

Name _____

Psychology 516
Applied Multivariate Analysis
Homework 5
Due October 9, 2018

The file, Set_5.csv, contains data from a study in which college students completed the NEO-PI Personality Inventory. This 240-item scale purportedly measures the Big Five personality dimensions, assumed to be fairly independent. The inventory is scored on 6 subscales per dimension, listed below. The file contains the subscale scores, rather than the individual items, which should help reduce the impact of the small sample size.

Neuroticism: Anxiety
Neuroticism: Angry_Hostility
Neuroticism: Depression
Neuroticism: Self_Consciousness
Neuroticism: Impulsiveness
Neuroticism: Vulnerability
Extraversion: Warmth
Extraversion: Gregariousness
Extraversion: Assertiveness
Extraversion: Activity
Extraversion: Excitement_Seeking
Extraversion: Positive_Emotions
Openness: Fantasy
Openness: Aesthetics
Openness: Feelings
Openness: Actions
Openness: Ideas
Openness: Values
Agreeableness: Trust
Agreeableness: Straightforwardness
Agreeableness: Altruism
Agreeableness: Compliance
Agreeableness: Modesty
Agreeableness: Tender_Mindedness
Conscientiousness: Competence
Conscientiousness: Order
Conscientiousness: Dutifulness
Conscientiousness: Achievement_Striving
Conscientiousness: Self_Discipline
Conscientiousness: Deliberation

Given what you have learned up through exploratory factor analysis, analyze the data in the way you think is appropriate and form conclusions about the claimed number of dimensions and their independence.