

5.33

Call:

```
lm(formula = log(wage) ~ educ + I(educ^2) + exper + I(exper^2) +  
  I(educ * exper), data = cps5_small)
```

Residuals:

| Min | 1Q | Median | 3Q | Max |
|---------|---------|---------|--------|--------|
| -1.6628 | -0.3138 | -0.0276 | 0.3140 | 2.1394 |

Coefficients:

| | Estimate | Std. Error | t value | Pr(> t) |
|-----------------|------------|------------|---------|--------------|
| (Intercept) | 1.038e+00 | 2.757e-01 | 3.764 | 0.000175 *** |
| educ | 8.954e-02 | 3.108e-02 | 2.881 | 0.004038 ** |
| I(educ^2) | 1.458e-03 | 9.242e-04 | 1.578 | 0.114855 |
| exper | 4.488e-02 | 7.297e-03 | 6.150 | 1.06e-09 *** |
| I(exper^2) | -4.680e-04 | 7.601e-05 | -6.157 | 1.01e-09 *** |
| I(educ * exper) | -1.010e-03 | 3.791e-04 | -2.665 | 0.007803 ** |

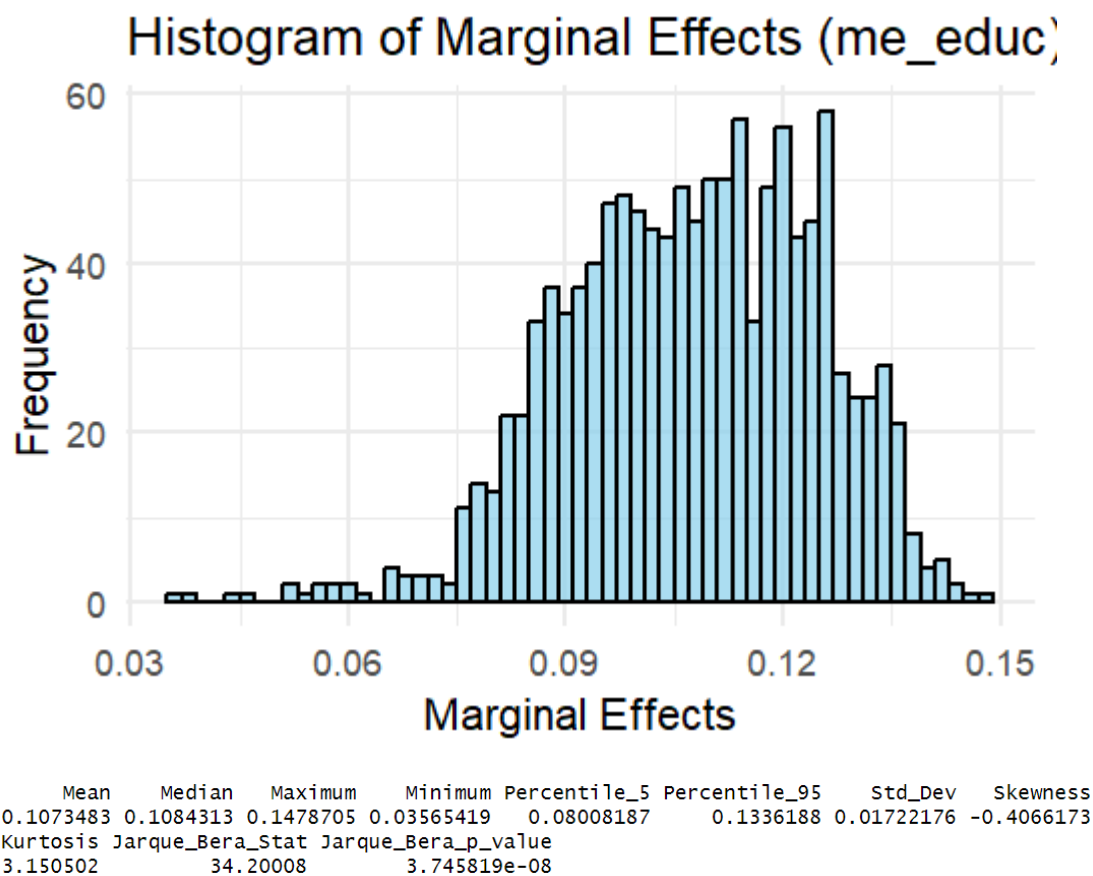
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.4638 on 1194 degrees of freedom

