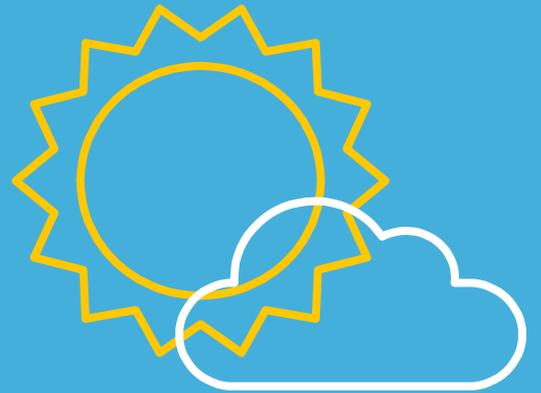


EXPLORING THE HAPPINESS OF GLOBAL CULTURES



KENICHIRO BERNIER, MICHERICE TAO, NATALIE YEE

RESEARCH QUESTIONS & SIGNIFICANCE

How can we live happily?

What factors in a society contribute to (or detriment) a person's happiness?

What policies or changes can be made in a country to improve happiness for the people within?



- Understanding what drives happiness is arguably akin to understanding how to live a better life
- Accordingly, answering such a question provides incredible value to both individuals and societies



HYPOTHESIS & DATA

Null Hypothesis: More freedoms and government support will be related with more happiness

Alternative Hypothesis: Freedoms and support are not associated with happiness.

Response Variable:

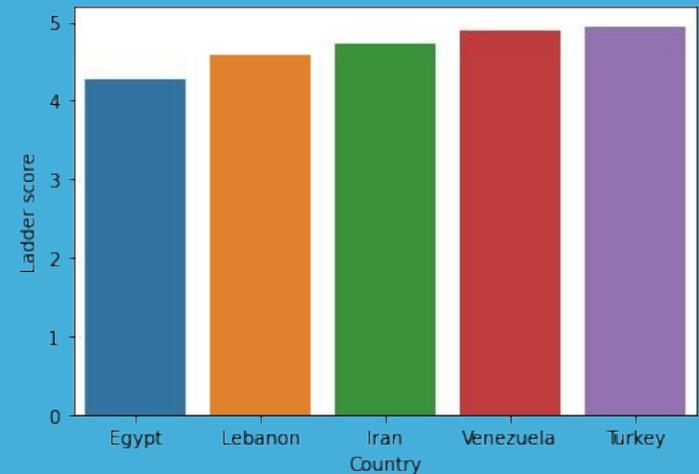
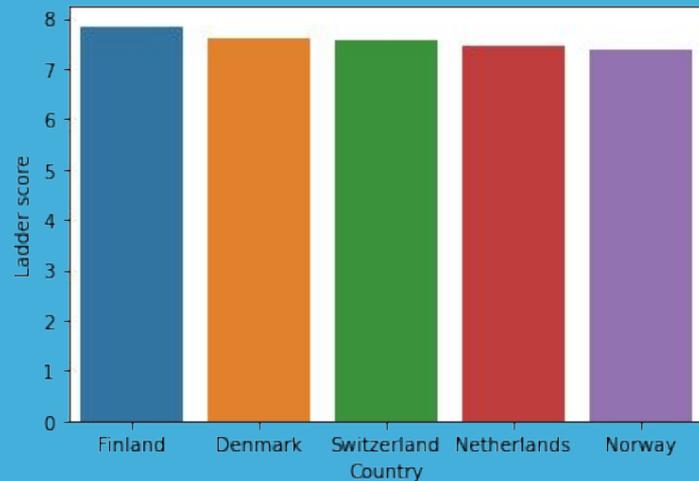
- World Happiness Report (WHR) 2021 ladder score

Predictor Variables:

- WHR Data
- Societal Norms Indexes
- Natural Disasters (World Risk Index)
- Divorce rates
- Gini coefficients

EDA

- Explored current country Ladder scores
 - Most and least happy
 - Accounted for outliers
 - Grouped by region for further analysis
- Analyzed correlations of individual metrics and factors contributing to happiness
 - Correlation heatmap



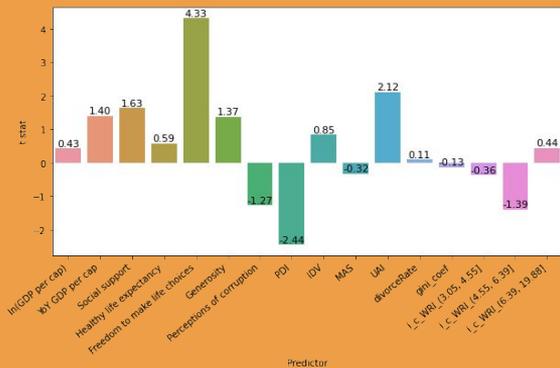
OUR RESULTS

Limitations

Small sample due to data availability; our predictor variables may not capture all relevant factors or accurately represent underlying situations in the countries analyzed; does not suggest causality; rather, it demonstrates existing associations and relationships.

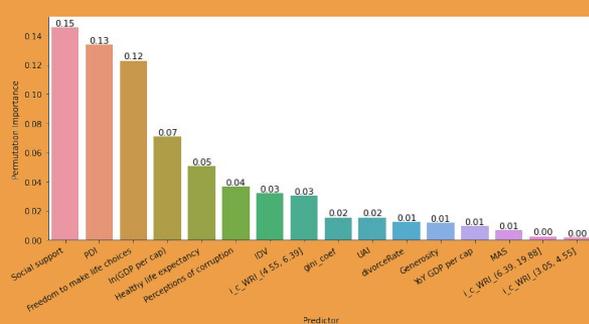
Multivariate Regression

Normalizing for error through t-statistic calculations, freedom to make life choices, PDI, and UAI are the only statistically significant variables.



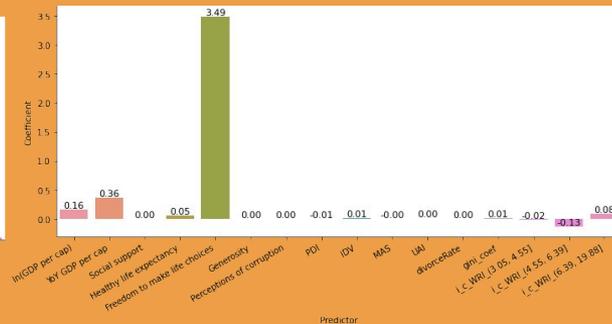
Random Forest

Social support, PDI, and freedom to make life choices are the top positive predictors of happiness by permutation importance.



Lasso

Regularization method eliminated social support, generosity, perceptions of corruption, MAS, UAI, indicating lower significance in predicting happiness scores.



LASTING IMPLICATIONS



Positive Factors

Many social factors, such as freedom to make life choices and social support, were strong positive factors in happiness. → This can be a point of support for more social program funding, such as welfare and human rights protection programs.



Negative Factors

Conversely, the Power Distance Index (PDI) was found to be the most negative factor. This is in keeping with our hypothesis that happy countries tend to display greater autonomy and less hierarchy. → This also supports programs to build stronger middle classes, to reduce wealth inequality.



Concluding Findings

We confirmed our null hypothesis that more freedoms and government support will be related with more happiness. Therefore, one can reasonably deduce that in democracies like the US, it is in a legislator's best interest to support social programs, increasing the happiness of their constituents and thus boosting their public favor.