

```
In [20]: import pandas as pd
world_happiness=pd.read_csv(r'C:\Users\hp\Downloads\world_happiness.csv')
world_happiness
```

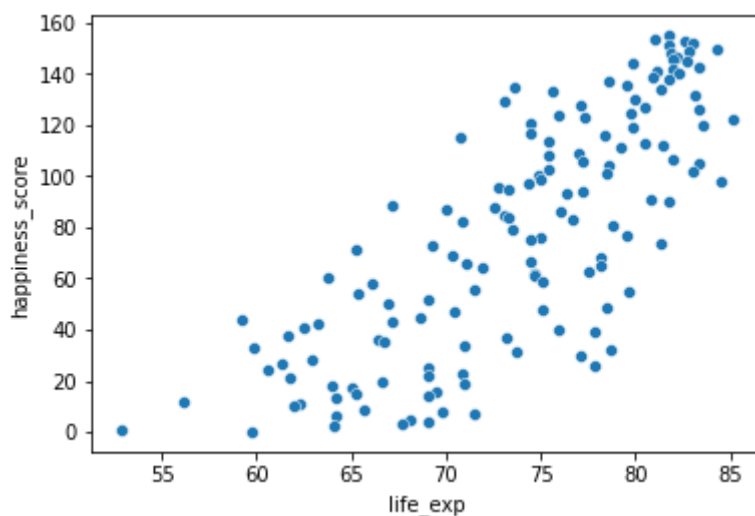
```
Out[20]:
```

	Unnamed: 0	country	social_support	freedom	corruption	generosity	gdp_per_cap	life_exp
0	1	Finland	2.0	5.0	4.0	47.0	42400	81.0
1	2	Denmark	4.0	6.0	3.0	22.0	48300	81.0
2	3	Norway	3.0	3.0	8.0	11.0	66300	81.0
3	4	Iceland	1.0	7.0	45.0	3.0	47900	81.0
4	5	Netherlands	15.0	19.0	12.0	7.0	50500	81.0
...	...	...	...	...	...	...	...	...
138	139	Rwanda	144.0	21.0	2.0	90.0	2110	60.0
139	140	Tanzania	131.0	78.0	34.0	49.0	2980	60.0
140	141	Afghanistan	151.0	155.0	136.0	137.0	1760	60.0
141	142	Central African Republic	155.0	133.0	122.0	113.0	794	55.0
142	143	South Sudan	148.0	154.0	61.0	85.0	1860	55.0

143 rows × 9 columns

```
In [21]: # Create a scatterplot of happiness_score vs. life_exp and show
sns.scatterplot(x="life_exp",y="happiness_score",data=world_happiness)

# Show plot
plt.show()
```



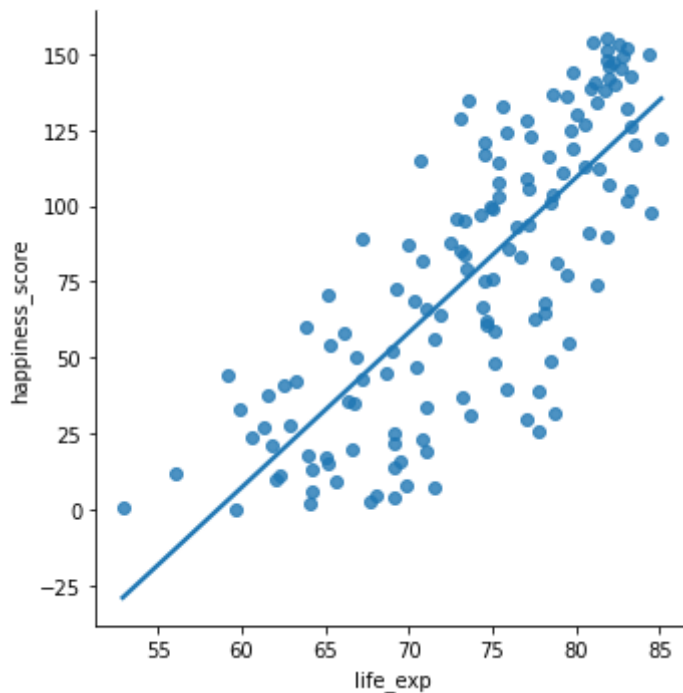
```
In [22]: import matplotlib.pyplot as plt
import seaborn as sns
# Create scatterplot of happiness_score vs life_exp with trendline
sns.lmplot(x='life_exp', y='happiness_score', data=world_happiness, ci=None)

# Show plot
```

```
plt.show()

# Correlation between life_exp and happiness_score
cor = WH['life_exp'].corr (world_happiness['happiness_score'])

print(cor)
```



