

More Money, Same Problems

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Question

Will income impact the level of happiness by the state?

It is a wide conception that money results in happiness. People assume that if they can raise their income their life satisfaction will improve. I am testing whether our focus and energy are in the right place when trying to improve happiness. What is the point of life if there is no happiness in it, and, therefore, motivating us to figure out the factors that could be contributing to it? This can help us provide the right necessities as country.

Methods

Happiness is the dependent variable in this model. Personal Income per capita is an independent level of measurement. Age group is another method I am using to divide up and separate my data to get more specific information in my results. Age squared allows the effect of age on happiness to be nonlinear. The linear age term captures the general trend, while the quadratic term allows for curvature. It provides a more flexible specification that lets the data determine the true functional form rather than imposing linearity. Often in happiness research there is evidence of a U-shaped relationship with age. Happiness declines in middle age then rises again later in life. The quadratic term can capture this pattern. It guards against omitted variable bias if there is non linearity that would be neglected by a strictly linear model. The ϵ_i is my error term that will control my regression. Religion and population have been two other factors that had a significant role in my data and are, therefore, added into my regression.

$$Happiness_i = \beta_0 + \beta_1 Income_i + \beta_2 Age_i + \beta_3 Age_i^2 + \beta_4 Population_i + \beta_5 Religion_i + \epsilon_i$$

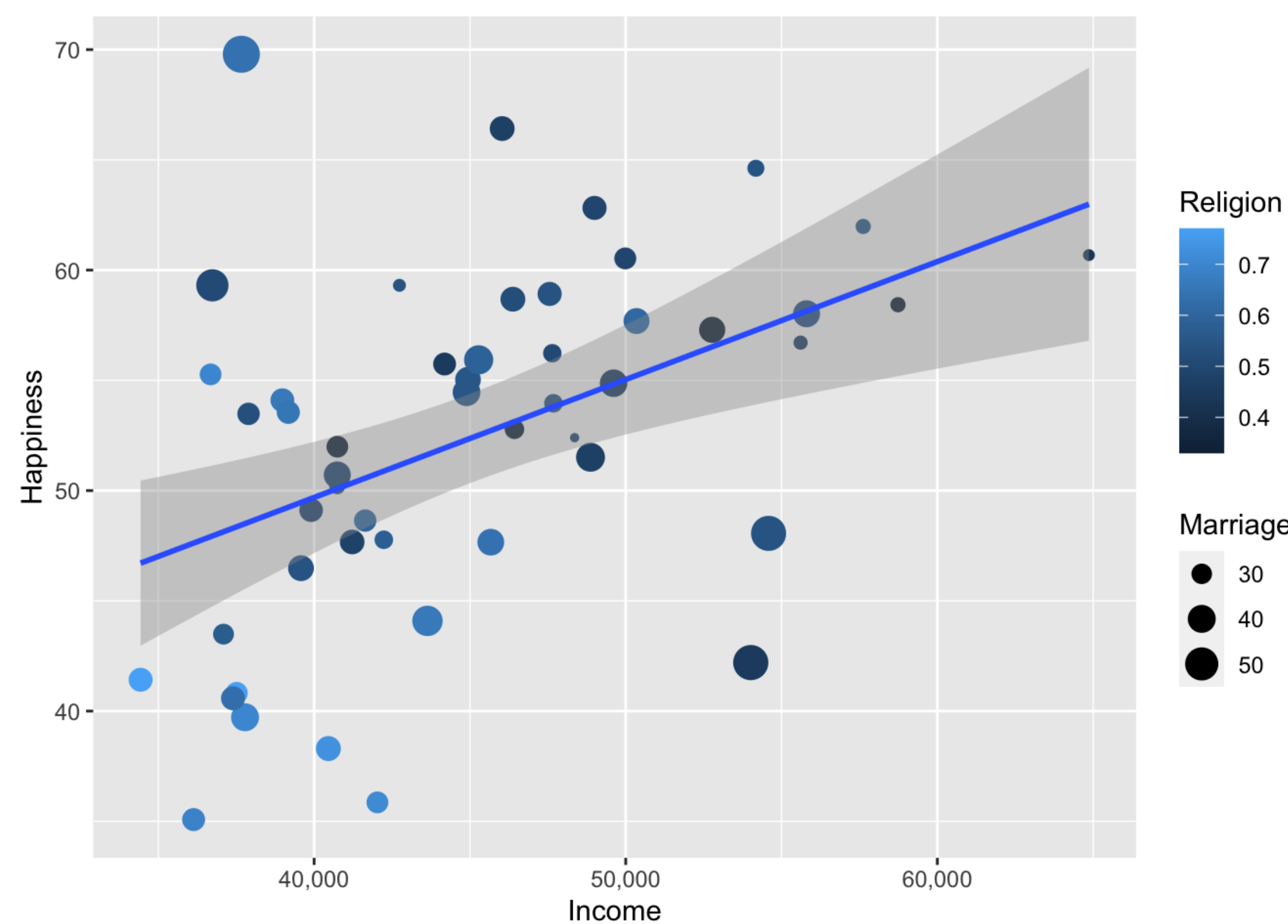


Figure 1: Happiness VS Income, Religion, and Age

Results

OLS Regression Estimates

	Dependent variable:
	Happiness
Log(Personal Income per Capita)	30.314 (18.996)
Age	-8.401 (7.421)
Age ²	0.102 (0.099)
Log(Population)	3.361 (2.121)
Religion	-30.220** (12.602)
Constant	77.667 (148.001)
Observations	50
R ²	0.377
Adjusted R ²	0.306
Residual Std. Error	6.632 (df = 44)
F Statistic	5.318*** (df = 5; 44)
Note:	$p < 0.1$; $p < 0.05$; $p < 0.01$

