New York University

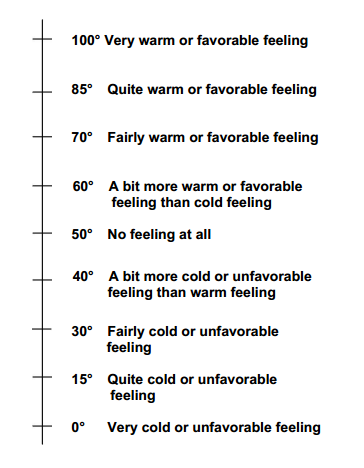
Wilf Family Department of Politics

Prof. Patrick Egan

**QUANT I: INDICATOR VARIABLES IN PRACTICE**

Use “[anes\_timeseries\_2012.dta](https://web1.fas.nyu.edu:8443/POLFS1/pje202/d.original%20data/anes_timeseries_2012.dta)”, clear

\*OUR DEPENDENT VARIABLE WILL BE R’S DIFFERENCE IN “FEELING THERMOMETER” SCORES ASSIGNED TO OBAMA AND ROMNEY. (IMAGE BELOW IS WHAT IS SHOWN TO R.)



. tab ft\_dpc

PRE: Feeling Thermometer: |

Democratic Presidential cand | Freq. Percent Cum.

--------------------------------+-----------------------------------

-9. Refused | 12 0.20 0.20

-8. Don't know | 2 0.03 0.24

-2. Don't recognize | 1 0.02 0.25

0 | 773 13.07 13.32

1 | 9 0.15 13.48

2 | 3 0.05 13.53

4 | 3 0.05 13.58

5 | 25 0.42 14.00

6 | 2 0.03 14.03

7 | 2 0.03 14.07

8 | 1 0.02 14.09

9 | 1 0.02 14.10

10 | 42 0.71 14.81

11 | 2 0.03 14.85

12 | 2 0.03 14.88

15 | 408 6.90 21.78

20 | 21 0.36 22.13

22 | 3 0.05 22.18

24 | 1 0.02 22.20

25 | 9 0.15 22.35

29 | 1 0.02 22.37

30 | 351 5.94 28.31

32 | 5 0.08 28.39

33 | 1 0.02 28.41

34 | 2 0.03 28.44

35 | 19 0.32 28.76

38 | 1 0.02 28.78

40 | 317 5.36 34.14

42 | 1 0.02 34.16

44 | 1 0.02 34.17

45 | 26 0.44 34.61

46 | 1 0.02 34.63

47 | 1 0.02 34.65

48 | 1 0.02 34.66

49 | 1 0.02 34.68

50 | 293 4.95 39.63

51 | 5 0.08 39.72

52 | 2 0.03 39.75

53 | 1 0.02 39.77

55 | 17 0.29 40.06

57 | 1 0.02 40.07

59 | 1 0.02 40.09

60 | 438 7.41 47.50

62 | 2 0.03 47.53

63 | 1 0.02 47.55

64 | 1 0.02 47.57

65 | 38 0.64 48.21

68 | 3 0.05 48.26

69 | 1 0.02 48.28

70 | 679 11.48 59.76

71 | 2 0.03 59.79

72 | 3 0.05 59.84

73 | 3 0.05 59.89

74 | 2 0.03 59.93

75 | 82 1.39 61.31

76 | 1 0.02 61.33

77 | 3 0.05 61.38

78 | 4 0.07 61.45

80 | 89 1.50 62.95

82 | 2 0.03 62.99

83 | 1 0.02 63.00

84 | 1 0.02 63.02

85 | 918 15.52 78.54

86 | 4 0.07 78.61

87 | 7 0.12 78.73

88 | 1 0.02 78.75

89 | 3 0.05 78.80

90 | 119 2.01 80.81

92 | 2 0.03 80.84

94 | 2 0.03 80.88

95 | 47 0.79 81.67

96 | 3 0.05 81.72

97 | 2 0.03 81.76

98 | 7 0.12 81.87

99 | 14 0.24 82.11

100 | 1,058 17.89 100.00

--------------------------------+-----------------------------------

Total | 5,914 100.00

. tab ft\_rpc

PRE: Feeling Thermometer: |

Republican Presidential cand | Freq. Percent Cum.

