countries with near-universal internet access (90-100%) generally show happiness scores above 60
- Countries with lower internet penetration (below 40%) tend to cluster in the lower happiness range (below 50)
- The relationship appears fairly linear with some scatter, suggesting other factors also influence national happiness levels

This strong correlation could reflect several underlying factors: economic development, education levels, social connectivity, access to information, and overall infrastructure quality that tend to correlate with both internet access and societal well-being.



#### Relationship between Internet Users and Happiness Score (2023)

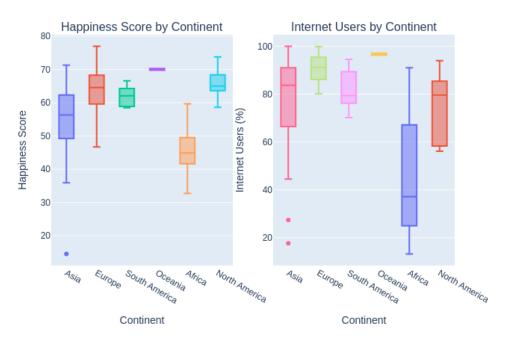


### DETAILED CONTINENTAL INSIGHTS

- 1. Oceania (Highest Happiness)
  - Countries: 2 (Australia, New Zealand)
  - Happiness: Mean 70.05 (range: 69.8-70.3) most consistent and highest scores
  - Internet: Mean 96.65% (range: 96.2-97.1%) near-universal access with minimal variation
  - Analysis: Represents the ideal scenario with both high happiness and comprehensive digital connectivity
- 2. North America (Second Highest Happiness)
  - Countries: 10
  - Happiness: Mean 65.33 (range: 58.6-73.8) consistently high with moderate variation
  - Internet: Mean 75.66% (range: 56.1-94.0%) good access but with notable disparities
  - Analysis: Strong happiness levels despite more variable internet access, suggesting robust underlying socioeconomic conditions
- 3. Europe (Third Highest Happiness)
  - Countries: 39 (largest sample)
  - Happiness: Mean 64.33 (range: 46.7-77.0) high average with significant range
  - Internet: Mean 90.53% (range: 80.2-99.8%) excellent connectivity with low variation

- Analysis: High digital maturity with generally strong happiness, though some Eastern European countries show lower happiness despite good connectivity
- 4. South America (Fourth Highest Happiness)
  - Countries: 9
  - Happiness: Mean 61.77 (range: 58.5-66.6) moderate-high with low variation
  - Internet: Mean 81.73% (range: 70.2-94.5%) good connectivity with moderate variation
  - Analysis: Consistent happiness levels across the continent with improving digital infrastructure
- 5. Asia (Fifth Highest Happiness)
  - Countries: 36
  - Happiness: Mean 54.56 (range: 14.5-71.3) moderate average but extreme variation
  - Internet: Mean 78.1% (range: 17.7-100.0%) good average but highest variation globally
  - Analysis: Most diverse continent showing the full spectrum from highly developed digital economies (Singapore, South Korea) to developing nations with limited access
- 6. Africa (Lowest Happiness)
  - Countries: 36
  - Happiness: Mean 44.95 (range: 32.7-59.7) lowest continental average
  - Internet: Mean 43.75% (range: 13.2-91.0%) lowest connectivity with high variation
  - Analysis: Faces dual challenges of limited digital infrastructure and lower happiness levels, though some countries (like Mauritius) show strong performance in both indicators

#### Distribution of Indicators by Continent (2023)



The box plot visualization reveals:

- Happiness Distribution: Europe and North America show the most consistent high scores, while Africa shows the lowest median with limited variation
- Internet Distribution: Europe demonstrates the most mature digital infrastructure, while
  Africa shows the widest variation and lowest median access

## **KEY INSIGHTS AND IMPLICATIONS**

## 1. Digital Divide Impact

The analysis reveals a clear "digital divide" that correlates strongly with happiness levels. Countries with higher internet penetration consistently report higher happiness scores, suggesting that digital connectivity may be a crucial factor in modern well-being.

## 2. Continental Development Patterns

- Developed Regions (Oceania, Europe, North America): High happiness + high connectivity
- Emerging Regions (South America, parts of Asia): Moderate happiness + improving connectivity
- Developing Regions (Africa, parts of Asia): Lower happiness + limited connectivity

# 3. Variability Patterns

Internet usage shows much higher variability than happiness scores globally, indicating that digital infrastructure development is at different stages worldwide, while happiness levels tend to be more stable within regions.

# 4. Policy Implications

The strong correlation (r = 0.74) suggests that investments in digital infrastructure may contribute to national well-being, though causation cannot be definitively established from this cross-sectional analysis.

## CONCLUSION

The 2023 data demonstrates a clear relationship between internet access and national happiness levels across continents. While Oceania and developed regions show optimal performance in both indicators, significant opportunities exist for improvement in Africa and parts of Asia. The analysis suggests that bridging the digital divide could be an important component of improving global well-being, though comprehensive development approaches addressing multiple socioeconomic factors remain essential.

## REFLECTION

I'm not a data analyst, and yet I found Julius to be quite intuitive and easy to pick up. The difficulty seems to be knowing what prompts to use in the first place. Still, I was impressed with Julius' ability, not only to read the data provided, but to tell a story with the data, and create a cohesive narrative around global and continental trends between indicators.

Olive Nwosu August 24th, 2025