

Impact of Marriage & Divorce on Women's Happiness

Oviya Adhan, Nory Arroyo, Helin Yilmaz

December 10, 2024

Agenda

1. Background
2. Questions & Dataset
3. Process
4. Assumptions/Risks
5. Findings
6. Takeaways

Background

- Divorce dates back to 1780 BCE
- Marriage & Divorce historically associated with less women's rights
- Goal: Find out the current connection between marriage/divorce and happiness



Questions

Is there a relationship between women's happiness, overall happiness, and divorce/marriage rates across regions and/or countries?

1. How do marriage and divorce rates vary based on regional areas?
2. Do cultural norms impact divorce rates?
3. Which is related to divorce rates more, overall happiness rates or women's happiness rates? Is it a positive or negative correlation?

Datasets

Dataset	Key Variables
Marriage Rates & Divorce Rates	<ul style="list-style-type: none">○ Marriage Rate (per 1000 people annually)○ Divorce Rate (per 1000 people annually)
Women's Happiness	<ul style="list-style-type: none">○ Women's Happiness Score<ul style="list-style-type: none">■ 9 Attributes: Gender Equality, % Legislature, Safety, Human Rights, Income, Paid Work, Education, Empowerment, Inclusion
Overall Happiness	<ul style="list-style-type: none">○ Overall Happiness Score<ul style="list-style-type: none">■ 6 Attributes: GDP, Social Welfare, Life Expectancy, Liberty, Generosity of Population, Corruption

Process



Exploration

Distribution & Characteristics of the Dataset



High-Level Analysis

Correlation between Key Variables



Deep Dive: Regions

Distribution of Key Variables based on Region



Deep Dive: Cross-Cultural

Comparison between Select Countries

Assumptions & Risks

Data Span - We assume the data would behave the same amongst multiple years.

Cultural Context - Averages reflect broader cultural and societal norms.

Missing Data - Countries with missing values were excluded.

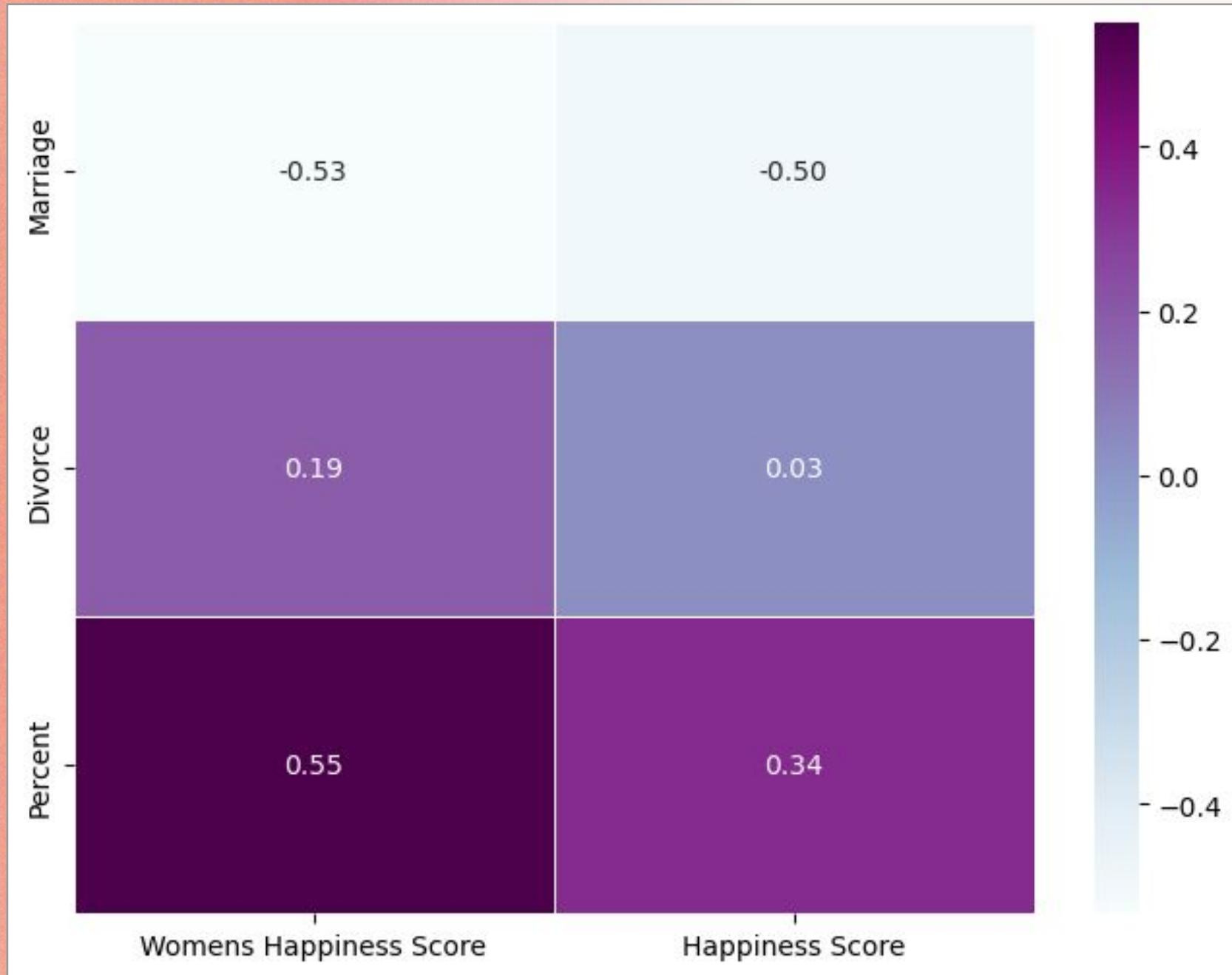
Insufficient Data - Limited data and small sample sizes.



