

Today's Agenda

Extending the OLS Regression

- 1 Dichotomous predictors (Dummies)
- 2 Categorical predictors

Dataset: Ross (1990)

Justin Leinaweaver (Spring 2022)

Work, Family, and Well-Being in the United States, 1990 (ICPSR 6666)

Version Date: Jun 10, 1996 [Cite this study](#) | [Share this page](#)

Principal Investigator(s): [Catherine E. Ross](#)

<https://doi.org/10.3886/ICPSR06666.v1>

Version V1

| | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O |
|----|--------|--------|------|-------|-------|-----------|-----------|------------------|------------------|------|----------|----------|-------|-------|-----|
| 1 | height | weight | male | earn | earnk | ethnicity | education | mother_education | father_education | walk | exercise | smokenow | tense | angry | age |
| 2 | 74 | 210 | 1 | 50000 | 50 | White | 16 | 16 | 16 | 3 | 3 | 2 | 0 | 0 | 45 |
| 3 | 66 | 125 | 0 | 60000 | 60 | White | 16 | 16 | 16 | 6 | 5 | 1 | 0 | 0 | 58 |
| 4 | 64 | 126 | 0 | 30000 | 30 | White | 16 | 16 | 16 | 8 | 1 | 2 | 1 | 1 | 29 |
| 5 | 65 | 200 | 0 | 25000 | 25 | White | 17 | 17 | NA | 8 | 1 | 2 | 0 | 0 | 57 |
| 6 | 63 | 110 | 0 | 50000 | 50 | Other | 16 | 16 | 16 | 5 | 6 | 2 | 0 | 0 | 91 |
| 7 | 68 | 165 | 0 | 62000 | 62 | Black | 18 | 18 | 18 | 1 | 1 | 2 | 2 | 2 | 54 |
| 8 | 63 | 190 | 0 | 51000 | 51 | White | 17 | 17 | 17 | 3 | 1 | 2 | 4 | 4 | 39 |
| 9 | 64 | 125 | 0 | 9000 | 9 | White | 15 | 15 | 15 | 7 | 4 | 1 | 4 | 4 | 26 |
| 10 | 62 | 200 | 0 | 29000 | 29 | White | 12 | 12 | 12 | 2 | 2 | 2 | 0 | 0 | 49 |
| 11 | 73 | 230 | 1 | 32000 | 32 | White | 17 | 17 | 17 | 7 | 1 | 1 | 0 | 0 | 46 |
| 12 | 72 | 176 | 1 | 2000 | 2 | Hispanic | 15 | 15 | 15 | 8 | 1 | 2 | 0 | 0 | 21 |
| 13 | 72 | 265 | 1 | 35000 | 35 | White | NA | NA | NA | 1 | 1 | 2 | 0 | 0 | 53 |
| 14 | 72 | 160 | 1 | 27000 | 27 | White | 12 | 12 | 12 | 1 | 2 | 2 | 1 | 1 | 26 |
| 15 | 70 | 225 | 1 | 6530 | 6.53 | White | 16 | 16 | NA | 4 | 1 | 2 | 0 | 0 | 65 |
| 16 | 63 | 107 | 0 | 0 | 0 | White | 14 | 14 | 14 | 7 | 4 | 2 | 2 | 2 | 50 |

Dichotomous Variables (e.g. Dummies)

| | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O |
|----|--------|--------|------|-------|-------|-----------|-----------|------------------|------------------|------|----------|----------|-------|-------|-----|
| 1 | height | weight | male | earn | earnk | ethnicity | education | mother_education | father_education | walk | exercise | smokenow | tense | angry | age |
| 2 | 74 | 210 | 1 | 50000 | 50 | White | 16 | 16 | 16 | 3 | 3 | 2 | 0 | 0 | 45 |
| 3 | 66 | 125 | 0 | 60000 | 60 | White | 16 | 16 | 16 | 6 | 5 | 1 | 0 | 0 | 58 |
| 4 | 64 | 126 | 0 | 30000 | 30 | White | 16 | 16 | 16 | 8 | 1 | 2 | 1 | 1 | 29 |
| 5 | 65 | 200 | 0 | 25000 | 25 | White | 17 | 17 | NA | 8 | 1 | 2 | 0 | 0 | 57 |
| 6 | 63 | 110 | 0 | 50000 | 50 | Other | 16 | 16 | 16 | 5 | 6 | 2 | 0 | 0 | 91 |
| 7 | 68 | 165 | 0 | 62000 | 62 | Black | 18 | 18 | 18 | 1 | 1 | 2 | 2 | 2 | 54 |
| 8 | 63 | 190 | 0 | 51000 | 51 | White | 17 | 17 | 17 | 3 | 1 | 2 | 4 | 4 | 39 |
| 9 | 64 | 125 | 0 | 9000 | 9 | White | 15 | 15 | 15 | 7 | 4 | 1 | 4 | 4 | 26 |
| 10 | 62 | 200 | 0 | 29000 | 29 | White | 12 | 12 | 12 | 2 | 2 | 2 | 0 | 0 | 49 |
| 11 | 73 | 230 | 1 | 32000 | 32 | White | 17 | 17 | 17 | 7 | 1 | 1 | 0 | 0 | 46 |
| 12 | 72 | 176 | 1 | 2000 | 2 | Hispanic | 15 | 15 | 15 | 8 | 1 | 2 | 0 | 0 | 21 |
| 13 | 72 | 265 | 1 | 35000 | 35 | White | NA | NA | NA | 1 | 1 | 2 | 0 | 0 | 53 |
| 14 | 72 | 160 | 1 | 27000 | 27 | White | 12 | 12 | 12 | 1 | 2 | 2 | 1 | 1 | 26 |
| 15 | 70 | 225 | 1 | 6530 | 6.53 | White | 16 | 16 | NA | 4 | 1 | 2 | 0 | 0 | 65 |
| 16 | 63 | 107 | 0 | 0 | 0 | White | 14 | 14 | 14 | 7 | 4 | 2 | 2 | 2 | 50 |

Dichotomous Variables (e.g. Dummies)

Is there evidence of a gender difference in earned income?

1. Calculate the mean income for each gender
 - Men = ?
 - Women = ?

Dichotomous Variables (e.g. Dummies)

Is there evidence of a gender difference in earned income?

1. Calculate the mean income for each gender
 - Men = \$59.9k
 - Women = \$32.1k

C2

*f_x*`=AVERAGE(A2:A1142)`

| | A | B | C | D | E | F | G | |
|----|-----------|------|-------------|---|-----------|------|-------------|--|
| 1 | earnk2021 | male | | | earnk2021 | male | | |
| 2 | 121.596 | 0 | 32.11742536 | | 101.33 | 1 | 59.89894732 | |
| 3 | 60.798 | 0 | | | 64.8512 | 1 | | |
| 4 | 50.665 | 0 | | | 4.0532 | 1 | | |
| 5 | 101.33 | 0 | | | 70.931 | 1 | | |
| 6 | 125.6492 | 0 | | | 54.7182 | 1 | | |
| 7 | 103.3566 | 0 | | | 13.233698 | 1 | | |
| 8 | 18.2394 | 0 | | | 60.798 | 1 | | |
| 9 | 58.7714 | 0 | | | 24.3192 | 1 | | |
| 10 | 0 | 0 | | | 30.399 | 1 | | |
| 11 | 24.3192 | 0 | | | 40.532 | 1 | | |
| 12 | 40.532 | 0 | | | 34.4522 | 1 | | |
| 13 | 0 | 0 | | | 89.1704 | 1 | | |

Dichotomous Variables (e.g. Dummies)

Is there evidence of a gender difference in earned income?

2. Fit an OLS regression of income on the male dummy

Dichotomous Variables (e.g. Dummies)

- Men = \$59.9k
- Women = \$32.1k

| Income (Thousands USD) | |
|-------------------------|------------------------|
| Male | 27.78* (1.93) |
| Constant | 32.12* (1.18) |
| Observations | 1,815 |
| Adjusted R ² | 0.10 |
| Residual Std. Error | 39.77 (df = 1813) |
| F Statistic | 206.76* (df = 1; 1813) |

Note:

