Question 4 - Relationship between education and health

In this case, we tried to test the hypothesis that education makes individuals healthier. This hypothesis is raised from the health econ textbook and the author indicates the reason may be highly educated people have better life style and more informed life and health related decisions. To measure health conditions, we used a naïve indicator – obesity (the variable HLT\_BMI\_CAT). We considered people who were obese or had extreme or high-risk obesity (HLT\_BMI\_CAT = 4 and 5) as worse health condition and others as healthy ones. In terms of education, we treated patients who had higher education level than high school as highly educated (DEM\_EDU = 3) and others were less educated. Noted that we ignored the null value in both variables (such as ‘D’, ‘N’ and ‘R’ in DEM\_EDU).

In order to see the difference in health conditions between highly educated group and less educated group, we created a following contingency table:

*Table 1 Contingency Table of Health and Depression*

|  |  |  |
| --- | --- | --- |
|  | Healthy | Obesity |
| Highly Educated | 4014 | 1591 |
| Less Educated | 4599 | 2208 |

Accordingly, we applied Fisher Exact Test to see if the difference is significant. Based on the table above, the odds ratio is 1.211253 and the P value is 1.097e-06. The difference between the two education groups is significant. Since the odds ratio is higher than 1, it proves our hypothesis that highly educated people tend to have better health conditions.