--------------------------------+-----------------------------------

-9. Refused | 14 0.24 0.24

-8. Don't know | 19 0.32 0.56

-2. Don't recognize | 19 0.32 0.88

0 | 1,001 16.93 17.81

1 | 11 0.19 17.99

2 | 3 0.05 18.04

3 | 8 0.14 18.18

4 | 2 0.03 18.21

5 | 21 0.36 18.57

6 | 1 0.02 18.58

7 | 1 0.02 18.60

9 | 1 0.02 18.62

10 | 50 0.85 19.46

12 | 2 0.03 19.50

13 | 1 0.02 19.51

14 | 2 0.03 19.55

15 | 539 9.11 28.66

17 | 1 0.02 28.68

18 | 1 0.02 28.69

20 | 43 0.73 29.42

22 | 1 0.02 29.44

25 | 20 0.34 29.78

30 | 565 9.55 39.33

32 | 3 0.05 39.38

35 | 27 0.46 39.84

37 | 2 0.03 39.87

38 | 5 0.08 39.96

40 | 537 9.08 49.04

43 | 1 0.02 49.05

44 | 2 0.03 49.09

45 | 29 0.49 49.58

47 | 1 0.02 49.59

49 | 4 0.07 49.66

50 | 679 11.48 61.14

51 | 2 0.03 61.18

52 | 2 0.03 61.21

54 | 1 0.02 61.23

55 | 26 0.44 61.67

57 | 2 0.03 61.70

59 | 4 0.07 61.77

60 | 522 8.83 70.60

62 | 3 0.05 70.65

64 | 1 0.02 70.66

65 | 48 0.81 71.47

66 | 1 0.02 71.49

68 | 3 0.05 71.54

69 | 1 0.02 71.56

70 | 583 9.86 81.42

72 | 1 0.02 81.43

75 | 65 1.10 82.53

76 | 1 0.02 82.55

77 | 1 0.02 82.57

79 | 1 0.02 82.58

80 | 62 1.05 83.63

82 | 1 0.02 83.65

85 | 579 9.79 93.44

86 | 3 0.05 93.49

87 | 1 0.02 93.51

88 | 3 0.05 93.56

89 | 1 0.02 93.57

90 | 74 1.25 94.83

92 | 2 0.03 94.86

94 | 1 0.02 94.88

95 | 18 0.30 95.18

96 | 1 0.02 95.20

98 | 1 0.02 95.21

100 | 283 4.79 100.00

--------------------------------+-----------------------------------

Total | 5,914 100.00

gen ft = ft\_rpc - ft\_dpc

replace ft = . if ft\_rpc<0|ft\_rpc==.

replace ft = . if ft\_dpc<0|ft\_dpc==.

label var ft "Romney FT - Obama FT"

. hist ft, percent

(bin=37, start=-100, width=5.4054054)



\*NOW LET US GENERATE SOME DEMOGRAPHIC VARIABLES

\*EDUCATION:

. tab dem\_edugroup

PRE: SUMMARY- R level of highest |

education | Freq. Percent Cum.

----------------------------------------+-----------------------------------

-9. Refused | 8 0.14 0.14

-2. Missing, other not codeable to 1-5 | 42 0.71 0.85

1. Less than high school credential | 622 10.52 11.36

2. High school credential | 1,442 24.38 35.75

3. Some post-high-school, no bachelor's | 1,972 33.34 69.09

4. Bachelor's degree | 1,120 18.94 88.03

5. Graduate degree | 708 11.97 100.00

----------------------------------------+-----------------------------------

Total | 5,914 100.00

. clonevar educ = dem\_edugroup

. recode educ (-9/-2=.)

(educ: 50 changes made)

. tab educ

PRE: SUMMARY- R level of highest |

education | Freq. Percent Cum.

