

```
name: <unnamed>
         log: /hdir/0/jhaber/Projects/charter_data/sorting-schools-2019/logs/robust_fil
  > tscores_mi5_linear_101019.smcl
    log type: smcl
   opened on: 18 Oct 2019, 11:56:06
2 . ** 3. RUN WITH FILTERED DATA
4.
6 . * 3A. RE-RUN LINEAR MIXED MODELS USING FILTERED DATA: PRECISE ACADEMIC DATA ONLY
7.
9 . mi xeq: drop if readlevel14 != 1 | mathlevel14 != 1
  m=0 data:
  -> drop if readlevel14 != 1 | mathlevel14 != 1
  (3,814 observations deleted)
  m=1 data:
  -> drop if readlevel14 != 1 | mathlevel14 != 1
  (3,616 observations deleted)
  m=2 data:
  -> drop if readlevel14 != 1 | mathlevel14 != 1
  (3,597 observations deleted)
  m=3 data:
  -> drop if readlevel14 != 1 | mathlevel14 != 1
  (3,600 observations deleted)
  m=4 data:
  -> drop if readlevel14 != 1 | mathlevel14 != 1
  (3,596 observations deleted)
  m=5 data:
  -> drop if readlevel14 != 1 | mathlevel14 != 1
  (3,599 observations deleted)
10.
11. * PT 1:
12. * 0. controls only
13. mi est, dots: mixed inquiry_full_log primary middle high lnage lnstudents urban pctp > dfs || cmoname: ,
  Imputations (5):
    .... done
  Multiple-imputation estimates
                                                    Imputations
                                                                              1,982
  Mixed-effects ML regression
                                                    Number of obs
                                                    Number of groups =
  Group variable: cmoname
                                                                                243
                                                    Obs per group:
                                                                  min =
                                                                  avg =
                                                                                8.2
                                                                  max =
                                                                             1,123
                                                                             0.0000
                                                    Average RVI
                                                    Largest FMI
                                                                             0.0000
  DF adjustment: Large sample
                                                            min
                                                                      =
                                                                          1.45e+63
                                                    DF:
                                                                      =
                                                            avg
                                                                           4.81e+63
                                                            max
                                                   F( 7, 1.9e+66) =
Prob > F =
                                                                               5.60
  Model F test:
                       Equal FMI
                                                                             0.0000
```

inquiry_full_log	Coef.	Std. Err.	t	P> t	[95% Conf.	Interval]
primary	0107552	.0061582	-1.75	0.081	022825	.00131460154769 .0002429 .003429 .024113 .0118559 .2273551
middle	0332203	.0090529	-3.67	0.000	0509637	
high	0239121	.0123242	-1.94	0.052	0480671	
lnage	0035714	.0035717	-1.00	0.317	0105718	
lnstudents	.0134679	.0054313	2.48	0.013	.0028227	
urban	.0015822	.0052418	0.30	0.763	0086916	
pctpdfs	.1330414	.0481201	2.76	0.006	.0387276	
_cons	.0509707	.0370569	1.38	0.169	0216595	

Random-effects Parameters	Estimate	Std. Err.	[95% Conf.	Interval]
<pre>cmoname: Identity     sd(_cons)</pre>	. 072932	. 0062865	.0615953	. 0863552
sd(Residual)	.1061569	.0017814	.1027222	.1097065

14. \* 1. school poverty
15. mi est, dots: mixed inquiry\_full\_log povertyschool primary middle high lnage lnstude
> nts urban pctpdfs || cmoname: ,

