# From standard model

Call:

lm(formula = FS ~ AGE2015 + hhtotalxx + AGE2015 + pargradex +

ttlhhinc + FA + SSatis + scpubpri + sneighbrx + sefuturex +

chispan + camind + casian + cpaci + cwhite + cblack, data = parental\_involvement)

Residuals:

Min 1Q Median 3Q Max

-6.3915 -0.9347 0.0639 0.9726 5.9552

Coefficients:

Estimate Std. Error t value Pr(>|t|)

(Intercept) 3.088049 0.143197 21.565 < 2e-16 \*\*\*

AGE2015 -0.105521 0.003394 -31.094 < 2e-16 \*\*\*

hhtotalxx 0.018799 0.010135 1.855 0.06364 .

pargradex 0.118607 0.013945 8.505 < 2e-16 \*\*\*

ttlhhinc 0.084067 0.005608 14.992 < 2e-16 \*\*\*

FA 0.164244 0.004475 36.702 < 2e-16 \*\*\*

SSatis 0.052631 0.001380 38.133 < 2e-16 \*\*\*

scpubpri -0.259117 0.016829 -15.397 < 2e-16 \*\*\*

sneighbrx -0.098188 0.032031 -3.065 0.00218 \*\*

sefuturex 0.110129 0.011063 9.955 < 2e-16 \*\*\*

chispan -0.150990 0.033319 -4.532 5.90e-06 \*\*\*

camind 0.026655 0.073831 0.361 0.71809

casian -0.383574 0.052115 -7.360 1.94e-13 \*\*\*

cpaci -0.116038 0.117930 -0.984 0.32515

cwhite 0.038841 0.042008 0.925 0.35519

cblack -0.011453 0.047937 -0.239 0.81118

---

Signif. codes: 0 ‘\*\*\*’ 0.001 ‘\*\*’ 0.01 ‘\*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 1.414 on 13507 degrees of freedom

Multiple R-squared: 0.3738, Adjusted R-squared: 0.3731

F-statistic: 537.6 on 15 and 13507 DF, p-value: < 2.2e-16

# GLM POISSON Model

Call:

glm(formula = FS ~ AGE2015 + hhtotalxx + AGE2015 + pargradex +

ttlhhinc + FA + SSatis + scpubpri + sneighbrx + sefuturex +

chispan + camind + casian + cpaci + cwhite + cblack, family = poisson(),

data = parental\_involvement)

Deviance Residuals:

Min 1Q Median 3Q Max

-3.6558 -0.5085 0.0331 0.4824 2.9023

Coefficients:

Estimate Std. Error z value Pr(>|z|)

(Intercept) 1.0524292 0.0502001 20.965 < 2e-16 \*\*\*

AGE2015 -0.0257468 0.0011856 -21.717 < 2e-16 \*\*\*

hhtotalxx 0.0059810 0.0036283 1.648 0.099259 .

pargradex 0.0332405 0.0050566 6.574 4.91e-11 \*\*\*

ttlhhinc 0.0219595 0.0020284 10.826 < 2e-16 \*\*\*

FA 0.0417360 0.0015748 26.503 < 2e-16 \*\*\*

SSatis 0.0102431 0.0003999 25.617 < 2e-16 \*\*\*

scpubpri -0.0528161 0.0053680 -9.839 < 2e-16 \*\*\*

sneighbrx -0.0213331 0.0111103 -1.920 0.054843 .

sefuturex 0.0316362 0.0041655 7.595 3.08e-14 \*\*\*

chispan -0.0434221 0.0119798 -3.625 0.000289 \*\*\*

camind 0.0090205 0.0263170 0.343 0.731777

casian -0.1026470 0.0186863 -5.493 3.95e-08 \*\*\*

cpaci -0.0212722 0.0422011 -0.504 0.614214

cwhite 0.0164646 0.0153015 1.076 0.281923

cblack 0.0030535 0.0172927 0.177 0.859842

---

Signif. codes: 0 ‘\*\*\*’ 0.001 ‘\*\*’ 0.01 ‘\*’ 0.05 ‘.’ 0.1 ‘ ’ 1

(Dispersion parameter for poisson family taken to be 1)

Null deviance: 13186.7 on 13522 degrees of freedom

Residual deviance: 9291.4 on 13507 degrees of freedom

AIC: 51200

Number of Fisher Scoring iterations: 4

> coef(posfit)

(Intercept) AGE2015 hhtotalxx pargradex ttlhhinc FA SSatis scpubpri sneighbrx

1.052429150 -0.025746774 0.005981028 0.033240539 0.021959544 0.041735960 0.010243128 -0.052816069 -0.021333138

sefuturex chispan camind casian cpaci cwhite cblack

0.031636161 -0.043422072 0.009020483 -0.102646956 -0.021272196 0.016464609 0.003053476

# Variables that we are using:

Age2015= Age of child as of December 31st, 2015

Hhtotalxx= number of people in the household

Pargradex= parent or guardians highest level of education

Ttlhhinc= total household income, categorical

Scpubpri= child is enrolled in a public or private school

Sneighbrx= parent moved to neighborhood for school

Sefuturex=parent’s expectation for child’s future education (not finish HS to graduate school)

RACEETH2- recoded race and ethnicity of child

**FS- count of school activities parent participated in. Comprised of:**

FSSPORTX (attended school or class event, science fair, etc.), FSVOL(volunteered at school), FSMTNG(attended a general school meeting), FSPTMTNG (attended a PTA meeting, FSATCNFN ( gone to a parent teacher conference), FSFUNDRS (participated in fundraising for the school), FSCOMMTE (served on a school committee), FSCOUNSLR (met with the guidance counselor in person).

**FA-count of at home activities**

FOSTORY2X (told child a story past week), focrafts(did arts and crafts past week), fogames (played games with child past week), fobuildx (worked on prokect with child past week), fosport(played sports with child past week), forespon (discussed time management with child past week), fohistx (talked about family history with child past week), folibrayx (took child to library past month, fobookstx (took child to bookstore past month), foconcrtx (took child to concert past month), fomuseumx (took child to museum past month), fozoox (took child to zoo past month), fogroupx (attended event with child past month), fosprtevx (attend athletic event with child past month)

**SSatis- satisfaction with school**

FCSHOOL (satisfaction with school child attends, FCTEACHR (satisfaction with teachers), FCSTDS (satisfaction with academic standards), FCORDER (satisfaction with order and discipline at school), FCSUPPRT (satisfaction with way school interacts with parents

Found and corrected error in code

fsmtng is in twice but second one should be fsptmtng