Stress and Achievement in Adulthood: The Mediating Influence of Exploration

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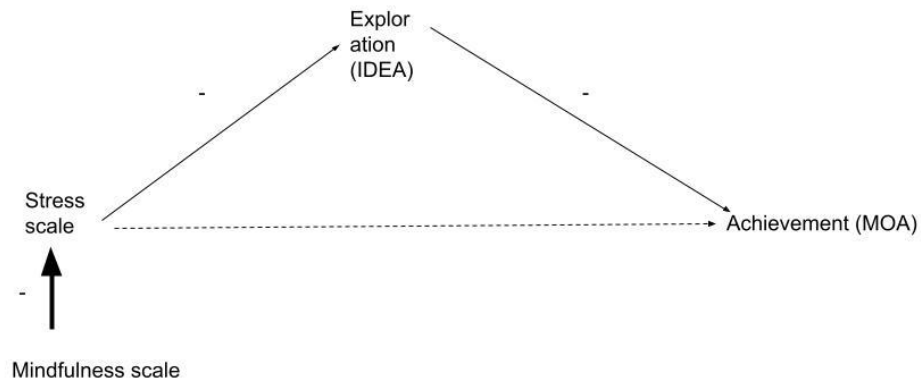University of Minnesota

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Figure 1:

Outline of this project:

Note: This graph illustrates the outline of this project. We predict that there is a negative

relationship between stress and mindfulness scale. We also assume that exploration (IDEA) is a

mediation between stress and achievement or markers of adulthood (MOA).

Results

Table 1:

Relationship	Achievement-Stress (DV-IV)	Exploration(IDEA)-Achievement (MOA) (Mediator-DV)	Exploration-Stress (Mediator-IV)	Mindful-Stress	Exploration as a mediator
P value	7.73e-08	0.3062	0.389	< 2.2e-16	0.6
Correlation	-0.14	-0.05		-0.42	
Estimate Std.	-0.1161	-0.0018	-0.00134	-0.10	
t value	-5.398	-1.024	-0.862	-19.05	

Figure 2:

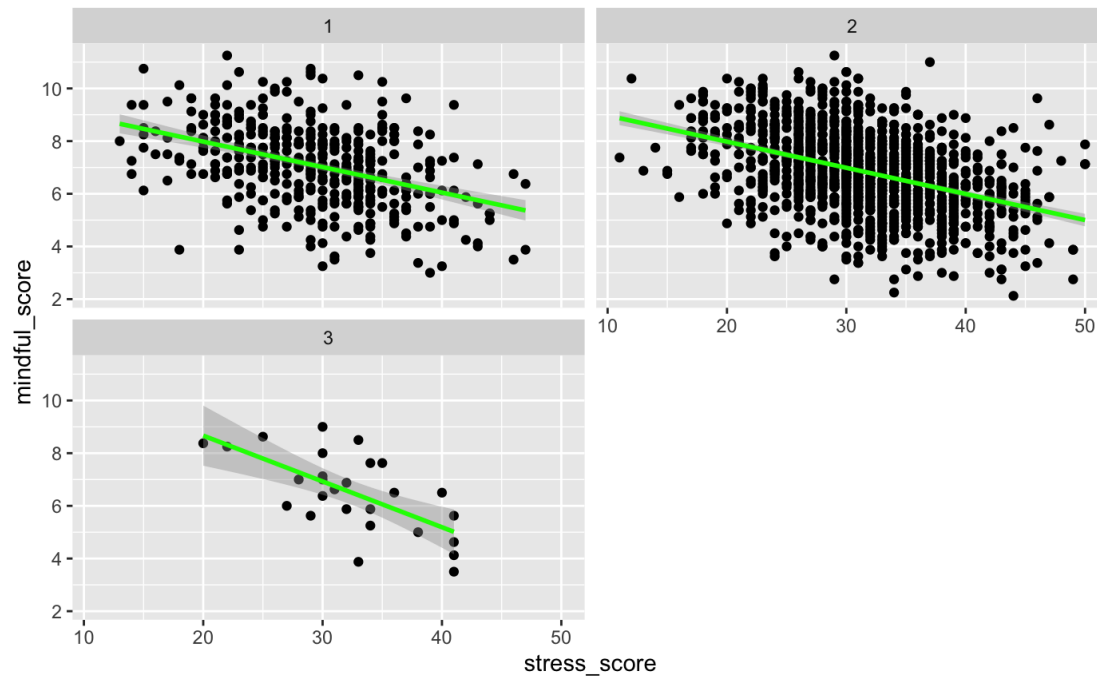*Plot of sample by racial identity*
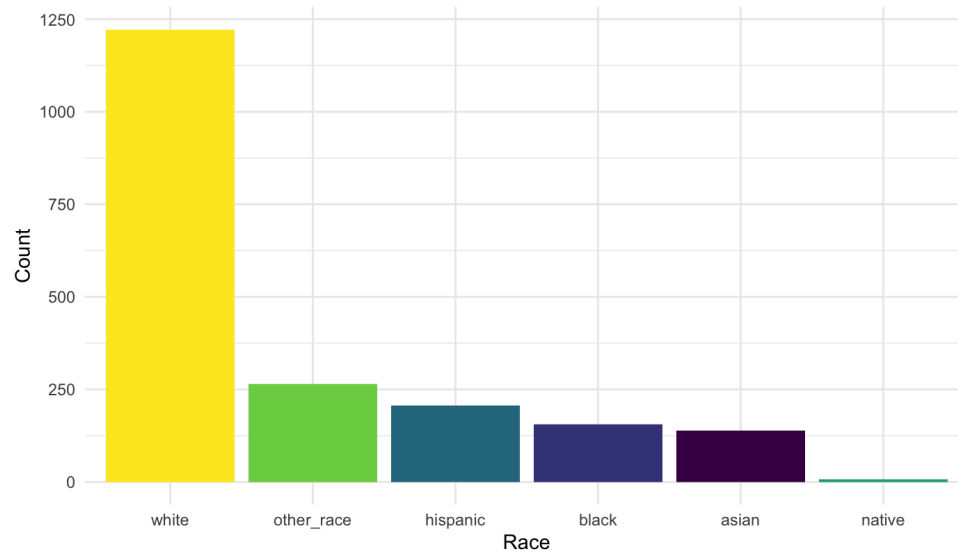
Figure 3:

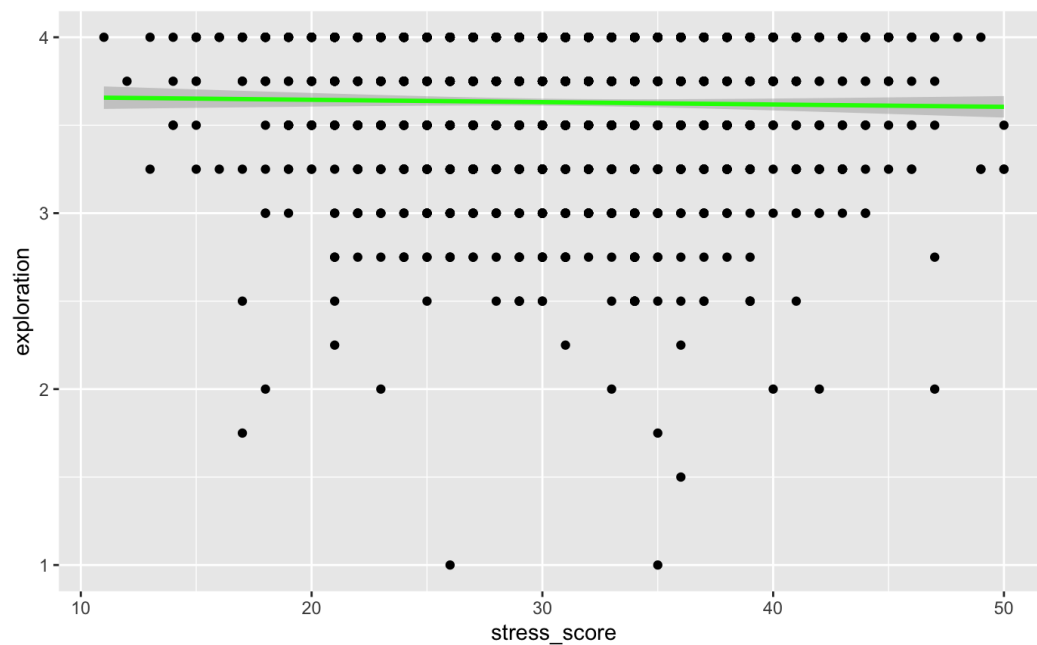*Graph of regression of stress onto achievement*
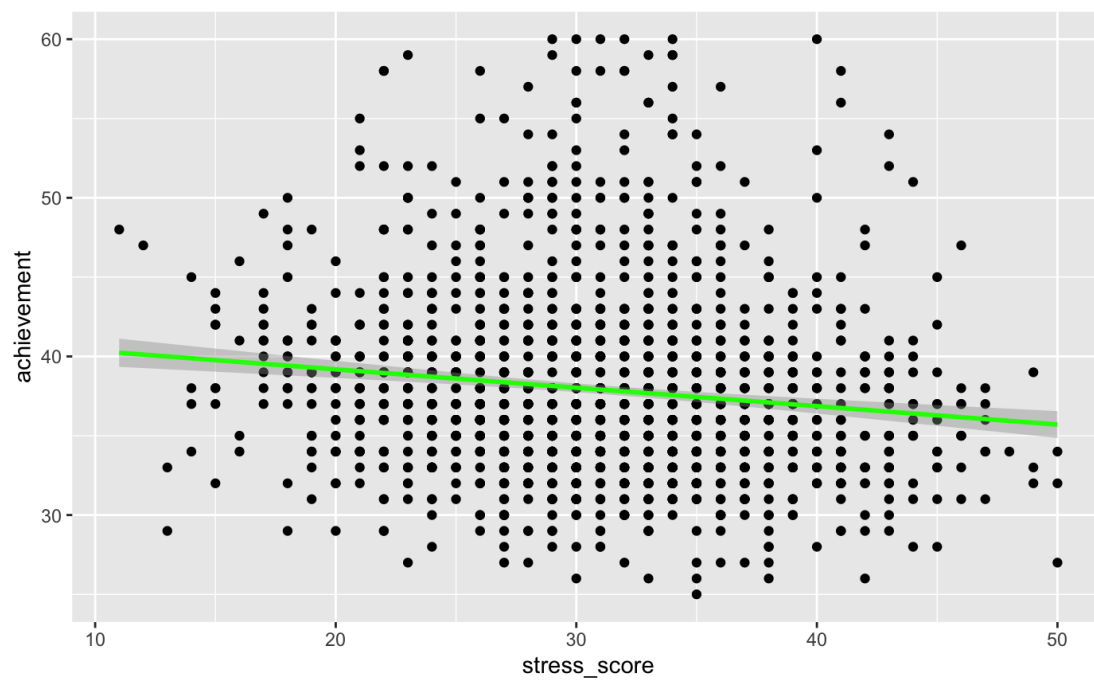
Figure 4:

Graphic of regression of stress onto mindfulness (exploratory analysis)

Figure 5:

Graphic of regression of stress on exploration

Analysis

Linear Regression

Linear regression models the relationship between an independent and dependent variable in predictive analyses. The analyses included in our results map the regression of achievement on stress, exploration on achievement, and exploration on stress. These models are used to establish relationships between our independent (stress), dependent (achievement), and mediating (exploration) variables. According to p values in table 1, we can conclude that mindfulness level is significantly negatively related to stress scale and there's no differences between sex. Also, stress scale is significantly negatively related to achievement or Markers of Adulthood (MOA).

Mediation Analysis

A mediation analysis seeks to explain an observed relationship between an independent and dependent variable through inclusion of a third, hypothetical variable (the mediator). According to table 1, our results indicate that the relationship between stress scale and exploration (IDEA) is not significant. The relationship between achievement and exploration is not significant either. What's more, our testing for exploration as a mediator between stress and achievement shows p value is 0.6. Therefore, based on the results for the relationship between exploitation and stress or exploration and the p value of exploration as a mediator, exploration is not a mediation between stress and achievement.

References

Grahe, J. E., Hermann, A., Ph.D., Chalk, H. M., Leighton, D. C., Corker, K. S., Faas, C., …
Schmolesky, M. (2018, January 10). Project Data. Retrieved from osf.io/8uy4d