----------------------------------------+-----------------------------------

1. Less than high school credential | 622 10.61 10.61

2. High school credential | 1,442 24.59 35.20

3. Some post-high-school, no bachelor's | 1,972 33.63 68.83

4. Bachelor's degree | 1,120 19.10 87.93

5. Graduate degree | 708 12.07 100.00

----------------------------------------+-----------------------------------

Total | 5,864 100.00

\*AGE:

. tab dem\_agegrp\_iwdate

PRE: SUMMARY- R age on interview date |

(age group) | Freq. Percent Cum.

----------------------------------------+-----------------------------------

-2. Missing, birthdate fields left blan | 60 1.01 1.01

01. Age group 17-20 | 183 3.09 4.11

02. Age group 21-24 | 328 5.55 9.66

03. Age group 25-29 | 425 7.19 16.84

04. Age group 30-34 | 456 7.71 24.55

05. Age group 35-39 | 405 6.85 31.40

06. Age group 40-44 | 482 8.15 39.55

07. Age group 45-49 | 466 7.88 47.43

08. Age group 50-54 | 641 10.84 58.27

09. Age group 55-59 | 671 11.35 69.61

10. Age group 60-64 | 585 9.89 79.51

11. Age group 65-69 | 520 8.79 88.30

12. Age group 70-74 | 331 5.60 93.90

13. Age group 75 or older | 361 6.10 100.00

----------------------------------------+-----------------------------------

Total | 5,914 100.00

\*LOTS OF CATEGORIES SO LET’S RECODE A BIT:

. clonevar age = dem\_agegrp\_iwdate

. recode age (-2=.) (2/3=1) (4/5=2) (6/7=3) (8/9=4) (10/11=5) (12/13=6)

(age: 5671 changes made)

. label def age 1 "17-29" 2 "30-39" 3 "40-49" 4 "50-59" 5 "60-69" 6 "70+"

. label values age age

. tab dem\_agegrp\_iwdate age, mi

PRE: SUMMARY- R age |

on interview date | PRE: SUMMARY- R age on interview date (age group)

(age group) | 17-29 30-39 40-49 50-59 60-69 70+ . | Total

----------------------+-----------------------------------------------------------------------------+----------

-2. Missing, birthdat | 0 0 0 0 0 0 60 | 60

01. Age group 17-20 | 183 0 0 0 0 0 0 | 183

02. Age group 21-24 | 328 0 0 0 0 0 0 | 328

03. Age group 25-29 | 425 0 0 0 0 0 0 | 425

04. Age group 30-34 | 0 456 0 0 0 0 0 | 456

05. Age group 35-39 | 0 405 0 0 0 0 0 | 405

06. Age group 40-44 | 0 0 482 0 0 0 0 | 482

07. Age group 45-49 | 0 0 466 0 0 0 0 | 466

08. Age group 50-54 | 0 0 0 641 0 0 0 | 641

09. Age group 55-59 | 0 0 0 671 0 0 0 | 671

10. Age group 60-64 | 0 0 0 0 585 0 0 | 585

11. Age group 65-69 | 0 0 0 0 520 0 0 | 520

12. Age group 70-74 | 0 0 0 0 0 331 0 | 331

13. Age group 75 or o | 0 0 0 0 0 361 0 | 361

----------------------+-----------------------------------------------------------------------------+----------

Total | 936 861 948 1,312 1,105 692 60 | 5,914

\*INCOME:

. tab inc\_incgroup\_pre

PRE: CASI/WEB: SUMARY- Pre family |

income (see also: incgroup\_prepost) | Freq. Percent Cum.

