

Data Exercise 1

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Women at the Deer Valley Utility Company claim that their job performances are not being rewarded to the same degree as the job performances of men. Is there statistical evidence to support this complaint? Prepare a summary of your findings for the Director of the Office of Equal Opportunity. Include a brief discussion of other factors you might want to investigate before issuing a final report.

You have the following data for the 60 persons (22 women and 38 men) who completed the trainee program two years ago and remain employed by the company:

Salary: thousands of dollars.

Gender: “1” for men and “0” for women.

Rating: The employee’s average performance rating over the last two years. The scale has a top score of 100. The company claims that performance rating is the primary factor in the determination of salary.)

Credits earned either in college courses or company programs.

To retrieve your data, execute in Stata:

```
net install PS813_EX3, from(https://faculty.polisci.wisc.edu/weimer)
```

```
PS813_EX3 yourseed
```

```
save "data/EX3.dta"
```

```
d <- haven::read_dta("data/EX3.dta")
```

Hypotheses

H1: Job performances of women are rewarded differently than the job performances of men. That is, the relationship between salary and performance differs by gender.

H0: There is no difference in how men’s performance and women’s performance are rewarded. That is, the relationship between salary and performance does not differ by gender.

Model

The dependent variable is salary. For employee i , let their salary be y_i .

$$y_i = \beta_0 + \dots + \epsilon_i$$

Hypothesis test

Lorem ipsum $\beta_? = 0$

Lorem ipsum $\beta_? \neq 0$

Findings

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Discussion

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