Davids_R_Script

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#Code for loading Library Packages

The following regressions show in table form will represent the effects of the Headstart program on PPVTat3, College Education, and High School graduation.

We decided to use a Genearlized Linear Models and a Linear Models to proceed with analysis of the effect of Headstart program.

For the first model, we regressed the data for PPVTat3 on headstart using a linear fit. The effect of the headstart program in this model shows a negative effect ranging from -6.741 to -2.179 PPVT scores across all regressions

#HS on PPVT Score at Age 3

```
##
## % Table created by stargazer v.5.2.2 by Marek Hlavac, Harvard University. E-mail: hlavac at fas.harva
## % Date and time: Wed, May 15, 2019 - 21:20:33
## \begin{table}[!htbp] \centering
##   \caption{Headstart effect on PPVT Scores at Age 3}
##   \label{}
## \begin{tabular}{@{\extracolsep{5pt}}lcccc}
## \\[-1.8ex]\hline
## \hline \\[-1.8ex]
##  & \multicolumn{4}{c}{\textit{Dependent variable:}} \\
## \cline{2-5}
## \\[-1.8ex] & \multicolumn{4}{c}{PPVTat3} \\
## \\[-1.8ex] & (1) & (2) & (3) & (4)\\
## \hline \\[-1.8ex]
##  headstart & $-$6.741$^{***}$ & $-$6.392$^{***}$ & $-$2.992$^{***}$ & $-$2.179$^{**}$ \\
##   & (1.054) & (1.063) & (1.010) & (1.008) \\
##   & & & & \\
##  BirthWeight &  & 0.065$^{***}$ &  & 0.045$^{**}$ \\
##   &  & (0.021) &  & (0.019) \\
##   & & & & \\
##  hsgrad &  &  &  & 3.236$^{***}$ \\
##   &  &  &  & (0.793) \\
##   & & & & \\
##  FirstBorn &  &  &  & 3.543$^{***}$ \\
##   &  &  &  & (0.791) \\
##   & & & & \\
##  Hispanic &  &  & $-$8.504$^{***}$ & $-$8.341$^{***}$ \\
##   &  &  & (1.073) & (1.067) \\
##   & & & & \\
##  Black &  &  & $-$12.205$^{***}$ & $-$11.902$^{***}$ \\
##   &  &  & (0.946) & (0.948) \\
##   & & & & \\
##  Male &  & $-$0.181 & 0.193 & 0.575 \\
##   &  & (0.859) & (0.783) & (0.788) \\
##   & & & & \\
```

```
##  Constant & 25.028$^{***}$ & 17.557$^{***}$ & 29.140$^{***}$ & 20.154$^{***}$ \\
##   & (0.477) & (2.464) & (0.671) & (2.327) \\
##   & & & & \\
## \hline \\[-1.8ex]
## Observations & 984 & 963 & 984 & 963 \\
## R$^{2}$ & 0.040 & 0.046 & 0.191 & 0.221 \\
## Adjusted R$^{2}$ & 0.039 & 0.043 & 0.188 & 0.216 \\
## Residual Std. Error & 13.348 (df = 982) & 13.263 (df = 959) & 12.270 (df = 979) & 12.010 (df = 955) \
## F Statistic & 40.942$^{***}$ (df = 1; 982) & 15.582$^{***}$ (df = 3; 959) & 57.909$^{***}$ (df = 4; 9
## \hline
## \hline \\[-1.8ex]
## \textit{Note:}  & \multicolumn{4}{r}{$^{*}$p$<$0.1; $^{**}$p$<$0.05; $^{***}$p$<$0.01} \\
## \end{tabular}
## \end{table}
```

#HS on College Enrollment

```
##
## Regressions of HS on College Enrollment
## ================================================================
##                                Dependent variable:
##                    ----------------------------------------
##                                     somecollege
##                        (1)         (2)         (3)         (4)
## ----------------------------------------------------------------
## headstart           0.486***    0.493***    0.269***     0.058
##                     (0.055)     (0.056)     (0.058)     (0.066)
##
## Male                           -0.301***   -0.306***   -0.408***
##                                 (0.045)     (0.045)     (0.051)
##
## Black                                       0.692***    0.790***
##                                             (0.053)     (0.063)
##
## Hispanic                                    0.482***    0.513***
##                                             (0.059)     (0.068)
##
## BirthWeight                                             0.002**
##                                                         (0.001)
##
## LogInc_0to3                                             0.140***
##                                                         (0.033)
##
## Constant           -1.292***   -1.146***   -1.414***   -2.499***
##                     (0.025)     (0.032)     (0.040)     (0.363)
##
## ----------------------------------------------------------------
## Observations         11,470      11,470      11,470      7,126
## Log Likelihood     -6,162.935  -6,140.100  -6,049.910  -4,482.696
## Akaike Inf. Crit.  12,329.870  12,286.200  12,109.820  8,979.392
## ================================================================
## Note:                              *p<0.1; **p<0.05; ***p<0.01
```

#HS on High School grad

```
##
## Regressions of HS on High School Graduation
## ================================================================
##                                Dependent variable:
##                    ----------------------------------------
##                                       hsgrad
##                       (1)         (2)         (3)         (4)
## ----------------------------------------------------------------
## headstart           0.486***    0.493***    0.269***     0.088
##                     (0.055)     (0.056)     (0.058)     (0.065)
##
## Male                           -0.301***   -0.306***   -0.390***
##                                 (0.045)     (0.045)     (0.050)
##
## Black                                       0.692***    0.738***
##                                             (0.053)     (0.061)
##
## Hispanic                                    0.482***    0.544***
##                                             (0.059)     (0.067)
##
## LogInc_0to3                                             0.091***
##                                                         (0.035)
##
## MothED                                                  0.043***
##                                                         (0.011)
##
## Constant           -1.292***   -1.146***   -1.414***   -2.293***
##                     (0.025)     (0.032)     (0.040)     (0.340)
##
## ----------------------------------------------------------------
## Observations         11,470      11,470      11,470      7,479
## Log Likelihood    -6,162.935  -6,140.100  -6,049.910  -4,653.955
## Akaike Inf. Crit. 12,329.870  12,286.200  12,109.820  9,321.910
## ================================================================
## Note:                                *p<0.1; **p<0.05; ***p<0.01
```