Multiple-imputation estimates Mixed-effects ML regression	Imputations Number of obs	=	5 1,982
Group variable: cmoname	Number of groups Obs per group:	=	243
	min	=	1
	avg	=	8.2
	max	=	1,123
	Average RVI	=	0.0082
	Largest FMI	=	0.0644
DF adjustment: Large sample	DF: min	=	1,021.28
	avg	=	983,844.51
W. J. 7. F. J. J. T.	max		3379160.50
Model F test: <b>Equal FMI</b>	F( 8,239185.5)	=	12.87
	Prob > F	=	0.0000

primary        0113867         .0060658         -1.88         0.060        0232754         .0005           middle        0304697         .0089223         -3.42         0.001        047957        01298           high        0240901         .0121349         -1.99         0.047        0478741        00030           lnage        0027247         .0035249         -0.77         0.440        0096334         .0041           lnstudents         .0117626         .0053604         2.19         0.028         .0012565         .02226           urban         .0118437         .0053266         2.22         0.026         .0014038         .02228           pctpdfs         .1376789         .0474239         2.90         0.004         .0447296         .23062							
primary middle middle high lnage lnstudents urban pctpdfs        0113867 .0060658 .0089223 .3.42 .0.001 .047957 .01298 .008923 .3.42 .0.001 .047957 .01298 .008923 .0047 .00478741 .00030 .0121349 .0121349 .0047 .00478741 .00030 .0121349 .005249 .0.77 .0.440 .0096334 .0041 .0041 .0117626 .0053604 .0117626 .0053604 .01226 .0118437 .0053266 .01226 .01226 .01226 .01226 .01226 .01226 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228 .01228	inquiry_full_log	Coef.	Std. Err.	t	P> t	[95% Conf.	Interval]
COIIS .0955853 .0369873 2.58 0.010 .0230911 .10807	primary middle high lnage lnstudents urban	0113867 0304697 0240901 0027247 .0117626 .0118437	.0060658 .0089223 .0121349 .0035249 .0053604 .0053266	-1.88 -3.42 -1.99 -0.77 2.19 2.22	0.060 0.001 0.047 0.440 0.028 0.026	0232754 047957 0478741 0096334 .0012565 .0014038	0005054 .000502 0129823 0003061 .004184 .0222688 .0222836 .2306282 .1680795

Random-effects Parameters	Estimate	Std. Err.	[95% Conf.	Interval]
<pre>cmoname: Identity     sd(_cons)</pre>	. 072436	.0062408	.0611812	. 0857612
sd(Residual)	.1044298	.0017585	.1010394	.1079339

16. \* 2. school race
17. mi est, dots: mixed inquiry\_full\_log pocschoolprop primary middle high lnage lnstude
> nts urban pctpdfs || cmoname: ,

### Imputations (5): .... done

Multiple-imputation estimates Mixed-effects ML regression	Imputations Number of obs	= =	5 1,982
Group variable: cmoname	Number of groups Obs per group:	=	243
	min	=	1
	avg	=	8.2
	max	=	1,123
	Average RVI	=	0.0000
	Largest FMI	=	0.0000
DF adjustment: Large sample	DF: min	=	7.96e+61
<b>3</b> ,	avq	=	2.20e+63
	max	=	
Model F test: <b>Equal FMI</b>	F( 8, 6.7e+63)	=	12.71
•	Prob > F	=	0.0000

inquiry_full_log	Coef.	Std. Err.	t	P> t	[95% Conf.	Interval]
pocschoolprop primary middle high lnage lnstudents urban pctpdfs cons	0733778 0068642 0253226 0229552 0039964 .0124509 .017236 .1276522 .1016042	.0093795 .0060867 .0089737 .0121413 .0035186 .0053514 .0055386 .0474098	-7.82 -1.13 -2.82 -1.89 -1.14 2.33 3.11 2.69 2.74	0.000 0.259 0.005 0.059 0.256 0.020 0.002	0917612 0187939 0429107 042918 0108927 .0019624 .0063805 .0347306 .0289503	0549943 .0050656 0077344 .0008414 .0028999 .0229394 .0280915 .2205738

Random-effects Parameters	Estimate	Std. Err.	[95% Conf.	Interval]
<pre>cmoname: Identity     sd(_cons)</pre>	.0711991	.0062157	.0600018	. 0844861
sd(Residual)	.1046141	.0017563	. 1012277	.1081137

