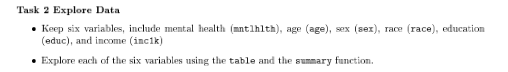


> rm(list=ls(all = TRUE))

> setwd("/Users/burrisfaculty/Desktop/DSCode/SOC686")

> library(foreign)

> mygss <- read.dta("gsscum7212teach.dta")



> usevar <- c("mntlhlth",'age','sex','race','educ','inc1k')

> useddta <- mygss[usevar]

Table and summary for mntlhlth

> table(useddta$mntlhlth, useNA = c("ifany"))

0 1 2 3 4 5 6 7 8 10 12 14 15 16 18 20 21 25

401 34 62 37 29 39 6 19 2 35 3 4 22 1 2 21 2 9 7 30 <NA> 1 23 4954

> summary(useddta$mntlhlth)

Min. 1st Qu. Median Mean 3rd Qu. Max. NA's

0.00 0.00 0.00 3.98 5.00 30.00 4954

Table and summary for age

> table(useddta$age, useNA = c("ifany"))

18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35

27 92 91 93 80 119 111 123 114 125 151 124 118 117 143 126 136 114

36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53

131 107 121 91 102 111 95 123 115 83 112 89 99 117 99 91 98 76

54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71

80 80 73 72 74 69 81 70 77 78 71 74 58 72 67 71 62 49

72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89

58 49 54 37 37 43 46 25 21 26 9 23 22 21 16 14 10 35

<NA>

18

> summary(useddta$age)

Min. 1st Qu. Median Mean 3rd Qu. Max. NA's

18.00 31.00 43.00 45.57 59.00 89.00 18

Table and summary for sex

> table(useddta$sex, useNA = c("ifany"))

male female

2480 3226

> summary(useddta$sex)

male female

2480 3226

Table and summary for race

> table(useddta$race, useNA = c("ifany"))

iap white black other

0 4644 770 292

> summary(useddta$race)

iap white black other

0 4644 770 292

Table and summary for educ

> table(useddta$educ, useNA = c("ifany"))

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

20 7 15 25 33 30 85 90 251 213 216 350 1817 479 580 249 679 167

18 19 20 <NA>

189 91 102 18

> summary(useddta$educ)

Min. 1st Qu. Median Mean 3rd Qu. Max. NA's

0.0 12.0 12.0 12.7 15.0 20.0 18

Table and summary for inc1k

> table(useddta$inc1k, useNA = c("ifany"))

0.245000049471855 0.25900000333786 0.267749965190887 0.284249991178513 0.301900029182434

6 3 2 7 6

0.312849968671799 0.345000028610229 0.363000065088272 0.382000058889389 0.444000065326691

1 1 4 1 1

0.482999950647354 0.510000050067902 0.550000071525574 0.602999866008759 0.904999792575836

2 1 2 5 3

0.962999880313873 0.980000197887421 1.03600001335144 1.07099986076355 1.1120001077652

2 1 2 1 2

1.13700008392334 1.20760011672974 1.23399996757507 1.25139987468719 1.31000018119812

4 4 4 2 4

1.32999980449677 1.37799978256226 1.45000004768372 1.52800023555756 1.57200014591217

3 4 3 3 3

1.67099976539612 1.7150000333786 1.81299960613251 1.92999982833862 1.98974978923798

3 2 3 2 3

2.00000023841858 2.11100053787231 2.11329984664917 2.18995046615601 2.20100021362305

2 5 3 2 4

2.20500040054321 2.27200055122375 2.32699966430664 2.40974974632263 2.41100025177002

1 4 3 3 9

2.53800058364868 2.55825018882751 2.67400002479553 2.69500041007996 2.70700025558472

4 5 1 1 13

2.7171003818512 2.75099968910217 2.81564974784851 2.84899997711182 2.92499923706055

3 5 1 3 3

2.9452497959137 2.99200034141541 3.02099895477295 3.09999847412109 3.10499882698059

2 1 4 1 4

3.12675023078918 3.24699878692627 3.26300096511841 3.31584334373474 3.32883048057556

8 2 3 1 1

3.36700057983398 3.37264037132263 3.37800002098083 3.43799901008606 3.44135165214539

4 1 2 5 4

3.48074817657471 3.50000143051147 3.5369987487793 3.56700110435486 3.61899828910828

3 3 2 5 9

3.65699911117554 3.67500066757202 3.69500041007996 3.69525074958801 3.74912452697754

3 2 5 8 1

3.75999879837036 3.78900098800659 3.85199952125549 3.88499999046326 3.92470073699951

5 3 13 3 4

3.96213483810425 3.9760000705719 3.98800015449524 4.01625156402588 4.06704807281494

1 2 4 3 3

4.0740008354187 4.11047840118408 4.17499876022339 4.20200109481812 4.21999979019165

10 1 4 8 12

4.2637505531311 4.32199907302856 4.32300090789795 4.34300088882446 4.34620380401611

6 5 2 3 1

4.41000080108643 4.44700145721436 4.47800064086914 4.50000047683716 4.5285005569458

4 14 3 9 1

4.57300615310669 4.58700037002563 4.59599924087524 4.66200017929077 4.69275188446045

1 6 3 4 4

4.71300172805786 4.74999809265137 4.81950187683105 4.87900114059448 4.93499755859375

6 6 5 3 15

4.95199823379517 4.96600151062012 4.9870023727417 5.10199928283691 5.10900163650513

7 1 8 4 2

5.11199855804443 5.11650037765503 5.16700172424316 5.24200248718262 5.2870020866394

6 7 5 6 5

5.30799865722656 5.42499923706055 5.43199872970581 5.43420076370239 5.43800067901611

6 10 2 6 3

5.49999809265137 5.51250123977661 5.60599994659424 5.63130235671997 5.7300009727478

5 7 2 8 4

5.76599931716919 5.80599880218506 5.8274998664856 5.89500093460083 5.89644050598145

1 3 7 4 1

5.98500204086304 6.02437734603882 6.02999925613403 6.0529990196228 6.05927133560181

9 10 4 5 1

6.15190982818604 6.20099973678589 6.23559617996216 6.24800157546997 6.26700258255005

1 7 1 3 3

6.27299976348877 6.30417394638062 6.33300161361694 6.39562606811523 6.45313119888306

3 1 6 19 1

6.49999856948853 6.52499723434448 6.62500190734863 6.63100051879883 6.65299940109253

4 9 1 9 6

6.73749876022339 6.74100160598755 6.74680233001709 6.7927508354187 6.79427337646484

8 10 1 3 1

6.7979998588562 6.86100101470947 6.87600088119507 6.9580020904541 7.03912782669067

4 3 6 2 6

7.03949069976807 7.04162549972534 7.0740008354187 7.11407232284546 7.11829328536987

1 1 3 1 1

7.12249708175659 7.13000011444092 7.15299940109253 7.23799991607666 7.36312437057495

6 10 3 4 6

7.38400220870972 7.48100280761719 7.49999761581421 7.52099800109863 7.64399862289429

3 14 8 2 2

7.65081071853638 7.71156692504883 7.75099802017212 7.78200244903564 7.81687259674072

1 1 8 11 17

7.83600234985352 7.83913421630859 7.86015462875366 7.88833808898926 7.91699934005737

7 1 1 1 3

7.96249914169312 7.9840030670166 8.12199974060059 8.14200115203857 8.15599727630615

8 7 12 7 13

8.25400257110596 8.2664966583252 8.29364585876465 8.30224704742432 8.30799674987793

8 1 1 9 4

8.31664657592773 8.34899711608887 8.41749668121338 8.43902206420898 8.5200023651123

1 5 7 1 3

8.59500217437744 8.60337543487549 8.63600063323975 8.66699886322021 8.68500423431396

15 8 7 4 5

8.69449234008789 8.70187473297119 8.70726299285889 8.84299945831299 8.87659358978271

1 5 1 8 1

8.99999713897705 9.04199695587158 9.06238746643066 9.07034301757812 9.14223098754883

6 7 1 1 1

9.14299869537354 9.16699981689453 9.17300033569336 9.18749809265137 9.23812294006348

8 3 17 6 11

9.24072170257568 9.3040189743042 9.40099716186523 9.47300434112549 9.5

1 1 10 12 4

9.5033073425293 9.62625789642334 9.64777278900146 9.71249580383301 9.75203418731689

1 1 1 3 1

9.75462055206299 9.81174850463867 9.81900215148926 9.85030937194824 9.86153221130371

1 6 7 1 1

9.90500164031982 9.95200347900391 9.96899795532227 9.97226810455322 9.98000431060791

5 3 10 1 7

10.0050001144409 10.0112991333008 10.040623664856 10.0774421691895 10.1676263809204

3 1 5 1 8

10.1768712997437 10.2203073501587 10.2229976654053 10.2312297821045 10.2455148696899

1 1 8 1 1

10.3233404159546 10.387354850769 10.3965711593628 10.4124975204468 10.4359979629517

1 1 1 11 6

10.4838199615479 10.504997253418 10.5187711715698 10.5940046310425 10.6593713760376

1 9 1 6 13

10.7324876785278 10.7467136383057 10.8060026168823 10.8069925308228 10.8080015182495

1 1 15 1 6

10.816065788269 10.8183240890503 10.8472929000854 10.8500032424927 10.8570003509521

1 1 1 7 11

10.86243724823 10.892219543457 10.9157829284668 10.9222602844238 10.9857225418091

1 1 1 1 1

11.0075044631958 11.0141201019287 11.0360431671143 11.0463190078735 11.0499439239502

6 1 1 1 1

11.0514621734619 11.1030035018921 11.111011505127 11.1368961334229 11.1959991455078

1 1 1 1 4

11.2050037384033 11.2282056808472 11.2499961853027 11.3173589706421 11.3212461471558

7 1 12 1 7

11.3290014266968 11.3793725967407 11.3844528198242 11.4659976959229 11.4900035858154

4 9 1 9 9

11.5382747650146 11.6375017166138 11.6599760055542 11.6940622329712 11.7184782028198

1 6 1 1 1

11.7318754196167 11.744647026062 11.7609996795654 11.7724018096924 11.7810049057007

10 1 9 1 6

11.793999671936 11.8189172744751 11.8489255905151 11.875997543335 11.9353685379028

4 1 1 8 1

12.063362121582 12.0806198120117 12.1227216720581 12.1687984466553 12.174464225769

1 14 1 1 1

12.1969966888428 12.22900390625 12.3024988174438 12.3177843093872 12.3274793624878

4 5 9 1 1

12.3418779373169 12.3565406799316 12.3810052871704 12.4090557098389 12.4149980545044

1 1 5 1 13

12.467999458313 12.5199966430664 12.5951814651489 12.71812915802 12.718165397644

9 5 1 4 1

12.7560033798218 12.7729969024658 12.7790040969849 12.8147125244141 12.8245306015015

6 9 10 1 1

12.8307447433472 12.8385782241821 12.8903274536133 12.9051609039307 12.9180040359497

12 1 1 1 7

12.9335851669312 13.008113861084 13.0627012252808 13.123610496521 13.1279163360596

1 1 1 1 1

13.2236642837524 13.2319650650024 13.242000579834 13.2690029144287 13.296124458313

1 1 6 8 10

13.3172149658203 13.3764915466309 13.4021701812744 13.475004196167 13.4937143325806

1 1 1 11 1

13.5018749237061 13.5369958877563 13.5569696426392 13.5629959106445 13.5699949264526

13 19 1 13 14

13.5790061950684 13.5939970016479 13.5949954986572 13.6877126693726 13.7353763580322

12 12 9 1 1

13.7500028610229 13.7579507827759 13.7665882110596 13.8759098052979 13.8913879394531

7 1 1 1 1

13.9312152862549 13.9367027282715 13.942193031311 13.9433364868164 13.9802465438843

1 1 1 1 1

14.0149936676025 14.1064586639404 14.1081266403198 14.1310052871704 14.1678438186646

12 1 1 9 1

14.2201480865479 14.2450008392334 14.3226051330566 14.3249959945679 14.3402500152588

1 8 1 6 7

14.4150056838989 14.4459981918335 14.4520053863525 14.4928455352783 14.5150051116943

11 4 8 1 11

14.5333576202393 14.5497217178345 14.5613956451416 14.6274385452271 14.6361169815063

1 1 1 1 1

14.6410036087036 14.7262554168701 14.7325210571289 14.7380018234253 14.7919321060181

9 10 1 3 1

14.8256988525391 14.842604637146 14.8603801727295 14.8783044815063 14.8802194595337

2 2 8 1 1

14.9133644104004 14.9317789077759 14.9434328079224 14.9535102844238 14.9568204879761

1 1 1 1 1

14.9662227630615 14.9670658111572 14.9963836669922 15.0072135925293 15.0435676574707

1 1 1 1 1

15.0733232498169 15.0750045776367 15.1320009231567 15.1443433761597 15.1513795852661

1 9 9 1 1

15.1577243804932 15.2433109283447 15.2789974212646 15.3102397918701 15.371994972229

1 1 6 1 2

15.3933115005493 15.3972463607788 15.4001235961914 15.4060001373291 15.4105110168457

1 1 1 11 1

15.4288196563721 15.4327783584595 15.4431867599487 15.5047388076782 15.5148258209229

1 1 1 1 1

15.5412015914917 15.562557220459 15.5770502090454 15.6028003692627 15.6165409088135

1 1 1 1 1

15.6189994812012 15.6337518692017 15.6464157104492 15.6680068969727 15.681999206543

8 18 1 1 2

15.6861429214478 15.6934299468994 15.7363815307617 15.7455244064331 15.7537403106689

1 1 1 1 1

15.788649559021 15.7930011749268 15.7959833145142 15.8189430236816 15.8254156112671

1 12 1 1 1

15.8873558044434 15.8884925842285 15.9195852279663 15.9250059127808 15.9518337249756

1 1 1 10 1

15.9700231552124 15.9774570465088 16.0170631408691 16.0348987579346 16.0380020141602

1 1 1 1 8

16.0444889068604 16.0513916015625 16.0901050567627 16.1358375549316 16.16943359375

1 1 1 1 1

16.2212677001953 16.2288188934326 16.2349948883057 16.2500057220459 16.2839946746826

2 1 13 2 10

16.3238620758057 16.3466529846191 16.3629989624023 16.3729095458984 16.5113830566406

1 1 5 1 1

16.5267601013184 16.5409660339355 16.5630016326904 16.5729560852051 16.5770034790039

1 1 5 1 13

16.5806713104248 16.6045017242432 16.6329975128174 16.6653881072998 16.6734981536865

1 11 6 1 1

16.6759948730469 16.6890239715576 16.6940364837646 16.6967926025391 16.7022552490234

10 1 1 1 1

16.7030048370361 16.7045650482178 16.7278881072998 16.7489585876465 16.7590560913086

4 1 1 1 1

16.7656421661377 16.7711448669434 16.8059043884277 16.8350028991699 16.8415222167969

1 1 1 12 1

16.8420677185059 16.8458442687988 16.8572044372559 16.8624782562256 16.8728866577148

1 2 1 1 1

16.9031181335449 16.9279270172119 16.9358081817627 16.9552974700928 16.9650993347168

1 1 1 1 1

16.9738864898682 16.991231918335 16.9940032958984 17.022876739502 17.0359973907471

1 1 8 1 9

17.0379981994629 17.0463676452637 17.0941314697266 17.098518371582 17.1064758300781

11 1 1 1 1

17.1100482940674 17.1155815124512 17.1539993286133 17.1830291748047 17.2067584991455

1 1 8 1 13

17.2102546691895 17.2744312286377 17.3249340057373 17.334997177124 17.345516204834

1 2 1 16 1

17.3792285919189 17.3800563812256 17.3940010070801 17.3962249755859 17.4037418365479

1 1 7 1 13

17.4903964996338 17.4913806915283 17.5031795501709 17.5193099975586 17.5435199737549

1 1 1 1 1

17.5569438934326 17.5692863464355 17.5719528198242 17.5846424102783 17.6128883361816

1 1 1 1 1

17.7022228240967 17.7065296173096 17.7372379302979 17.7570056915283 17.764289855957

1 1 1 7 1

17.8056564331055 17.8290901184082 17.8494205474854 17.8696022033691 17.8839912414551

1 1 1 1 9

17.8909854888916 17.8934593200684 17.898868560791 17.9243221282959 17.9540042877197

1 1 1 1 15

18.0366535186768 18.0735893249512 18.0808982849121 18.0843296051025 18.0940074920654

1 1 1 1 4

18.1110496520996 18.170129776001 18.1758117675781 18.1794357299805 18.1984996795654

1 1 1 1 1

18.2695350646973 18.2870025634766 18.3176174163818 18.3214435577393 18.3350067138672

1 15 1 1 10

18.3517475128174 18.3606414794922 18.371955871582 18.3750038146973 18.416145324707

1 1 1 11 1

18.4482765197754 18.4589939117432 18.471004486084 18.4762535095215 18.4860553741455

1 14 8 19 1

18.4974632263184 18.504997253418 18.5451011657715 18.5601940155029 18.5874366760254

1 8 1 1 1

18.5899906158447 18.5986423492432 18.6467380523682 18.6473770141602 18.6654376983643

1 1 1 1 1

18.6657409667969 18.6704044342041 18.6958293914795 18.6988620758057 18.7081718444824

1 1 1 1 1

18.721076965332 18.7217178344727 18.7288970947266 18.7500038146973 18.759859085083

1 1 1 6 1

18.7699337005615 18.7825946807861 18.799259185791 18.826530456543 18.8509998321533

1 1 1 1 6

18.8752136230469 18.9088344573975 18.9326515197754 18.9469928741455 18.9510040283203

2 1 1 21 10

18.9881820678711 19.0156002044678 19.0461444854736 19.0488700866699 19.1110095977783

1 1 1 1 11

19.1276187896729 19.1623458862305 19.1666049957275 19.1779594421387 19.1947383880615

1 1 1 1 1

19.2011280059814 19.2078876495361 19.2405395507812 19.2615776062012 19.2746257781982

1 1 1 1 1

19.3010196685791 19.3048496246338 19.313024520874 19.3374462127686 19.3604011535645

1 1 1 1 1

19.4052257537842 19.4235572814941 19.4249992370605 19.4325981140137 19.4656314849854

1 1 7 1 1

19.4692344665527 19.508264541626 19.5323162078857 19.5475959777832 19.5869140625

1 1 1 1 1

19.5910053253174 19.6072673797607 19.6235046386719 19.6569938659668 19.6599578857422

13 1 23 9 1

19.6777782440186 19.6904468536377 19.7129936218262 19.7131080627441 19.746826171875

1 1 5 1 1

19.7629699707031 19.7801475524902 19.7810726165771 19.7929992675781 19.8027038574219

1 1 1 3 1

19.8089942932129 19.8459987640381 19.8551425933838 19.8573760986328 19.8640823364258

1 6 1 1 1

19.869176864624 19.8758678436279 19.9179916381836 19.9380054473877 19.9494915008545

1 1 1 13 1

19.9900016784668 20.0086154937744 20.0110015869141 20.0221118927002 20.0458030700684

1 1 12 1 1

20.0623645782471 20.0726623535156 20.0812568664551 20.0863914489746 20.0925807952881

1 1 8 1 1

20.1206321716309 20.1423473358154 20.1862678527832 20.2226295471191 20.2424068450928

1 1 1 1 1

20.3110332489014 20.335241317749 20.345308303833 20.3549938201904 20.3640403747559

1 20 1 10 1

20.3736763000488 20.378963470459 20.3900241851807 20.4072208404541 20.4086799621582

1 1 1 1 1

20.411678314209 20.4129428863525 20.4193305969238 20.4847869873047 20.4877948760986

1 1 1 1 1

20.502592086792 20.5069923400879 20.5407752990723 20.6013946533203 20.609058380127

1 5 1 1 1

20.6349983215332 20.6762866973877 20.6899375915527 20.7425098419189 20.7700042724609

8 1 1 1 8

20.7741451263428 20.8232555389404 20.8870410919189 20.9181365966797 20.9325866699219

1 1 1 1 1

20.9417304992676 20.9775505065918 20.9807510375977 20.9912986755371 21.0100040435791

1 1 1 1 20

21.0206069946289 21.0679893493652 21.0906867980957 21.0908889770508 21.1080303192139

1 9 1 1 1

21.1693572998047 21.2163276672363 21.2500019073486 21.298999786377 21.3061504364014

1 1 12 4 1

21.3187522888184 21.3319721221924 21.4025592803955 21.4383697509766 21.4469184875488

23 1 1 1 1

21.4923725128174 21.6119937896729 21.6126136779785 21.6150035858154 21.6427898406982

1 13 1 16 1

21.6589984893799 21.6689968109131 21.6776580810547 21.6932926177979 21.7069702148438

5 13 1 1 1

21.7339191436768 21.7655124664307 21.7931346893311 21.8101863861084 21.8915176391602

2 1 1 1 1

21.9368877410889 21.9657573699951 22.011157989502 22.0304164886475 22.0319900512695

1 1 1 1 4

22.0394725799561 22.0476722717285 22.0500049591064 22.0742645263672 22.1800479888916

1 1 17 1 1

22.1951160430908 22.1958332061768 22.205997467041 22.2578792572021 22.2925891876221

1 1 15 1 1

22.3486385345459 22.3920097351074 22.4174137115479 22.431999206543 22.4395523071289

1 24 1 9 1

22.5441856384277 22.5933647155762 22.6050033569336 22.6249103546143 22.6264209747314

1 1 8 1 1

22.6425018310547 22.7713718414307 22.777214050293 22.8018836975098 22.9189987182617

13 1 1 1 7

22.9658203125 22.9799957275391 23.035924911499 23.0743370056152 23.0836486816406

1 7 1 1 1

23.3099994659424 23.3379821777344 23.3859958648682 23.4032211303711 23.4637603759766

10 1 11 1 13

23.563009262085 23.5880107879639 23.6295051574707 23.6875820159912 23.7377853393555

26 12 1 1 1

23.7499904632568 23.8359203338623 23.9472007751465 24.001501083374 24.0383148193359

11 1 1 1 1

24.0975093841553 24.1210765838623 24.1390037536621 24.207010269165 24.2512836456299

20 1 10 6 1

24.3062725067139 24.3659896850586 24.3773555755615 24.3907032012939 24.3950061798096

1 18 1 1 8

24.4603748321533 24.5429992675781 24.5470027923584 24.5626449584961 24.5973148345947

1 10 5 1 1

24.6775550842285 24.6803550720215 24.6838855743408 24.719762802124 24.7441749572754

1 1 1 1 1

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1 1 20 1 13

24.9012680053711 24.9026679992676 24.9076557159424 24.9192523956299 24.9370098114014

1 1 1 1 18

24.9987525939941 25.1022186279297 25.1756286621094 25.2174873352051 25.3855247497559

1 1 1 1 1

25.4090423583984 25.4429664611816 25.4617042541504 25.4650077819824 25.5109958648682

1 1 1 37 21

25.514087677002 25.5450077056885 25.5631866455078 25.5825042724609 25.5869922637939

1 9 1 34 7

25.6107940673828 25.6173667907715 25.6190032958984 25.6412220001221 25.6426639556885

1 1 9 1 1

25.6489753723145 25.6531581878662 25.7967758178711 25.8370056152344 25.8568477630615

1 1 1 22 1

25.8781127929688 26.0223693847656 26.0379333496094 26.1136817932129 26.1331634521484

1 1 1 1 1

26.1382732391357 26.1417388916016 26.202615737915 26.2186870574951 26.2270164489746

1 1 1 1 1

26.3845119476318 26.4109954833984 26.4839897155762 26.5379943847656 26.726526260376

1 11 11 12 1

26.7638416290283 26.8955631256104 26.9499950408936 27.0180358886719 27.0659008026123

1 1 8 1 1

27.1469917297363 27.1579971313477 27.1710033416748 27.1880073547363 27.3516654968262

1 11 23 23 1

27.4999923706055 27.5047912597656 27.5781517028809 27.6257171630859 27.7155456542969

13 1 1 1 1

27.7910308837891 27.7929916381836 27.8078117370605 27.9018249511719 28.0290107727051

1 36 1 1 9

28.0300025939941 28.1565113067627 28.3015365600586 28.3230018615723 28.4899883270264

12 23 1 13 17

28.6500053405762 28.7432460784912 28.8299980163574 28.9983959197998 29.0328750610352

18 1 9 1 1

29.2208156585693 29.3102951049805 29.377233505249 29.4020118713379 29.4524974822998

1 1 1 14 22

29.4750061035156 29.6023635864258 29.6143360137939 29.7988510131836 29.8067512512207

7 1 1 1 1

29.925012588501 29.9440536499023 30.149995803833 30.1614971160889 30.2814235687256

22 1 14 1 1

30.3802051544189 30.4580097198486 30.6559371948242 30.6709403991699 30.6760005950928

1 19 1 1 1

30.8410015106201 30.8632469177246 30.9091663360596 31.004997253418 31.0110607147217

32 1 1 29 1

31.1343631744385 31.1781902313232 31.2674903869629 31.2989940643311 31.3360004425049

1 1 35 12 9

31.364013671875 31.4041194915771 31.6605682373047 31.6679973602295 31.7129077911377

14 1 1 21 1

31.7424392700195 31.9319610595703 31.9431991577148 31.9510612487793 31.9796257019043

1 1 1 1 1

32.0175857543945 32.0702095031738 32.1000137329102 32.1555938720703 32.3958358764648

1 1 13 1 1

32.4999923706055 32.506160736084 32.5317802429199 32.5364303588867 32.6249847412109

11 1 1 1 32

32.6574211120605 32.7101936340332 32.760986328125 32.9048614501953 33.0160102844238

1 1 32 1 21

33.0244522094727 33.075008392334 33.1250114440918 33.1252632141113 33.2089881896973

1 9 13 1 18

33.2660102844238 33.4096870422363 33.4123954772949 33.7737693786621 33.8190498352051

7 1 1 1 1

33.8344421386719 33.9260063171387 34.0171089172363 34.0779914855957 34.2394065856934

1 11 1 21 1

34.3800086975098 34.413501739502 34.5543823242188 34.7036552429199 34.7879867553711

35 27 1 1 8

34.9650001525879 35.1210021972656 35.3273620605469 35.3700065612793 35.6509895324707

12 10 1 11 16

36.1140174865723 36.1462669372559 36.1669883728027 36.1889991760254 36.2548408508301

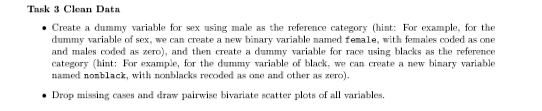
10 25 22 8 1

[ reached getOption("max.print") -- omitted 135 entries ]

> summary(useddta$inc1k)

Min. 1st Qu. Median Mean 3rd Qu. Max.

0.245 12.481 22.605 30.279 37.226 162.607



#Make Dummy Variables

> useddta$female <- as.numeric(useddta$sex == "female")

> table(useddta$sex, useddta$female, useNA = c("ifany"))

0 1

male 2480 0

female 0 3226

> useddta$nonblack <- as.numeric(useddta$race != 'black')

> table(useddta$race, useddta$nonblack, useNA = c("ifany"))

0 1

iap 0 0

white 0 4644

black 770 0

other 0 292

> #Drop Missing Data

> nmdta <- useddta[complete.cases(useddta),]

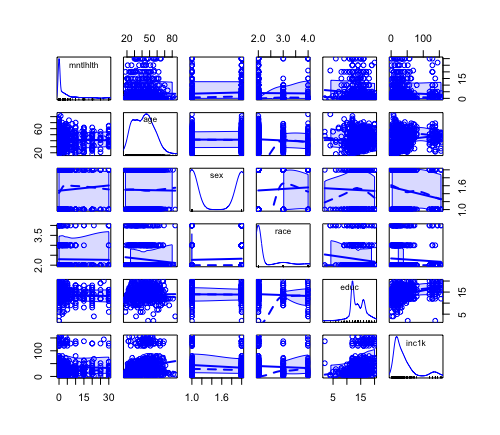
> #Make Pairwise Scatterplots

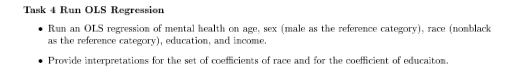
>

> scatterplotMatrix(~ mntlhlth + age + sex + race +

+ educ + inc1k,

+ smooth = list(span = 0.7), data = useddta)





ols.model <- lm(formula = mntlhlth ~ age + female + nonblack + educ + inc1k, data = nmdta )

> (summary(ols.model))

Call:

lm(formula = mntlhlth ~ age + female + nonblack + educ + inc1k,

data = nmdta)

Residuals:

Min 1Q Median 3Q Max

-6.5285 -4.0983 -2.8307 0.5829 27.6992

Coefficients:

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

(Intercept) 4.888469 1.735513 2.817 0.00498 \*\*

age -0.010493 0.020006 -0.525 0.60008

female 1.016221 0.527771 1.925 0.05455 .

nonblack 2.174152 0.784366 2.772 0.00571 \*\*

educ -0.192373 0.102653 -1.874 0.06132 .

inc1k -0.004288 0.007949 -0.539 0.58974

---

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

Residual standard error: 7.102 on 744 degrees of freedom

Multiple R-squared: 0.01996, Adjusted R-squared: 0.01337

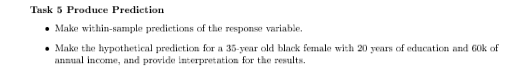
F-statistic: 3.03 on 5 and 744 DF, p-value: 0.01024

**Interpretation of slope for female:**

Holding all other variables constant, we would expect females to have 1.01622 more poor mental health days on average than men.

**Interpretation of slope for nonblack:**

Holding all other variables constant, we would expect people who are nonblack to have 2.174152 more poor mental health days on average than people who are black.



> #Predicted Outcomes for Full Estimation Sample

> nmdta$mntlhlthpr <- predict(ols.model, type = "response")

> summary(nmdta$mntlhlthpr)

Min. 1st Qu. Median Mean 3rd Qu. Max.

-0.2233 3.3093 4.0865 3.9907 4.7694 6.7267

> #Hypothetical Prediction for 35-year old white female with 20 years of educ

> hyp.data <- data.frame( age = 35, nonblack = 1, female = 1,educ = 20, inc1k = 60)

> pr = predict(ols.model, hyp.data, interval = "confidence")



> save(useddta, file = "Assignment\_02.rdata")

> sink()

**R Script**

#source("/Users/burrisfaculty/Desktop/DSCode/SOC686/Shepherd\_Lab02\_SOC686.R", echo = TRUE, max.deparse.length = 1000)

#Task 1

sink("assign\_02\_shepherd.log")

rm(list=ls(all = TRUE))

setwd("/Users/burrisfaculty/Desktop/DSCode/SOC686")

library(foreign)

library(carData)

library(car)

mygss <- read.dta("gsscum7212teach.dta")

#Task 2

usevar <- c("mntlhlth",'age','sex','race','educ','inc1k')

useddta <- mygss[usevar]

table(useddta$mntlhlth, useNA = c("ifany"))

summary(useddta$mntlhlth)

table(useddta$age, useNA = c("ifany"))

summary(useddta$age)

table(useddta$sex, useNA = c("ifany"))

summary(useddta$sex)

table(useddta$race, useNA = c("ifany"))

summary(useddta$race)

table(useddta$educ, useNA = c("ifany"))

summary(useddta$educ)

table(useddta$inc1k, useNA = c("ifany"))

summary(useddta$inc1k)

#TASK 3

#Make Dummy Variables

useddta$female <- as.numeric(useddta$sex == "female")

table(useddta$sex, useddta$female, useNA = c("ifany"))

useddta$nonblack <- as.numeric(useddta$race != 'black')

table(useddta$race, useddta$nonblack, useNA = c("ifany"))

#Drop Missing Data

nmdta <- useddta[complete.cases(useddta),]

#Make Pairwise Scatterplots

scatterplotMatrix(~ mntlhlth + age + sex + race +

educ + inc1k,

smooth = list(span = 0.7), data = useddta)

#TASK 4

#Run OLS

#usevar <- c("mntlhlth",'age','sex','race','educ','inc1k')

ols.model <- lm(formula = mntlhlth ~ age + female + nonblack + educ + inc1k, data = nmdta )

(summary(ols.model))

#Interpret coefficients of female and nonblack in document

#Task 5

#Predicted Outcomes for Full Estimation Sample

nmdta$mntlhlthpr <- predict(ols.model, type = "response")

summary(nmdta$mntlhlthpr)

#Hypothetical Prediction for 35-year old white female with 20 years of educ

hyp.data <- data.frame( age = 35, nonblack = 1, female = 1,educ = 20, inc1k = 60)

pr = predict(ols.model, hyp.data, interval = "confidence")

#Close Out

save(useddta, file = "Assignment\_02.rdata")

sink()

**Log**