----------------------------------------+-----------------------------------

-9. Refused | 235 3.97 3.97

-8. Don't know | 124 2.10 6.07

-2. Missing; IWR mistakenly entered '2' | 161 2.72 8.79

01. Under $5,000 | 567 9.59 18.38

02. $5,000-$9,999 | 177 2.99 21.37

03. $10,000-$12,499 | 182 3.08 24.45

04. $12,500-$14,999 | 94 1.59 26.04

05. $15,000-$17,499 | 166 2.81 28.85

06. $17,500-$19,999 | 91 1.54 30.39

07. $20,000-$22,499 | 196 3.31 33.70

08. $22,500-$24,999 | 111 1.88 35.58

09. $25,000-$27,499 | 204 3.45 39.03

10. $27,500-$29,999 | 88 1.49 40.51

11. $30,000-$34,999 | 305 5.16 45.67

12. $35,000-$39,999 | 271 4.58 50.25

13. $40,000-$44,999 | 246 4.16 54.41

14. $45,000-$49,999 | 169 2.86 57.27

15. $50,000-$54,999 | 263 4.45 61.72

16. $55,000-$59,999 | 132 2.23 63.95

17. $60,000-$64,999 | 218 3.69 67.64

18. $65,000-$69,999 | 155 2.62 70.26

19. $70,000-$74,999 | 164 2.77 73.03

20. $75,000-$79,999 | 183 3.09 76.12

21. $80,000-$89,999 | 253 4.28 80.40

22. $90,000-$99,999 | 188 3.18 83.58

23. $100,000-$109,999 | 213 3.60 87.18

24. $110,000-$124,999 | 171 2.89 90.07

25. $125,000-$149,999 | 195 3.30 93.37

26. $150,000-$174,999 | 148 2.50 95.87

27. $175,000-$249,999 | 152 2.57 98.44

28. $250,000 or more | 92 1.56 100.00

----------------------------------------+-----------------------------------

Total | 5,914 100.00

\*LOTS OF CATEGORIES SO LET’S RECODE A BIT:

clonevar income = inc\_incgroup\_pre

recode income (-9/-2=.) (1/8=1) (9/12=2) (13/16=3) (17/19=4) (20/22=5) (23/25=6) (26/28=7)

label def income 1 "<$25K" 2 "$25-$39K" 3 "$40-$59K" 4 "$60-$74K" 5 "$75-$99K" 6 "$100-$150K" 7 "$150K+"

label values income income

. tab inc\_incgroup\_pre income

PRE: CASI/WEB: |

SUMARY- Pre family |

income (see also: | PRE: CASI/WEB: SUMARY- Pre family income (see also: incgroup\_prepost)

incgroup\_prepost) | <$25K $25-$39K $40-$59K $60-$74K $75-$99K $100-$150 $150K+ | Total

----------------------+-----------------------------------------------------------------------------+----------

