

Week 4: Data Analysis Application on Dark Triad Personality Traits

About the Dataset

The dark triad is a term in psychology used to refer to the traits of Machiavelianism, Narcissism, and Psychopathy.

- Machiavelianism is characterized by manipulation of others for one's own gain
- Narcissism means having an inflated sense of self esteem and self-gratification
- Psychopathy is similar to antisocial personality disorder, which is often described as lacking a conscience, and also has the characteristics of impulsivity and selfishness

People scoring high on these tests are more likely to do things that hurt society.

The Main Question

The goal of my work in this notebook is to validate the personality test. The question is: Do scores on each of the questions for sections of the dark triad correlate with each other?

If the test is not a good measure of the traits, scoring highly on one question about Narcissism will not correlate with scoring highly on another question about Narcissism. This is the null hypothesis.

If the test is a good measure of traits, scoring highly on one question measuring Narcissism will correlate with scoring highly on another question about Narcissism. This is the alternative hypothesis.

Possible Secondary Questions

I would also want to see how much the dark triad personality traits correlate with each other. For example, if someone scores high in Psychopathy, are they also likely to score highly in Machiavelianism? And which traits correlate most highly with each other? Or are they independent?

There is also a datapoint for what country people came from, so it might be interesting to look at dark triad scores by country. The other extra piece of data is where they came from the test from (google search, main page of website), so I could do some analysis to see if there are any correlations between those factors.

Answering the Question

```
data = readtable('data.csv');
```

```
size(data)
```

```
ans = 1x2  
      18192      29
```

```
average(data.M1)
```

```
ans = 4.1790
```

```
average(data.N1)
```

```
ans = 3.2695
```

```
average(data.P1)
```

```
ans = 3.0660
```