*p<0.05

- Men = \$59.9k
- Women = \$32.1k

| Income (Thousands USD) | |
|-------------------------|------------------------|
| Male | 27.78* (1.93) |
| Constant | 32.12* (1.18) |
| Observations | 1,815 |
| Adjusted R ² | 0.10 |
| Residual Std. Error | 39.77 (df = 1813) |
| F Statistic | 206.76* (df = 1; 1813) |

Note:

*p<0.05

$$\text{Income} = 32.12 + 27.78 \times (\text{Male})$$

- Men = \$59.9k
- Women = \$32.1k

$$\text{Income} = 32.12 + 27.78 \times (\text{Male})$$

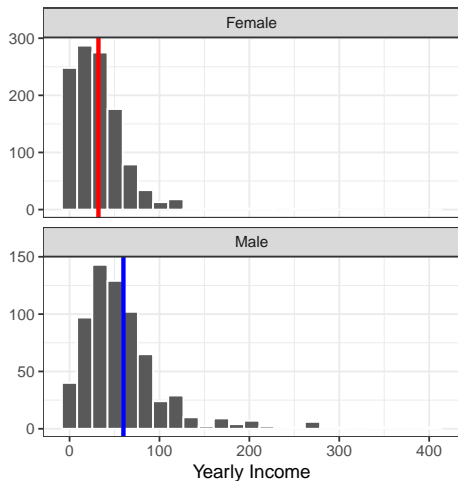
- $P(\text{Male} = 1) = 32.12 + 27.78 \times 1 = 59.9$
- $P(\text{Male} = 0) = 32.12 + 27.78 \times 0 = 32.12$

| | Income (Thousands USD) |
|-------------------------|------------------------|
| Male | 27.78* (1.93) |
| Constant | 32.12* (1.18) |
| Observations | 1,815 |
| Adjusted R ² | 0.10 |
| Residual Std. Error | 39.77 (df = 1813) |
| F Statistic | 206.76* (df = 1; 1813) |

Note:

*p<0.05

Gender Differences in Income?

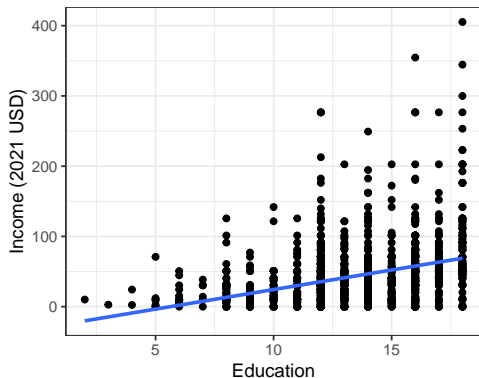


| | Income (Thousands USD) |
|-------------------------|------------------------|
| Male | 27.78* (1.93) |
| Constant | 32.12* (1.18) |
| Observations | 1,815 |
| Adjusted R ² | 0.10 |
| Residual Std. Error | 39.77 (df = 1813) |
| F Statistic | 206.76* (df = 1; 1813) |

Note:

*p<0.05

Gender Differences in Income?



| | Income (Thousands USD) |
|-------------------------|------------------------|
| Education | 5.57* (0.36) |
| Constant | -31.34* (4.89) |
| Observations | 1,813 |
| Adjusted R ² | 0.11 |
| Residual Std. Error | 39.50 (df = 1811) |
| F Statistic | 235.79* (df = 1; 1811) |

Note:

*p<0.05

Dummy Variables in OLS Regressions

Regress earnings (2021) on education and
the male dummy

| | Income (Thousands USD) | | |
|-------------------------|------------------------|------------------------|------------------------|
| | (1) | (2) | (3) |
| male | 27.78* (1.93) | | 26.53* (1.82) |
| education | | 5.57* (0.36) | 5.35* (0.34) |
| Constant | 32.12* (1.18) | -31.34* (4.89) | -38.28* (4.65) |
| Observations | 1,815 | 1,813 | 1,813 |
| Adjusted R ² | 0.10 | 0.11 | 0.21 |
| Residual Std. Error | 39.77 (df = 1813) | 39.50 (df = 1811) | 37.38 (df = 1810) |
| F Statistic | 206.76* (df = 1; 1813) | 235.79* (df = 1; 1811) | 238.09* (df = 2; 1810) |

Note:

*p<0.05

| | Income (Thousands USD) |
|-------------------------|------------------------|
| Education | 5.35* (0.34) |
| Male | 26.53* (1.82) |
| Constant | -38.28* (4.65) |
| Observations | 1,813 |
| Adjusted R ² | 0.21 |
| Residual Std. Error | 37.38 (df = 1810) |
| F Statistic | 238.09* (df = 2; 1810) |

Note:

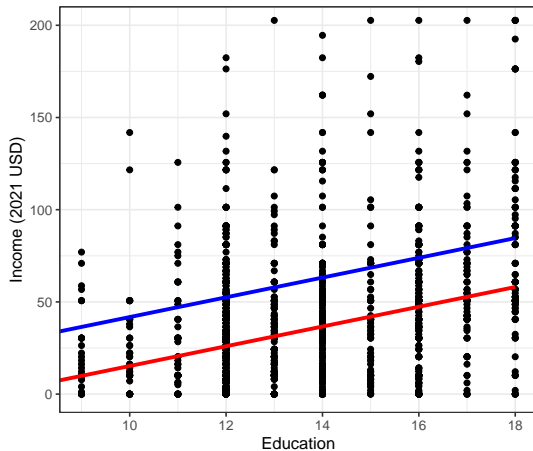
*p<0.05

Make a marginal effects plot of education with separate lines for each gender

Make a marginal effects plot of education with separate lines for each gender

- ➊ Add a sheet
- ➋ Column 1: The levels of education
- ➌ Column 2: Model point estimates for a male across the levels of education
- ➍ Column 3: Model point estimates for a female across the levels of education
- ➎ Highlight all three columns, insert a scatterplot and polish it

| Education | Male | Female |
|-----------|------|--------|
| 9 | 36.4 | 9.9 |
| 10 | 41.8 | 15.2 |
| 11 | 47.1 | 20.6 |
| 12 | 52.4 | 25.9 |
| 13 | 57.8 | 31.3 |
| 14 | 63.1 | 36.6 |
| 15 | 68.5 | 42 |
| 16 | 73.8 | 47.3 |
| 17 | 79.2 | 52.7 |
| 18 | 84.6 | 58 |



Dummy Variables in OLS Regressions

- ① Point estimates produce the group means (with a significance test), and
- ② The coefficient on the dummy moves the intercept, not the slope

Categorical Variables

| | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O |
|----|--------|--------|------|-------|-------|-----------|-----------|------------------|------------------|------|----------|----------|-------|-------|-----|
| 1 | height | weight | male | earn | earnk | ethnicity | education | mother_education | father_education | walk | exercise | smokenow | tense | angry | age |
| 2 | 74 | 210 | 1 | 50000 | 50 | White | 16 | 16 | 16 | 3 | 3 | 2 | 0 | 0 | 45 |
| 3 | 66 | 125 | 0 | 60000 | 60 | White | 16 | 16 | 16 | 6 | 5 | 1 | 0 | 0 | 58 |
| 4 | 64 | 126 | 0 | 30000 | 30 | White | 16 | 16 | 16 | 8 | 1 | 2 | 1 | 1 | 29 |
| 5 | 65 | 200 | 0 | 25000 | 25 | White | 17 | 17 | NA | 8 | 1 | 2 | 0 | 0 | 57 |
| 6 | 63 | 110 | 0 | 50000 | 50 | Other | 16 | 16 | 16 | 5 | 6 | 2 | 0 | 0 | 91 |
| 7 | 68 | 165 | 0 | 62000 | 62 | Black | 18 | 18 | 18 | 1 | 1 | 2 | 2 | 2 | 54 |
| 8 | 63 | 190 | 0 | 51000 | 51 | White | 17 | 17 | 17 | 3 | 1 | 2 | 4 | 4 | 39 |
| 9 | 64 | 125 | 0 | 9000 | 9 | White | 15 | 15 | 15 | 7 | 4 | 1 | 4 | 4 | 26 |
| 10 | 62 | 200 | 0 | 29000 | 29 | White | 12 | 12 | 12 | 2 | 2 | 2 | 0 | 0 | 49 |
| 11 | 73 | 230 | 1 | 32000 | 32 | White | 17 | 17 | 17 | 7 | 1 | 1 | 0 | 0 | 46 |
| 12 | 72 | 176 | 1 | 2000 | 2 | Hispanic | 15 | 15 | 15 | 8 | 1 | 2 | 0 | 0 | 21 |
| 13 | 72 | 265 | 1 | 35000 | 35 | White | NA | NA | NA | 1 | 1 | 2 | 0 | 0 | 53 |
| 14 | 72 | 160 | 1 | 27000 | 27 | White | 12 | 12 | 12 | 1 | 2 | 2 | 1 | 1 | 26 |
| 15 | 70 | 225 | 1 | 6530 | 6.53 | White | 16 | 16 | NA | 4 | 1 | 2 | 0 | 0 | 65 |
| 16 | 63 | 107 | 0 | 0 | 0 | White | 14 | 14 | 14 | 7 | 4 | 2 | 2 | 2 | 50 |

Categorical Variables

| Ethnicity | Income |
|-----------|----------|
| Black | \$34.73k |
| Hispanic | \$32k |
| Other | \$42.9k |
| White | \$44.08k |

D7



fx

Grand Total

| | A | B | C | D | E | F |
|----|-----------|-----------|-------------|----------------------|---|---|
| 1 | earnk2021 | ethnicity | ethnicity | Average of earnk2021 | | |
| 2 | 101.33 | White | Black | 34.73268144 | | |
| 3 | 121.596 | White | Hispanic | 32.00469077 | | |
| 4 | 60.798 | White | Other | 42.90077541 | | |
| 5 | 50.665 | White | White | 44.07720889 | | |
| 6 | 101.33 | Other | (blank) | | | |
| 7 | 125.6492 | Black | Grand Total | 42.43408972 | | |
| 8 | 103.3566 | White | | | | |
| 9 | 18.2394 | White | | | | |
| 10 | 58.7714 | White | | | | |
| 11 | 64.8512 | White | | | | |
| 12 | 4.0532 | Hispanic | | | | |
| 13 | 70.931 | White | | | | |
| 14 | 54.7182 | White | | | | |
| 15 | 13.233698 | White | | | | |
| 16 | 0 | White | | | | |
| 17 | 60.798 | White | | | | |
| 18 | 24.3192 | White | | | | |
| 19 | 30.399 | White | | | | |
| 20 | 24.3192 | White | | | | |
| 21 | 40.532 | White | | | | |

PivotTable Fields



Choose fields to add to the report and drag them between the areas below:

☒ earnk2021☒ ethnicity

Filters

Rows

ethnicity

Columns

Values

Average of earnk2021

Using Categorical Variables in Excel: Make Dummies

| | A | B | C | D |
|---|------|-------|-----------|-----------|
| 1 | male | earnk | ethnicity | education |
| 2 | 1 | 50 | White | 16 |
| 3 | 0 | 60 | White | 16 |
| 4 | 0 | 30 | White | 16 |
| 5 | 0 | 25 | White | 17 |
| 6 | 0 | 50 | Other | 16 |
| 7 | 0 | 62 | Black | 18 |
| 8 | 0 | 51 | White | 17 |
| 9 | 0 | 9 | White | 15 |
| 0 | 0 | 29 | White | 12 |
| 1 | 1 | 32 | White | 17 |
| 2 | 1 | 2 | Hispanic | 15 |
| 3 | 1 | 35 | White | NA |
| 4 | 1 | 27 | White | 12 |
| 5 | 1 | 6.53 | White | 16 |
| 6 | 0 | 0 | White | 14 |



| | A | B | C | D |
|---|------|-------|-----------|-----------|
| 1 | male | earnk | ethnicity | education |
| 2 | 0 | 62 | Black | 18 |
| 3 | 0 | 7 | Black | 12 |
| 4 | 1 | 53 | Black | 13 |
| 5 | 0 | 5 | Black | 12 |
| 6 | 0 | 5 | Black | 12 |
| 7 | 0 | 10 | Black | 12 |
| 8 | 0 | 30 | Black | 14 |
| 9 | 1 | 13 | Black | 8 |
| 0 | 0 | 5 | Black | 12 |
| 1 | 0 | 0 | Black | 13 |
| 2 | 1 | 15 | Black | 11 |
| 3 | 0 | 15 | Black | 14 |
| 4 | 0 | 21 | Black | 17 |
| 5 | 0 | 15 | Black | 12 |
| 6 | 1 | 15 | Black | 14 |

1. Sort data by categorical predictor

Using Categorical Variables in Excel: Make Dummies

| male | earnk | ethnicity | education | Black | Hispanic | Other |
|------|-------|-----------|-----------|-------|----------|-------|
| 0 | 62 | Black | 18 | 1 | 0 | 0 |
| 0 | 7 | Black | 12 | 1 | 0 | 0 |
| 1 | 53 | Black | 13 | 1 | 0 | 0 |
| 0 | 5 | Black | 12 | 1 | 0 | 0 |
| 0 | 5 | Black | 12 | 1 | 0 | 0 |
| 0 | 10 | Black | 12 | 1 | 0 | 0 |
| 0 | 30 | Black | 14 | 1 | 0 | 0 |
| 1 | 13 | Black | 8 | 1 | 0 | 0 |
| 0 | 5 | Black | 12 | 1 | 0 | 0 |
| 0 | 0 | Black | 13 | 1 | 0 | 0 |
| 1 | 15 | Black | 11 | 1 | 0 | 0 |
| 0 | 15 | Black | 14 | 1 | 0 | 0 |
| 0 | 21 | Black | 17 | 1 | 0 | 0 |
| 0 | 15 | Black | 12 | 1 | 0 | 0 |
| 1 | 15 | Black | 14 | 1 | 0 | 0 |
| 1 | 43 | Black | 13 | 1 | 0 | 0 |
| 0 | 32 | Black | 14 | 1 | 0 | 0 |
| 0 | 25 | Black | 12 | 1 | 0 | 0 |

2. Create dummies for each category (omit baseline)

Using Categorical Variables in Excel: Make Dummies

| male | earnk | ethnicity | education | Black | Hispanic | Other |
|------|-------|-----------|-----------|-------|----------|-------|
| 0 | 62 | Black | 18 | 1 | 0 | 0 |
| 0 | 7 | Black | 12 | 1 | 0 | 0 |
| 1 | 53 | Black | 13 | 1 | 0 | 0 |
| 0 | 5 | Black | 12 | 1 | 0 | 0 |
| 0 | 5 | Black | 12 | 1 | 0 | 0 |
| 0 | 10 | Black | 12 | 1 | 0 | 0 |
| 0 | 30 | Black | 14 | 1 | 0 | 0 |
| 1 | 13 | Black | 8 | 1 | 0 | 0 |
| 0 | 5 | Black | 12 | 1 | 0 | 0 |
| 0 | 0 | Black | 13 | 1 | 0 | 0 |
| 1 | 15 | Black | 11 | 1 | 0 | 0 |
| 0 | 15 | Black | 14 | 1 | 0 | 0 |
| 0 | 21 | Black | 17 | 1 | 0 | 0 |
| 0 | 15 | Black | 12 | 1 | 0 | 0 |
| 1 | 15 | Black | 14 | 1 | 0 | 0 |
| 1 | 43 | Black | 13 | 1 | 0 | 0 |
| 0 | 32 | Black | 14 | 1 | 0 | 0 |
| 0 | 25 | Black | 12 | 1 | 0 | 0 |

Regress income on the three dummy predictors

| Ethnicity | Income |
|-----------|----------|
| Black | \$34.73k |
| Hispanic | \$32k |
| Other | \$42.9k |
| White | \$44.08k |

| | Income (2021) |
|-------------------------|----------------------|
| Ethnicity: Black | -9.34* (3.30) |
| Ethnicity: Hispanic | -12.07* (4.24) |
| Ethnicity: Other | -1.18 (6.87) |
| Constant | 44.08* (1.08) |
| Observations | 1,815 |
| Adjusted R ² | 0.01 |
| Residual Std. Error | 41.83 (df = 1811) |
| F Statistic | 4.96* (df = 3; 1811) |
| Note: | *p<0.05 |

| Ethnicity | Income |
|-----------|----------|
| Black | \$34.73k |
| Hispanic | \$32k |
| Other | \$42.9k |
| White | \$44.08k |

| | Income (2021) |
|-------------------------|-------------------|
| Ethnicity: Black | -9.34* (3.30) |
| Ethnicity: Hispanic | -12.07* (4.24) |
| Ethnicity: Other | -1.18 (6.87) |
| Constant | 44.08* (1.08) |
| Observations | 1,815 |
| Adjusted R ² | 0.01 |
| Residual Std. Error | 41.83 (df = 1811) |
| Note: *p<0.05 | |

$$\text{Income} = 44.08 + -9.34(\text{Black}) + -12.07(\text{Hispanic}) + -1.18(\text{Other})$$

