**Table 1**: Regression Analysis

|  |  |  |
| --- | --- | --- |
| **Independent Variables** | **Model (Dependent Variable-CompTotal)** | **Significant** |
| Intercept | -100348 | 2e-16\*\*\* |
| Gender | 57330.7 | 2e-16\*\*\* |
| Age | 79035.2 | 2e-16\*\*\* |
| YearsCodePro | -5970.7 | 2e-16\*\*\* |
| Multiple R-squared | 0.1906 |  |
| Adjusted R-squared | 0.1904 |  |
| N | 11417 |  |

*\*p<0.05; \*\*p<0.01; \*\*\*p<0.001*

Ypredicted = b0 + b1\*x1 + b2\*x2 + b3\*x3 + b4\*x4

CompTotal = -100348+ 57330.7 \* Gender + 79035.2\*Age – 5970.7\*YearsCodePro

Gender: 1: Female; 0: Male

For females, the predicted CompTotal would be 57330.7 points ($) higher than for males. This is significant because p-value=2e-16 < 0.001.

For every unit increase in Age, we expect a 79035.2-point increase in the CompTotal. This significant since the p-value =02e-16 <0.001.

For every unit increase in YearsCodePro, we expect a 5970.7-point decrease in the CompTotal. This significant since the p-value =2e-16 <0.001.

The aim of this project is to test whether sexism exists in the IT industry, so we try to discover if females and males can make the same CompTotal. A multiple regression analysis was employed. There were 80,439 entries at the beginning. After deleting NA values, focusing on US entries, and omitting outliers (ComTotal values < 250,000), we finally analyzed 11417 samples. Gender is a binary variable where the female was coded as 1 while the male was coded as 0. The regression analysis result was shown in Table 1. Moreover, 19.04% of the variance in ComTotal was explained by Gender, Age, YearsCodePro (Adj-R2=.1904).

The result shows: Females increase 57330.7 points ($) more than males and have a positive statistically significant effect on CompTotal (b1=57330.7, p<0.001). Age has a positive and significant effect on CompTotal (b2=79035.2, p<0.001). YearsCodePro has a negative and significant effect on CompTotal (b3=-5970.7, p<0.001).

**Conclusion**: the result of this project indicates that there is no sexism exists in the IT industry.