01. Under $5,000 | 567 0 0 0 0 0 0 | 567

02. $5,000-$9,999 | 177 0 0 0 0 0 0 | 177

03. $10,000-$12,499 | 182 0 0 0 0 0 0 | 182

04. $12,500-$14,999 | 94 0 0 0 0 0 0 | 94

05. $15,000-$17,499 | 166 0 0 0 0 0 0 | 166

06. $17,500-$19,999 | 91 0 0 0 0 0 0 | 91

07. $20,000-$22,499 | 196 0 0 0 0 0 0 | 196

08. $22,500-$24,999 | 111 0 0 0 0 0 0 | 111

09. $25,000-$27,499 | 0 204 0 0 0 0 0 | 204

10. $27,500-$29,999 | 0 88 0 0 0 0 0 | 88

11. $30,000-$34,999 | 0 305 0 0 0 0 0 | 305

12. $35,000-$39,999 | 0 271 0 0 0 0 0 | 271

13. $40,000-$44,999 | 0 0 246 0 0 0 0 | 246

14. $45,000-$49,999 | 0 0 169 0 0 0 0 | 169

15. $50,000-$54,999 | 0 0 263 0 0 0 0 | 263

16. $55,000-$59,999 | 0 0 132 0 0 0 0 | 132

17. $60,000-$64,999 | 0 0 0 218 0 0 0 | 218

18. $65,000-$69,999 | 0 0 0 155 0 0 0 | 155

19. $70,000-$74,999 | 0 0 0 164 0 0 0 | 164

20. $75,000-$79,999 | 0 0 0 0 183 0 0 | 183

21. $80,000-$89,999 | 0 0 0 0 253 0 0 | 253

22. $90,000-$99,999 | 0 0 0 0 188 0 0 | 188

23. $100,000-$109,999 | 0 0 0 0 0 213 0 | 213

24. $110,000-$124,999 | 0 0 0 0 0 171 0 | 171

25. $125,000-$149,999 | 0 0 0 0 0 195 0 | 195

26. $150,000-$174,999 | 0 0 0 0 0 0 148 | 148

27. $175,000-$249,999 | 0 0 0 0 0 0 152 | 152

28. $250,000 or more | 0 0 0 0 0 0 92 | 92

----------------------+-----------------------------------------------------------------------------+----------

Total | 1,584 868 810 537 624 579 392 | 5,394

\*RACE/ETHNICITY:

. tab dem\_raceeth

PRE: SUMMARY- R race |

and ethnicity group | Freq. Percent Cum.

----------------------+-----------------------------------

-9. Refused | 27 0.46 0.46

-8. Don't know | 2 0.03 0.49

1. White non-Hispanic | 3,495 59.10 59.59

2. Black non-Hispanic | 1,016 17.18 76.77

3. Hispanic | 1,005 16.99 93.76

4. Other non-Hispanic | 369 6.24 100.00

----------------------+-----------------------------------

Total | 5,914 100.00

\*WANT TO INCLUDE ASIAN-AMERICANS, SO FIND OTHER VARIABLE:

. tab dem\_racecps\_asian

PRE: RESTRICTED: Race |

self-identification: mention |

Asian | Freq. Percent Cum.

--------------------------------+-----------------------------------

0. Not selected by R | 5,807 98.19 98.19

1. Selected by R | 107 1.81 100.00

--------------------------------+-----------------------------------

Total | 5,914 100.00

\*NOW COMBINE THEM:

clonevar raceeth = dem\_raceeth

recode raceeth (-9/-8=.) (4=5)

replace raceeth = 4 if dem\_racecps\_asian==1

label def raceeth 1 "white" 2 "black" 3 "hispanic" 4 "asian" 5 "other"

label values raceeth raceeth

tab raceeth

PRE: |

SUMMARY- R |

race and |

ethnicity |

group | Freq. Percent Cum.

------------+-----------------------------------

white | 3,495 59.39 59.39

black | 1,016 17.26 76.65

hispanic | 998 16.96 93.61

asian | 107 1.82 95.43

other | 269 4.57 100.00

------------+-----------------------------------

Total | 5,885 100.00

\*RELIGION:

. tab relig\_4cat

PRE: SUMMARY- full |

RELIG section: R |

Catholic, oth |

Christian, other, not |

relig | Freq. Percent Cum.

----------------------+-----------------------------------

-9. Refused | 29 0.49 0.49

-8. Don't know | 10 0.17 0.66

-4. Error | 427 7.22 7.88

1. Catholic | 1,323 22.37 30.25

2. Other Christian | 2,418 40.89 71.14

3. Other religion | 126 2.13 73.27

4. Not religious | 1,581 26.73 100.00

----------------------+-----------------------------------

Total | 5,914 100.00

. clonevar relig = relig\_4cat

. recode relig (-9/-4=.)

(relig: 466 changes made)

\*GENDER:

tab gender\_respondent

SUMMARY: Gender |

of Respondent |

for both FTF and |

Web modes | Freq. Percent Cum.

-----------------+-----------------------------------

1. Male | 2,845 48.11 48.11

2. Female | 3,069 51.89 100.00

-----------------+-----------------------------------

Total | 5,914 100.00

. gen female = gender\_respondent

. recode female (2=1) (1=0)

(female: 5914 changes made)

label def female 0 male 1 female

label values female female

\*SEXUAL ORIENTATION:

\*tab orientn\_rgay

PRE: CASI/WEB Sexual orientation |

of R | Freq. Percent Cum.

