

# The Impact of Sociodemographic Factors and Eating Habits on Mental Health Among College Students

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## ABSTRACT

This study aimed to examine the relationships between college students' mental health and their eating habits, alongside sociodemographic variables. A multiple linear regression analysis was conducted to predict participants' perceived mental health, measured by the Total PHQ8 score, based on their eating habits, assessed via the total Healthy Eating Assessment score, and various sociodemographic variables (age, gender, academic degree, student classification, college, living arrangement, and BMI). Additionally, a multivariable logistic regression analysis was used to identify predictors of mental health disorders. The multiple linear regression analysis yielded a significant model ( $F(17, 460) = 5.90, p < .001, R^2 = 0.179$ ). Significant predictors included gender, living arrangement, and healthy eating habits. Females reported higher PHQ8 scores, indicating poorer mental health. Living with family or friends was associated with better mental health compared to living alone. Improved healthy eating habits correlated with decreased PHQ8 scores. The logistic regression model, explaining 19.1% of the variance, identified gender, student classification, and healthy eating habits as significant predictors of mental health disorders. Female gender and second-year student classification increased the likelihood of mental health disorders, while healthier eating habits reduced this likelihood. Gender, living arrangements, and healthy eating habits significantly influence mental health among college students. These findings highlight the need for targeted mental health interventions and support systems tailored to specific student needs, particularly focusing on female students, those living alone, and promoting healthy eating behaviors. Future research should consider longitudinal designs and objective measures to further elucidate these relationships.

**Keywords:** Mental health, eating habits, college students, gender, living arrangement, sociodemographic variables, PHQ8, Healthy Eating Assessment.

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