Impacaciono	= 5 = 1,982
Number of groups Obs per group:	= 243
min	= 1
avg	= 8.2
max	= 1,123
Average RVI	= 0.0007
Largest FMI	= 0.0069
•	= 84,839.21
avq	= 4.04e+11
max	= 2.22e+12
F( 8, 3,2e+07)	= 8.30
Prob > F	= 0.0000
	Number of obs  Number of groups Obs per group:  min avg max  Average RVI Largest FMI DF: min avg max F( 8, 3.2e+07)

<sup>18. \* 3.</sup> school district poverty
19. mi est, dots: mixed inquiry\_full\_log povertysd primary middle high lnage lnstudents
> urban pctpdfs || cmoname: ,

inquiry_full_log	Coef.	Std. Err.	t	P> t	[95% Conf.	Interval]
povertysd primary middle high lnage lnstudents urban pctpdfs _cons	1906086 011304 0340242 0240511 0033001 .0124316 .0118493 .136865 .0818923	.0368116 .0061152 .0089937 .0122352 .0035472 .0053971 .0055666 .0477764	-5.18 -1.85 -3.78 -1.97 -0.93 2.30 2.13 2.86 2.20	0.000 0.065 0.000 0.049 0.352 0.021 0.033 0.004 0.028	262759 0232896 0516517 0480316 0102524 .0018534 .0009389 .043225	1184582 .0006816 0163968 0000705 .0036522 .0230097 .0227597 .230505 .1549626

Random-effects Parameters	Estimate	Std. Err.	[95% Conf.	Interval]
<pre>cmoname: Identity      sd(_cons)</pre>	.0739613	. 0062257	.0627126	. 0872277
sd(Residual)	.1053014	. 0017665	.1018954	.1088213

20. \* 4. school district race
21. mi est, dots: mixed inquiry\_full\_log pocsd primary middle high lnage lnstudents urba
> n pctpdfs || cmoname: ,

Multiple-imputation estimates Mixed-effects ML regression	Imputations Number of obs	= =	5 1,982
Group variable: cmoname	Number of groups Obs per group:	=	243
	min	=	1
	avg	=	8.2
	max	=	1,123
	Average RVI	=	0.0007
	Largešt FMI	=	0.0073
DF adjustment: Large sample	DF: min	=	75,192.01
<b>y</b>	avq	=	4,00e+10
	max	=	2.96e+11
Model F test: <b>Equal FMI</b>	F( 8, 2.9e+07)	=	6.49
# ##	Prob > F	=	0.0000

inquiry_full_log	Coef.	Std. Err.	t	P> t	[95% Conf.	Interval]
pocsd primary middle high lnage lnstudents urban pctpdfs _cons	050975 009681 0307102 0250553 003813 .0145341 .0095697 .1291087 .0588542	.014493 .0061477 .0090535 .0122925 .0035617 .0054229 .0057015 .0479946	-3.52 -1.57 -3.39 -2.04 -1.07 2.68 1.68 2.69 1.59	0.000 0.115 0.001 0.042 0.284 0.007 0.093 0.007 0.112	0793813 0217303 0484548 0491482 0107938 .0039055 001605 .0350411 0136839	0225687 .0023683 0129657 0009625 .0031677 .0251627 .0207445 .2231763 .1313924

Random-effects Parameters	Estimate	Std. Err.	[95% Conf.	Interval]
<pre>cmoname: Identity     sd(_cons)</pre>	.0720199	. 0062827	.0607013	. 0854492
sd(Residual)	.1058886	.0017775	.1024614	.1094305

Model F test:

**Equal FMI** 

```
22.
23. * PT 2:
24. * 0. controls only
25. mi est, dots: mixéd povertyschoolprop primary middle high lnage lnstudents urban ||
 > geodistrict: ,
  Imputations (5):
    .... done
  Multiple-imputation estimates
                                                     Imputations
                                                                                    5
  Mixed-effects ML regression
                                                                               1,982
                                                     Number of obs
                                                     Number of groups =
  Group variable: geodistrict
                                                                                  660
                                                     Obs per group:
                                                                    min =
                                                                                    1
                                                                    avg =
                                                                                  3.0
                                                                    max =
                                                                                 121
                                                                              0.0513
                                                     Average RVI
                                                     Largest FMI
                                                                        =
                                                                              0.1061
  DF adjustment:
                    Large sample
                                                                        =
                                                     DF:
                                                             min
                                                                              388.56
                                                             avg
                                                                        =
                                                                            2,604.97
                                                                            5,950.42
                                                             max
  Model F test:
                                                          6, 9351.5)
                                                                        =
                       Equal FMI
                                                     F(
                                                                               10.04
                                                     Prob > F
                                                                              0.0000
  povertyschoolprop
                            Coef.
                                     Std. Err.
                                                          P>|t|
                                                                     [95% Conf. Interval]
                                                     t
                        -.0067693
                                     .0143678
                                                  -0.47
            primary
                                                          0.638
                                                                    -.0349449
                                                                                  .0214064
             middle
                                     .0208775
                                                          0.109
                                                                    -.0074573
                         .0334777
                                                   1.60
                                                                                  .0744128
               high
                         .0014881
                                      .027765
                                                   0.05
                                                          0.957
                                                                    -.0529536
                                                                                  .0559299
                                                  -1.69
                                     .0082558
                                                          0.091
                                                                                  .0022519
              lnage
                        -.0139617
                                                                    -.0301752
         Instudents
                        - . 0378257
                                     .0125338
                                                  -3.02
                                                          0.003
                                                                    -.0624051
                                                                                 -.0132462
              urban
                         .0987909
                                     .0170533
                                                   5.79
                                                          0.000
                                                                     .0653604
                                                                                  .1322215
                         .7246512
                                       .08506
              _cons
                                                   8.52
                                                          0.000
                                                                     .5578455
                                                                                  .8914569
                                                                [95% Conf. Interval]
    Random-effects Parameters
                                     Estimate
                                                 Std. Err.
  geodistrict: Identity
                      sd(_cons)
                                     .2048125
                                                 .0097291
                                                                .1865993
                                                                             .2248034
                   sd(Residual)
                                     .2215537
                                                 .0044629
                                                                .2129508
                                                                             .2305041
26. * 1. IBL
27. mi est, dots: mixed povertyschoolprop inquiry_full_log primary middle high lnage lns
 > tudents urban pctpdfs || geodistrict: ,
  Imputations (5):
    .... done
  Multiple-imputation estimates
                                                     Imputations
                                                                               1,982
  Mixed-effects ML regression
                                                     Number of obs
                                                     Number of groups =
                                                                                  660
  Group variable: geodistrict
                                                     Obs per group:
                                                                    min =
                                                                                    1
                                                                    avg =
                                                                                  3.0
                                                                    max =
                                                                                 121
                                                     Average RVI
                                                                              0.0653
                                                     Largest FMI
                                                                              0.1459
  DF adjustment:
                                                                        =
                                                                              210.62
                    Large sample
                                                     DF:
                                                             min
                                                                        =
                                                             avg
                                                                            2,034.31
                                                                            5,896.41
                                                                        =
```

max

8, 7390.0)

F(

Prob > F

=

12.43

0.0000

povertyschoolprop	Coef.	Std. Err.	t	P> t	[95% Conf.	Interval]
inquiry_full_log primary middle high lnage lnstudents urban pctpdfs cons	3153741 0064143 .0268155 0040723 0143691 0308628 .1015134 .0705195 .7281073	.0528422 .0142232 .0207671 .0275392 .0081678 .0124377 .0168886 .1193092 .0842544	-5.97 -0.45 1.29 -0.15 -1.76 -2.48 6.01 0.59 8.64	0.000 0.652 0.197 0.882 0.079 0.013 0.000 0.555	4195414 0343067 0139094 0580758 0304092 0552524 .0684056 1635553 .562874	2112069 .0214782 .0675404 .0499312 .001671 0064732 .1346213 .3045944 .8933405

Random-effects Parameters	Estimate	Std. Err.	[95% Conf.	Interval]
<pre>geodistrict: Identity</pre>	. 2029547	.0096822	. 184831	. 2228555
sd(Residual)	. 2191996	. 0044813	. 2105494	. 2282052

