



The Pursuit of Happiness

Welcome to my presentation on the prediction of happiness.

What is Happiness?



Emotions

Happiness is made up of short-term positive emotions like joy, gratitude, and contentment.

Life Satisfaction

It's also a long-term sense of satisfaction and meaning in life.

Mindset

The way we think and perceive the world around us also plays a huge role in our happiness.



Made with Gamma

INTRODUCTION

The primary goals of this project are to forecast happiness scores, extract valuable insights, and analyze the dataset. Given that the project is a regression when different algorithms are employed, a comparison to determine which model to use, Random Forest, linear regression, and support vector regression are used feels superior. Better decision-making is correlated with happiness.

Factors Influencing Happiness



Relationships

Strong and supportive relationships can increase our happiness, while negative relationships can have the opposite effect.



Environment

Being in nature, having access to clean air and water, and living in a safe community all contribute to our happiness levels.



Values & Passions

Pursuing activities that align with our values and passions can bring a sense of purpose and satisfaction to our lives.



The Science of Happiness

Setpoint Theory
Our individual baseline for happiness is determined by genetics and personality traits.



Methodology

1

Data Description

2

Data Preprocessing and
Visualisation

3

Splitting Dataset

4

Linear Regression

5

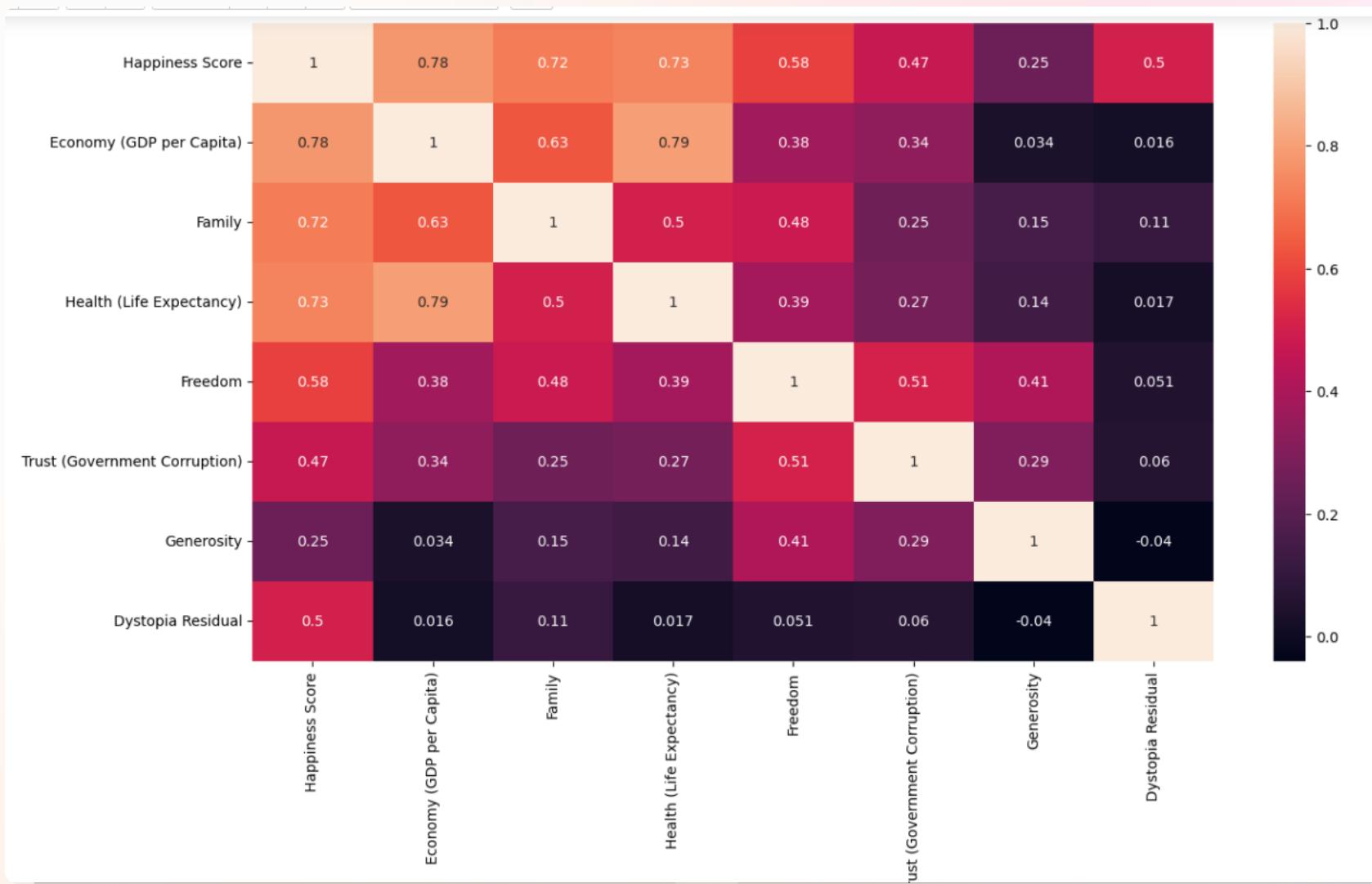
Random Forest

6

Support Vector Machine



Result



We will be using cross validation to avoid the chance of overfitting.

We will apply cross validation for linear regression,
the results are 0.632.

After we check the cross-validation score for Random Forest Regression,
the results are -3.795.

Now checking the cross validation for Support Vector Regression,
the results are -2.830.

Conclusion

From the above Cross Validation score of we can infer that
Linear Regression is the best model to proceed further.

After we will fit the model using the best parameters,
the results are shown here.

```
0.9768665332017045
0.9928485396026963
r2_score 0.9927929798394555
mean_squared_error 0.010723433437448396
mean_absolute_error 0.07637570150416745
```

Expressing Our Gratitude

We would like to take a moment
to express our sincere gratitude
for your support and trust.

Thank you for being part of our
journey!

