
```

      name: <unnamed>
      log: /Users/fatimahashimi/Desktop/FINAL PROJECT ECON 7910/QUESTION-2.sm
> cl
  log type: smcl
opened on:  9 Dec 2020, 00:00:17

1 . set more off

2 . use "/Users/fatimahashimi/Desktop/FINAL PROJECT ECON 7910/ECON_7910_Final_Pro
> ject_DataSET/namelist.dta"

3 . *****
4 .
5 .
6 . * Each school is a distinct data point, weighted by number of pupils
7 .      keep if visit==981
   (521,715 observations deleted)

8 .      collapse sex elg98 stdgap yrbirth wgrp* (count) np=pupild, by (sch98v1
> )

9 .
10 . * Create worm group indicators
11 .      gen wgrp1 = (wgrp==1)

12 .      gen wgrp2 = (wgrp==2)

13 .      gen wgrp3 = (wgrp==3)

14 . **** TABLE 1: PANEL A
15 . *t-test without weight
16 . bys wgrp: summ sex elg98 stdgap yrbirth

```

```
-> wgrp = 1
```

Variable	Obs	Mean	Std. Dev.	Min	Max
sex	25	.5312851	.0303126	.4649681	.58
elg98	25	.8872714	.0257725	.8320313	.9418604
stdgap	25	-1.99899	.2826454	-2.605882	-1.580786
yrbirth	25	1986.235	.5578535	1985.276	1987.464

```
-> wgrp = 2
```

Variable	Obs	Mean	Std. Dev.	Min	Max
sex	25	.5108336	.1046006	.0200893	.5714286
elg98	25	.8977165	.0349129	.8363096	1
stdgap	25	-1.884126	.4078422	-2.539063	-.7777778
yrbirth	25	1986.561	.7466577	1985.349	1988.789

-> wgrp = 3

Variable	Obs	Mean	Std. Dev.	Min	Max
sex	25	.5193998	.0230937	.4585635	.5606061
elg98	25	.8826151	.0215419	.84	.9104478
stdgap	25	-1.974756	.3330687	-2.612903	-1.384921
yrbirth	25	1985.757	.5159941	1984.777	1986.964

```
17 .      foreach var in sex elg98 stdgap yrbirth {
2.          regress `var' wgrp1 wgrp2
3.      }
```

Source	SS	df	MS	Number of obs	=	75
Model	.005274177	2	.002637089	F(2, 72)	=	0.64
Residual	.297443191	72	.004131155	Prob > F	=	0.5311
				R-squared	=	0.0174
				Adj R-squared	=	-0.0099
Total	.302717368	74	.004090775	Root MSE	=	.06427

sex	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	.0118853	.0181795	0.65	0.515	-.0243548	.0481254
wgrp2	-.0085661	.0181795	-0.47	0.639	-.0448062	.0276739
_cons	.5193998	.0128548	40.41	0.000	.4937742	.5450254

Source	SS	df	MS	Number of obs	=	75
Model	.002990256	2	.001495128	F(2, 72)	=	1.91
Residual	.056332415	72	.000782395	Prob > F	=	0.1554
				R-squared	=	0.0504
				Adj R-squared	=	0.0240
Total	.059322671	74	.000801658	Root MSE	=	.02797

elg98	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	.0046564	.0079115	0.59	0.558	-.0111149	.0204276
wgrp2	.0151014	.0079115	1.91	0.060	-.0006699	.0308726
_cons	.8826151	.0055943	157.77	0.000	.8714631	.8937671

Source	SS	df	MS	Number of obs	=	75
Model	.183290267	2	.091645133	F(2, 72)	=	0.77
Residual	8.57180301	72	.11905282	Prob > F	=	0.4669
				R-squared	=	0.0209
				Adj R-squared	=	-0.0063
Total	8.75509327	74	.118312071	Root MSE	=	.34504

stdgap	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	-.0242337	.0975921	-0.25	0.805	-.2187801	.1703127
wgrp2	.0906302	.0975921	0.93	0.356	-.1039162	.2851766
_cons	-1.974756	.0690081	-28.62	0.000	-2.112321	-1.837191

Source	SS	df	MS	Number of obs	=	75
Model	8.18183944	2	4.09091972	F(2, 72)	=	10.81
Residual	27.2387571	72	.37831607	Prob > F	=	0.0001
				R-squared	=	0.2310
				Adj R-squared	=	0.2096
Total	35.4205965	74	.478656709	Root MSE	=	.61507

yrbirth	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	.4786377	.1739692	2.75	0.008	.1318364	.825439
wgrp2	.8041992	.1739692	4.62	0.000	.4573979	1.151
_cons	1985.757	.1230148	1.6e+04	0.000	1985.512	1986.002

```

18 . **** TABLE 2: PANEL A
19 .      *t-test with weights
20 .      bys wgrp: summ sex elg98 stdgap yrbirth [aw=np]

```

```
-> wgrp = 1
```

Variable	Obs	Weight	Mean	Std. Dev.	Min	Max
sex	25	11634	.5329346	.0274165	.4649681	.58
elg98	25	11634	.885874	.0247304	.8320313	.9418604
stdgap	25	11634	-1.972535	.2533046	-2.605882	-1.580786
yrbirth	25	11634	1986.193	.5321102	1985.276	1987.464

```
-> wgrp = 2
```

Variable	Obs	Weight	Mean	Std. Dev.	Min	Max
sex	25	11990	.5096209	.1047615	.0200893	.5714286
elg98	25	11990	.8919381	.0248131	.8363096	1
stdgap	25	11990	-1.822323	.3955458	-2.539063	-.7777778
yrbirth	25	11990	1986.543	.6205553	1985.349	1988.789

```
-> wgrp = 3
```

Variable	Obs	Weight	Mean	Std. Dev.	Min	Max
sex	25	11157	.5221049	.0213989	.4585635	.5606061

elg98	25	11157	.8842065	.0199719	.84	.9104478
stdgap	25	11157	-1.969827	.335163	-2.612903	-1.384921
yrbirth	25	11157	1985.787	.5752325	1984.777	1986.964

```
21 .      foreach var in sex elg98 stdgap yrbirth {
      2.          regress `var' wgrp1 wgrp2 [aw=np]
      3.          }
(sum of wgt is 3.4781e+04)
```

Source	SS	df	MS	Number of obs	=	75
				F(2, 72)	=	0.83
Model	.006936961	2	.00346848	Prob > F	=	0.4404
Residual	.301082184	72	.004181697	R-squared	=	0.0225
				Adj R-squared	=	-0.0046
Total	.308019145	74	.004162421	Root MSE	=	.06467

sex	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	.0108297	.0184527	0.59	0.559	-.0259551	.0476145
wgrp2	-.0124841	.0183181	-0.68	0.498	-.0490006	.0240324
_cons	.5221049	.0131839	39.60	0.000	.4958234	.5483865

(sum of wgt is 3.4781e+04)

Source	SS	df	MS	Number of obs	=	75
				F(2, 72)	=	0.77
Model	.000836175	2	.000418088	Prob > F	=	0.4680
Residual	.039223479	72	.000544771	R-squared	=	0.0209
				Adj R-squared	=	-0.0063
Total	.040059654	74	.000541347	Root MSE	=	.02334

elg98	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	.0016674	.0066603	0.25	0.803	-.0116095	.0149444
wgrp2	.0077316	.0066117	1.17	0.246	-.0054485	.0209117
_cons	.8842065	.0047585	185.81	0.000	.8747206	.8936925

(sum of wgt is 3.4781e+04)

Source	SS	df	MS	Number of obs	=	75
				F(2, 72)	=	1.69
Model	.375640759	2	.18782038	Prob > F	=	0.1926
Residual	8.02307178	72	.111431552	R-squared	=	0.0447
				Adj R-squared	=	0.0182
Total	8.39871254	74	.113496115	Root MSE	=	.33381

stdgap	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	-.002708	.095255	-0.03	0.977	-.1925955	.1871794

wgrp2	.1475039	.0945602	1.56	0.123	-.0409985	.3360062
_cons	-1.969827	.0680567	-28.94	0.000	-2.105496	-1.834159

(sum of wgt is 3.4781e+04)

Source	SS	df	MS	Number of obs	=	75
Model	7.11649537	2	3.55824768	F(2, 72)	=	10.67
Residual	24.0194209	72	.333603068	Prob > F	=	0.0001
				R-squared	=	0.2286
				Adj R-squared	=	0.2071
Total	31.1359163	74	.420755625	Root MSE	=	.57758

yrbirth	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
wgrp1	.4060469	.1648158	2.46	0.016	.0774926 .7346012
wgrp2	.7554875	.1636136	4.62	0.000	.4293297 1.081645
_cons	1985.787	.1177556	1.7e+04	0.000	1985.552 1986.022

```

22 .
23 .
24 .      * Incorporate data from Pupil Questionnaire
25 .
26 .      keep sch98v1 wgrp*
27 .
28 .      rename sch98v1 schid
29 .
30 .      sort schid
31 .
32 .      save schoolnum, replace
33 .      file schoolnum.dta saved
34 .
35 .      clear
36 .
37 .      use "/Users/fatimahashimi/Desktop/FINAL PROJECT ECON 7910/ECON_7910_F
> inal_Project_DataSET/pupq.dta"
38 .
39 .      * Only keep pupils with 1998 data
40 .      drop if pupdate_98_1==" " & schid_98_2==.
(2,620 observations deleted)
41 .
42 .      * Incorporate treatment group variable
43 .      gen schid = schid_98_2
44 .
45 .      sort schid
46 .
47 .      merge m:1 schid using schoolnum

```

Result

of obs.

not matched	0	
matched	13,130	(<i>_merge</i> ==3)

41 . tab *_merge*

<i>_merge</i>	Freq.	Percent	Cum.
matched (3)	13,130	100.00	100.00
Total	13,130	100.00	

42 . drop *_merge*

43 .

44 . * Create measure of pre-program school attendance based on # days absent in p
> revious four weeks

45 . gen preatt_98 = (20-absdays_98_6)/20
(152 missing values generated)

46 .

47 . * Create indicator for "Household Has Livestock"

48 . gen Ilivestock_98 = (cows_98_23==1 | goats_98_24==1 | sheep_98_25
> ==1 | pigs_98_26==1)

49 . replace Ilivestock_98 = . if (cows_98_23==. | goats_98_24==. | sheep_
> 98_25==. | pigs_98_26==.)
(9 real changes made, 9 to missing)

50 .

51 . * Create indicator for "Child Sick Often"

52 . gen Isoften_98 = (fallsick_98_37==3)

53 . replace Isoften_98 = . if fallsick_98_37==.
(9 real changes made, 9 to missing)

54 .

55 . * Create indicator for "Child Clean"

56 . gen Iclean_98 = (clean_98_15==1)

57 . replace Iclean_98 = . if clean_98_15==.
(1 real change made, 1 to missing)

58 .

59 . * Each school is a distinct data point, weighted by number of pupils

60 . collapse preatt_98 havelatr_98_33 Ilivestock_98 waz_98 bloodst_98_58 Isoften_
> 98 malaria_98_48 Iclean_98 ///
> wgrp* (count) np = pupid, by(schid)

61 .

62 .

63 . **** TABLE 1: PANEL B

```

64 . *t-test without weight
65 . bys wgrp: summ preatt_98 havelatr_98_33 Ilivestock_98 waz_98 bloodst_98_58 Is
> often_98 malaria_98_48 Iclean_98

```

```
-> wgrp = 1
```

Variable	Obs	Mean	Std. Dev.	Min	Max
preatt_98	25	.9738543	.014945	.9269388	.9969512
havelatr_~33	25	.8187817	.0859229	.646789	.9288538
Ilivestoc~98	25	.6483713	.118392	.4324324	.8323354
waz_98	25	-1.389107	.1331045	-1.745147	-1.174286
bloodst_9~58	25	.259286	.1213661	.097561	.5183486
Isoften_98	25	.0919839	.0519109	.0073529	.1792453
malaria_9~48	25	.3618487	.0910702	.2248804	.5697674
Iclean_98	25	.5878764	.1248119	.2173913	.8208333

```
-> wgrp = 2
```

Variable	Obs	Mean	Std. Dev.	Min	Max
preatt_98	25	.9618636	.0184693	.9117117	.9895
havelatr_~33	25	.7956409	.1508569	.4076923	.9649123
Ilivestoc~98	25	.6738798	.1108677	.4858491	.8430232
waz_98	25	-1.426267	.1815372	-1.843793	-.9624057
bloodst_9~58	25	.2285974	.1053984	.0564972	.4883721
Isoften_98	25	.1073843	.0441899	.035	.2461538
malaria_9~48	25	.4119708	.1233183	.2307692	.7142857
Iclean_98	25	.6588723	.1274986	.4186046	.9622642

```
-> wgrp = 3
```

Variable	Obs	Mean	Std. Dev.	Min	Max
preatt_98	25	.9695311	.0093731	.9401361	.9813253
havelatr_~33	25	.8096977	.1522834	.3962264	.974026
Ilivestoc~98	25	.6748721	.1065462	.4146341	.9090909
waz_98	25	-1.440187	.2038174	-2.013962	-1.159683
bloodst_9~58	25	.2043866	.1572354	.0829694	.754717
Isoften_98	25	.0777073	.0406948	.0095238	.168
malaria_9~48	25	.4012834	.1076253	.2207792	.6956522
Iclean_98	25	.6523937	.1201077	.3207547	.7987805

```

66 .      foreach var in preatt_98 havelatr_98_33 Ilivestock_98 waz_98 bloodst_
> 98_58 Isoften_98 malaria_98_48 Iclean_98 {
2.      regress `var' wgrp1 wgrp2

```

3. }

Source	SS	df	MS	Number of obs	=	75
Model	.001843815	2	.000921908	F(2, 72)	=	4.24
Residual	.015655815	72	.000217442	Prob > F	=	0.0182
				R-squared	=	0.1054
				Adj R-squared	=	0.0805
Total	.01749963	74	.000236481	Root MSE	=	.01475

preatt_98	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	.0043232	.0041708	1.04	0.303	-.0039911	.0126375
wgrp2	-.0076675	.0041708	-1.84	0.070	-.0159818	.0006468
_cons	.9695311	.0029492	328.75	0.000	.963652	.9754102

Source	SS	df	MS	Number of obs	=	75
Model	.00679677	2	.003398385	F(2, 72)	=	0.19
Residual	1.27993845	72	.017776923	Prob > F	=	0.8264
				R-squared	=	0.0053
				Adj R-squared	=	-0.0223
Total	1.28673522	74	.017388314	Root MSE	=	.13333

havelatr_~33	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	.009084	.0377115	0.24	0.810	-.0660924	.0842604
wgrp2	-.0140568	.0377115	-0.37	0.710	-.0892332	.0611196
_cons	.8096977	.026666	30.36	0.000	.7565399	.8628554

Source	SS	df	MS	Number of obs	=	75
Model	.011283004	2	.005641502	F(2, 72)	=	0.45
Residual	.903849658	72	.012553467	Prob > F	=	0.6398
				R-squared	=	0.0123
				Adj R-squared	=	-0.0151
Total	.915132662	74	.012366658	Root MSE	=	.11204

Ilivestoc~98	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	-.0265008	.0316903	-0.84	0.406	-.0896743	.0366727
wgrp2	-.0009923	.0316903	-0.03	0.975	-.0641658	.0621812
_cons	.6748721	.0224085	30.12	0.000	.6302017	.7195425

Source	SS	df	MS	Number of obs	=	75
Model	.034865423	2	.017432711	F(2, 72)	=	0.57
Residual	2.21313831	72	.030738032	Prob > F	=	0.5697
				R-squared	=	0.0155
				Adj R-squared	=	-0.0118
Total	2.24800373	74	.030378429	Root MSE	=	.17532

waz_98	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	.0510803	.0495887	1.03	0.306	-.0477731	.1499336
wgrp2	.0139198	.0495887	0.28	0.780	-.0849335	.1127732
_cons	-1.440187	.0350645	-41.07	0.000	-1.510087	-1.370287

