**Data Analysis 2 - Assignment 1**

Occupation: Physicians and surgeons (2010 CENSUS CODE: 3060)

**Task 1 - Unconditional Gender Gap**

Model 1:  
Female physicians and surgeons earn 8% less, on average than their male colleagues in our data. The CI means that the true value of this wage difference lies between 20% less or 4% more wage for women in this occupation. Our p-value suggests that we do not have statistically significant evidence to say that the wage for female and male physicians is not the same at 0.05 significance level.

Model 2:  
 Despite adjusting for potential heteroscedasticity. Model2 shows the same slope, but with a wider CI and higher p-value which indicates more uncertainty in the estimation of the true value of the slope coefficient.

**Task 2 - Variance on Level of Education**