## Milestone 2 – Project 2

### **Business Problem**

The topic of my project is about factors that contribute to overall happiness in one's life. My company is a nonprofit mental health company that would like to increase the overall happiness in our patients. To do this we would like to find out what factors contribute to overall happiness. We will be looking into this topic on a worldwide level to measure which factors make up the happiest countries.

# **Background/History**

According to the World Health Organization, 5 percent of people worldwide live with depression and 75 percent of those people do not get treatment. Prior to the Covid pandemic depression was the leading cause of disability. After the pandemic, those percentages worsened. To lower these rates, we need strategies that will help increase positivity and happy emotions.

What is happiness? Getting a better understanding of what happiness is could help understand how to assist our patients in achieving it. Happiness is an emotional state that is characterized by feelings of joy, satisfaction, contentment, and fulfillment. Certain things like genes play a role of your overall happiness. Another factor that plays a roll in happiness is the choices people make. Some of the happiest places worldwide are Finland, Denmark, Switzerland and Iceland are amongst the happiest countries in the world.

### Data Explanation (Data Prep/Data Dictionary/etc)

One dataset I have collected is from Kaggle. It includes data taken from different countries in the world and measures individuals feelings in regards to variables like generosity, and political views.. The other is from the World Happiness Report of 2022 which includes factors such as freedom to make choices and social support. I have compiled the data and condensed it to focus on the top 15 happiest countries. After collecting the data needed, I compared the variables against happiness score to see what the correlation is, thus finding the best variables that increase happiness.

#### Methods

I will be pulling information from the World Happiness Report. On this report it gives data on a I how countries overall happiness levels are. There are other datasets that I retrieved data from that provide variables I will be using to find any correlation within these countries.

### **Analysis**

After analyzing the data I found that Social Support had the highest correlation with happiness at 0.68, freedom to make life choices had a 0.63 correlation. Healthy life expectancy and Perception of corruptions came in 3<sup>rd</sup> and 4<sup>th</sup> with Healthy life expectancy having a 0.32 correlation with happiness and Perception of corruptions having a 0.27 correlation.

### Conclusion

After analyzing data from the World Happiness report, the data shows that there are two factors that play a significant role in happiness. The factors are Social Support and the freedom

to make your own decision. Some other factors that are proven to scientifically contribute to happiness is said to be Gratitude and giving back. Gratitude is appreciating and being grateful for things in your life. Some ways we can show more gratitude is by doing something as simple as making eye contact, which shows that you are present in the moment. Last but not least, we can think of several things in the morning that we are grateful for. Giving back is another way people feel happier. It falls into the realm of generosity. Some ways people can give back is to teach a skill, volunteer in your community and give food to those in need.

## Assumptions

We have set a budget for all of the resources needed to conduct our data collection and analysis as well as funding from several different health care organizations. After collecting all of the data, we will make sure that we have put into place deliveries of bulletins or infographics to make the general public aware of our findings.

### Limitations

I would like to consider more factors in the future. There are things that play a role in happiness such as being single or in a relationship, having kids or no kids, as well as pets. These aspects give meaning to life as well or in some cases make people feel like they do not have the freedom to make choices as freely.

## Challenges

Several challenges that I faced was only finding significant correlation between two of the variables tested while the others weren't that high of a correlation when measuring them against the Happiness score.

## **Future Uses/Additional Applications**

I would like measurement on different things like complacent, satisfaction, inflation, kid/no kids, homeowner/renting, and pets. These things play a part in everyday life and should be involved in analysis in the future.

#### Recommendations

My recommendations would be to do more studies on those countries and states that are the happiest while collecting data from those that are the most unhappy to measure any correlation.

#### **Ethical Assessment**

Some potential ethical concerns the company may face while collecting the data and doing research internationally are anonymity, confidentiality, and informed consent, however, the data is going to be shown by country instead of individually, and people's identities will not be shown.

#### Question and Answer:

- 1. There is the category in the World Happiness report called Dystopia. What is Dystopia? Dystopia is a hypothetical country with values equal to the world's lowest national averages for each of the six factors.
- 2. What are the top factors that make people happy?

  According to the data analysis, the top two factors that make up the happiest countries are social support and freedom to make decisions.
- 3. Do genetics play a part in happiness?

Yes, genetics play about 40% of a role, however it is completely possible to be happy even if your genes want to be unhappy. Other things that can make up the additional 60% of happiness is social support, freedom to make your own choices and environmental factors.

4. Are there foods that can assist in happiness?

There are some foods that can assist with boosting your endorphins. Several foods are greek yogurt, chocolate, grass fed beef, honey, cherry tomatoes, eggs and pumpkin seeds.

5. Does exercise assist with happiness?

When you exercise, it increases endorphins, dopamine, and adrenaline. These are all brain chemicals associated with feeling happy, confident, and reduces anxiety and stress.

- 6. Is there a routine that happier people partake in?
  - Depending on one's schedule, there are several things that you can incorporate into your routine that are proven to boost your mood. Some things include meditation, exercise, being creative, forward planning to have something exciting to look forward to and prioritizing sleep.
- 7. Does sleep assist in one's happiness?

Yes, sleep plays a part in your happiness because when we do not get enough sleep, it increases the risk of depression, and it is harder to deal with daily tasks which could increase stress levels.

8. How has covid impact people's overall happiness

In the World Happiness report of 2021, it shows unprecedented impacts on world emotions, and while countries around the world are seeing increases in negative emotions such as worry and sadness, and a rise in the frequency of stress, their evaluations of life as a whole has shown surprising resilience. Despite the worrying trends, the findings are also surprisingly optimistic. People around the world reported that they still found a reason to laugh and smile on a daily basis.

- 9. How to overcome depression without medication?
  - -One way is to help others. This provides personal meaning by serving for a larger purpose.
  - -Finding workable goals that can give you a sense of accomplishment.
  - -Practicing mindfulness during activities and learning how to live your best self in the moment.
  - -Exercising 5 times a week about 30 to 45 minutes will not only make you feel happier but help with your health and sleeping better at night.
  - Focus on relationships that make you happy and lift you up.
- 10. What will the prospects for happiness in the future depend on?

  Staying mentally and physically healthy is a major factor that plays a role in future happiness. Taking a look at the millennial generations, data revealed that poor millennial health could increase the cost of health treatments by 33%, increase mortality rates among Millennials by 40% and reduce the annual income of Millennials by as much as \$4500