

The Effects of Personality Traits on Coping with Stress and Alcohol Consumption

Tabatha Bowers and Veronica Conway ~ Eastern Oregon University

Abstract

The role of personality traits and how it pertains to alcohol consumption and stress levels have been a focus of many studies. It is speculated that daily alcohol consumption is a coping mechanism for stress for those with certain personality types. In previous work it has been shown that many different types of personality traits (including extraverts, hopelessness, anxiety, impulsivity and sensation seekers) have a higher rates of alcohol consumption (Mackinnon, et al., 2014). Research that includes college students show those who consume alcohol to help cope with the daily stressors not only have more alcohol-related problems, but they also consume more in a sitting (McCabe, et al., 2013). Identifying personality traits that have a higher probability for alcohol consumption or dependence would allow for the person to become aware of their increased risk.

Methods

Participants:

There were 20 working adults and college students (10 from Tennessee and 10 from Idaho). All were over the age of 21 and were not considered to be a recovering alcoholic.

Materials/Procedure:

Participants completed the Big Five personality test, a 10 question survey about their drinking habits for the prior six months, a 21 question survey regarding stress levels and the Stroop test. Half of the participants completed the Stroop test at their own pace, while the other half completed it under 90 seconds in order to produce stress.

Design:

All of the participants completed the surveys and questionnaires on paper, using a pencil. After the paper portion of the study was complete, the participants were administered the Stroop test. They were shown a total of 200 color words to read aloud. The first 100 color words written in the coordinating color (i.e. BROWN was written as “BROWN”). The second set of 100 color words were written in a different color than the word written (i.e. PURPLE was written as “PURPLE”). The errors were



Figure 1. Stress Level by Personality Trait

Conclusion

The findings indicate that personality traits do not determine alcohol usage or stress levels.

Looking at the disbursement of alcohol usage and stress levels, when compared to personality traits, it looks as if there would be a relation. Those who are more agreeable had increased alcohol usage, while those who show openness have higher stress levels. However, that is not the case.

