

Homework 60046+1061

1) i) age of the woman, period of woman, Health care of woman, etc.

this factors affect on y but this simple model want to focus the relationship between fertility to years of education so it would be a good predictions there must be (uncorrelated) no relationship between all this factors (w) with level of education.

ii) Yes it will, ceteris paribus is holding all other factors fixed (in U_i) so that we can measure or estimate the effect of x on y

4) i) birth weight will equal 119.77 ounces

$$\text{birth weight} = 119.77 - 0.514(20) = 109.49 \text{ ounces}$$

so we can see that there is an effect from mother smoked per day during pregnancy to the birth weight then if number of cigarettes increase by 1, the infant birth weight will decrease by 0.514

ii) I think this one is clear. We know that smoking is not good so it might have negative effect to the infant

iii) $125 = 119.77 - 0.514 x_i$

$$5.29 = -0.514 \text{ Cigs}$$

$$-10.175 = \text{Cigs}$$

It's impossible from this model so the least cigarettes can be is zero

iv) mean the number of women who smoke is .15 (1388) = 208.2

No, it doesn't

1) i) because hsperc is from the number large to small mean bad grade to good grade

$$\text{colgpa} = 1.392 - 0.135 \text{ hsperc} + 0.0148 \text{ sat}^{(19950)}$$

$$= 1.392 - 2.7 + 1.554 = 0.246$$

ii) Their colgpa will higher 0.2072 than colgpa_B, which is not much because the multiple of sat is very small

iv) There would be a bias estimator, not strong predictor

2) i) When we have more siblings, a year of schooling will decrease 0.04 so if you want to reduce education by one year so you will have about 11 siblings

ii) There is an positive coefficient on meduc, holding other factor fixed, meduc associate with .131 on the yearing education

iii This can predicted that the ~~educ~~-years of schooling of A is lower or less than B
because ~~man~~ have mother & father education higher than man_B