Source	SS	df	MS	Number of obs	=	75
				F(2, 72)	=	1.12
Model	.037849052	2	.018924526	Prob > F	=	0.3310
Residual	1.21347687	72	.016853845	R-squared	=	0.0302
				Adj R-squared	=	0.0033
Total	1.25132592	74	.01690981	Root MSE	=	.12982

bloodst_9~58	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	.0548993	.0367193	1.50	0.139	-.0182993	.1280979
wgrp2	.0242108	.0367193	0.66	0.512	-.0489878	.0974094
_cons	.2043866	.0259645	7.87	0.000	.1526274	.2561459

Source	SS	df	MS	Number of obs	=	75
				F(2, 72)	=	2.62
Model	.011014316	2	.005507158	Prob > F	=	0.0797
Residual	.151285395	72	.002101186	R-squared	=	0.0679
				Adj R-squared	=	0.0420
Total	.162299711	74	.002193239	Root MSE	=	.04584

Isoften_98	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	.0142766	.0129651	1.10	0.274	-.0115689	.0401222
wgrp2	.029677	.0129651	2.29	0.025	.0038315	.0555225
_cons	.0777073	.0091677	8.48	0.000	.0594317	.0959828

Source	SS	df	MS	Number of obs	=	75
				F(2, 72)	=	1.49
Model	.034846225	2	.017423112	Prob > F	=	0.2323
Residual	.842025588	72	.0116948	R-squared	=	0.0397
				Adj R-squared	=	0.0131
Total	.876871813	74	.011849619	Root MSE	=	.10814

malaria_9~48	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	-.0394347	.0305873	-1.29	0.201	-.1004094	.02154
wgrp2	.0106874	.0305873	0.35	0.728	-.0502873	.0716621
_cons	.4012834	.0216285	18.55	0.000	.3581678	.4443991

Source	SS	df	MS	Number of obs	=	75
Model	.077040613	2	.038520306	F(2, 72)	=	2.50
Residual	1.11023437	72	.015419922	Prob > F	=	0.0893
				R-squared	=	0.0649
				Adj R-squared	=	0.0389
Total	1.18727498	74	.016044257	Root MSE	=	.12418

Iclean_98	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	-.0645173	.0351226	-1.84	0.070	-.1345329	.0054982
wgrp2	.0064785	.0351226	0.18	0.854	-.063537	.0764941
_cons	.6523937	.0248354	26.27	0.000	.6028853	.7019022

```

67 .
68 . **** TABLE 2: PANEL B
69 .             *t-test with weight
70 .             bys wgrp: summ preatt_98 havelatr_98_33 Ilivestock_98 waz_98
> bloodst_98_58 Isoften_98 malaria_98_48 Iclean_98 [aw=np]

```

```
-> wgrp = 1
```

Variable	Obs	Weight	Mean	Std. Dev.	Min	Max
preatt_98	25	4601	.9727461	.0144374	.9269388	.9969512
havelatr_~33	25	4601	.822321	.086307	.646789	.9288538
Ilivestoc~98	25	4601	.6590974	.1148677	.4324324	.8323354
waz_98	25	4601	-1.39012	.1264909	-1.745147	-1.174286
bloodst_9~58	25	4601	.2635569	.1196989	.097561	.5183486
Isoften_98	25	4601	.0976071	.0473208	.0073529	.1792453
malaria_9~48	25	4601	.367683	.0926754	.2248804	.5697674
Iclean_98	25	4601	.6032854	.1176456	.2173913	.8208333

```
-> wgrp = 2
```

Variable	Obs	Weight	Mean	Std. Dev.	Min	Max
preatt_98	25	4260	.9632722	.0166778	.9117117	.9895
havelatr_~33	25	4260	.8083434	.14127	.4076923	.9649123
Ilivestoc~98	25	4260	.6725352	.1118874	.4858491	.8430232
waz_98	25	4260	-1.402161	.1760423	-1.843793	-.9624057
bloodst_9~58	25	4260	.2206573	.0950049	.0564972	.4883721
Isoften_98	25	4260	.1044601	.0405134	.035	.2461538
malaria_9~48	25	4260	.3840376	.0970834	.2307692	.7142857
Iclean_98	25	4260	.657277	.1257667	.4186046	.9622642

-> wgrp = 3

Variable	Obs	Weight	Mean	Std. Dev.	Min	Max
preatt_98	25	4269	.9694445	.0093602	.9401361	.9813253
havelatr_~33	25	4269	.8181786	.1331183	.3962264	.974026
Ilivestoc~98	25	4269	.664068	.0968795	.4146341	.9090909
waz_98	25	4269	-1.439656	.1801888	-2.013962	-1.159683
bloodst_9~58	25	4269	.1934879	.1290711	.0829694	.754717
Isoften_98	25	4269	.0810494	.0423568	.0095238	.168
malaria_9~48	25	4269	.4018115	.1052634	.2207792	.6956522
Iclean_98	25	4269	.6697119	.0980211	.3207547	.7987805

```

71 .      foreach var in preatt_98 havelatr_98_33 Ilivestock_98 waz_98 bloodst_
> 98_58 Isoften_98 malaria_98_48 Iclean_98 {
2.          regress `var' wgrp1 wgrp2 [aw=np]
3.          }
(sum of wgt is 1.3130e+04)

```

Source	SS	df	MS	Number of obs	=	75
Model	.001159891	2	.000579946	F(2, 72)	=	3.02
Residual	.013807584	72	.000191772	Prob > F	=	0.0548
Total	.014967475	74	.000202263	R-squared	=	0.0775
				Adj R-squared	=	0.0519
				Root MSE	=	.01385

preatt_98	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
wgrp1	.0033016	.0038937	0.85	0.399	-.0044604 .0110637
wgrp2	-.0061723	.003968	-1.56	0.124	-.0140824 .0017379
_cons	.9694445	.0028043	345.69	0.000	.9638541 .9750348

(sum of wgt is 1.3130e+04)

Source	SS	df	MS	Number of obs	=	75
Model	.002577881	2	.00128894	F(2, 72)	=	0.09
Residual	1.06897181	72	.014846831	Prob > F	=	0.9169
Total	1.07154969	74	.014480401	R-squared	=	0.0024
				Adj R-squared	=	-0.0253
				Root MSE	=	.12185

havelatr_~33	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
wgrp1	.0041424	.0342603	0.12	0.904	-.0641543 .0724391
wgrp2	-.0098352	.034914	-0.28	0.779	-.079435 .0597646
_cons	.8181786	.0246749	33.16	0.000	.7689901 .8673671

(sum of wgt is 1.3130e+04)

Source	SS	df	MS	Number of obs	=	75
				F(2, 72)	=	0.10
Model	.002318088	2	.001159044	Prob > F	=	0.9061
Residual	.845057643	72	.011736912	R-squared	=	0.0027
				Adj R-squared	=	-0.0250
Total	.847375731	74	.011451023	Root MSE	=	.10834

Ilivestoc~98	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	-.0049706	.0304615	-0.16	0.871	-.0656945	.0557533
wgrp2	.0084672	.0310427	0.27	0.786	-.0534153	.0703498
_cons	.664068	.0219389	30.27	0.000	.6203335	.7078025

(sum of wgt is 1.3130e+04)

Source	SS	df	MS	Number of obs	=	75
				F(2, 72)	=	0.64
Model	.033326941	2	.016663471	Prob > F	=	0.5326
Residual	1.88769898	72	.026218041	R-squared	=	0.0173
				Adj R-squared	=	-0.0099
Total	1.92102592	74	.02595981	Root MSE	=	.16192

waz_98	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	.0495361	.0455276	1.09	0.280	-.0412215	.1402936
wgrp2	.037495	.0463963	0.81	0.422	-.0549943	.1299843
_cons	-1.439656	.0327898	-43.91	0.000	-1.505021	-1.37429

(sum of wgt is 1.3130e+04)

Source	SS	df	MS	Number of obs	=	75
				F(2, 72)	=	2.37
Model	.063485915	2	.031742957	Prob > F	=	0.1003
Residual	.962329712	72	.01336569	R-squared	=	0.0619
				Adj R-squared	=	0.0358
Total	1.02581563	74	.013862373	Root MSE	=	.11561

bloodst_9~58	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	.070069	.0325065	2.16	0.034	.0052685	.1348695
wgrp2	.0271693	.0331267	0.82	0.415	-.0388676	.0932063
_cons	.1934879	.0234118	8.26	0.000	.1468174	.2401585

(sum of wgt is 1.3130e+04)

Source	SS	df	MS	Number of obs	=	75
				F(2, 72)	=	1.86
Model	.007079175	2	.003539587	Prob > F	=	0.1627
Residual	.136837976	72	.001900527	R-squared	=	0.0492
				Adj R-squared	=	0.0228

Total | .143917151 74 .001944826 Root MSE = .0436

Isoften_98	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	.0165577	.0122578	1.35	0.181	-.0078777	.0409931
wgrp2	.0234107	.0124917	1.87	0.065	-.001491	.0483123
_cons	.0810494	.0088283	9.18	0.000	.0634506	.0986483

(sum of wgt is 1.3130e+04)

Source	SS	df	MS	Number of obs	=	75
				F(2, 72)	=	0.76
Model	.01473294	2	.00736647	Prob > F	=	0.4706
Residual	.696257134	72	.009670238	R-squared	=	0.0207
				Adj R-squared	=	-0.0065
Total	.710990075	74	.009607974	Root MSE	=	.09834

malaria_9~48	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	-.0341286	.0276499	-1.23	0.221	-.0892475	.0209904
wgrp2	-.017774	.0281774	-0.63	0.530	-.0739446	.0383967
_cons	.4018115	.0199139	20.18	0.000	.3621138	.4415092

(sum of wgt is 1.3130e+04)

Source	SS	df	MS	Number of obs	=	75
				F(2, 72)	=	2.43
Model	.063784678	2	.031892339	Prob > F	=	0.0949
Residual	.943615485	72	.013105771	R-squared	=	0.0633
				Adj R-squared	=	0.0373
Total	1.00740016	74	.013613516	Root MSE	=	.11448

Iclean_98	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	-.0664265	.0321889	-2.06	0.043	-.1305938	-.0022592
wgrp2	-.0124349	.032803	-0.38	0.706	-.0778266	.0529568
_cons	.6697119	.023183	28.89	0.000	.6234974	.7159264

```
72 .            clear

73 .

74 .

75 . * Use School data
76 .            use "/Users/fatimahashimi/Desktop/FINAL PROJECT ECON 7910/ECON_7910_F
> inal_Project_DataSET/schoolvar.dta"

77 .

78 . * Create worm group indicators
79 .
```

```

80 .           gen wgrp1 = (wgrp==1)

81 .           gen wgrp2 = (wgrp==2)

82 .           gen wgrp3 = (wgrp==3)

83 .

84 . * Normalize 1996 mock tests to be in units of individual std dev, equivalent
    > to 1998, 1999
85 .           replace mk96_s = mk96_s*(0.4357)/(0.8318)
    (75 real changes made)

86 .

87 .

88 . **** TABLE 1 & 2: PANEL C

89 .

90 .           bys wgrp: summ mk96_s distlake pup_pop latr_pup z_inf98

```

```
-> wgrp = 1
```

Variable	Obs	Mean	Std. Dev.	Min	Max
mk96_s	25	-.1029716	.3799214	-1.096043	.5278673
distlake	25	10.03356	5.425798	0	19.381
pup_pop	25	392.72	158.3297	148	748
latr_pup	24	.0074168	.0033881	.0022779	.0142857
z_inf98	25	.3688953	.1058442	.2206897	.5326461

```
-> wgrp = 2
```

Variable	Obs	Mean	Std. Dev.	Min	Max
mk96_s	25	.0918428	.5040303	-.8385319	1.16006
distlake	24	9.922959	8.116067	0	24.742
pup_pop	25	403.8	275.6167	14	1351
latr_pup	22	.0061782	.003619	.0007402	.0144928
z_inf98	25	.3665191	.1005379	.2206897	.5326461

```
-> wgrp = 3
```

Variable	Obs	Mean	Std. Dev.	Min	Max
mk96_s	25	.0111289	.4086192	-.5630336	1.493038
distlake	25	9.45548	6.399379	.355	21.956
pup_pop	25	375.88	153.5291	95	675
latr_pup	24	.0065807	.0033304	.0015291	.0140845
z_inf98	25	.360046	.1078718	.2206897	.5326461

```

91 .           foreach var in mk96_s distlake pup_pop latr_pup z_inf98 {

```

```
2. regress `var' wgrp1 wgrp2
3. }
```

Source	SS	df	MS	Number of obs	=	75
				F(2, 72)	=	1.27
Model	.479052529	2	.239526264	Prob > F	=	0.2868
Residual	13.5685559	72	.188452165	R-squared	=	0.0341
				Adj R-squared	=	0.0073
Total	14.0476084	74	.189832547	Root MSE	=	.43411

mk96_s	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	-.1141005	.1227851	-0.93	0.356	-.358868	.1306671
wgrp2	.0807139	.1227851	0.66	0.513	-.1640537	.3254815
_cons	.0111289	.0868222	0.13	0.898	-.1619479	.1842057

Source	SS	df	MS	Number of obs	=	74
				F(2, 71)	=	0.05
Model	4.69353615	2	2.34676807	Prob > F	=	0.9494
Residual	3204.41479	71	45.1326026	R-squared	=	0.0015
				Adj R-squared	=	-0.0267
Total	3209.10832	73	43.960388	Root MSE	=	6.7181

distlake	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	.57808	1.90016	0.30	0.762	-3.210731	4.366892
wgrp2	.4674786	1.919851	0.24	0.808	-3.360596	4.295553
_cons	9.45548	1.343616	7.04	0.000	6.776386	12.13457

Source	SS	df	MS	Number of obs	=	75
				F(2, 72)	=	0.12
Model	9882.32	2	4941.16	Prob > F	=	0.8880
Residual	2990497.68	72	41534.69	R-squared	=	0.0033
				Adj R-squared	=	-0.0244
Total	3000380	74	40545.6757	Root MSE	=	203.8

pup_pop	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	16.84	57.64352	0.29	0.771	-98.07025	131.7503
wgrp2	27.92	57.64352	0.48	0.630	-86.99025	142.8303
_cons	375.88	40.76012	9.22	0.000	294.6262	457.1338

Source	SS	df	MS	Number of obs	=	70
				F(2, 67)	=	0.78
Model	.000018548	2	9.2739e-06	Prob > F	=	0.4614
Residual	.000794177	67	.000011853	R-squared	=	0.0228
				Adj R-squared	=	-0.0063

Total | .000812725 69 .000011779 Root MSE = .00344

latr_pup	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	.0008362	.0009939	0.84	0.403	-.0011476	.00282
wgrp2	-.0004025	.0010162	-0.40	0.693	-.0024308	.0016259
_cons	.0065807	.0007028	9.36	0.000	.0051779	.0079834

Source	SS	df	MS	Number of obs	=	75
				F(2, 72)	=	0.05
Model	.001048818	2	.000524409	Prob > F	=	0.9534
Residual	.790732524	72	.010982396	R-squared	=	0.0013
				Adj R-squared	=	-0.0264
Total	.791781342	74	.010699748	Root MSE	=	.1048

z_inf98	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	.0088493	.029641	0.30	0.766	-.050239	.0679377
wgrp2	.0064732	.029641	0.22	0.828	-.0526152	.0655615
_cons	.360046	.0209594	17.18	0.000	.3182642	.4018277

```
92 .
93 .
94 .      *****
95 .
end of do-file
```

```

name: <unnamed>
log: /Users/fatimahashimi/Desktop/FINAL PROJECT ECON 7910/TABLE-2-.smcl
log type: smcl
opened on: 30 Nov 2020, 18:24:13

```

```

1 . set more off

2 .
3 .
4 . * Incorporate child gender and age information with parasitological exam data
5 .       use "/Users/fatimahashimi/Desktop/FINAL PROJECT ECON 7910/ECON_7910_F
> inal_Project_Data /namelist.dta"

6 .       collapse sex yrbirth sch98v1, by (pupid)

7 .       sort pupid

8 .       save namelist, replace
file namelist.dta saved

9 .       use "//Users/fatimahashimi/Desktop/FINAL PROJECT ECON 7910/ECON_7910_
> Final_Project_Data /wormed.dta"

10 .      drop sch98v1

11 .      sort pupid

12 .      merge pupid using namelist
(note: you are using old merge syntax; see \[D\] merge for new syntax)

13 .      tab _merge

```

_merge	Freq.	Percent	Cum.
1	137	0.39	0.39
2	30,900	88.49	88.89
3	3,881	11.11	100.00
Total	34,918	100.00	

```

14 .      drop _merge

15 .      save namelist2, replace
file namelist2.dta saved

16 .      clear

17 .
18 . * Incorporate treatment group information
19 .      use "/Users/fatimahashimi/Desktop/FINAL PROJECT ECON 7910/ECON_7910_F
> inal_Project_Data /schoolvar.dta"

```

```

20 .      keep schid distlake wgrp

21 .      rename schid sch98v1

22 .      sort sch98v1

23 .      save namelist, replace
      file namelist.dta saved

24 .      clear

25 .      use namelist2

26 .      drop wgrp1

27 .      sort sch98v1

28 .      merge sch98v1 using namelist
      (note: you are using old merge syntax; see [D] merge for new syntax)
      variable sch98v1 does not uniquely identify observations in the master data

```

```

29 .      tab _merge

```

<u>_merge</u>	Freq.	Percent	Cum.
1	137	0.39	0.39
3	34,781	99.61	100.00
Total	34,918	100.00	

```

30 .      drop _merge

31 .      drop if hw98==.
      (33,024 observations deleted)

32 .

33 . * Change units for average infection intensity variables from 100 milligrams
      > to grams

34 .      replace hw98 = hw98*10
      (1,464 real changes made)

35 .      replace al98 = al98*10
      (803 real changes made)

36 .      replace sm98 = sm98*10
      (412 real changes made)

37 .      replace tt98 = tt98*10
      (1,045 real changes made)

38 .

39 . * Prevalence of infection
40 .      * Hookwork

```

41 . summ any_hw98

Variable	Obs	Mean	Std. Dev.	Min	Max
any_hw98	1,894	.7729673	.4190246	0	1

42 . * Roundworm

43 . summ any_al98

Variable	Obs	Mean	Std. Dev.	Min	Max
any_al98	1,894	.4239704	.4943162	0	1

44 . * Schistosomiasis

45 . summ any_sm98

Variable	Obs	Mean	Std. Dev.	Min	Max
any_sm98	1,894	.217529	.4126743	0	1

46 . * Whipworm

47 . summ any_tt98

Variable	Obs	Mean	Std. Dev.	Min	Max
any_tt98	1,894	.5517423	.4974469	0	1

48 . * At least one infection

49 . summ any_98

Variable	Obs	Mean	Std. Dev.	Min	Max
any_98	1,894	.9155227	.2781757	0	1

50 . * Born since 1985

51 . summ any_98 if (yrbirth>=1985 & yrbirth~=.)

Variable	Obs	Mean	Std. Dev.	Min	Max
any_98	822	.9306569	.2541913	0	1

52 . * Born before 1985

53 . summ any_98 if yrbirth<1985

Variable	Obs	Mean	Std. Dev.	Min	Max
any_98	1,008	.9077381	.289539	0	1

54 . * Female

55 . summ any_98 if sex==0

Variable	Obs	Mean	Std. Dev.	Min	Max

```
any_98 |      833    .9051621    .293167      0      1
```

```
56 .      * Male
57 .      summ any_98 if sex==1
```

Variable	Obs	Mean	Std. Dev.	Min	Max
any_98	1,012	.9268775	.2604662	0	1

```
58 .      * At least two & three infections
59 .      gen atleast2=0 if numinf98!=.

60 .      replace atleast2=1 if numinf98>=2 & numinf98!=.
      (1,228 real changes made)
```

```
61 .      tab atleast2
```

atleast2	Freq.	Percent	Cum.
0	666	35.16	35.16
1	1,228	64.84	100.00
Total	1,894	100.00	

```
62 .      gen atleast3=0 if numinf98!=.
```

```
63 .      replace atleast3=1 if numinf98>=3 & numinf98!=.
      (645 real changes made)
```

```
64 .      tab atleast3
```

atleast3	Freq.	Percent	Cum.
0	1,249	65.95	65.95
1	645	34.05	100.00
Total	1,894	100.00	

```
65 .
66 . * Prevalence of moderate-heavy infection
67 .      * Hookworm
68 .      summ hw98_ics
```

Variable	Obs	Mean	Std. Dev.	Min	Max
hw98_ics	1,894	.1541711	.361208	0	1

```
69 .      * Roundworm
70 .      summ al98_who
```

Variable	Obs	Mean	Std. Dev.	Min	Max
al98_who	1,894	.157339	.3642162	0	1

71 . * Schistosomiasis
72 . summ sm98_who

Variable	Obs	Mean	Std. Dev.	Min	Max
sm98_who	1,894	.0712777	.2573561	0	1

73 . * Whipworm
74 . summ tt98_ics

Variable	Obs	Mean	Std. Dev.	Min	Max
tt98_ics	1,894	.0982049	.29767	0	1

75 . * At least one infection
76 . summ any_ics98

Variable	Obs	Mean	Std. Dev.	Min	Max
any_ics98	1,894	.3658923	.4818067	0	1

77 . * Born since 1985
78 . summ any_ics98 if (yrbirth>=1985 & yrbirth~=.)

Variable	Obs	Mean	Std. Dev.	Min	Max
any_ics98	822	.3990268	.4899964	0	1

79 . * Born before 1985
80 . summ any_ics98 if yrbirth<1985

Variable	Obs	Mean	Std. Dev.	Min	Max
any_ics98	1,008	.3382937	.4733639	0	1

81 . * Female
82 . summ any_ics98 if sex==0

Variable	Obs	Mean	Std. Dev.	Min	Max
any_ics98	833	.3433373	.4751082	0	1

83 . * Male
84 . summ any_ics98 if sex==1

Variable	Obs	Mean	Std. Dev.	Min	Max
any_ics98	1,012	.3824111	.4862165	0	1

85 . * At least two & three infections
86 . gen atleast2i=0 if numics98!=.

```
87 .           replace atleast2i=1 if numics98>=2 & numics98!=.
    (196 real changes made)
```

```
88 .
89 .           summ atleast2i
```

Variable	Obs	Mean	Std. Dev.	Min	Max
atleast2i	1,894	.1034847	.3046713	0	1

```
90 .           gen atleast3i=0 if numics98!=.
```

```
91 .           replace atleast3i=1 if numics98>=3 & numics98!=.
    (22 real changes made)
```

```
92 .
93 .           summ atleast3i
```

Variable	Obs	Mean	Std. Dev.	Min	Max
atleast3i	1,894	.0116156	.1071764	0	1

```
94 .
95 . * Average worm load
96 .   * Hookworm
97 .           summ hw98
```

Variable	Obs	Mean	Std. Dev.	Min	Max
hw98	1,894	425.6917	1055.285	0	20000

```
98 .   * Roundworm
99 .           summ al98
```

Variable	Obs	Mean	Std. Dev.	Min	Max
al98	1,894	2336.521	5155.714	0	20900

```
100 .   * Schistosomiasis
101 .           summ sm98
```

Variable	Obs	Mean	Std. Dev.	Min	Max
sm98	1,894	90.5491	412.9692	0	5520

```
102 .   * Whipworm
103 .           summ tt98
```

Variable	Obs	Mean	Std. Dev.	Min	Max
tt98	1,894	161.3147	469.6525	0	6720

```
104 .
```

end of do-file

```

      name: <unnamed>
      log: /Users/fatimahashimi/Desktop/FINAL PROJECT ECON 7910/Question3-.sm
> cl
  log type: smcl
opened on: 30 Nov 2020, 19:05:20

1 . set more off

2 .
3 .
4 . * Incorporate child gender and age information with parasitological exam data
5 .       use "/Users/fatimahashimi/Desktop/FINAL PROJECT ECON 7910/ECON_7910_F
> inal_Project_DATASETT/namelist.dta"

6 . collapse sex yrbirth sch98v1 wgrp, by (pupid)

7 .       sort pupid

8 .       keep if wgrp==1
(23,147 observations deleted)

9 .       keep if sex==1
(6,077 observations deleted)

10 .
11 . save namelist_sub, replace
    file namelist_sub.dta saved

12 .
13 .       use "/Users/fatimahashimi/Desktop/FINAL PROJECT ECON 7910/ECON_7910_F
> inal_Project_DATASETT/wormed.dta"

14 .
15 .       drop sch98v1

16 .       sort pupid

17 .       merge pupid using namelist_sub
(note: you are using old merge syntax; see [D] merge for new syntax)

18 .       keep if sex==1
(2,841 observations deleted)

19 .
20 .       tab _merge

```

_merge	Freq.	Percent	Cum.
2	4,380	78.82	78.82
3	1,177	21.18	100.00
Total	5,557	100.00	


```

21 .      drop _merge

22 .      save namelist_sub2, replace
      file namelist_sub2.dta saved

23 .      clear

24 .
25 . * Incorporate treatment group information
26 .      use "/Users/fatimahashimi/Desktop/FINAL PROJECT ECON 7910/ECON_7910_F
      > inal_Project_DATASETT/schoolvar.dta"

27 .
28 .      keep schid distlake wgrp

29 .
30 .      rename schid sch98v1

31 .      sort sch98v1

32 .      keep if wgrp==1
      (50 observations deleted)

33 .      save namelist_sub, replace
      file namelist_sub.dta saved

34 .      clear

35 .      use namelist_sub2

36 .
37 .      sort sch98v1

38 .      merge sch98v1 using namelist_sub
      (note: you are using old merge syntax; see [D] merge for new syntax)
      variable sch98v1 does not uniquely identify observations in the master data

39 .      tab _merge

      +-----+-----+-----+-----+
      | _merge | Freq. | Percent | Cum. |
      +-----+-----+-----+-----+
      |      3 |   5,557 |   100.00 | 100.00 |
      +-----+-----+-----+-----+
      | Total |   5,557 |   100.00 |      |
      +-----+-----+-----+-----+

40 .      drop _merge

41 .      drop if hw98==.
      (4,546 observations deleted)

42 .
43 . * Change units for average infection intensity variables from 100 milligrams

```

```

> to grams
44 .      replace hw98 = hw98*10
    (804 real changes made)

45 .      replace al98 = al98*10
    (426 real changes made)

46 .      replace sm98 = sm98*10
    (249 real changes made)

47 .      replace tt98 = tt98*10
    (565 real changes made)

```

```

48 .
49 . * Prevalence of infection
50 .      * Hookworm
51 .      summ any_hw98

```

Variable	Obs	Mean	Std. Dev.	Min	Max
any_hw98	1,011	.7952522	.4037169	0	1

```

52 .      * Roundworm
53 .      summ any_al98

```

Variable	Obs	Mean	Std. Dev.	Min	Max
any_al98	1,011	.421365	.4940222	0	1

```

54 .      * Schistosomiasis
55 .      summ any_sm98

```

Variable	Obs	Mean	Std. Dev.	Min	Max
any_sm98	1,011	.2462908	.4310631	0	1

```

56 .      * Whipworm
57 .      summ any_tt98

```

Variable	Obs	Mean	Std. Dev.	Min	Max
any_tt98	1,011	.5588526	.49677	0	1

```

58 .      * At least one infection
59 .      summ any_98

```

Variable	Obs	Mean	Std. Dev.	Min	Max
any_98	1,011	.9268051	.260585	0	1

```

60 .      * Born since 1985
61 .      summ any_98 if (yrbirth>=1985 & yrbirth~=. )

```

```

Variable | Obs      Mean      Std. Dev.      Min      Max
-----|-----
any_98   | 405      .9308642    .2539987      0        1

62 .
63 .      * Born before 1985
      summ any_98 if yrbirth<1985

Variable | Obs      Mean      Std. Dev.      Min      Max
-----|-----
any_98   | 594      .9276094    .2593519      0        1

64 .
65 .      * At least two & three infections
66 .      gen atleast2=0 if numinf98!=.

67 .      replace atleast2=1 if numinf98>=2 & numinf98!=.
(675 real changes made)

68 .      summ atleast2

Variable | Obs      Mean      Std. Dev.      Min      Max
-----|-----
atleast2 | 1,011    .6676558    .4712868      0        1

69 .      gen atleast3=0 if numinf98!=.

70 .      replace atleast3=1 if numinf98>=3 & numinf98!=.
(352 real changes made)

71 .      summ atleast3

Variable | Obs      Mean      Std. Dev.      Min      Max
-----|-----
atleast3 | 1,011    .3481701    .476626      0        1

72 .
73 . * Prevalence of moderate-heavy infection
74 .      * Hookworm
75 .      summ hw98_ics

Variable | Obs      Mean      Std. Dev.      Min      Max
-----|-----
hw98_ics | 1,011    .1721068    .3776601      0        1

76 .      * Roundworm
77 .      summ al98_who

Variable | Obs      Mean      Std. Dev.      Min      Max
-----|-----
al98_who | 1,011    .1513353    .3585528      0        1

78 .      * Schistosomiasis
79 .      summ sm98_who
```

Variable	Obs	Mean	Std. Dev.	Min	Max
sm98_who	1,011	.0850643	.2791154	0	1

80 . * Whipworm

81 . summ tt98_ics

Variable	Obs	Mean	Std. Dev.	Min	Max
tt98_ics	1,011	.0999011	.3000165	0	1

82 . * At least one infection

83 . summ any_ics98

Variable	Obs	Mean	Std. Dev.	Min	Max
any_ics98	1,011	.3827893	.4863081	0	1

84 . * Born since 1985

85 . summ any_ics98 if (yrbirth>=1985 & yrbirth~=.)

Variable	Obs	Mean	Std. Dev.	Min	Max
any_ics98	405	.4148148	.4932994	0	1

86 . * Born before 1985

87 . summ any_ics98 if yrbirth<1985

Variable	Obs	Mean	Std. Dev.	Min	Max
any_ics98	594	.3636364	.4814511	0	1

88 .

89 . * At least two & three infections

90 . gen atleast2i=0 if numics98!=.

91 . replace atleast2i=1 if numics98>=2 & numics98!=.
(114 real changes made)

92 .

93 . summ atleast2i

Variable	Obs	Mean	Std. Dev.	Min	Max
atleast2i	1,011	.1127596	.3164553	0	1

94 .

95 . gen atleast3i=0 if numics98!=.

96 . replace atleast3i=1 if numics98>=3 & numics98!=.
(13 real changes made)

97 .

98 . summ atleast3i

Variable	Obs	Mean	Std. Dev.	Min	Max
atleast3i	1,011	.0128586	.1127199	0	1

99 .

100 . * Average worm load

101 . * Hookworm

102 . summ hw98

Variable	Obs	Mean	Std. Dev.	Min	Max
hw98	1,011	469.9308	1122.219	0	20000

103 . * Roundworm

104 . summ al98

Variable	Obs	Mean	Std. Dev.	Min	Max
al98	1,011	2224.352	4943.906	0	20310

105 . * Schistosomiasis

106 . summ sm98

Variable	Obs	Mean	Std. Dev.	Min	Max
sm98	1,011	108.368	444.2736	0	4980

107 . * Whipworm

108 . summ tt98

Variable	Obs	Mean	Std. Dev.	Min	Max
tt98	1,011	143.7191	364.4443	0	3590

109 .

end of do-file

110 . do "/var/folders/rt/52z7d4k159d4c4gsnxmbjnxr0000gn/T//SD02389.000000"

111 .

112 . /*DATA ANALYSIS DO FILES: TABLE 1*/

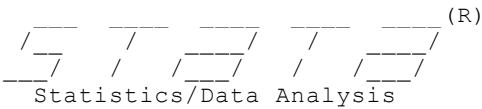
113 .