0.7802249053272062

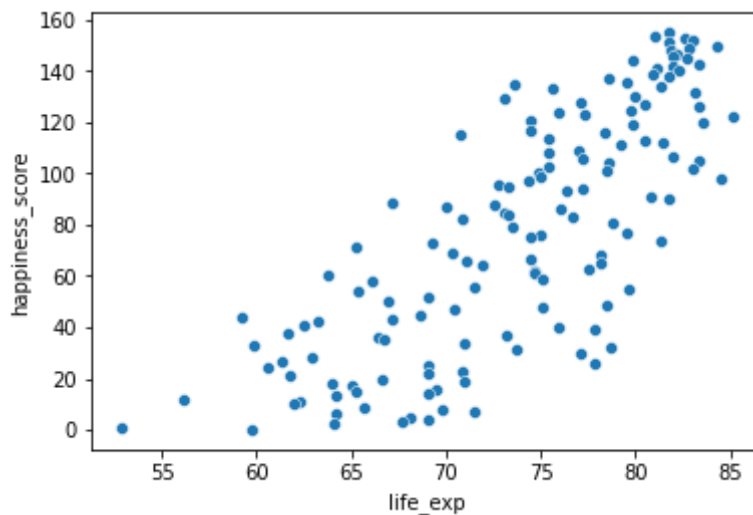
```
In [23]: # Create a scatterplot of happiness_score vs. life_exp and show
sns.scatterplot(x="life_exp",y="happiness_score",data=world_happiness)

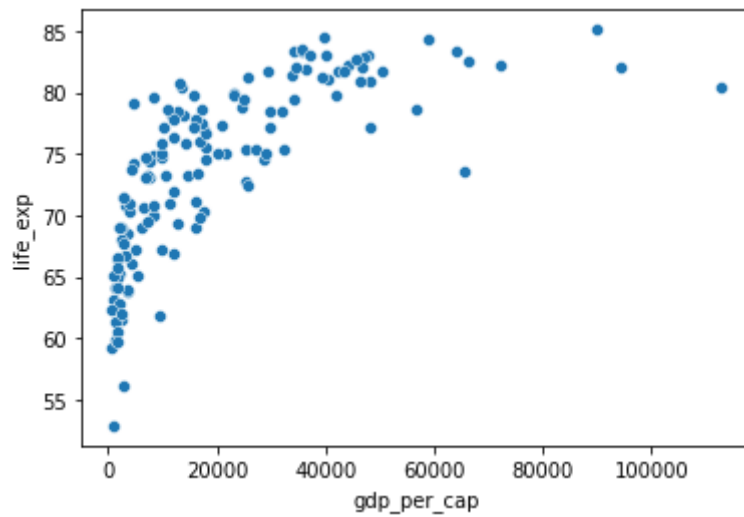
# Show plot
plt.show()

# Scatterplot of gdp_per_cap and life_exp
sns.scatterplot(x='gdp_per_cap', y='life_exp', data=world_happiness)

# Show plot
plt.show()

# Correlation between gdp_per_cap and life_exp
cor = world_happiness['gdp_per_cap'].corr(world_happiness["life_exp"])
```



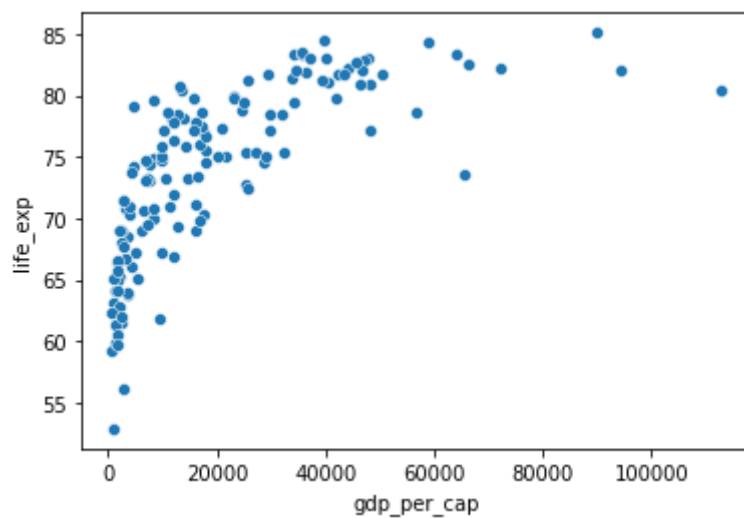


```
In [24]: # Scatterplot of gdp_per_cap and life_exp
sns.scatterplot(x='gdp_per_cap', y='life_exp', data=world_happiness)

# Show plot
plt.show()

# Correlation between gdp_per_cap and life_exp
cor = world_happiness['gdp_per_cap'].corr(world_happiness["life_exp"])

print(cor)
```

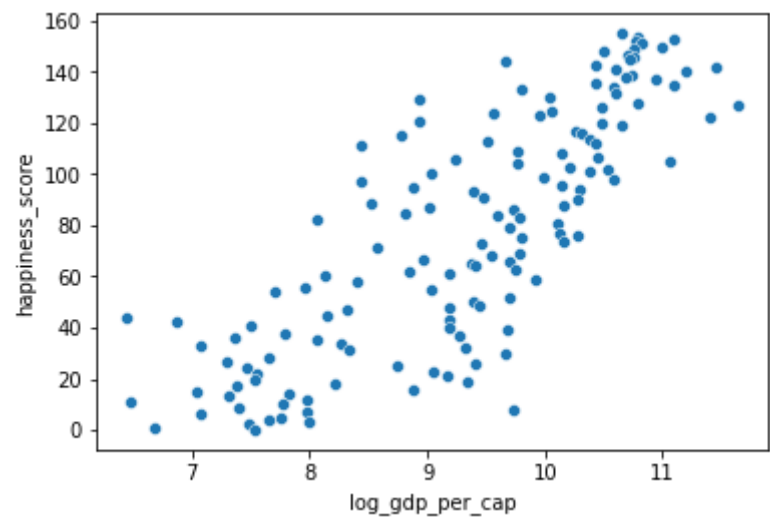


0.7019547642148015

```
In [26]: import numpy as np
# Create log_gdp_per_cap column
world_happiness['log_gdp_per_cap'] = np.log(world_happiness['gdp_per_cap'])

# Scatterplot of log_gdp_per_cap and happiness_score
sns.scatterplot(x='log_gdp_per_cap', y='happiness_score', data=world_happiness)
plt.show()

# Calculate correlation
cor = world_happiness['log_gdp_per_cap'].corr(world_happiness['happiness_score'])
print(cor)
```



0.8043146004918288

In [ ]:

In [ ]: