Add health Analyis for R

2023-01-04

Logistic Regression

```
##
## Call:
## glm(formula = collegedegree ~ race + gender + parentcollege +
##     gpa + expelled + teachertrouble + attentiontrouble + hwtrouble +
##     socialtrouble + closeschool + partschool + prejschool + happyschool +
##     fairschool + safeschool + wave1grade, family = "binomial",
##     data = total)
##
## Deviance Residuals:
##     Min       1Q   Median       3Q      Max
## -1.3308  -0.9468  -0.8124   1.3233   1.9355
##
## Coefficients:
##                   Estimate Std. Error z value Pr(>|z|)
## (Intercept)      -0.146244   0.994579  -0.147  0.88310
## race              0.350959   0.134970   2.600  0.00932 **
## gender           -0.375729   0.126574  -2.968  0.00299 **
## parentcollege    -0.112041   0.128464  -0.872  0.38312
## gpa              -0.151081   0.086747  -1.742  0.08157 .
## expelled         -0.375957   0.312246  -1.204  0.22857
## teachertrouble    0.379056   0.189850   1.997  0.04587 *
## attentiontrouble -0.171361   0.154444  -1.110  0.26720
## hwtrouble         0.190727   0.157201   1.213  0.22503
## socialtrouble    -0.273170   0.182407  -1.498  0.13424
## closeschool      -0.001133   0.149540  -0.008  0.99396
## partschool        0.011576   0.166281   0.070  0.94450
## prejschool       -0.028999   0.127782  -0.227  0.82047
## happyschool      -0.058684   0.147519  -0.398  0.69077
## fairschool        0.167600   0.137772   1.217  0.22379
## safeschool       -0.280561   0.149553  -1.876  0.06066 .
## wave1grade        0.042931   0.037643   1.140  0.25409
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## (Dispersion parameter for binomial family taken to be 1)
##
##     Null deviance: 1601.8  on 1236  degrees of freedom
## Residual deviance: 1567.8  on 1220  degrees of freedom
##   (2954 observations deleted due to missingness)
## AIC: 1601.8
##
## Number of Fisher Scoring iterations: 4
```

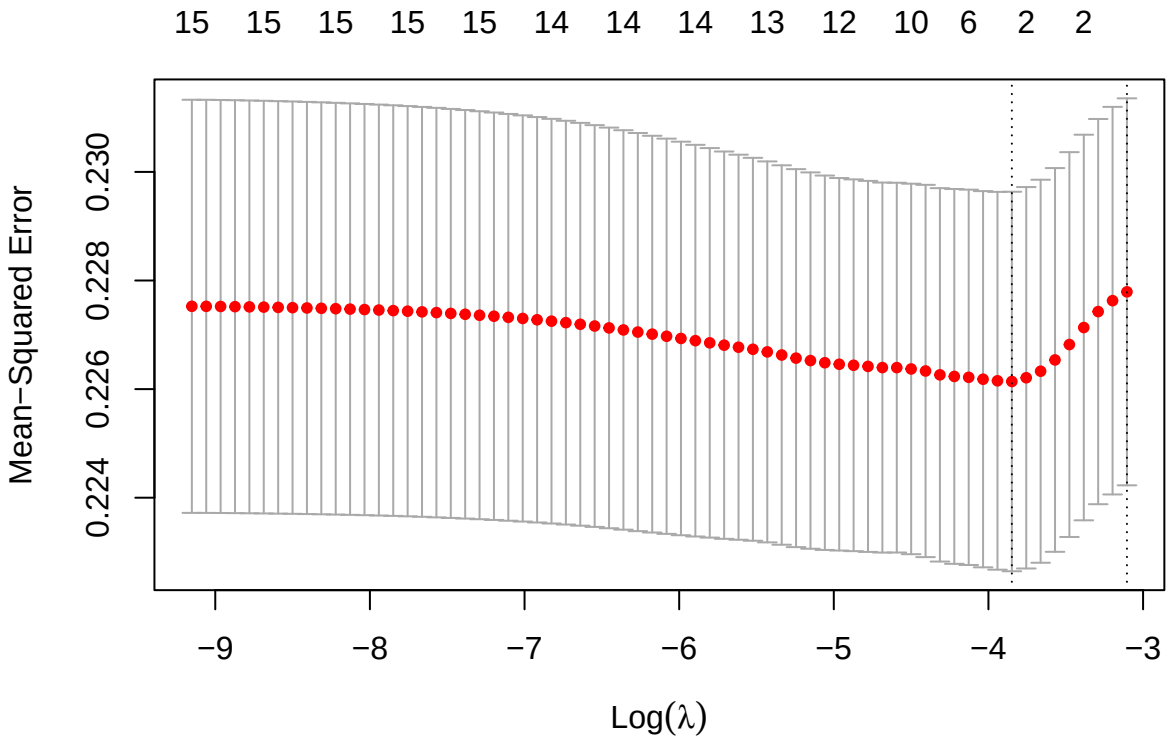
```
##      (Intercept)             race           gender    parentcollege
##        0.8639470        1.4204295        0.6867887        0.8940079
##              gpa         expelled   teachertrouble attentiontrouble
##        0.8597784        0.6866320        1.4609052        0.8425175
##        hwtrouble    socialtrouble      closeschool       partschool
##        1.2101285        0.7609636        0.9988677        1.0116435
##       prejschool      happyschool       fairschool       safeschool
##        0.9714173        0.9430046        1.1824639        0.7553597
##       wave1grade
##        1.0438664
```

```
## Waiting for profiling to be done...
```

```
##                       2.5 %    97.5 %
## (Intercept)      0.1217264 6.0474757
## race             1.0922631 1.8546297
## gender           0.5351405 0.8791441
## parentcollege    0.6950758 1.1503755
## gpa              0.7251243 1.0190497
## expelled         0.3735584 1.2795193
## teachertrouble   1.0111385 2.1302606
## attentiontrouble 0.6225470 1.1410663
## hwtrouble        0.8905553 1.6500547
## socialtrouble    0.5328281 1.0902927
## closeschool      0.7440687 1.3377934
## partschool       0.7290776 1.3999559
## prejschool       0.7564012 1.2485094
## happyschool      0.7052903 1.2580153
## fairschool       0.9023880 1.5490710
## safeschool       0.5621075 1.0106857
## wave1grade       0.9696899 1.1239693
```

Lasso Regression

```
## [1] 0.02131027
```




```
## 17 x 1 sparse Matrix of class "dgCMatrix"
##                              s0
## (Intercept)       0.31680216
## race              0.03048987
## gender           -0.04649204
## parentcollege     .
## gpa               .
## expelled          .
## teachertrouble    .
## attentiontrouble  .
## hwtrouble         .
## socialtrouble     .
## closeschool       .
## partschool        .
## prejschool        .
## happyschool       .
## fairschool        .
## safeschool        .
## wave1grade        .
```

```
##             s1
## [1,] 0.1613239
```

```
## [1] 0.01021536
```

Graph

```
## `summarise()` has grouped output by 'total.race'. You can override using the
## `.groups` argument.
```