114 . cd "/Users/fatimahashimi/Desktop/FINAL PROJECT ECON 7910"
/Users/fatimahashimi/Desktop/FINAL PROJECT ECON 7910

115 . * lets create a file with all our work, that is called a log file

116 . clear

117 . cap log close



```
std -> std981 std982 ... std998
name: <unnamed>
log: C:\Users\Lenovo-V\Desktop\econ7910\ECON_7910_Final_Project_Data\Question4Final.smo
log type: smcl
opened on: 10 Dec 2020, 21:57:11
```

```
1 .
2 . * Merge Compliance data with Namelist data
3 .      rename schid sch
4 .
5 .      drop Tmonths
6 .
7 .      reshape wide date sch std obs prs sex Isem*, i(pupid) j(visit) /*for males only*/
8 .      (note: j = 981 982 983 984 985 986 987 988 991 992 993 994 995 996 997 998)
```

Data	long	->	wide
Number of obs.	556496	->	34781
Number of variables	22	->	156
j variable (16 values)	visit	->	(dropped)
xij variables:			
	date	->	date981 date982 ... date998
	sch	->	sch981 sch982 ... sch998
	std	->	std981 std982 ... std998
	obs	->	obs981 obs982 ... obs998
	prs	->	prs981 prs982 ... prs998
	sex	->	sex981 sex982 ... sex998
	Isem1	->	Isem1981 Isem1982 ... Isem1998
	Isem2	->	Isem2981 Isem2982 ... Isem2998
	Isem3	->	Isem3981 Isem3982 ... Isem3998

```
6 .      sort pupid
7 .      save "question4final", replace
8 .      file question4final.dta saved
9 .
10 .      use "comply"
11 .      sort pupid
12 .
13 .      merge pupid using "question4final"
14 .      (note: you are using old merge syntax; see [D] merge for new syntax)
15 .      (label sch_label already defined)
16 .
17 .      aorder
18 .
19 .      drop if wgrp==.
20 .      (10,377 observations deleted)
21 .
22 .      tab wgrp, gen(wgrp)
```

Initial worm group, Jan 1998	Freq.	Percent	Cum.
1	11,634	33.45	33.45
2	11,990	34.47	67.92
3	11,157	32.08	100.00
Total	34,781	100.00	

```

15 .          gen any98=.
    (34,781 missing values generated)

16 .          replace any98 = 0 if (a981==0 | a982==0 | p98==0)
    (26,076 real changes made)

17 .          replace any98 = 1 if (a981==1 | a982==1 | p98==1)
    (6,958 real changes made)

18 .
19 .          gen any99=.
    (34,781 missing values generated)

20 .          replace any99 = 0 if (a991==0 | a992==0 | p99==0)
    (24,630 real changes made)

21 .          replace any99 = 1 if (a991==1 | a992==1 | p99==1)
    (9,056 real changes made)

22 .
23 . *****TABLE 5,6*****
24 .
25 .          * Girls < 13
26 .          * Any medical treatment in 1998
27 .          bys wgrp: tab any98 if elg98 == 1

```

```
-> wgrp = 1
```

any98	Freq.	Percent	Cum.
0	1,951	22.56	22.56
1	6,697	77.44	100.00
Total	8,648	100.00	

```
-> wgrp = 2
```

any98	Freq.	Percent	Cum.
0	8,534	100.00	100.00
Total	8,534	100.00	

```
-> wgrp = 3
```

any98	Freq.	Percent	Cum.
0	8,047	100.00	100.00
Total	8,047	100.00	

```

28 .          * Albendazole
29 .          bys wgrp: tab a981 if elg98 == 1

```

```
-> wgrp = 1
```

Treated with albendazole in Round 1, 1998	Freq.	Percent	Cum.
0	2,729	31.56	31.56
1	5,919	68.44	100.00
Total	8,648	100.00	

-> wgrp = 2

Treated with albendazole in Round 1, 1998	Freq.	Percent	Cum.
0	8,534	100.00	100.00
Total	8,534	100.00	

-> wgrp = 3

Treated with albendazole in Round 1, 1998	Freq.	Percent	Cum.
0	8,047	100.00	100.00
Total	8,047	100.00	

30 . * Praziquantel
31 . tab p98 if elg98 == 1 & wgrp1==1 & psch98==1

Treated with praziquante 1 in 1998	Freq.	Percent	Cum.
0	806	36.21	36.21
1	1,420	63.79	100.00
Total	2,226	100.00	

32 . tab p98 if elg98 == 1 & wgrp2==1
no observations

33 . tab p98 if elg98 == 1 & wgrp3==1
no observations

34 . * Albendazole
35 . bys wgrp: tab a982 if elg98 == 1

-> wgrp = 1

Treated with albendazole in Round 2, 1998	Freq.	Percent	Cum.
0	3,831	44.30	44.30
1	4,817	55.70	100.00
Total	8,648	100.00	

-> wgrp = 2

Treated with albendazole in Round 2, 1998	Freq.	Percent	Cum.
0	8,534	100.00	100.00
Total	8,534	100.00	

-> wgrp = 3

Treated with albendazole in Round 2, 1998	Freq.	Percent	Cum.
0	8,047	100.00	100.00
Total	8,047	100.00	

```
36 .  
37 .      * Girls >= 13  
38 .      * Any medical treatment in 1998  
39 .      bys wgrp: tab any98 if elg98==0
```

-> wgrp = 1

any98	Freq.	Percent	Cum.
0	1,039	80.42	80.42
1	253	19.58	100.00
Total	1,292	100.00	

-> wgrp = 2

any98	Freq.	Percent	Cum.
0	1,239	100.00	100.00
Total	1,239	100.00	

-> wgrp = 3

any98	Freq.	Percent	Cum.
0	1,236	100.00	100.00
Total	1,236	100.00	

```
40 .      * Albendazole  
41 .      bys wgrp: tab a981 if elg98==0
```

-> wgrp = 1

Treated with albendazole in Round 1, 1998	Freq.	Percent	Cum.
0	1,144	88.54	88.54
1	148	11.46	100.00
Total	1,292	100.00	

-> wgrp = 2

Treated with albendazole in Round 1, 1998	Freq.	Percent	Cum.
0	1,239	100.00	100.00
Total	1,239	100.00	

-> wgrp = 3

Treated with albendazole in Round 1, 1998	Freq.	Percent	Cum.
0	1,236	100.00	100.00
Total	1,236	100.00	

42 . * Praziquantel
43 . tab p98 if elg98==0 & wgrp1==1 & psch98==1

Treated with praziquante 1 in 1998	Freq.	Percent	Cum.
0	175	65.54	65.54
1	92	34.46	100.00
Total	267	100.00	

44 . tab p98 if elg98==0 & (wgrp2==1)
no observations

45 . tab p98 if elg98==0 & (wgrp3==1)
no observations

46 . * Albendazole
47 . bys wgrp: tab a982 if elg98==0

-> wgrp = 1

Treated with albendazole in Round 2, 1998	Freq.	Percent	Cum.
0	1,202	93.03	93.03
1	90	6.97	100.00
Total	1,292	100.00	

-> wgrp = 2

Treated with albendazole in Round 2, 1998	Freq.	Percent	Cum.
0	1,239	100.00	100.00
Total	1,239	100.00	

-> wgrp = 3

Treated with albendazole in Round 2, 1998	Freq.	Percent	Cum.
0	1,236	100.00	100.00
Total	1,236	100.00	

48 .
49 .
50 .
51 . *Males*
52 . * Any medical treatment in 1998
53 . bys wgrp: tab any98 if sex981 == 1

-> wgrp = 1

any98	Freq.	Percent	Cum.
0	885	17.20	17.20
1	4,261	82.80	100.00
Total	5,146	100.00	

-> wgrp = 2

any98	Freq.	Percent	Cum.
0	4,690	100.00	100.00
Total	4,690	100.00	

-> wgrp = 3

any98	Freq.	Percent	Cum.
0	4,428	100.00	100.00
Total	4,428	100.00	

```

54 .
55 .           * Albendazole r1
56 .           bys wgrp: tab a981  if sex981 == 1

```

```
-> wgrp = 1
```

Treated with albendazole in Round 1, 1998	Freq.	Percent	Cum.
0	1,323	25.71	25.71
1	3,823	74.29	100.00
Total	5,146	100.00	

```
-> wgrp = 2
```

Treated with albendazole in Round 1, 1998	Freq.	Percent	Cum.
0	4,690	100.00	100.00
Total	4,690	100.00	

```
-> wgrp = 3
```

Treated with albendazole in Round 1, 1998	Freq.	Percent	Cum.
0	4,428	100.00	100.00
Total	4,428	100.00	

```

57 .           * Praziquantel
58 .           tab p98 if sex981 == 1 & wgrp1==1 & psch98==1

```

Treated with praziquante 1 in 1998	Freq.	Percent	Cum.
0	408	30.24	30.24
1	941	69.76	100.00
Total	1,349	100.00	

```
59 .  
60 .           * Albendazole r2  
61 .           bys wgrp: tab a982 if sex982 == 1
```

-> wgrp = 1

Treated with albendazole in Round 2, 1998	Freq.	Percent	Cum.
0	2,096	40.73	40.73
1	3,050	59.27	100.00
Total	5,146	100.00	

-> wgrp = 2

Treated with albendazole in Round 2, 1998	Freq.	Percent	Cum.
0	4,690	100.00	100.00
Total	4,690	100.00	

-> wgrp = 3

Treated with albendazole in Round 2, 1998	Freq.	Percent	Cum.
0	4,428	100.00	100.00
Total	4,428	100.00	

```
62 .  
63 .  
64 .  
65 .  
66 .           * Drop pupils in standard 8 in 1998  
67 .           drop if std981==8  
           (1,620 observations deleted)  
  
68 .  
69 .           * Girls < 13  
70 .           * Any medical treatment in 1999  
71 .           bys wgrp: tab any99 if elg99 == 1
```

-> wgrp = 1

any99	Freq.	Percent	Cum.
0	3,239	41.91	41.91
1	4,490	58.09	100.00
Total	7,729	100.00	

-> wgrp = 2

any99	Freq.	Percent	Cum.
0	3,532	45.96	45.96
1	4,153	54.04	100.00
Total	7,685	100.00	

-> wgrp = 3

any99	Freq.	Percent	Cum.
0	7,122	98.77	98.77
1	89	1.23	100.00
Total	7,211	100.00	

72 . * Albendazole
73 . bys wgrp: tab a991 if elg99 == 1

-> wgrp = 1

Treated with albendazole in Round 1, 1999	Freq.	Percent	Cum.
0	4,329	56.01	56.01
1	3,400	43.99	100.00
Total	7,729	100.00	

-> wgrp = 2

Treated with albendazole in Round 1, 1999	Freq.	Percent	Cum.
0	5,004	65.11	65.11
1	2,681	34.89	100.00
Total	7,685	100.00	

-> wgrp = 3

Treated with albendazole in Round 1, 1999	Freq.	Percent	Cum.
0	7,155	99.22	99.22
1	56	0.78	100.00
Total	7,211	100.00	

```
74 . * Praziquantel
75 .     bys wgrp: tab p99 if elg99 == 1 & psch99==1
```

-> wgrp = 1

Treated with praziquante 1 in 1999	Freq.	Percent	Cum.
0	928	52.52	52.52
1	839	47.48	100.00
Total	1,767	100.00	

-> wgrp = 2

Treated with praziquante 1 in 1999	Freq.	Percent	Cum.
0	2,114	62.09	62.09
1	1,291	37.91	100.00
Total	3,405	100.00	

-> wgrp = 3
no observations

```
76 . * Albendazole
77 .     bys wgrp: tab a992 if elg99 == 1
```

-> wgrp = 1

Treated with albendazole in Round 2, 1999	Freq.	Percent	Cum.
0	3,713	48.04	48.04
1	4,016	51.96	100.00
Total	7,729	100.00	

-> wgrp = 2

Treated with albendazole in Round 2, 1999	Freq.	Percent	Cum.
0	3,856	50.18	50.18
1	3,829	49.82	100.00
Total	7,685	100.00	

-> wgrp = 3

Treated with albendazole in Round 2, 1999	Freq.	Percent	Cum.
0	7,128	98.85	98.85
1	83	1.15	100.00
Total	7,211	100.00	

```
78 .  
79 .      * Girls >= 13  
80 .      * Any medical treatment in 1999  
81 .      bys wgrp: tab any99 if elg99 == 0
```

```
-> wgrp = 1
```

any99	Freq.	Percent	Cum.
0	1,461	92.70	92.70
1	115	7.30	100.00
Total	1,576	100.00	

```
-> wgrp = 2
```

any99	Freq.	Percent	Cum.
0	1,350	90.66	90.66
1	139	9.34	100.00
Total	1,489	100.00	

```
-> wgrp = 3
```

any99	Freq.	Percent	Cum.
0	1,466	99.86	99.86
1	2	0.14	100.00
Total	1,468	100.00	

```
82 .      * Albendazole  
83 .      bys wgrp: tab a991 if elg99 == 0
```

```
-> wgrp = 1
```

Treated with albendazole in Round 1, 1999	Freq.	Percent	Cum.
0	1,485	94.23	94.23
1	91	5.77	100.00
Total	1,576	100.00	

```
-> wgrp = 2
```


Treated with albendazole in Round 1, 1999	Freq.	Percent	Cum.
0	1,410	94.69	94.69
1	79	5.31	100.00
Total	1,489	100.00	

-> wgrp = 3

Treated with albendazole in Round 1, 1999	Freq.	Percent	Cum.
0	1,466	99.86	99.86
1	2	0.14	100.00
Total	1,468	100.00	

```
84 . * Praziquantel
85 .     bys wgrp: tab p99     if elg99 == 0 & psch99==1
```

-> wgrp = 1

Treated with praziquante 1 in 1999	Freq.	Percent	Cum.
0	291	93.87	93.87
1	19	6.13	100.00
Total	310	100.00	

-> wgrp = 2

Treated with praziquante 1 in 1999	Freq.	Percent	Cum.
0	632	94.19	94.19
1	39	5.81	100.00
Total	671	100.00	

-> wgrp = 3
no observations

```
86 . * Albendazole
87 .     bys wgrp: tab a992 if elg99 == 0
```

-> wgrp = 1

Treated with albendazole in Round 2, 1999	Freq.	Percent	Cum.
0	1,480	93.91	93.91
1	96	6.09	100.00
Total	1,576	100.00	

-> wgrp = 2

Treated with albendazole in Round 2, 1999	Freq.	Percent	Cum.
0	1,379	92.61	92.61
1	110	7.39	100.00
Total	1,489	100.00	

-> wgrp = 3

Treated with albendazole in Round 2, 1999	Freq.	Percent	Cum.
0	1,466	99.86	99.86
1	2	0.14	100.00
Total	1,468	100.00	

```
88 .
89 . *Males
90 . *Any medical treatment in 1999
91 .     bys wgrp: tab any99 if sex981 == 1
```

-> wgrp = 1

any99	Freq.	Percent	Cum.
0	1,909	39.91	39.91
1	2,874	60.09	100.00
Total	4,783	100.00	

-> wgrp = 2

any99	Freq.	Percent	Cum.
0	1,921	43.42	43.42
1	2,503	56.58	100.00
Total	4,424	100.00	

-> wgrp = 3

any99	Freq.	Percent	Cum.
0	4,061	98.71	98.71
1	53	1.29	100.00
Total	4,114	100.00	

92 . * Albendazole
93 . bys wgrp: tab a991 if sex991 == 1

-> wgrp = 1

Treated with albendazole in Round 1, 1999	Freq.	Percent	Cum.
0	2,603	54.42	54.42
1	2,180	45.58	100.00
Total	4,783	100.00	

-> wgrp = 2

Treated with albendazole in Round 1, 1999	Freq.	Percent	Cum.
0	2,762	62.43	62.43
1	1,662	37.57	100.00
Total	4,424	100.00	

-> wgrp = 3

Treated with albendazole in Round 1, 1999	Freq.	Percent	Cum.
0	4,087	99.34	99.34
1	27	0.66	100.00
Total	4,114	100.00	

94 . * Praziquantel
95 . bys wgrp: tab p99 if sex991 == 1 & psch99==1

-> wgrp = 1

Treated with praziquante 1 in 1999	Freq.	Percent	Cum.
0	578	51.47	51.47
1	545	48.53	100.00
Total	1,123	100.00	

-> wgrp = 2

Treated with praziquante 1 in 1999	Freq.	Percent	Cum.
0	1,179	61.21	61.21
1	747	38.79	100.00
Total	1,926	100.00	