----------------------------------+-----------------------------------

-9. Refused | 135 2.28 2.28

-8. Don't know | 40 0.68 2.96

1. Heterosexual or straight | 5,499 92.98 95.94

2. Homosexual or gay (or lesbian) | 124 2.10 98.04

3. Bisexual | 116 1.96 100.00

----------------------------------+-----------------------------------

Total | 5,914 100.00

gen lgb = orientn\_rgay

label def lgb 0 "not LGB" 1 "LGB"

label values lgb lgb

tab lgb orientn\_rgay, mi

| PRE: CASI/WEB Sexual orientation of R

lgb | -9. Refus -8. Don't 1. Hetero 2. Homose 3. Bisexu | Total

-----------+-------------------------------------------------------+----------

not LGB | 0 0 5,499 0 0 | 5,499

LGB | 0 0 0 124 116 | 240

. | 135 40 0 0 0 | 175

-----------+-------------------------------------------------------+----------

Total | 135 40 5,499 124 116 | 5,914

\*A GOOD WAY TO GET A SENSE OF THE RELATIONSHIPS BETWEEN EACH OF THESE PREDICTORS AND THE DEPENDENT VARIABLE IS WITH THE FOLLOWING COMMAND:

grmeanby raceeth relig female lgb, summarize(ft) aspect(.6)



NOMINAL LEVEL VARIABLES

DICHOTOMOUS VARIABLES

grmeanby age income educ, summarize(ft) aspect(1.2)



ORDINAL VARIABLES

RELATIONSHIPS APPEAR MONOTONIC, BUT NON-LINEAR

RELATIONSHIP IS NOT MONOTONIC

\*NOMINAL-LEVEL PREDICTORS MUST ALWAYS BE ENTERED INTO A REGRESSION AS INDICATORS: THEIR VALUES TAKE ON NO NATURAL ORDERING, AND THUS IT IS NON-SENSICAL TO CONSIDER THE EFFECT OF A UNIT CHANGE IN X ON Y.

\*DICHOTOMOUS VARIABLES ARE ALWAYS ENTERED INTO A REGRESSION AS INDICATORS THAT TAKE ON THE VALUE ONE IF THE UNIT HAS THE CHARACTERISTIC AND ZERO IF NOT.

\*BEST PRACTICE IS TO ENTER ORDINAL-LEVEL VARIABLES INTO REGRESSIONS AS INDICATORS IN WHICH THEY HAVE BEEN “DUMMIED OUT.” THIS AVOIDS ASSUMING THAT THE RELATIONSHIP BETWEEN X AND Y IS LINEAR, WHICH IN MANY CASES (AS IN AGE, INCOME AND EDUC ABOVE) CAN BE A MISSPECIFICATION.

\*IN STATA WE DO IT LIKE THIS:

. reg ft i.raceeth i.relig i.age i.income i.educ female lgb

\*THE i. PREFIX TELLS STATA TO TREAT AS CATEGORICAL VARIABLE AND CREATE INDICATORS FOR ALL BUT ONE OF THE CATEGORIES IN THE VARIABLE. ONE OF THE CATEGORIES IS LEFT OUT IN ORDER TO AVOID PERFECT MULTICOLLINEARITY, WHICH WOULD MAKE THE MODEL UNESTIMABLE.

\*THIS “LEFT OUT” CATEGORY IS CALLED THE “EXCLUDED” CATEGORY OR THE “BASE” CATEGORY.

\*NOTE THAT i. PREFIX NOT NEEDED FOR female AND lgb AS THEY ARE ALREADY INDICATOR VARIABLES IN THEIR OWN RIGHT.

\* THE INTERPRETATION OF A COEFFICIENT ON A CATEGORICAL-LEVEL PREDICTOR IS THE ESTIMATED CHANGE IN THE VALUE OF THE DV WHEN THE PREDICTOR SHIFTS FROM THE BASE CATEGORY TO THE CATEGORY OF INTEREST

\* THE SIGNIFICANCE TEST ON THIS COEFFICIENT IS THUS A TEST OF THE NULL THAT THIS SHIFT IS NOT SIGNIFICANTLY DIFFERENT FROM ZERO.