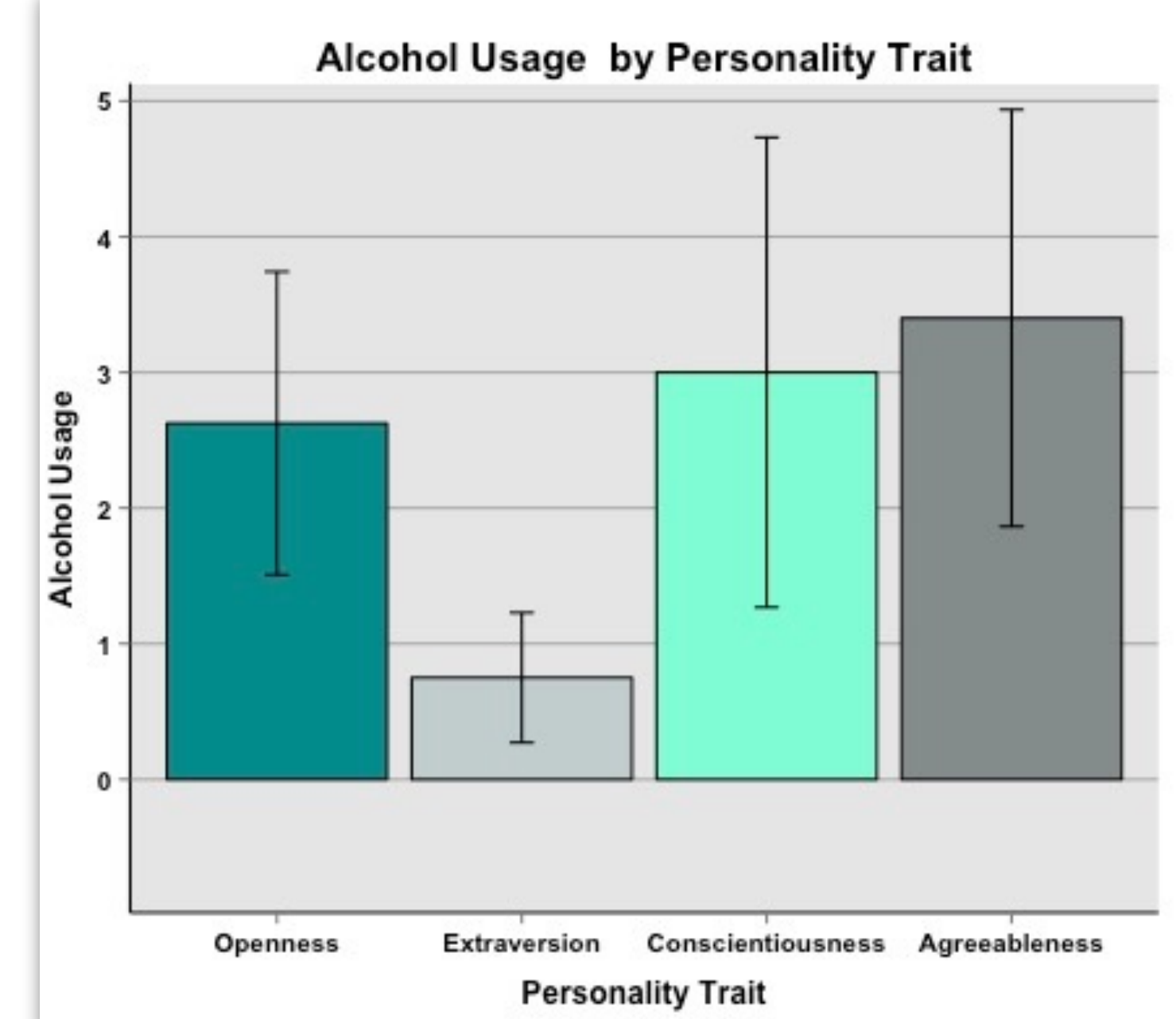


Figure 2. Alcohol Usage by Personality Trait

Analysis the hypothesis is a coping mechanism in effect

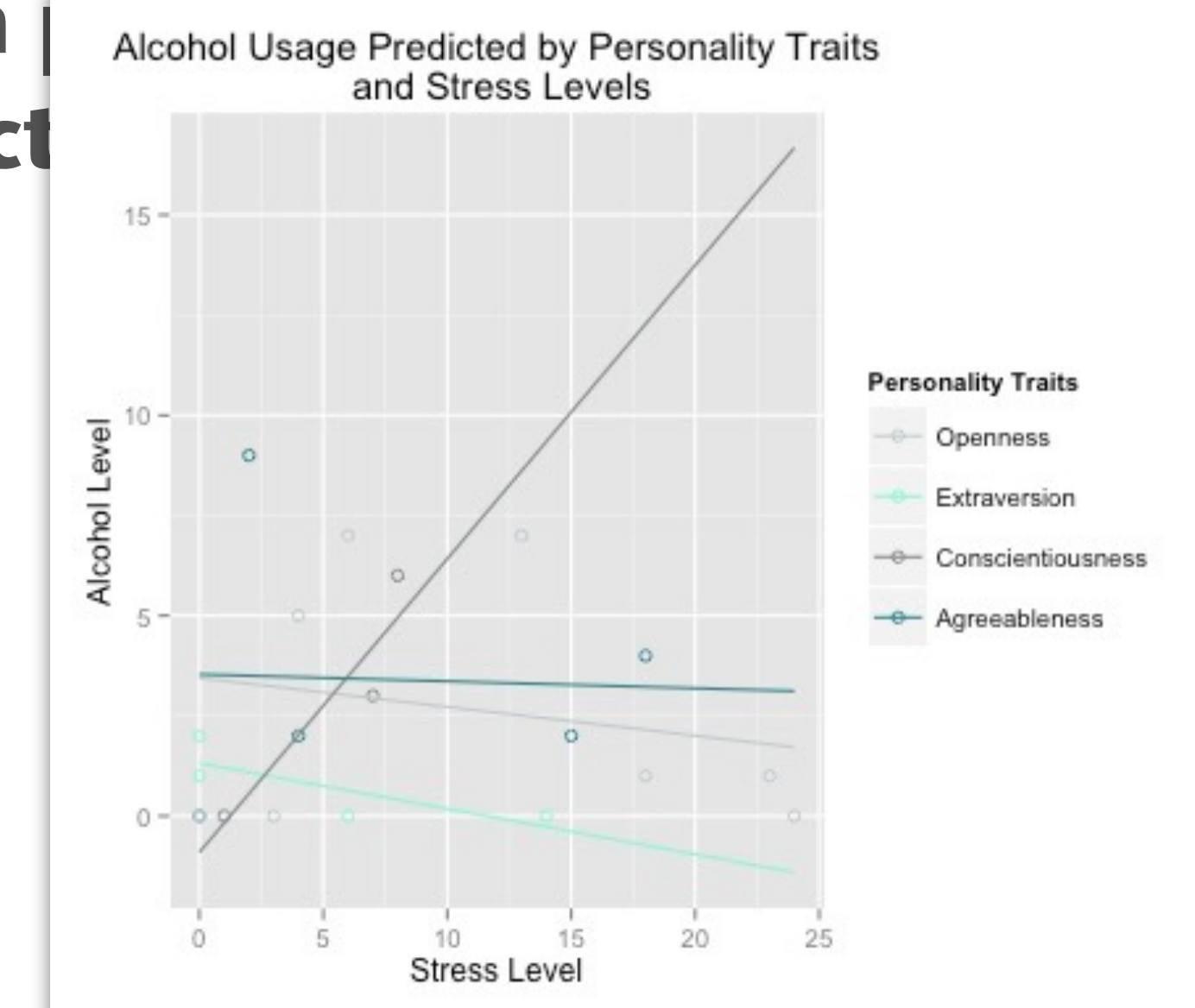


Figure 3. Alcohol Usage Predicted by Personality Traits and Stress Levels

Results

- Being under stress during the Big Five personality test is independent of Stroop errors, Chi-Square(2)=10.57, $p=0.103$.
- Stress Levels are not related to Personality Trait, $F(3,12)=0.643$, $p=0.602$, Alcohol Usage, $F(3,12)=0.180$, $p=0.679$, or an interaction between stress and alcohol usage, $F(3,12)=0.534$, $p=0.668$
- Given, $R^2=0.1224$, $F(4,15)=0.523$, $p=0.7203$, alcohol usage cannot be predicted by personality traits or stress levels.

Discussion

It is important to be able to predict which personality traits would increase an individuals chance of consuming high levels of alcohol and/or have high stress levels. The proposed hypothesis stating that daily alcohol consumption is a coping mechanism for stress for those with certain personality types is not supported by the results from the present study. The findings do not indicate that personality traits determine alcohol usage or stress levels. However, previous studies indicate the opposite.

The present study has many limitations, as it was conducted by two senior graduates, with no prior experience. In addition, the sampling of participants was not as random as desired- there were mostly college students and consumers of two grocery stores. One last limitation to mention, is the fact that the questionnaire gathering information about alcohol consumption can be skewed. It is possible that for those who have a high alcohol intake to under estimate the amount of alcohol they actually consume. However, the focus of information that was gathered was directly related to the information being sought.

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