Torri Simon Mentor: Xuan Li

Statistical Analysis of Reported Health Habits and Mental Health from the Bridge to Health Survey 2015: Northeastern Minnesota and Northwestern Wisconsin

Abstract

Over the past two decades, the percentage of people diagnosed with major depressive disorder has remained nearly constant. The lack of decline stimulates questions of what preventative measures exist. Preliminary research suggests that both adequate nutrition and physical activity can decrease likelihood of depression by interacting with serotonin levels, the neurotransmitter responsible for mood. In an attempt to further this research, I am analyzing results from the Bridge to Health Survey, 2015 conducted in Northeastern Minnesota and Northwestern Wisconsin. Emphasis is placed on evaluating records of depression, anxiety, or poor mental health days with respect to self-reported diet and exercise habits. Analysis of different components of diet and exercise reports, adjusting for confounding variables, and a review of multiple models will determine if local data complies with suggestions that good nutrition and activity can decrease occurrence of mental health problems. Deeper research into individual attributes of diet and exercise will also demonstrate variability in the effectiveness of certain health habits such as differences occurring from intensity of exercise or type of food consumed.