\* THE INTERPRETATION OF A COEFFICIENT ON AN INDICATOR PREDICTOR IS SIMILAR: THE ESTIMATED CHANGE IN THE VALUE OF THE DV WHEN THE PREDICTOR SHIFTS FROM THE CATEGORY SCORED ZERO TO THE CATEGORY SCORED ONE.

. reg ft i.raceeth i.relig i.age i.income i.educ female lgb

Source | SS df MS Number of obs = 4782

-------------+------------------------------ F( 24, 4757) = 59.49

Model | 3976634.92 24 165693.122 Prob > F = 0.0000

Residual | 13249952.5 4757 2785.35895 R-squared = 0.2308

-------------+------------------------------ Adj R-squared = 0.2270

Total | 17226587.5 4781 3603.1348 Root MSE = 52.777

-----------------------------------------------------------------------------------------------------------------

ft | Coef. Std. Err. t P>|t| [95% Conf. Interval]

------------------------------------------------+----------------------------------------------------------------

raceeth |

**A**

black | -67.25865 2.317571 -29.02 0.000 -71.80216 -62.71513

hispanic | -26.15815 2.27298 -11.51 0.000 -30.61425 -21.70206

asian | -3.807497 5.964202 -0.64 0.523 -15.50009 7.885099

other | -13.74217 3.852544 -3.57 0.000 -21.29494 -6.189402

|

relig |

**B**

2. Other Christian | 12.59192 2.053897 6.13 0.000 8.565327 16.61851

3. Other religion | -14.48476 5.43076 -2.67 0.008 -25.13156 -3.837951

4. Not religious | -12.2799 2.186692 -5.62 0.000 -16.56683 -7.992973

|

age |

30-39 | 1.654376 2.862497 0.58 0.563 -3.957442 7.266194

**C**

40-49 | 3.288047 2.815598 1.17 0.243 -2.231828 8.807922

50-59 | 5.285702 2.624267 2.01 0.044 .1409252 10.43048

60-69 | 8.605932 2.709209 3.18 0.001 3.294628 13.91724

70+ | 17.42066 3.040909 5.73 0.000 11.45907 23.38225

|

income |

$25-$39K | 2.542747 2.426979 1.05 0.295 -2.215254 7.300748

$40-$59K | 8.591183 2.486533 3.46 0.001 3.716427 13.46594

$60-$74K | 7.703737 2.909087 2.65 0.008 2.00058 13.40689

$75-$99K | 9.433229 2.764979 3.41 0.001 4.01259 14.85387

$100-$150K | 5.955101 2.92654 2.03 0.042 .2177288 11.69247

$150K+ | 14.34508 3.356317 4.27 0.000 7.765141 20.92501

|

educ |

2. High school credential | 1.950567 2.992657 0.65 0.515 -3.916426 7.817559

3. Some post-high-school, no bachelor's degree | 4.532723 2.913597 1.56 0.120 -1.179276 10.24472

4. Bachelor's degree | 5.670197 3.219608 1.76 0.078 -.6417251 11.98212

**D**

5. Graduate degree | -10.71784 3.524855 -3.04 0.002 -17.62818 -3.80749

|

female | -10.52796 1.54741 -6.80 0.000 -13.5616 -7.494316

**E**

lgb | -28.10924 3.821109 -7.36 0.000 -35.60039 -20.6181

\_cons | -5.564657 3.912867 -1.42 0.155 -13.23569 2.106373

-----------------------------------------------------------------------------------------------------------------

\*TAKE A FEW MOMENTS TO INTERPRET COEFFICIENTS A THROUGH E. WRITE A SENTENCE OR TWO FOR EACH ON A BLANK PIECE OF PAPER. BE SURE TO DISCUSS THEIR MAGNITUDE AND STATISTICAL SIGNIFICANCE.