Findings

High- Level

Correlation Heatmap between Key Variables



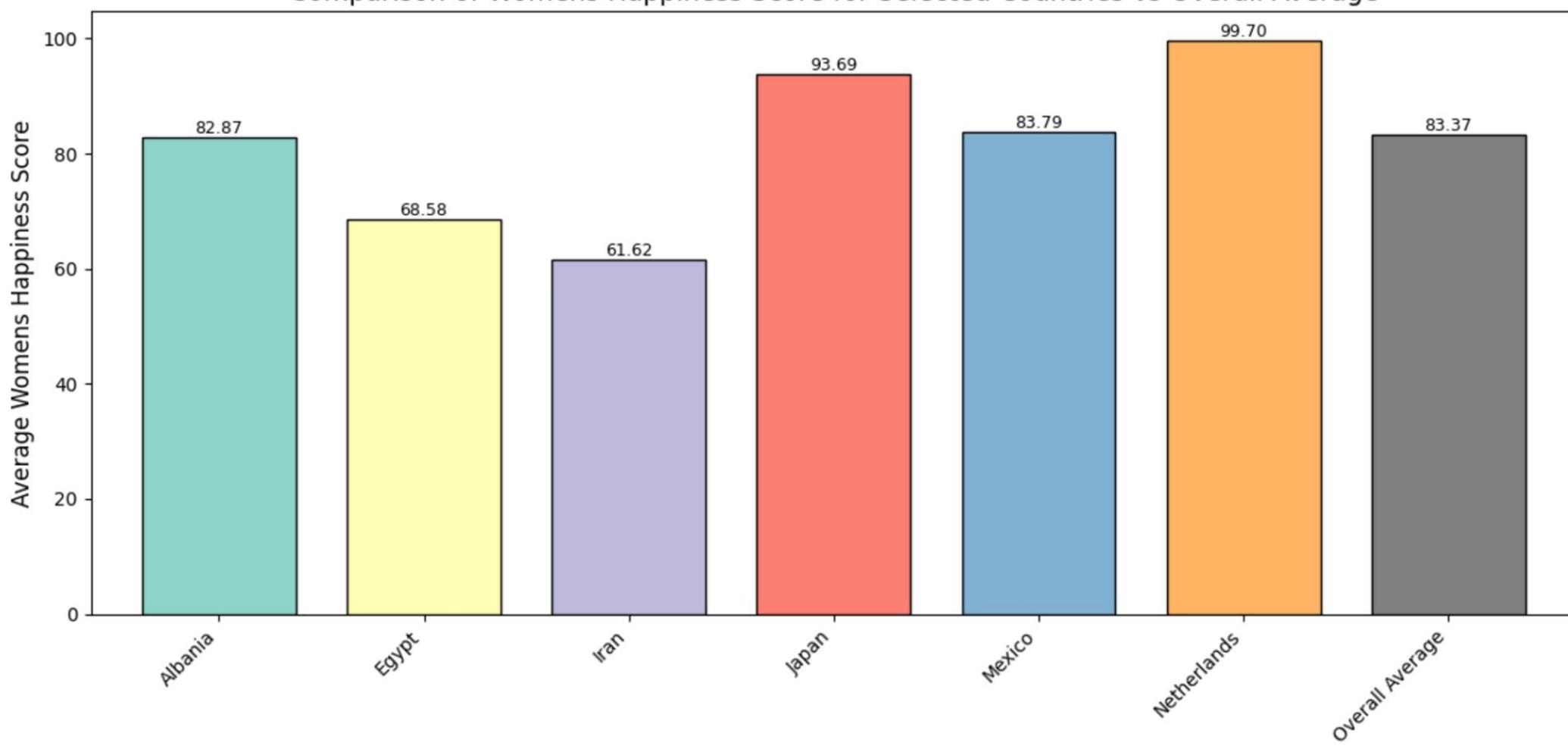
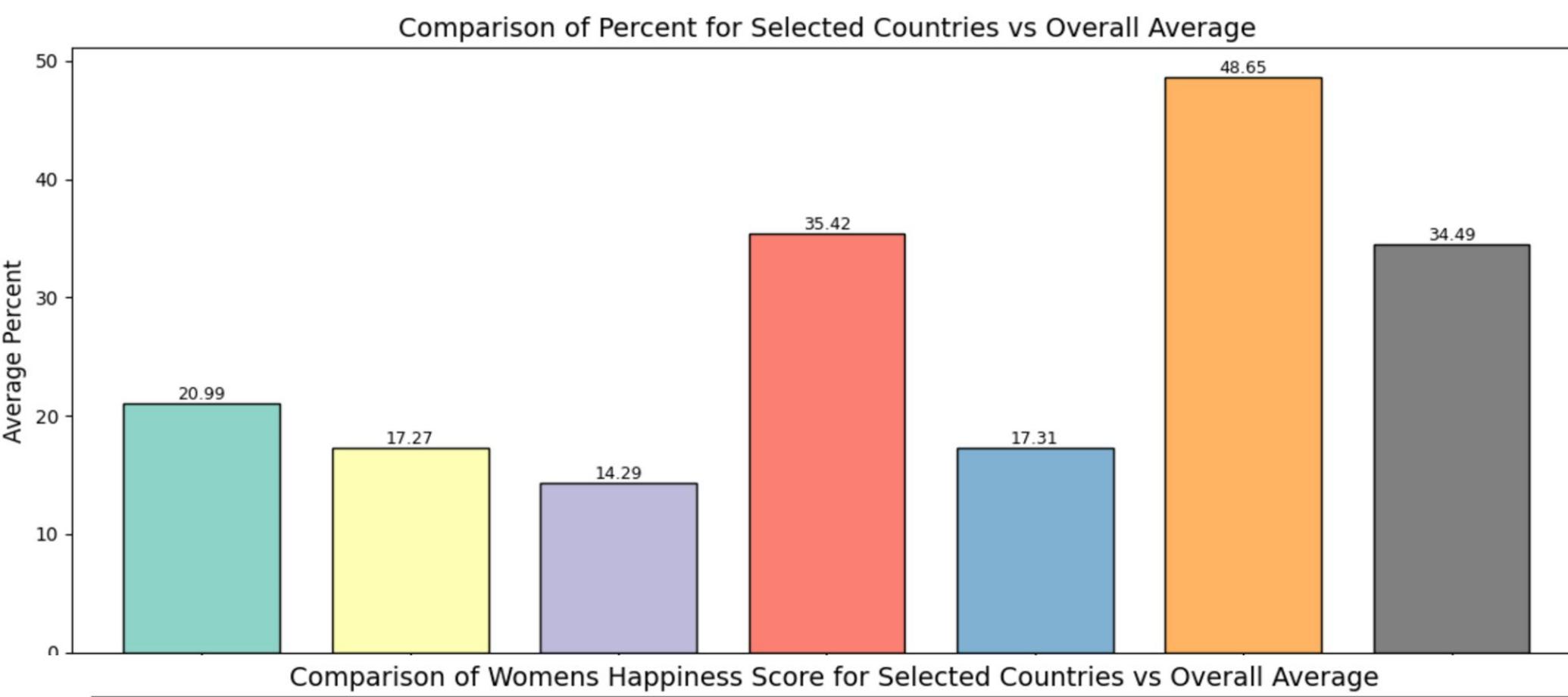
By Continent

Continent	Marriage	Divorce	Percent	Women's Happiness Score	Happiness Score
South America	4.22	1.02	25.77	77.98	79.36
Oceania	4.70	2.00	42.58	94.44	93.47
North America	5.22	1.75	34.81	84.35	86.80
Europe	5.02	1.95	41.95	88.43	85.56
Asia	6.93	1.70	26.83	77.73	79.14
Africa	8.72	1.60	18.09	70.66	72.46

Lowest

Highest

By Country



Takeaways

- LESSONS LEARNED:
 - Recent Change in Marriage/Divorce norms
 - Limited Cultural Context
- FUTURE FACING:
 - Cultural Data by Country
 - Time Series Analysis
 - Causality through Experimentation

Q&A

Thank You !