> library(readr)

> affairs1 <- read\_csv("C:/Users/Admin/Desktop/affairs1.csv")

> View(affairs1)

> logit<- glm(affair~id+factor(male)+age+yrsmarr+factor(kids)+relig+educ+occup+ratemarr+naffairs+factor(vryhap)+factor(hapavg)+factor(avgmarr)+factor(unhap)+factor(vryrel)+factor(smerel)+factor(slghtrel)+factor(notrel),family = poisson,data = affairs1)

> summary(logit)

Call:

glm(formula = affair ~ id + factor(male) + age + yrsmarr + factor(kids) +

relig + educ + occup + ratemarr + naffairs + factor(vryhap) +

factor(hapavg) + factor(avgmarr) + factor(unhap) + factor(vryrel) +

factor(smerel) + factor(slghtrel) + factor(notrel), family = poisson,

data = affairs1)

Deviance Residuals:

Min 1Q Median 3Q Max

-0.9538 -0.5202 -0.4688 -0.3838 1.6835

Coefficients: (2 not defined because of singularities)

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

(Intercept) -1.679e+00 1.079e+00 -1.556 0.120

id -5.929e-07 1.084e-04 -0.005 0.996

factor(male)1 1.697e-01 2.065e-01 0.822 0.411

age -7.381e-03 1.581e-02 -0.467 0.641

yrsmarr -6.322e-03 2.735e-02 -0.231 0.817

factor(kids)1 3.291e-01 2.391e-01 1.376 0.169

relig -3.055e-01 2.789e-01 -1.095 0.273

educ 3.619e-02 4.272e-02 0.847 0.397

occup -3.360e-02 6.208e-02 -0.541 0.588

ratemarr -1.650e-01 4.139e-01 -0.399 0.690

naffairs 2.027e-01 1.829e-02 11.082 <2e-16 \*\*\*

factor(vryhap)1 2.810e-01 1.338e+00 0.210 0.834

factor(hapavg)1 3.895e-01 9.221e-01 0.422 0.673

factor(avgmarr)1 3.510e-01 5.538e-01 0.634 0.526

factor(unhap)1 NA NA NA NA

factor(vryrel)1 9.906e-01 9.831e-01 1.008 0.314

factor(smerel)1 5.960e-01 6.865e-01 0.868 0.385

factor(slghtrel)1 5.079e-01 4.214e-01 1.205 0.228

factor(notrel)1 NA NA NA NA

---

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

(Dispersion parameter for poisson family taken to be 1)

Null deviance: 416.39 on 600 degrees of freedom

Residual deviance: 248.59 on 584 degrees of freedom

AIC: 582.59

Number of Fisher Scoring iterations: 5

**After removing id:**

> logit1<- glm(affair~factor(male)+age+yrsmarr+factor(kids)+relig+educ+occup+ratemarr+naffairs+factor(vryhap)+factor(hapavg)+factor(avgmarr)+factor(unhap)+factor(vryrel)+factor(smerel)+factor(slghtrel)+factor(notrel),family = poisson,data = affairs1)

> summary(logit1)

Call:

glm(formula = affair ~ factor(male) + age + yrsmarr + factor(kids) +

relig + educ + occup + ratemarr + naffairs + factor(vryhap) +

factor(hapavg) + factor(avgmarr) + factor(unhap) + factor(vryrel) +

factor(smerel) + factor(slghtrel) + factor(notrel), family = poisson,

data = affairs1)

Deviance Residuals:

Min 1Q Median 3Q Max

-0.9535 -0.5201 -0.4688 -0.3838 1.6837

Coefficients: (2 not defined because of singularities)

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

(Intercept) -1.679147 1.073952 -1.564 0.118

factor(male)1 0.169622 0.205679 0.825 0.410

age -0.007378 0.015793 -0.467 0.640

yrsmarr -0.006343 0.027096 -0.234 0.815

factor(kids)1 0.329189 0.238847 1.378 0.168

relig -0.305529 0.278831 -1.096 0.273

educ 0.036197 0.042700 0.848 0.397

occup -0.033582 0.061948 -0.542 0.588

ratemarr -0.165129 0.413419 -0.399 0.690

naffairs 0.202741 0.018227 11.123 <2e-16 \*\*\*

factor(vryhap)1 0.281289 1.337649 0.210 0.833

factor(hapavg)1 0.389738 0.921265 0.423 0.672

factor(avgmarr)1 0.351101 0.553524 0.634 0.526

factor(unhap)1 NA NA NA NA

factor(vryrel)1 0.990882 0.981542 1.010 0.313

factor(smerel)1 0.596264 0.685347 0.870 0.384

factor(slghtrel)1 0.507962 0.421131 1.206 0.228

factor(notrel)1 NA NA NA NA

---

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

(Dispersion parameter for poisson family taken to be 1)

Null deviance: 416.39 on 600 degrees of freedom

Residual deviance: 248.59 on 585 degrees of freedom

AIC: 580.59

Number of Fisher Scoring iterations: 5

**After removing yrsmarr & factor(vryhap)1:**

> logit2<- glm(affair~factor(male)+age+factor(kids)+relig+educ+occup+ratemarr+naffairs+factor(hapavg)+factor(avgmarr)+factor(unhap)+factor(vryrel)+factor(smerel)+factor(slghtrel)+factor(notrel),family = poisson,data = affairs1)

> summary(logit2)

Call:

glm(formula = affair ~ factor(male) + age + factor(kids) + relig +

educ + occup + ratemarr + naffairs + factor(hapavg) + factor(avgmarr) +

factor(unhap) + factor(vryrel) + factor(smerel) + factor(slghtrel) +

factor(notrel), family = poisson, data = affairs1)

Deviance Residuals:

Min 1Q Median 3Q Max

-0.9481 -0.5236 -0.4679 -0.3842 1.6831

Coefficients: (1 not defined because of singularities)

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

(Intercept) -1.71564 0.91469 -1.876 0.0607 .

factor(male)1 0.17937 0.20156 0.890 0.3735

age -0.01007 0.01088 -0.926 0.3546

factor(kids)1 0.31425 0.23026 1.365 0.1723

relig -0.30400 0.27880 -1.090 0.2755

educ 0.03600 0.04269 0.843 0.3991

occup -0.03412 0.06191 -0.551 0.5815

ratemarr -0.09078 0.10653 -0.852 0.3941

naffairs 0.20181 0.01781 11.332 <2e-16 \*\*\*

factor(hapavg)1 0.17694 0.22630 0.782 0.4343

factor(avgmarr)1 0.21476 0.28274 0.760 0.4475

factor(unhap)1 -0.06626 0.33386 -0.198 0.8427

factor(vryrel)1 0.97854 0.98016 0.998 0.3181

factor(smerel)1 0.58753 0.68446 0.858 0.3907

factor(slghtrel)1 0.49884 0.41949 1.189 0.2344

factor(notrel)1 NA NA NA NA

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

(Dispersion parameter for poisson family taken to be 1)

Null deviance: 416.39 on 600 degrees of freedom

Residual deviance: 248.65 on 586 degrees of freedom

AIC: 578.65

Number of Fisher Scoring iterations: 5