Multiple-imputation estimates Mixed-effects ML regression	Imputations Number of obs	=======================================	5 1,982
Group variable: <b>geodistrict</b>	Number of groups Obs per group:	=	660
	. o . min	=	1
	avg	=	3.0
	max	=	121
	Average RVI	=	0.1299
	Largest FMI	=	0.4171
DF adjustment: Large sample	DF: min	=	28.13
,	avg	=	965.10
	max	=	1,778.00
Model F test: <b>Equal FMI</b>	F( 8, 3562.2)	=	77.98
·	Prob > F	=	0.0000

povertyschoolprop	Coef.	Std. Err.	t	P> t	[95% Conf.	Interval]
readall14 mathall14 primary middle high lnage lnstudents urban readlevel14 mathlevel14 cons	7923956 .1089926 0202277 .022511 .0204863 .0014761 0249719 .0770312	.0665144 .0627691 .0127532 .0181483 .0243078 .0072575 .0109013 .0155869 (omitted) (omitted)	-11.91 1.74 -1.59 1.24 0.84 0.20 -2.29 4.94	0.000 0.084 0.113 0.215 0.399 0.839 0.022 0.000	9231464 0145389 0452617 0130881 0271886 0127916 0463555 .0464585	6616448 .232524 .0048062 .0581101 .0681611 .0157438 0035884 .1076038

Random-effects Parameters	Estimate	Std. Err.	[95% Conf. I	nterval]
<pre>geodistrict: Identity</pre>	. 2074866	.0089108	.1907163	. 2257316
sd(Residual)	.1872307	. 0045596	. 1781217	. 1968055

<sup>28. \* 2.</sup> academic performance 29. mi est, dots: mixed povertyschoolprop readall14 mathall14 primary middle high lnage > lnstudents urban readlevel14 mathlevel14 || geodistrict: ,

30. \* 3. fully specified
31. mi est, dots: mixed povertyschoolprop inquiry\_full\_log readall14 mathall14 primary m
> iddle high lnage lnstudents urban pctpdfs readlevel14 mathlevel14 || geodistrict: ,

### Imputations (5): .... done

Multiple-imputation estimates Mixed-effects ML regression	Imputations Number of obs	= =	5 1,982
Group variable: <b>geodistrict</b>	Number of groups Obs per group:	=	660
	min	=	1
	avg	=	3.0
	max	=	121
	Average RVI	=	0.1357
	Largešt FMI	=	0.4328
DF adjustment: Large sample	DF: min	=	26.16
<b>3</b> ,	avq	=	867.72
	max	=	1,748.96
Model F test: <b>Equal FMI</b>	F( 10, 3797.2)	=	65.06
• "	Prob > F	=	0.0000

povertyschoolprop	Coef.	Std. Err.	t	P> t	[95% Conf.	Interval]
inquiry_full_log     readall14     mathall14     primary     middle     high     lnage     lnstudents     urban     pctpdfs     readlevel14     mathlevel14	2214784 7591745 .0866459 0191334 .018793 .0150354 .0008874 0203708 .0799573 .0046709	.0471881 .0662044 .06622996 .0126608 .0181153 .0242235 .0071989 .0108402 .0154947 .1054794 (omitted)	-4.69 -11.47 1.39 -1.51 1.04 0.62 0.12 -1.88 5.16 0.04	0.000 0.000 0.165 0.131 0.300 0.535 0.902 0.060 0.000 0.965	3148683 8892737 035911 0439851 0167502 0324814 0132628 0416318 .049566 2023127	1280885 6290754 .2092029 .0057183 .0543361 .0625522 .0150377 .0008903 .1103486 .2116545
_cons	. 99754	.0744191	13.40	0.000	. 8515476	1.143532

Random-effects Parameters	Estimate	Std. Err.	[95% Conf.	Interval]
<pre>geodistrict: Identity</pre>	. 2064873	.008912	.1897134	. 2247444
sd(Residual)	. 1858615	. 0045826	.1766793	. 1955209

32. 33. \* PT 3: 34. \* 0. controls only

35. mi est, dots: mixed pocschoolprop primary middle high lnage lnstudents urban || stat > e: || geodistrict: ,

#### Imputations (5): .... done

Multiple-imputation estimates Mixed-effects ML regression

Imputations Number of obs 1,982

Group Variable	No. of	Observ	Observations per		
	Groups	Minimum	Minimum Average		
state	36	1	55.1	415	
geodistrict	660	1	3.0	121	

0.0000 Average RVI = = = Largest FMI 0.0000 DF adjustment: Large sample <u>DF</u>: min avg = max = Model F test:  $\frac{F(6, 6)}{Prob > F}$ 16.49 **Equal FMI** 0.0000

pocschoolprop	Coef.	Std. Err.	t	P> t	[95% Conf.	Interval]
primary middle high lnage lnstudents urban _cons	.0313046 .0635113 .0099473 0233458 0290584 .0989649 .7409372	.0120324 .0174964 .0233267 .0068081 .0104383 .0148576	2.60 3.63 0.43 -3.43 -2.78 6.66 9.73	0.009 0.000 0.670 0.001 0.005 0.000	.0077215 .029219 0357722 0366895 0495171 .0698445 .5917013	.0548876 .0978036 .0556669 0100021 0085996 .1280853 .8901731

Random-effects Parameters	Estimate	Std. Err.	[95% Conf.	Interval]
<pre>state: Identity sd(_cons)</pre>	.1582177	. 0247165	.1164881	. 2148961
<pre>geodistrict: Identity</pre>	.1839148	.0088123	. 1674292	. 2020237
sd(Residual)	. 1857085	.0036138	. 178759	.1929282

36. \* 1. IBL

### Imputations (5): .... done

Multiple-imputation estimates Mixed-effects ML regression

Imputations = 5
Number of obs = 1,982

Group Variable	No. of	Obser	vations per	Group
	Groups	Minimum	Average	Maximum
state	36	1	55.1	415
geodistrict	660	1	3.0	121

Model F test: Equal FMI  $\frac{F(8, .)}{Prob > F} = \frac{18.52}{0.0000}$ 

pocschoolprop	Coef.	Std. Err.	t	P> t	[95% Conf.	Interval]
inquiry_full_log primary middle high lnage lnstudents urban pctpdfs cons	2855527 .0322012 .058531 .0066491 024124 0222645 .1024793 .0747232	.0417822 .0118958 .01732 .0230685 .006732 .010365 .0146875 .0989067	-6.83 2.71 3.38 0.29 -3.58 -2.15 6.98 0.76	0.000 0.007 0.001 0.773 0.000 0.032 0.000 0.450 0.000	3674443 .0088859 .0245845 0385642 0373184 0425795 .0736922 1191304 .5939304	2036611 .0555165 .0924776 .0518625 0109296 0019494 .1312664 .2685768

<sup>37.</sup> mi est, dots: mixed pocschoolprop inquiry\_full\_log primary middle high lnage lnstude > nts urban pctpdfs || state: || geodistrict: ,

Random-effects	Parameters	Estimate	Std. Err.	[95% Conf.	Interval]
state: Identity	sd(_cons)	. 1594119	. 0249132	.1173528	. 2165449
geodistrict: Iden	ntity sd(_cons)	.1811907	. 0087355	.1648534	.1991469
\$	sd(Residual)	.1836374	. 003577	.1767587	.1907838

38. \* 2. academic performance
39. mi est, dots: mixed pocschoolprop readall14 mathall14 primary middle high lnage lnst > udents urban readlevel14 mathlevel14 || state: || geodistrict: ,

Imputations (5):
 .... done

Multiple-imputation estimates Mixed-effects ML regression

Imputations Number of obs 1,982

Group Variable	No. of	Observ	vations per	Group
	Groups	Minimum	Average	Maximum
state	36	1	55.1	415
geodistrict	660	1	3.0	121

Average RVI 0.0000 Largest FMI 0.0000 2.65e+59 DF adjustment: = Large sample min <u>DF</u>: avg 2.75e+59 max

= = =  $\frac{F(8, \\$ Prob > F Model F test: **Equal FMI** 91.77 0.0000

pocschoolprop	Coef.	Std. Err.	t	P> t	[95% Conf.	Interval]
readall14 mathall14 primary middle high lnage lnstudents urban readlevel14 mathlevel14	7386733 .1126231 .0221022 .05649 .0368704 0056296 0165127 .0749118	.0571565 .0543693 .0106292 .015307 .0207335 .0059961 .0091358 .0130171 (omitted)	-12.92 2.07 2.08 3.69 1.78 -0.94 -1.81 5.75	0.000 0.038 0.038 0.000 0.075 0.348 0.071 0.000	850698 .0060612 .0012693 .0264888 0037665 0173818 0344186 .0493987	6266486 .2191851 .0429351 .0864912 .0775073 .0061226 .0013933 .1004249
_cons	.9673004	. 0689884	14.02	0.000	.8320855	1.102515

Random-effects	Parameters	Estimate	Std. Err.	[95% Conf.	Interval]
state: Identity	sd(_cons)	.1660682	.0233201	.1261121	. 2186836
geodistrict: Ide	ntity sd(_cons)	. 1596755	.007884	.1449473	.1759002
	sd(Residual)	.1623585	.0031894	.1562261	.1687316

40. \* 3. fully specified

41. mi est, dóts: mixed pocschoolprop inquiry\_full\_log readall14 mathall14 primary middl > e high lnage lnstudents urban pctpdfs readlevel14 mathlevel14 || state: || geodistri > ct: ,

#### Imputations (5): .... done

Multiple-imputation estimates Mixed-effects ML regression Imputations = 5
Number of obs = 1,982

max

Group Variable	No. of	Obser	vations per	Group
	Groups	Minimum	Average	Maximum
state	36	1	55.1	415
geodistrict	660	1	3.0	121

Average RVI = 0.0000 Largest FMI = 0.0000 DF adjustment: Large sample  $\frac{DF}{}$ : min =  $\frac{4.29e+57}{avg}$  =  $\frac{1.84e+59}{}$ 

Model F test: Equal FMI  $\frac{F(10, .)}{Prob > F} = 77.34$ 

pocschoolprop Coef. Std. Err. [95% Conf. Interval] t P>|t| inquiry\_full\_log -.1982082 .0369044 -5.37 0.000 -.2705395 -.125877 readall14 .0570248 -.7061226 -12.38 0.000 -.8178891 -.5943561 mathall14 .0920814 .0540847 1.70 0.089 -.0139227 .1980854 primary .0232784 .0105497 0.027 .0439554 2.21 .0026013 3.51 middle .053327 .015204 0.000 .0235276 .0831264 high .0328244 .0205823 1.59 0.111 -.0075162 .0731649 lnage -.0065396 .0059531 -.0182074 .0051282 -1.10 0.272 **Instudents** -.0121789 .0091019 -1.34 0.181 -.0300183 .0056606 .0777842 .0129474 0.000 .0524078 urban 6.01 .1031607 pctpdfs .0350484 0.40 0.686 . 0867951 -.1350668 .2051636 readlevel14 0 (omitted) (omitted) mathlevel14 0 \_cons .9628093 0.000 .0685583 14.04 .8284374 1.097181

Random-effects Parameters	Estimate	Std. Err.	[95% Conf.	Interval]
state: Identity sd(_cons	) .1661116	.0234301	.1259904	. 2190092
<pre>geodistrict: Identity     sd(_cons</pre>	) .1592744	. 0078402	. 1446258	.1754067
sd(Residual	) .1609814	.0031643	. 1548974	.1673043

42.

43. log close

name: <unnamed>

log: /hdir/0/jhaber/Projects/charter\_data/sorting-schools-2019/logs/robust\_fil

> tscores\_mi5\_linear\_101019.smcl

log type: **smcl** 

closed on: 18 Oct 2019, 11:58:05