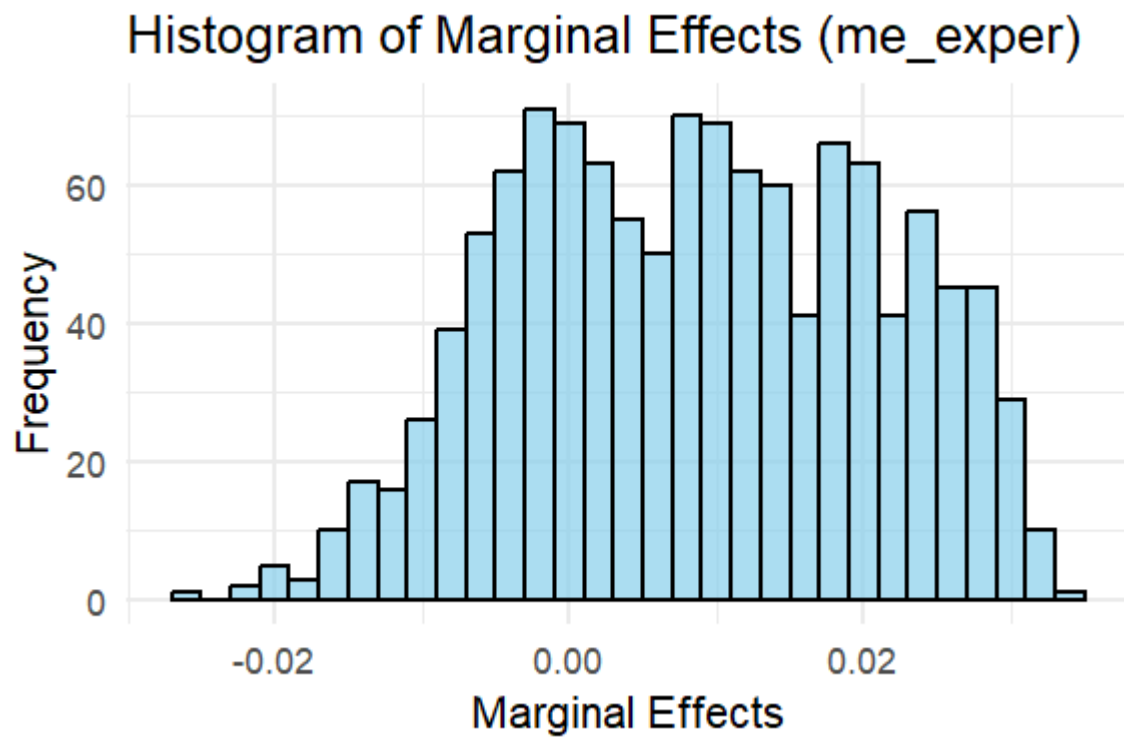
Multiple R-squared: 0.3227, Adjusted R-squared: 0.3198

F-statistic: 113.8 on 5 and 1194 DF, p-value: < 2.2e-16

(c)



(e)



| | | | | | | | |
|-------------|------------------|---------------------|-------------|--------------|---------------|------------|-------------|
| Mean | Median | Maximum | Minimum | Percentile_5 | Percentile_95 | Std_Dev | Skewness |
| 0.008651732 | 0.008418878 | 0.03398886 | -0.02527874 | -0.01037621 | 0.02793115 | 0.01216966 | -0.04659748 |
| Kurtosis | Jarque_Bera_Stat | Jarque_Bera_p_value | | | | | |
| 2.123526 | 38.84459 | 3.672862e-09 | | | | | |