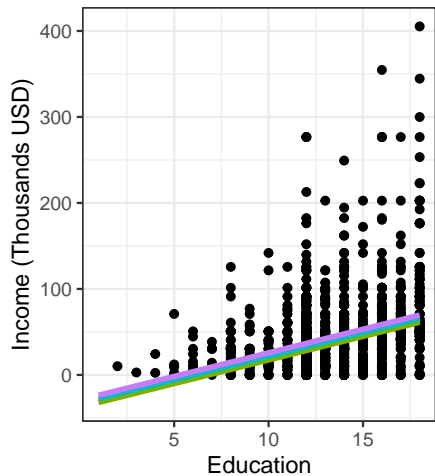
Categorical Variables in OLS Regressions

Regress earnings (2021) on education and the ethnicity dummies

| | Income (2021) | | |
|-------------------------|------------------------|----------------------|-----------------------|
| | (1) | (2) | (3) |
| Education | 5.57* (0.36) | | 5.49* (0.36) |
| Ethnicity: Black | | -9.34* (3.30) | -5.47 (3.13) |
| Ethnicity: Hispanic | | -12.07* (4.24) | -8.43* (4.01) |
| Ethnicity: Other | | -1.18 (6.87) | -3.80 (6.48) |
| Constant | -31.34* (4.89) | 44.08* (1.08) | -29.11* (4.97) |
| Observations | 1,813 | 1,815 | 1,813 |
| Adjusted R ² | 0.11 | 0.01 | 0.12 |
| Residual Std. Error | 39.50 (df = 1811) | 41.83 (df = 1811) | 39.46 (df = 1808) |
| F Statistic | 235.79* (df = 1; 1811) | 4.96* (df = 3; 1811) | 60.85* (df = 4; 1808) |

Note:

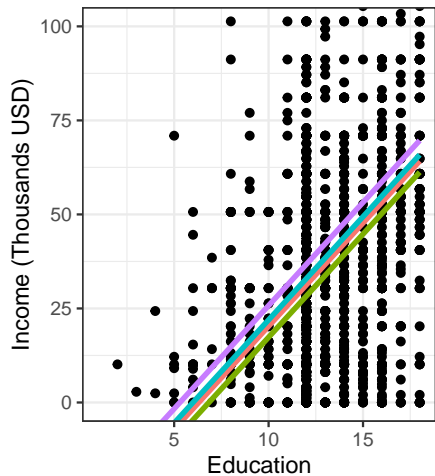
*p<0.05



| | Income (2021) |
|-------------------------|-----------------------|
| Education | -5.47 (3.13) |
| Ethnicity: Black | -8.43* (4.01) |
| Ethnicity: Hispanic | -3.80 (6.48) |
| Ethnicity: Other | 5.49* (0.36) |
| Constant | -29.11* (4.97) |
| Observations | 1,813 |
| Adjusted R ² | 0.12 |
| Residual Std. Error | 39.46 (df = 1808) |
| F Statistic | 60.85* (df = 4; 1808) |

Note:

*p<0.05



| | Income (2021) |
|-------------------------|-----------------------|
| Education | -5.47 (3.13) |
| Ethnicity: Black | -8.43* (4.01) |
| Ethnicity: Hispanic | -3.80 (6.48) |
| Ethnicity: Other | 5.49* (0.36) |
| Constant | -29.11* (4.97) |
| Observations | 1,813 |
| Adjusted R ² | 0.12 |
| Residual Std. Error | 39.46 (df = 1808) |
| F Statistic | 60.85* (df = 4; 1808) |

Note:

*p<0.05