Conclusion

The coefficients show the estimated effect of each independent variable on the dependent variable happiness, holding other variables constant. The model predicts happiness based on income, age, population and religion. Religion has a significant negative effect on happiness ($p < 0.05$) - more religious states tend to have lower happiness and income. Income, age and population do not have statistically significant effects on happiness in this model. The model overall is statistically significant ($p < 0.01$) and explains around 38% of the variation in happiness.

Data

The figure in the next column is a a heat map of the United States that provides a visual of the happiness across the country.

The data, provided by WalletHub, sought to identify which states have the highest levels of happiness and well-being. They assessed each state across these broad categories:

Health and Emotional State which looked at factors like depression rates, adequate sleep, and physical health. Occupational Fulfillment measured

elements related to job satisfaction, work hours, and career outlook. Community Support and Social Ties focused on metrics around relationships, community engagement, and access to entertainment.

In summary, WalletHub assessed happiness across three broad domains using weighted metrics. Scores were indexed and averaged to produce state rankings.

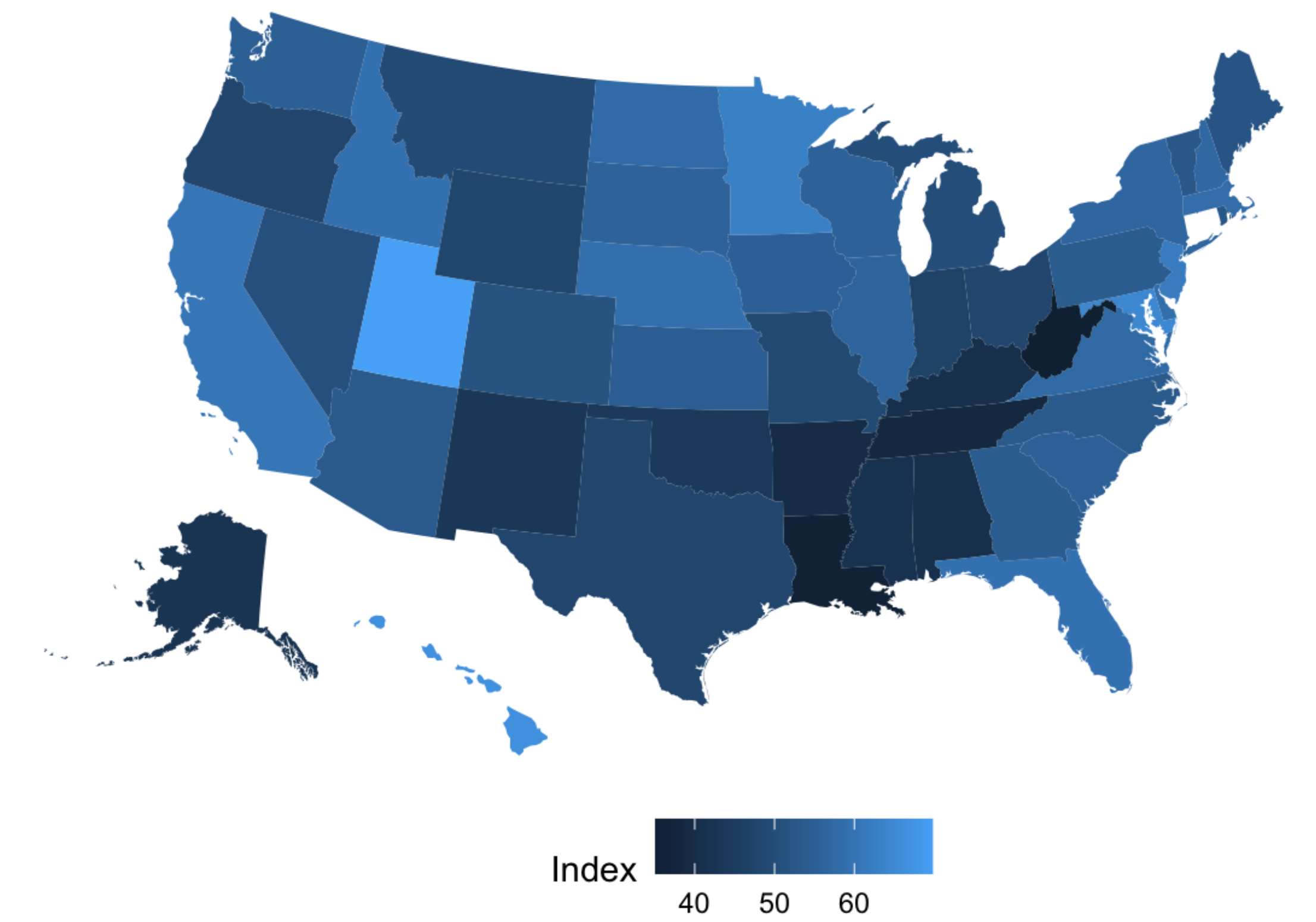


Figure 2: Happiness Across the States

References

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