-> wgrp = 3
no observations

96 . * Albendazole
97 . bys wgrp: tab a992 if sex991 == 1

-> wgrp = 1

Treated with albendazole in Round 2, 1999	Freq.	Percent	Cum.
0	2,242	46.87	46.87
1	2,541	53.13	100.00
Total	4,783	100.00	

-> wgrp = 2

Treated with albendazole in Round 2, 1999	Freq.	Percent	Cum.
0	2,146	48.51	48.51
1	2,278	51.49	100.00
Total	4,424	100.00	

-> wgrp = 3

Treated with albendazole in Round 2, 1999	Freq.	Percent	Cum.
0	4,062	98.74	98.74
1	52	1.26	100.00
Total	4,114	100.00	

98 .
end of do-file

```

name: <unnamed>
log: /Users/jingxianliu/Desktop/ECON_7910_Final_Project_Data/Q5.smcl
log type: smcl
opened on: 10 Dec 2020, 14:30:44

```

```

1 . set more off

2 .
3 .
4 . * Incorporate data on treatment group and from pupil questionnaire
5 .      keep if visit >= 991
   (278,248 observations deleted)

6 .      keep pupid wgrp sap1 sap2 sap3 sap4 sch98v1

7 .      codebook pupid

```

pupid

Pupil ID Nu

```

type: numeric (long)

range: [1071714,9146209]      units: 1
unique values: 34,781        missing .: 0/278,248

mean: 2.1e+06
std. dev: 699078

percentiles:      10%      25%      50%      75%      90%
                  1.2e+06  1.7e+06  2.1e+06  2.7e+06  2.9e+06

```

```

8 .      duplicates report

```

Duplicates in terms of all variables

copies	observations	surplus
8	278248	243467

```

9 .      duplicates drop

```

Duplicates in terms of all variables

(243,467 observations deleted)

```
10 . codebook pupid
```

pupid	Pupil ID Nu
-------	-------------

```
type: numeric (long)
```

```
range: [1071714,9146209] units: 1
unique values: 34,781 missing.: 0/34,781
```

```
mean: 2.1e+06
std. dev: 699087
```

```
percentiles:      10%      25%      50%      75%      90%
                1.2e+06  1.7e+06  2.1e+06  2.7e+06  2.9e+06
```

```
11 .
12 . merge 1:1 pupid using "/Users/jingxianliu/Desktop/ECON_7910_Final_Project_Data/p
> dta"
```

Result	# of obs.
not matched	20,425
from master	19,728 (_merge==1)
from using	697 (_merge==2)
matched	15,053 (_merge==3)

```
13 .
14 . keep if _merge == 3
(20,425 observations deleted)
```

```
15 . drop _merge
```

```
16 .
17 .
```

```
18 . **** TABLE 5, PANEL B
```

```
19 . tab wgrp, gen(wgrp)
```

Initial worm group, Jan 1998	Freq.	Percent	Cum.
1	5,494	36.50	36.50
2	4,667	31.00	67.50
3	4,892	32.50	100.00

Total | 15,053 100.00

```
20 .      summ soften_99_39 haz99 waz_99 if wgrp==1
```

Variable	Obs	Mean	Std. Dev.	Min	Max
soften_99_39	3,535	1.960396	.5310014	1	3
haz99	3,446	-1.131872	1.04989	-5.06	3.35
waz_99	3,445	-1.252589	.7975108	-3.81	1.72

```
21 .      summ soften_99_39 haz99 waz_99 if wgrp==2
```

Variable	Obs	Mean	Std. Dev.	Min	Max
soften_99_39	2,578	1.986036	.5646065	1	3
haz99	2,472	-1.110951	1.089717	-5.78	3.84
waz_99	2,471	-1.22276	.849352	-4.97	2.15

```
22 .      drop if wgrp == 3
(4,892 observations deleted)
```

```
23 .      foreach var in soften_99_39 haz99 waz_99 {
2.          regress `var' wgrp1 if (wgrp==1 | wgrp==2), robust cluster(sch98v1)
3.      }
```

Linear regression	Number of obs	=	6,113
	F(1, 48)	=	0.88
	Prob > F	=	0.3535
	R-squared	=	0.0005
	Root MSE	=	.54543

(Std. Err. adjusted for 49 clusters in sch98v1)

	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
soften_99_39						
wgrp1	-.0256396	.0273691	-0.94	0.354	-.080669	.0293897
_cons	1.986036	.0213796	92.89	0.000	1.943049	2.029022

Linear regression	Number of obs	=	5,918
	F(1, 47)	=	0.12
	Prob > F	=	0.7253
	R-squared	=	0.0001
	Root MSE	=	1.0667

(Std. Err. adjusted for 48 clusters in sch98v1)

	Robust
--	--------

haz99	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	-.0209211	.0591849	-0.35	0.725	-.1399857	.0981436
_cons	-1.110951	.0473009	-23.49	0.000	-1.206108	-1.015794

Linear regression

Number of obs	=	5,916
F(1, 47)	=	0.27
Prob > F	=	0.6049
R-squared	=	0.0003
Root MSE	=	.81956

(Std. Err. adjusted for **48** clusters in sch98v1)

waz_99	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	-.0298292	.0572649	-0.52	0.605	-.1450313	.0853728
_cons	-1.22276	.0475264	-25.73	0.000	-1.318371	-1.127149

24 .

25 . reg soften_99_39 wgrp1 if (wgrp==1 | wgrp==2), robust cluster(sch98v1)

Linear regression

Number of obs	=	6,113
F(1, 48)	=	0.88
Prob > F	=	0.3535
R-squared	=	0.0005
Root MSE	=	.54543

(Std. Err. adjusted for **49** clusters in sch98v1)

soften_99_39	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	-.0256396	.0273691	-0.94	0.354	-.080669	.0293897
_cons	1.986036	.0213796	92.89	0.000	1.943049	2.029022

26 . reg haz99 wgrp1 if (wgrp==1 | wgrp==2), robust cluster(sch98v1)

Linear regression

Number of obs	=	5,918
F(1, 47)	=	0.12
Prob > F	=	0.7253
R-squared	=	0.0001
Root MSE	=	1.0667

(Std. Err. adjusted for **48** clusters in sch98v1)

haz99	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	-.0209211	.0591849	-0.35	0.725	-.1399857	.0981436
_cons	-1.110951	.0473009	-23.49	0.000	-1.206108	-1.015794

```
27 .      reg waz_99 wgrp1 if (wgrp==1 | wgrp==2), robust cluster(sch98v1)
```

```
Linear regression              Number of obs   =      5,916
                               F(1, 47)         =      0.27
                               Prob > F          =      0.6049
                               R-squared          =      0.0003
                               Root MSE       =      .81956
```

(Std. Err. adjusted for **48** clusters in sch98v1)

waz_99	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	-.0298292	.0572649	-0.52	0.605	-.1450313	.0853728
_cons	-1.22276	.0475264	-25.73	0.000	-1.318371	-1.127149

```
28 .
```

```
29 . **** TABLE 5, PANELS B AND C
```

```
30 .      summ clean_99_13 shoes_99_10 boilwat_99_29 if wgrp==1
```

Variable	Obs	Mean	Std. Dev.	Min	Max
clean_99_13	3,539	1.47471	.619197	1	3
shoes_99_10	3,542	2.664879	.648943	1	3
boilwat_99~9	3,539	.3882453	.4874197	0	1

```
31 .      summ clean_99_13 shoes_99_10 boilwat_99_29 if wgrp==2 | wgrp==3
```

Variable	Obs	Mean	Std. Dev.	Min	Max
clean_99_13	2,587	1.422884	.5851228	1	3
shoes_99_10	2,584	2.593653	.7318155	1	3
boilwat_99~9	2,581	.4153429	.4928766	0	1

```
32 .
```

```
33 .      drop if wgrp == 3
      (0 observations deleted)
```

```
34 .      bys wgrp: summ clean_99_13 shoes_99_10 boilwat_99_29
```

-> wgrp = 1

Variable	Obs	Mean	Std. Dev.	Min	Max
clean_99_13	3,539	1.47471	.619197	1	3
shoes_99_10	3,542	2.664879	.648943	1	3
boilwat_99~9	3,539	.3882453	.4874197	0	1

-> wgrp = 2

Variable	Obs	Mean	Std. Dev.	Min	Max
clean_99_13	2,587	1.422884	.5851228	1	3
shoes_99_10	2,584	2.593653	.7318155	1	3
boilwat_99~9	2,581	.4153429	.4928766	0	1

```

35 .
36 .      foreach var in clean_99_13 shoes_99_10 boilwat_99_29 {
      2.          regress `var' wgrp1 if (wgrp==1 | wgrp==2), robust cluster(sch98v1)
      3.      }

```

```

Linear regression              Number of obs   =      6,126
                               F(1, 48)        =      2.21
                               Prob > F         =      0.1437
                               R-squared         =      0.0018
                               Root MSE      =      .60504

```

(Std. Err. adjusted for 49 clusters in sch98v1)

clean_99_13	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	.0518267	.0348663	1.49	0.144	-.0182767	.1219302
_cons	1.422884	.0294515	48.31	0.000	1.363667	1.4821

```

Linear regression              Number of obs   =      6,126
                               F(1, 48)        =      1.14
                               Prob > F         =      0.2906
                               R-squared         =      0.0026
                               Root MSE      =      .68512

```

(Std. Err. adjusted for 49 clusters in sch98v1)

shoes_99_10	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	

wgrp1	.0712253	.0666493	1.07	0.291	-.062782	.2052327
_cons	2.593653	.0582053	44.56	0.000	2.476624	2.710683

```

Linear regression               Number of obs   =      6,120
                                F(1, 48)         =      1.02
                                Prob > F           =      0.3184
                                R-squared          =      0.0007
                                Root MSE        =      .48973

```

(Std. Err. adjusted for 49 clusters in sch98v1)

	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
boilwat_99~9						
wgrp1	-.0270976	.0268777	-1.01	0.318	-.0811389	.0269437
_cons	.4153429	.0212808	19.52	0.000	.3725549	.4581308

37 .

38 . reg clean_99_13 wgrp1 if (wgrp==1 | wgrp==2), robust cluster(sch98v1)

```

Linear regression               Number of obs   =      6,126
                                F(1, 48)         =      2.21
                                Prob > F           =      0.1437
                                R-squared          =      0.0018
                                Root MSE        =      .60504

```

(Std. Err. adjusted for 49 clusters in sch98v1)

	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
clean_99_13						
wgrp1	.0518267	.0348663	1.49	0.144	-.0182767	.1219302
_cons	1.422884	.0294515	48.31	0.000	1.363667	1.4821

39 . reg shoes_99_10 wgrp1 if (wgrp==1 | wgrp==2), robust cluster(sch98v1)

```

Linear regression               Number of obs   =      6,126
                                F(1, 48)         =      1.14
                                Prob > F           =      0.2906
                                R-squared          =      0.0026
                                Root MSE        =      .68512

```

(Std. Err. adjusted for 49 clusters in sch98v1)

	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
shoes_99_10						

wgrp1	.0712253	.0666493	1.07	0.291	-.062782	.2052327
_cons	2.593653	.0582053	44.56	0.000	2.476624	2.710683

```
40 . reg boilwat_99_29 wgrp1 if (wgrp==1 | wgrp==2), robust cluster(sch98v1)
```

```
Linear regression                               Number of obs   =      6,120
                                                F(1, 48)       =      1.02
                                                Prob > F       =      0.3184
                                                R-squared      =      0.0007
                                                Root MSE      =      .48973
```

(Std. Err. adjusted for 49 clusters in sch98v1)

boilwat_99~9	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	-.0270976	.0268777	-1.01	0.318	-.0811389	.0269437
_cons	.4153429	.0212808	19.52	0.000	.3725549	.4581308

```
41 .
```

```
42 . * Incorporate data on eligibility and parasitological exams
```

```
43 . use "/Users/jingxianliu/Desktop/ECON_7910_Final_Project_Data/namelist.dta", clear
```

```
44 . keep if visit==981
(521,715 observations deleted)
```

```
45 . keep pupid sch98v1 wgrp elg98 elg99
```

```
46 . sort pupid
```

```
47 . save "/Users/jingxianliu/Desktop/ECON_7910_Final_Project_Data/f1.dta", replace
file /Users/jingxianliu/Desktop/ECON_7910_Final_Project_Data/f1.dta saved
```

```
48 .
```

```
49 . use "/Users/jingxianliu/Desktop/ECON_7910_Final_Project_Data/wormed.dta", clear
```

```
50 . sort pupid
```

```
51 . merge pupid using "/Users/jingxianliu/Desktop/ECON_7910_Final_Project_Data/f1.dta"
(note: you are using old merge syntax; see [D] merge for new syntax)
(label sch_label already defined)
```

```
52 . tab _merge
```

_merge	Freq.	Percent	Cum.
--------	-------	---------	------

1	137	0.39	0.39
2	30,900	88.49	88.89
3	3,881	11.11	100.00
<hr/>			
Total	34,918	100.00	

```

53 .      keep if _merge==3
      (31,037 observations deleted)

54 .      drop _merge

55 .
56 . **** TABLE 5, PANEL A
57 .      gen wgrp1 = (wgrp==1)

58 .      gen wgrp2 = (wgrp==2)

59 .      gen wgrp3 = (wgrp==3)

60 .
61 . * create schistosomiasis infection rate
62 .      gen sm99 = (sm99_a + sm99_b)*10
      (1,533 missing values generated)

63 .      gen modheavy_sm99= (sm99>250) if sm99 !=.
      (1,533 missing values generated)

64 .      gen any_sm99= (sm99>0) if sm99 !=.
      (1,533 missing values generated)

65 .
66 . * create Hookworm infection rate
67 .      gen hw99= (hw99_a+ hw99_b) *10
      (1,533 missing values generated)

68 .      gen modheavy_hw99= (hw99>750) if hw99 !=.
      (1,533 missing values generated)

69 .      gen any_hw99=(hw99>0) if hw99 !=.
      (1,533 missing values generated)

70 .
71 . * create Roundworm infection rate
72 .      gen rw99= (al99_a+ al99_b) *10
      (1,533 missing values generated)

73 .      gen modheavy_rw99= (rw99>5000) if rw99 !=.
      (1,533 missing values generated)

```

```

74 .      gen any_rw99= (rw99>0) if rw99 !=.
      (1,533 missing values generated)

75 .
76 . * create Whipworm infection rate
77 .      gen ww99= (tt99_a+ tt99_b) *10
      (1,541 missing values generated)

78 .      gen modheavy_ww99= (ww99>400) if ww99 !=.
      (1,541 missing values generated)

79 .      gen any_ww99= (ww99>0) if ww99 !=.
      (1,541 missing values generated)

80 .
81 . * create any moderate-heavy infection rate
82 .      egen any_modheavy99= rowtotal (modheavy_sm99 modheavy_hw99 modheavy_rw99 modheavy_ww99)
      (1529 missing values generated)

83 .      replace any_modheavy99=1 if any_modheavy99>0 & !missing(any_modheavy99)
      (373 real changes made)

84 .
85 . summ  ww99 sm99 hw99 rw99 if wgrp==1

```

Variable	Obs	Mean	Std. Dev.	Min	Max
ww99	864	268.8657	957.2916	0	14040
sm99	869	116.7664	582.2418	0	9070
hw99	867	231.5802	1078.126	0	20040
rw99	869	1589.344	5004.206	0	25720

```

86 . summ  any_modheavy99 modheavy_sm99 modheavy_hw99 modheavy_rw99 modheavy_ww99 if wgrp==1

```

Variable	Obs	Mean	Std. Dev.	Min	Max
any_modhe~99	869	.2658228	.4420247	0	1
modheavy_s~9	869	.0794016	.2705203	0	1
modheavy_h~9	867	.0588235	.2354299	0	1
modheavy_r~9	869	.0932106	.2908947	0	1
modheavy_w~9	864	.1238426	.3295927	0	1

```

87 . summ  any_modheavy99 modheavy_sm99 modheavy_hw99 modheavy_rw99 modheavy_ww99 if wgrp==2

```

Variable	Obs	Mean	Std. Dev.	Min	Max
any_modhe~99	1,482	.5209177	.4997309	0	1
modheavy_s~9	1,478	.1759134	.3808753	0	1

modheavy_h~9	1,480	.2155405	.4113358	0	1
modheavy_r~9	1,478	.2428958	.4289778	0	1
modheavy_w~9	1,475	.1708475	.3765033	0	1

```

88 .      foreach var in any_modheavy99 modheavy_sm99 modheavy_hw99 modheavy_rw99 modheavy
> 9 {
      2.      regress `var' wgrp1 if (wgrp==1 | wgrp==2), robust cluster(sch98v1)
      3.      }

```

```

Linear regression              Number of obs   =      2,351
                               F(1, 48)        =      16.94
                               Prob > F         =      0.0002
                               R-squared         =      0.0620
                               Root MSE       =      .47922

```

(Std. Err. adjusted for 49 clusters in sch98v1)

any_modhe~99	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	-.2550949	.0619768	-4.12	0.000	-.3797076	-.1304822
_cons	.5209177	.0486023	10.72	0.000	.4231963	.6186391

```

Linear regression              Number of obs   =      2,347
                               F(1, 48)        =       2.89
                               Prob > F         =      0.0954
                               R-squared         =      0.0180
                               Root MSE       =      .34418

```

(Std. Err. adjusted for 49 clusters in sch98v1)

modheavy_s~9	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	-.0965118	.0567346	-1.70	0.095	-.2105843	.0175607
_cons	.1759134	.0479582	3.67	0.001	.0794871	.2723397

```

Linear regression              Number of obs   =      2,347
                               F(1, 48)        =     39.90
                               Prob > F         =      0.0000
                               R-squared         =      0.0431
                               Root MSE       =      .35663

```

(Std. Err. adjusted for 49 clusters in sch98v1)

modheavy_h~9	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
--------------	-------	---------------------	---	------	----------------------	--

wgrp1	-.156717	.0248091	-6.32	0.000	-.206599	-.106835
_cons	.2155405	.0227097	9.49	0.000	.1698795	.2612016

```

Linear regression              Number of obs   =      2,347
                               F(1, 48)         =      11.48
                               Prob > F          =      0.0014
                               R-squared          =      0.0343
                               Root MSE       =      .3837

```

(Std. Err. adjusted for 49 clusters in sch98v1)

	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
modheavy_r~9						
wgrp1	-.1496852	.0441702	-3.39	0.001	-.2384953	-.0608751
_cons	.2428958	.0374456	6.49	0.000	.1676065	.3181852

```

Linear regression              Number of obs   =      2,339
                               F(1, 48)         =       0.77
                               Prob > F          =      0.3854
                               R-squared          =      0.0040
                               Root MSE       =      .35989

```

(Std. Err. adjusted for 49 clusters in sch98v1)

	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
modheavy_w~9						
wgrp1	-.0470049	.0536567	-0.88	0.385	-.1548888	.0608791
_cons	.1708475	.0474541	3.60	0.001	.0754345	.2662604

89 .

90 . *the codes above equals to the following codes

91 . reg any_modheavy99 wgrp1 if (wgrp==1 | wgrp==2), robust cluster(sch98v1)

```

Linear regression              Number of obs   =      2,351
                               F(1, 48)         =     16.94
                               Prob > F          =      0.0002
                               R-squared          =      0.0620
                               Root MSE       =      .47922

```

(Std. Err. adjusted for 49 clusters in sch98v1)

	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
any_modhe~99						

wgrp1	-.2550949	.0619768	-4.12	0.000	-.3797076	-.1304822
_cons	.5209177	.0486023	10.72	0.000	.4231963	.6186391

92 . reg modheavy_sm99 wgrp1 if (wgrp==1 | wgrp==2), robust cluster(sch98v1)

Linear regression	Number of obs	=	2,347
	F(1, 48)	=	2.89
	Prob > F	=	0.0954
	R-squared	=	0.0180
	Root MSE	=	.34418

(Std. Err. adjusted for **49** clusters in sch98v1)

modheavy_s~9	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	-.0965118	.0567346	-1.70	0.095	-.2105843	.0175607
_cons	.1759134	.0479582	3.67	0.001	.0794871	.2723397

93 . reg modheavy_hw99 wgrp1 if (wgrp==1 | wgrp==2), robust cluster(sch98v1)

Linear regression	Number of obs	=	2,347
	F(1, 48)	=	39.90
	Prob > F	=	0.0000
	R-squared	=	0.0431
	Root MSE	=	.35663

(Std. Err. adjusted for **49** clusters in sch98v1)

modheavy_h~9	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	-.156717	.0248091	-6.32	0.000	-.206599	-.106835
_cons	.2155405	.0227097	9.49	0.000	.1698795	.2612016

94 . reg modheavy_rw99 wgrp1 if (wgrp==1 | wgrp==2), robust cluster(sch98v1)

Linear regression	Number of obs	=	2,347
	F(1, 48)	=	11.48
	Prob > F	=	0.0014
	R-squared	=	0.0343
	Root MSE	=	.3837

(Std. Err. adjusted for **49** clusters in sch98v1)

modheavy_r~9	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	-.1496852	.0441702	-3.39	0.001	-.2384953	-.0608751
_cons	.2428958	.0374456	6.49	0.000	.1676065	.3181852

```
95 . reg modheavy_wv99 wgrp1 if (wgrp==1 | wgrp==2), robust cluster(sch98v1)
```

Linear regression	Number of obs	=	2,339
	F(1, 48)	=	0.77
	Prob > F	=	0.3854
	R-squared	=	0.0040
	Root MSE	=	.35989

(Std. Err. adjusted for **49** clusters in sch98v1)

modheavy_w~9	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	-.0470049	.0536567	-0.88	0.385	-.1548888	.0608791
_cons	.1708475	.0474541	3.60	0.001	.0754345	.2662604

```
96 .
97 . **** TABLE 5, PANEL B: HB AND ANEMIA ONLY
98 . * Generate low HB indicator
99 .       gen hb100 = (hb<100)
```

```
100 .       replace hb100=. if hb==.
      (3,005 real changes made, 3,005 to missing)
```

```
101 .
102 .       summ hb hb100 if wgrp==1
```

Variable	Obs	Mean	Std. Dev.	Min	Max
hb	332	124.8102	13.51904	75	159
hb100	332	.0180723	.133414	0	1

```
103 .       summ hb hb100 if wgrp==2
```

Variable	Obs	Mean	Std. Dev.	Min	Max
hb	544	123.0386	13.7132	69	160
hb100	544	.0386029	.192824	0	1

```
104 .       foreach var in hb hb100 {
      2.           regress `var' wgrp1 if (wgrp==1 | wgrp==2), robust cluster(sch98v1)
```

3. }

Linear regression	Number of obs	=	876
	F(1, 36)	=	2.03
	Prob > F	=	0.1625
	R-squared	=	0.0040
	Root MSE	=	13.64

(Std. Err. adjusted for 37 clusters in sch98v1)

hb	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	1.771638	1.242572	1.43	0.163	-.7484143	4.29169
_cons	123.0386	.6737509	182.62	0.000	121.6722	124.405

Linear regression	Number of obs	=	876
	F(1, 36)	=	2.58
	Prob > F	=	0.1166
	R-squared	=	0.0033
	Root MSE	=	.17275

(Std. Err. adjusted for 37 clusters in sch98v1)

hb100	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	-.0205307	.01277	-1.61	0.117	-.0464294	.0053681
_cons	.0386029	.0090473	4.27	0.000	.0202542	.0569517

```
105 .
106 . reg hb wgrp1 if (wgrp==1 | wgrp==2), robust cluster(sch98v1)
```

Linear regression	Number of obs	=	876
	F(1, 36)	=	2.03
	Prob > F	=	0.1625
	R-squared	=	0.0040
	Root MSE	=	13.64

(Std. Err. adjusted for 37 clusters in sch98v1)

hb	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	1.771638	1.242572	1.43	0.163	-.7484143	4.29169
_cons	123.0386	.6737509	182.62	0.000	121.6722	124.405

```
107 . reg hb100 wgrp1 if (wgrp==1 | wgrp==2), robust cluster(sch98v1)
```

```
Linear regression                               Number of obs   =       876
                                                F(1, 36)         =       2.58
                                                Prob > F          =     0.1166
                                                R-squared        =     0.0033
                                                Root MSE        =     .17275
```

(Std. Err. adjusted for 37 clusters in sch98v1)

hb100	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	-.0205307	.01277	-1.61	0.117	-.0464294	.0053681
_cons	.0386029	.0090473	4.27	0.000	.0202542	.0569517

```
108 .
109 .
110 .
111 . ***** For subsample- Eligible Male Pupils *****
112 . use "/Users/jingxianliu/Desktop/ECON_7910_Final_Project_Data/namelist.dta", clear

113 . keep if sex==1
      (311,008 observations deleted)

114 . set more off

115 .
116 . * Incorporate data on treatment group and from pupil questionnaire
117 . keep if visit >= 991
      (122,744 observations deleted)

118 .
119 . keep pupid wgrp sap1 sap2 sap3 sap4 sch98v1

120 . codebook pupid
```

pupid

Pupil ID Nu

```
type: numeric (long)

range: [1080007,9146209]      units: 1
unique values: 15,343         missing.: 0/122,744

mean: 2.2e+06
```

```
std. dev:      645400

percentiles:      10%      25%      50%      75%      90%
                1.2e+06  1.7e+06  2.1e+06  2.7e+06  2.9e+06
```

```
121 .      duplicates report
```

Duplicates in terms of all variables

copies	observations	surplus
8	122744	107401

```
122 .      duplicates drop
```

Duplicates in terms of all variables

(107,401 observations deleted)

```
123 .      codebook pupil
```

pupil	Pupil ID Nu
-------	-------------

```
type:  numeric (long)

range:  [1080007,9146209]      units:  1
unique values:  15,343      missing .:  0/15,343

mean:    2.2e+06
std. dev:  645418

percentiles:      10%      25%      50%      75%      90%
                1.2e+06  1.7e+06  2.1e+06  2.7e+06  2.9e+06
```

```
124 .
125 .      merge 1:1 pupil using "/Users/jingxianliu/Desktop/ECON_7910_Final_Project_Data/p
> dta"
```

Result	# of obs.	
not matched	15,711	
from master	7,652	(_merge==1)
from using	8,059	(_merge==2)
matched	7,691	(_merge==3)

```

126 .
127 .      keep if _merge == 3
      (15,711 observations deleted)

```

```

128 .      drop _merge

```

```

129 .

```

```

130 .

```

```

131 . **** TABLE 5, PANEL B

```

```

132 .      tab wgrp, gen(wgrp)

```

Initial worm group, Jan 1998	Freq.	Percent	Cum.
1	2,945	38.29	38.29
2	2,307	30.00	68.29
3	2,439	31.71	100.00
Total	7,691	100.00	

```

133 .      summ soften_99_39 haz99 waz_99 if wgrp==1

```

Variable	Obs	Mean	Std. Dev.	Min	Max
soften_99_39	1,896	1.955169	.5244368	1	3
haz99	1,845	-1.322878	1.016409	-5.06	3.35
waz_99	1,844	-1.448823	.7790825	-3.81	1.72

```

134 .      summ soften_99_39 haz99 waz_99 if wgrp==2

```

Variable	Obs	Mean	Std. Dev.	Min	Max
soften_99_39	1,285	1.955642	.5626426	1	3
haz99	1,255	-1.399498	1.028373	-5.78	3.84
waz_99	1,254	-1.504458	.8143854	-3.54	2.15

```

135 .      drop if wgrp == 3
      (2,439 observations deleted)

```

```

136 .      foreach var in soften_99_39 haz99 waz_99 {
      2.          regress `var' wgrp1 if (wgrp==1 | wgrp==2), robust cluster(sch98v1)
      3.      }

```

Linear regression	Number of obs	=	3,181
	F(1, 44)	=	0.00
	Prob > F	=	0.9896

(Std. Err. adjusted for 45 clusters in sch98v1)

Linear regression	Number of obs	=	3,100
	F(1, 44)	=	2.27
	Prob > F	=	0.1391
	R-squared	=	0.0014
	Root MSE	=	1.0213

	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
haz99						
wgrp1	.07662	.0508553	1.51	0.139	-.0258721	.179112
_cons	-1.399498	.040005	-34.98	0.000	-1.480123	-1.318873

(Std. Err. adjusted for 45 clusters in sch98v1)

```
137 .
138 .       reg soften_99_39 wgrp1 if (wgrp==1 | wgrp==2), robust cluster(sch98v1)
```

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Root MSE = .54019

(Std. Err. adjusted for 45 clusters in sch98v1)

	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
soften_99_39						
wgrp1	-.0004732	.0360748	-0.01	0.990	-.0731773	.0722308
_cons	1.955642	.0306718	63.76	0.000	1.893827	2.017457

139 . reg haz99 wgrp1 if (wgrp==1 | wgrp==2), robust cluster(sch98v1)

Linear regression	Number of obs	=	3,100
	F(1, 44)	=	2.27
	Prob > F	=	0.1391
	R-squared	=	0.0014
	Root MSE	=	1.0213

(Std. Err. adjusted for 45 clusters in sch98v1)

	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
haz99						
wgrp1	.07662	.0508553	1.51	0.139	-.0258721	.179112
_cons	-1.399498	.040005	-34.98	0.000	-1.480123	-1.318873

140 . reg waz_99 wgrp1 if (wgrp==1 | wgrp==2), robust cluster(sch98v1)

Linear regression	Number of obs	=	3,098
	F(1, 44)	=	0.92
	Prob > F	=	0.3427
	R-squared	=	0.0012
	Root MSE	=	.79356

(Std. Err. adjusted for 45 clusters in sch98v1)

	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
waz_99						
wgrp1	.0556345	.0580004	0.96	0.343	-.0612576	.1725267
_cons	-1.504458	.047212	-31.87	0.000	-1.599607	-1.409308

141 .

142 .

143 . **** TABLE 5, PANELS B AND C

144 . summ clean_99_13 shoes_99_10 boilwat_99_29 if wgrp==1

Variable	Obs	Mean	Std. Dev.	Min	Max
clean_99_13	1,898	1.575342	.6661188	1	3
shoes_99_10	1,897	2.744333	.5686063	1	3
boilwat_99~9	1,897	.3763838	.4846058	0	1

```
145 .      summ clean_99_13 shoes_99_10 boilwat_99_29 if wgrp==2 | wgrp==3
```

Variable	Obs	Mean	Std. Dev.	Min	Max
clean_99_13	1,291	1.505035	.6180221	1	3
shoes_99_10	1,289	2.7564	.5774688	1	3
boilwat_99~9	1,286	.403577	.4908054	0	1

```
146 .
```

```
147 .      drop if wgrp == 3
      (0 observations deleted)
```

```
148 .      bys wgrp: summ clean_99_13 shoes_99_10 boilwat_99_29
```

```
-> wgrp = 1
```

Variable	Obs	Mean	Std. Dev.	Min	Max
clean_99_13	1,898	1.575342	.6661188	1	3
shoes_99_10	1,897	2.744333	.5686063	1	3
boilwat_99~9	1,897	.3763838	.4846058	0	1

```
-> wgrp = 2
```

Variable	Obs	Mean	Std. Dev.	Min	Max
clean_99_13	1,291	1.505035	.6180221	1	3
shoes_99_10	1,289	2.7564	.5774688	1	3
boilwat_99~9	1,286	.403577	.4908054	0	1

```
149 .
```

```
150 .      foreach var in clean_99_13 shoes_99_10 boilwat_99_29 {
      2.          regress `var' wgrp1 if (wgrp==1 | wgrp==2), robust cluster(sch98v1)
      3.      }
```

```
Linear regression
```

```
Number of obs    =    3,189
F(1, 44)         =    3.33
Prob > F         =    0.0746
R-squared        =    0.0028
```

Root MSE = .64708

(Std. Err. adjusted for 45 clusters in sch98v1)

clean_99_13	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
wgrpl	.0703076	.0385031	1.83	0.075	-.0072903	.1479055
_cons	1.505035	.0299577	50.24	0.000	1.444659	1.565411

Linear regression

Number of obs = 3,186

F(1, 44) = 0.06

Prob > F = 0.8148

R-squared = 0.0001

Root MSE = .57221

(Std. Err. adjusted for 45 clusters in sch98v1)

shoes_99_10	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
wgrpl	-.0120672	.0511977	-0.24	0.815	-.1152493	.091115
_cons	2.7564	.0417472	66.03	0.000	2.672264	2.840536

Linear regression

Number of obs = 3,183

F(1, 44) = 0.78

Prob > F = 0.3825

R-squared = 0.0008

Root MSE = .48712

(Std. Err. adjusted for 45 clusters in sch98v1)

boilwat_99~9	Robust					
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
wgrpl	-.0271932	.0308248	-0.88	0.382	-.0893165	.0349301
_cons	.403577	.025171	16.03	0.000	.3528482	.4543058

```
151 .
152 .       reg clean_99_13 wgrpl if (wgrp==1 | wgrp==2), robust cluster(sch98v1)
```

Linear regression

Number of obs = 3,189

F(1, 44) = 3.33

Prob > F = 0.0746

R-squared = 0.0028

Root MSE = .64708

(Std. Err. adjusted for 45 clusters in sch98v1)

clean_99_13	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	.0703076	.0385031	1.83	0.075	-.0072903	.1479055
_cons	1.505035	.0299577	50.24	0.000	1.444659	1.565411

```
153 .      reg shoes_99_10 wgrp1 if (wgrp==1 | wgrp==2), robust cluster(sch98v1)
```

```
Linear regression              Number of obs   =      3,186
                               F(1, 44)         =      0.06
                               Prob > F          =      0.8148
                               R-squared          =      0.0001
                               Root MSE       =      .57221
```

(Std. Err. adjusted for 45 clusters in sch98v1)

shoes_99_10	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	-.0120672	.0511977	-0.24	0.815	-.1152493	.091115
_cons	2.7564	.0417472	66.03	0.000	2.672264	2.840536

```
154 .      reg boilwat_99_29 wgrp1 if (wgrp==1 | wgrp==2), robust cluster(sch98v1)
```

```
Linear regression              Number of obs   =      3,183
                               F(1, 44)         =      0.78
                               Prob > F          =      0.3825
                               R-squared          =      0.0008
                               Root MSE       =      .48712
```

(Std. Err. adjusted for 45 clusters in sch98v1)

boilwat_99~9	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	-.0271932	.0308248	-0.88	0.382	-.0893165	.0349301
_cons	.403577	.025171	16.03	0.000	.3528482	.4543058

```
155 .
```

```
156 . * Incorporate data on eligibility and parasitological exams
```

```
157 .      use "/Users/jingxianliu/Desktop/ECON_7910_Final_Project_Data/namelist.dta", clear
```

```
158 .      keep if sex==1
```

(311,008 observations deleted)

```

159 .      keep if visit==981
      (230,145 observations deleted)

160 .      keep pupid sch98v1 wgrp elg98 elg99

161 .      sort pupid

162 .      save "/Users/jingxianliu/Desktop/ECON_7910_Final_Project_Data/f1.dta", replace
      file /Users/jingxianliu/Desktop/ECON_7910_Final_Project_Data/f1.dta saved

163 .

164 .      use "/Users/jingxianliu/Desktop/ECON_7910_Final_Project_Data/wormed.dta"

165 .      sort pupid

166 .      merge pupid using "/Users/jingxianliu/Desktop/ECON_7910_Final_Project_Data/f1.dta"
      (note: you are using old merge syntax; see \[D\] merge for new syntax)
      (label sch_label already defined)

167 .      tab _merge

```

<u>_merge</u>	Freq.	Percent	Cum.
1	2,002	11.54	11.54
2	13,327	76.83	88.38
3	2,016	11.62	100.00
Total	17,345	100.00	

```

168 .      keep if _merge==3
      (15,329 observations deleted)

169 .      drop _merge

170 .

171 . **** TABLE 5, PANEL A
172 .      gen wgrp1 = (wgrp==1)

173 .      gen wgrp2 = (wgrp==2)

174 .      gen wgrp3 = (wgrp==3)

175 .

176 . * create schistosomiasis infection rate
177 .      gen sm99 = (sm99_a + sm99_b)*10
      (821 missing values generated)

```

```

178 .           gen modheavy_sm99= (sm99>250) if sm99 !=.
      (821 missing values generated)

179 .           gen any_sm99= (sm99>0) if sm99 !=.
      (821 missing values generated)

180 .
181 . * create Hookworm infection rate
182 .           gen hw99= (hw99_a+ hw99_b) *10
      (821 missing values generated)

183 .           gen modheavy_hw99= (hw99>750) if hw99 !=.
      (821 missing values generated)

184 .           gen any_hw99=(hw99>0) if hw99 !=.
      (821 missing values generated)

185 .
186 . * create Roundworm infection rate
187 .           gen rw99= (al99_a+ al99_b) *10
      (819 missing values generated)

188 .           gen modheavy_rw99= (rw99>5000) if rw99 !=.
      (819 missing values generated)

189 .           gen any_rw99= (rw99>0) if rw99 !=.
      (819 missing values generated)

190 .
191 . * create Whipworm infection rate
192 .           gen ww99= (tt99_a+ tt99_b) *10
      (828 missing values generated)

193 .           gen modheavy_ww99= (ww99>400) if ww99 !=.
      (828 missing values generated)

194 .           gen any_ww99= (ww99>0) if ww99 !=.
      (828 missing values generated)

195 .
196 . * create any moderate-heavy infection rate
197 .           egen any_modheavy99= rowtotal (modheavy_sm99 modheavy_hw99 modheavy_rw99 modheavy_ww99)
      > 99), m
      (818 missing values generated)

198 .           replace any_modheavy99=1 if any_modheavy99>0 & !missing(any_modheavy99)
      (187 real changes made)

199 .

```

```
200 .
201 . summ ww99 sm99 hw99 rw99 if wgrp==1
```

Variable	Obs	Mean	Std. Dev.	Min	Max
ww99	473	253.8901	876.6501	0	12400
sm99	478	147.9707	734.3565	0	9070
hw99	476	159.8739	497.5426	0	5900
rw99	478	1226.13	4201.544	0	25500

```
202 . summ any_modheavy99 modheavy_sm99 modheavy_hw99 modheavy_rw99 modheavy_ww99 if wgrp==1
```

Variable	Obs	Mean	Std. Dev.	Min	Max
any_modhe~99	478	.251046	.4340692	0	1
modheavy_s~9	478	.0899582	.2864216	0	1
modheavy_h~9	476	.0504202	.2190406	0	1
modheavy_r~9	478	.08159	.2740258	0	1
modheavy_w~9	473	.1226216	.3283496	0	1

```
203 . summ any_modheavy99 modheavy_sm99 modheavy_hw99 modheavy_rw99 modheavy_ww99 if wgrp==2
```

Variable	Obs	Mean	Std. Dev.	Min	Max
any_modhe~99	719	.5368567	.4989869	0	1
modheavy_s~9	716	.1829609	.3869047	0	1
modheavy_h~9	718	.2576602	.4376507	0	1
modheavy_r~9	718	.218663	.4136275	0	1
modheavy_w~9	714	.1680672	.3741881	0	1

```
204 .      foreach var in any_modheavy99 modheavy_sm99 modheavy_hw99 modheavy_rw99 modheavy_ww99
> 9 {
2.      regress `var' wgrp1 if (wgrp==1 | wgrp==2), robust cluster(sch98v1)
3.      }
```

```
Linear regression      Number of obs      =      1,197
                      F(1, 47)              =      21.04
                      Prob > F                =      0.0000
                      R-squared               =      0.0803
                      Root MSE              =      .47414
```

(Std. Err. adjusted for 48 clusters in sch98v1)

	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
any_modhe~99						
wgrp1	-.2858107	.0623063	-4.59	0.000	-.4111548	-.1604667
_cons	.5368567	.0494545	10.86	0.000	.437367	.6363465

```

Linear regression               Number of obs   =      1,194
                                F(1, 47)         =       2.13
                                Prob > F           =     0.1513
                                R-squared          =     0.0167
                                Root MSE       =     0.35017

```

(Std. Err. adjusted for 48 clusters in sch98v1)

	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
modheavy_s~9						
wgrp1	-.0930027	.0637529	-1.46	0.151	-.221257	.0352516
_cons	.1829609	.0537913	3.40	0.001	.0747468	.2911749

```

Linear regression               Number of obs   =      1,194
                                F(1, 47)         =     45.51
                                Prob > F           =     0.0000
                                R-squared          =     0.0713
                                Root MSE       =     0.36651

```

(Std. Err. adjusted for 48 clusters in sch98v1)

	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
modheavy_h~9						
wgrp1	-.20724	.0307202	-6.75	0.000	-.2690411	-.1454389
_cons	.2576602	.0264364	9.75	0.000	.2044769	.3108434

```

Linear regression               Number of obs   =      1,196
                                F(1, 47)         =     10.49
                                Prob > F           =     0.0022
                                R-squared          =     0.0329
                                Root MSE       =     0.36433

```

(Std. Err. adjusted for 48 clusters in sch98v1)

	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
modheavy_r~9						
wgrp1	-.137073	.0423278	-3.24	0.002	-.2222256	-.0519204
_cons	.218663	.0370667	5.90	0.000	.1440943	.2932316

```

Linear regression               Number of obs   =      1,187
                                F(1, 47)         =       0.62
                                Prob > F           =     0.4335

```


R-squared = **0.0039**
 Root MSE = **.35664**

(Std. Err. adjusted for **48** clusters in sch98v1)

modheavy_w~9	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	-.0454457	.0575248	-0.79	0.433	-.1611705	.0702792
_cons	.1680672	.0517353	3.25	0.002	.0639893	.2721451

205 .

206 . reg any_modheavy99 wgrp1 if (wgrp==1 | wgrp==2), robust cluster(sch98v1)

Linear regression

Number of obs = **1,197**
 F(1, 47) = **21.04**
 Prob > F = **0.0000**
 R-squared = **0.0803**
 Root MSE = **.47414**

(Std. Err. adjusted for **48** clusters in sch98v1)

any_modhe~99	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	-.2858107	.0623063	-4.59	0.000	-.4111548	-.1604667
_cons	.5368567	.0494545	10.86	0.000	.437367	.6363465

207 . reg modheavy_sm99 wgrp1 if (wgrp==1 | wgrp==2), robust cluster(sch98v1)

Linear regression

Number of obs = **1,194**
 F(1, 47) = **2.13**
 Prob > F = **0.1513**
 R-squared = **0.0167**
 Root MSE = **.35017**

(Std. Err. adjusted for **48** clusters in sch98v1)

modheavy_s~9	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	-.0930027	.0637529	-1.46	0.151	-.221257	.0352516
_cons	.1829609	.0537913	3.40	0.001	.0747468	.2911749

208 . reg modheavy_hw99 wgrp1 if (wgrp==1 | wgrp==2), robust cluster(sch98v1)

```

Linear regression               Number of obs   =      1,194
                                F(1, 47)         =      45.51
                                Prob > F          =      0.0000
                                R-squared         =      0.0713
                                Root MSE      =      .36651

```

(Std. Err. adjusted for 48 clusters in sch98v1)

modheavy_h~9	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	-.20724	.0307202	-6.75	0.000	-.2690411	-.1454389
_cons	.2576602	.0264364	9.75	0.000	.2044769	.3108434

```

209 . reg modheavy_rw99 wgrp1 if (wgrp==1 | wgrp==2), robust cluster(sch98v1)

```

```

Linear regression               Number of obs   =      1,196
                                F(1, 47)         =      10.49
                                Prob > F          =      0.0022
                                R-squared         =      0.0329
                                Root MSE      =      .36433

```

(Std. Err. adjusted for 48 clusters in sch98v1)

modheavy_r~9	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	-.137073	.0423278	-3.24	0.002	-.2222256	-.0519204
_cons	.218663	.0370667	5.90	0.000	.1440943	.2932316

```

210 . reg modheavy_ww99 wgrp1 if (wgrp==1 | wgrp==2), robust cluster(sch98v1)

```

```

Linear regression               Number of obs   =      1,187
                                F(1, 47)         =      0.62
                                Prob > F          =      0.4335
                                R-squared         =      0.0039
                                Root MSE      =      .35664

```

(Std. Err. adjusted for 48 clusters in sch98v1)

modheavy_w~9	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	-.0454457	.0575248	-0.79	0.433	-.1611705	.0702792
_cons	.1680672	.0517353	3.25	0.002	.0639893	.2721451

```

211 .
212 .
213 . **** TABLE 5, PANEL B: HB AND ANEMIA ONLY
214 . * Generate low HB indicator
215 .         gen hb100 = (hb<100)

216 .         replace hb100=. if hb==.
          (1,579 real changes made, 1,579 to missing)

217 .
218 .         summ hb hb100 if wgrp==1

```

Variable	Obs	Mean	Std. Dev.	Min	Max
hb	172	125.6512	13.3147	87	159
hb100	172	.005814	.0762493	0	1

```

219 .         summ hb hb100 if wgrp==2

```

Variable	Obs	Mean	Std. Dev.	Min	Max
hb	265	122.6566	13.95308	80	160
hb100	265	.0377358	.1909173	0	1

```

220 .         foreach var in hb hb100 {
221 .             2. regress `var' wgrp1 if (wgrp==1 | wgrp==2), robust cluster(sch98v1)
222 .             3. }

```

Linear regression	Number of obs	=	437
	F(1, 35)	=	3.73
	Prob > F	=	0.0614
	R-squared	=	0.0113
	Root MSE	=	13.706

(Std. Err. adjusted for 36 clusters in sch98v1)

hb	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	2.994559	1.549643	1.93	0.061	-.151384	6.140502
_cons	122.6566	.6784378	180.79	0.000	121.2793	124.0339

Linear regression	Number of obs	=	437
	F(1, 35)	=	4.86
	Prob > F	=	0.0342
	R-squared	=	0.0099
	Root MSE	=	.15623

(Std. Err. adjusted for 36 clusters in sch98v1)

hb100	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	-.0319219	.0144832	-2.20	0.034	-.0613244	-.0025194
_cons	.0377358	.013361	2.82	0.008	.0106115	.0648602

221 .

222 . reg hb wgrp1 if (wgrp==1 | wgrp==2), robust cluster(sch98v1)

Linear regression	Number of obs	=	437
	F(1, 35)	=	3.73
	Prob > F	=	0.0614
	R-squared	=	0.0113
	Root MSE	=	13.706

(Std. Err. adjusted for 36 clusters in sch98v1)

hb	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	2.994559	1.549643	1.93	0.061	-.151384	6.140502
_cons	122.6566	.6784378	180.79	0.000	121.2793	124.0339

223 . reg hb100 wgrp1 if (wgrp==1 | wgrp==2), robust cluster(sch98v1)

Linear regression	Number of obs	=	437
	F(1, 35)	=	4.86
	Prob > F	=	0.0342
	R-squared	=	0.0099
	Root MSE	=	.15623

(Std. Err. adjusted for 36 clusters in sch98v1)

hb100	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	-.0319219	.0144832	-2.20	0.034	-.0613244	-.0025194
_cons	.0377358	.013361	2.82	0.008	.0106115	.0648602

224 .

end of do-file

```
name: <unnamed>
log: /Users/jingxianliu/Desktop/ECON_7910_Final_Project_Data/Q6/Q6.smcl
log type: smcl
opened on: 10 Dec 2020, 14:29:41
```

```
1 . set more off

2 .
3 . * create schistosomiasis infection rate
4 .       gen sm99 = (sm99_a + sm99_b)*10
   (1,578 missing values generated)

5 .       gen modheavy_sm99= (sm99>250) if sm99 !=.
   (1,578 missing values generated)

6 .       gen any_sm99= (sm99>0) if sm99 !=.
   (1,578 missing values generated)

7 .
8 . * create Hookworm infection rate
9 .       gen hw99= (hw99_a+ hw99_b) *10
   (1,577 missing values generated)

10 .      gen modheavy_hw99= (hw99>750) if hw99 !=.
   (1,577 missing values generated)

11 .      gen any_hw99=(hw99>0) if hw99 !=.
   (1,577 missing values generated)

12 .
13 . * create Roundworm infection rate
14 .      gen rw99= (al99_a+ al99_b) *10
   (1,577 missing values generated)

15 .      gen modheavy_rw99= (rw99>5000) if rw99 !=.
   (1,577 missing values generated)

16 .      gen any_rw99= (rw99>0) if rw99 !=.
   (1,577 missing values generated)

17 .
18 . * create Whipworm infection rate
19 .      gen ww99= (tt99_a+ tt99_b) *10
   (1,585 missing values generated)

20 .      gen modheavy_ww99= (ww99>400) if ww99 !=.
   (1,585 missing values generated)
```

```

21 .      gen any_ww99= (ww99>0) if ww99 !=.
      (1,585 missing values generated)

22 .
23 . * create any moderate-heavy infection rate
24 .      egen any_modheavy99= rowtotal (modheavy_sm99 modheavy_hw99 modheavy_rw99 modheavy_ww99), m
      (1573 missing values generated)

25 .      replace any_modheavy99=1 if any_modheavy99>0 & !missing(any_modheavy99)
      (399 real changes made)

26 .
27 . * create moderate-heavy geohelminth (hookworm, roundworm, or whipworm) infection rate
28 .      egen modheavy_geo99= rowtotal (modheavy_hw99 modheavy_rw99 modheavy_ww99), m
      (1573 missing values generated)

29 .      replace modheavy_geo99=1 if modheavy_geo99>0 & !missing(modheavy_geo99)
      (314 real changes made)

30 .
31 .      save "/Users/jingxianliu/Desktop/ECON_7910_Final_Project_Data/wormed1.dta", replace
      file /Users/jingxianliu/Desktop/ECON_7910_Final_Project_Data/wormed1.dta saved

32 .
33 . *Merge database: wormed1, namelist, and schoolvar
34 . *merge namelist & wormed 1 as namelistMERGEwormed1 99.dta
35 .
36 .      use "/Users/jingxianliu/Desktop/ECON_7910_Final_Project_Data/namelist.dta", clear

37 .
38 .      keep if visit==991
      (521,715 observations deleted)

39 .      keep if elg99==1
      (6,735 observations deleted)

40 .      isid pupid

41 .      merge 1:1 pupid using "/Users/jingxianliu/Desktop/ECON_7910_Final_Project_Data/wormed1.dta"
      (label sch_label already defined)
      (label std_label already defined)

```

Result	# of obs.	
not matched	26,342	
from master	25,185	(_merge==1)
from using	1,157	(_merge==2)

matched 2,861 (_merge==3)

42 . tab _merge

_merge	Freq.	Percent	Cum.
master only (1)	25,185	86.24	86.24
using only (2)	1,157	3.96	90.20
matched (3)	2,861	9.80	100.00
Total	29,203	100.00	

43 . keep if _merge==3
(26,342 observations deleted)

44 . codebook pupid

pupid

Pupil ID Nu

type: numeric (long)

range: [1092003,2978017]

units: 1

unique values: 2,861

missing.: 0/2,861

mean: 2.2e+06

std. dev: 603890

percentiles:	10%	25%	50%	75%	90%
	1.2e+06	1.7e+06	2.2e+06	2.8e+06	2.9e+06

45 . drop _merge

46 .

47 . save "/Users/jingxianliu/Desktop/ECON_7910_Final_Project_Data/wormed2.dta", repl
file /Users/jingxianliu/Desktop/ECON_7910_Final_Project_Data/wormed2.dta saved

48 .

49 . * 1:m merge with school to control for 1996 school district exam score

50 .

51 . use "/Users/jingxianliu/Desktop/ECON_7910_Final_Project_Data/schoolvar.dta", cle

52 . rename schid sch98v1

53 . merge 1:m sch98v1 using"/Users/jingxianliu/Desktop/ECON_7910_Final_Project_Data/
> ed2.dta"

Result	# of obs.	
not matched	23	
from master	23	(_merge==1)
from using	0	(_merge==2)
matched	2,861	(_merge==3)

```
54 .      keep if _merge==3
      (23 observations deleted)
```

```
55 .      codebook pupid
```

pupid	Pupil ID Nu
--------------	--------------------

```

      type:  numeric (long)

      range:  [1092003,2978017]          units:  1
unique values: 2,861                  missing .:  0/2,861

      mean:   2.2e+06
      std. dev: 603890

      percentiles:      10%      25%      50%      75%      90%
                        1.2e+06  1.7e+06  2.2e+06  2.8e+06  2.9e+06
```

```
56 .      drop _merge
```

```
57 .
```

```
58 . *Create variables used in regression: group dummy variable and control variable
```

```
59 . * create group dummy
```

```
60 .      tab wgrp, gen (wgrp)
```

Treatment group number	Freq.	Percent	Cum.
1	1,550	54.18	54.18
2	1,308	45.72	99.90
3	3	0.10	100.00
Total	2,861	100.00	

```
61 .      tab wgrp wgrp1
```


Treatment group number	wgrp== 1.0000		Total
	0	1	
1	0	1,550	1,550
2	1,308	0	1,308
3	3	0	3
Total	1,311	1,550	2,861

```

62 .
63 . *when account for SAP, egen a row total for SAP1 SAP SAP3 SAP4?
64 .      egen sap=rowtotal (sap1 sap2 sap3 sap4), m

65 .      save "/Users/jingxianliu/Desktop/ECON_7910_Final_Project_Data/wormed3.dta", repl
file /Users/jingxianliu/Desktop/ECON_7910_Final_Project_Data/wormed3.dta saved

66 .
67 . *Do probit regression on groups, cluster at 1998 school level
68 .
69 .      use "/Users/jingxianliu/Desktop/ECON_7910_Final_Project_Data/wormed3.dta", clear

70 .
71 .
72 . ***** For all eligible pupils:
73 .
74 . * Any mod-heavy infection
75 .      probit any_modheavy99 wgrp1 if (wgrp==1 | wgrp==2), robust cluster(sch98v1)

```

```

Iteration 0:  log pseudolikelihood = -1223.2856
Iteration 1:  log pseudolikelihood = -1154.0237
Iteration 2:  log pseudolikelihood = -1153.8691
Iteration 3:  log pseudolikelihood = -1153.8691

```

```

Probit regression                                Number of obs      =       1,802
                                                Wald chi2(1)       =       18.91
                                                Prob > chi2        =       0.0000
Log pseudolikelihood = -1153.8691              Pseudo R2          =       0.0567

```

(Std. Err. adjusted for 49 clusters in sch98v1)

any_modheavy99	Robust		z	P> z	[95% Conf. Interval]	
	Coef.	Std. Err.				
wgrp1	-.7469	.1717567	-4.35	0.000	-1.083537	-.4102631
_cons	.0514982	.1200546	0.43	0.668	-.1838045	.2868008

```
80 . margins, dydx (wgrp1)
```

Average marginal effects Number of obs = **1,798**
Model VCE : **Robust**

```
Expression      : Pr(modheavy_sm99), predict()
dy/dx w.r.t.   : wgrp1
```

		Robust				
modheavy_sm99	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
wgrp1	-.4397624	.2745438	-1.60	0.109	-.9778583	.0983336
_cons	-.9321588	.1827704	-5.10	0.000	-1.290382	-.5739353

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wgrp1	-.0964877	.0642937	-1.50	0.133	-.2225011	.0295257
-------	-----------	----------	-------	-------	-----------	----------

```

81 .
82 . * moderate heavy geohelminth infection
83 .       probit modheavy_geo99 wgrp1 if (wgrp==1 | wgrp==2), robust cluster(sch98v1)

```

```

Iteration 0:  log pseudolikelihood = -1149.9788
Iteration 1:  log pseudolikelihood = -1083.8531
Iteration 2:  log pseudolikelihood = -1083.5172
Iteration 3:  log pseudolikelihood = -1083.5171

```

```

Probit regression                               Number of obs   =       1,802
                                                Wald chi2(1)    =       24.22
                                                Prob > chi2     =       0.0000
Log pseudolikelihood = -1083.5171              Pseudo R2      =       0.0578

```

(Std. Err. adjusted for 49 clusters in sch98v1)

	Coef.	Robust Std. Err.	z	P> z	[95% Conf. Interval]	
modheavy_geo99						
wgrp1	-.7622476	.1548873	-4.92	0.000	-1.065821	-.4586742
_cons	-.1686507	.1089386	-1.55	0.122	-.3821663	.044865

```

84 .       margins, dydx (wgrp1)

```

```

Average marginal effects                       Number of obs   =       1,802
Model VCE      : Robust

Expression    : Pr(modheavy_geo99), predict()
dy/dx w.r.t. : wgrp1

```

	dy/dx	Delta-method Std. Err.	z	P> z	[95% Conf. Interval]	
wgrp1	-.2609556	.0506035	-5.16	0.000	-.3601367	-.1617745

```

85 .
86 .
87 .
88 . ***** For subsample - Eligible Male Pupils
89 .       keep if sex==1
      (845 observations deleted)

```

```

90 .
91 .       probit any_modheavy99 wgrp1 if (wgrp==1 | wgrp==2), robust cluster(sch98v1)

```

```

Iteration 0:   log pseudolikelihood = -815.34355
Iteration 1:   log pseudolikelihood = -765.85781
Iteration 2:   log pseudolikelihood = -765.76176
Iteration 3:   log pseudolikelihood = -765.76175

```

```

Probit regression                               Number of obs   =       1,197
                                                Wald chi2(1)    =       19.68
                                                Prob > chi2     =       0.0000
Log pseudolikelihood = -765.76175              Pseudo R2      =       0.0608

```

(Std. Err. adjusted for 48 clusters in sch98v1)

any_modheavy99	Robust					[95% Conf. Interval]	
	Coef.	Std. Err.	z	P> z			
wgrp1	-.7637197	.1721486	-4.44	0.000	-1.101125	-.4263145	
_cons	.092518	.1244438	0.74	0.457	-.1513873	.3364233	

```

92 .       margins, dydx (wgrp1)

```

```

Average marginal effects                     Number of obs   =       1,197
Model VCE      : Robust

```

```

Expression   : Pr(any_modheavy99), predict()
dy/dx w.r.t. : wgrp1

```

	Delta-method					[95% Conf. Interval]	
	dy/dx	Std. Err.	z	P> z			
wgrp1	-.2793594	.0562487	-4.97	0.000	-.3896049	-.1691139	

```

93 .
94 .       probit modheavy_sm99 wgrp1 if (wgrp==1 | wgrp==2), robust cluster(sch98v1)

```

```

Iteration 0:   log pseudolikelihood = -495.78208
Iteration 1:   log pseudolikelihood = -485.33839
Iteration 2:   log pseudolikelihood = -485.27803
Iteration 3:   log pseudolikelihood = -485.27802

```

```

Probit regression                               Number of obs   =       1,194
                                                Wald chi2(1)    =       2.23
                                                Prob > chi2     =       0.1352
Log pseudolikelihood = -485.27802              Pseudo R2      =       0.0212

```

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```

96 .
97 .       probit modheavy_geo99 wgrp1 if (wgrp==1 | wgrp==2), robust cluster(sch98v1)

```

```
Iteration 0:    log pseudolikelihood = -767.33273
Iteration 1:    log pseudolikelihood = -719.73025
Iteration 2:    log pseudolikelihood = -719.50726
Iteration 3:    log pseudolikelihood = -719.50724
```

Probit regression	Number of obs	=	1,197
	Wald chi2(1)	=	25.03
	Prob > chi2	=	0.0000
Log pseudolikelihood = -719.50724	Pseudo R2	=	0.0623

	Delta-method					
	dy/dx	Std. Err.	z	P> z	[95% Conf. Interval]	
wgrp1	-.0978403	.0701188	-1.40	0.163	-.2352706	.0395899

(Std. Err. adjusted for **48** clusters in sch98v1)

	Coef.	Robust Std. Err.	z	P> z	[95% Conf. Interval]	
modheavy_geo99						
wgrp1	-.781057	.156127	-5.00	0.000	-1.08706	-.4750537
_cons	-.134627	.1141401	-1.18	0.238	-.3583374	.0890835

```
98 . margins, dydx (wgrp1)
```

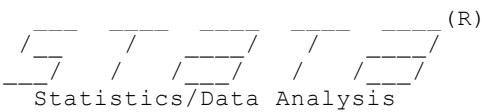
Average marginal effects
Model VCE : **Robust**

Number of obs = **1,197**

Expression : **Pr(modheavy_geo99), predict()**
dy/dx w.r.t. : **wgrp1**

	Delta-method					
	dy/dx	Std. Err.	z	P> z	[95% Conf. Interval]	
wgrp1	-.2672967	.0506695	-5.28	0.000	-.366607	-.1679863

```
99 .  
100 .  
101 .  
102 .  
103 .  
104 .  
105 .  
    end of do-file  
  
106 . do "/Users/jingxianliu/Desktop/FFFfinal Proj/q5.do"  
  
107 .  
108 . use "/Users/jingxianliu/Desktop/ECON_7910_Final_Project_Data/namelist.dta", clear  
  
109 . cap log close
```



name: <unnamed>
log: C:\Users\Lenovo-V\Desktop\econ7910\ECON_7910_Final_Project_Data\Question7Final.sm
log type: smcl
opened on: 10 Dec 2020, 21:45:30

```
1 .      *cap log close
2 .      sort pupid visit

3 .      keep if visit==981
(521,715 observations deleted)

4 .      keep pupid std

5 .      rename std std98v1

6 .      sort pupid

7 .      save question7, replace
file question7.dta saved

8 .
9 .      use "namelist"

10 .     sort pupid

11 .     merge m:1 pupid using question7
(label std_label already defined)
```

Result	# of obs.
not matched	0
matched	556,496 (_merge==3)

```
12 .     tab _merge
```

_merge	Freq.	Percent	Cum.
matched (3)	556,496	100.00	100.00
Total	556,496	100.00	

```
13 .     drop _merge

14 .     sort pupid

15 .     keep pupid visit std std98v1 prs wgrp* sch98v1 elg98 sex yrbirth

16 .     save question7, replace
file question7.dta saved

17 .
18 .     ***Table 11***
19 .     /*First year whole sample*/
20 .     use question7

21 .     keep if (visit>981 & visit<993 & elg98==1)
(288,386 observations deleted)
```

```

22 .      collapse prs wgrp* (count) np = pupid, by(sch98v1)
23 .      bys wgrp: summ prs [aw=np]

```

```
-> wgrp = 1
```

Variable	Obs	Weight	Mean	Std. Dev.	Min	Max
prs	25	90351	.8409796	.1265969	.462772	.970467

```
-> wgrp = 2
```

Variable	Obs	Weight	Mean	Std. Dev.	Min	Max
prs	25	92151	.731088	.1190025	.4411765	.9712408

```
-> wgrp = 3
```

Variable	Obs	Weight	Mean	Std. Dev.	Min	Max
prs	25	85608	.7662045	.1277115	.4990086	.9620563

```
24 .      tab wgrp, gen(wgrp)
```

(mean) wgrp	Freq.	Percent	Cum.
1	25	33.33	33.33
2	25	33.33	66.67
3	25	33.33	100.00
Total	75	100.00	

```
25 .      regress prs wgrp1 [aw=np]
(sum of wgt is 2.6811e+05)
```

Source	SS	df	MS	Number of obs	=	75
Model	.144868949	1	.144868949	F(1, 73)	=	9.36
Residual	1.12959628	73	.015473922	Prob > F	=	0.0031
				R-squared	=	0.1137
				Adj R-squared	=	0.1015
Total	1.27446523	74	.017222503	Root MSE	=	.12439

prs	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	.0929796	.0303879	3.06	0.003	.0324167	.1535426
_cons	.748	.0176405	42.40	0.000	.7128425	.7831574

```
26 .      regress prs wgrp1 wgrp2 [aw=np]
(sum of wgt is 2.6811e+05)
```

Source	SS	df	MS	Number of obs	=	75
Model	.160178209	2	.080089104	F(2, 72)	=	5.17
Residual	1.11428702	72	.015476209	Prob > F	=	0.0079
				R-squared	=	0.1257
				Adj R-squared	=	0.1014
Total	1.27446523	74	.017222503	Root MSE	=	.1244

prs	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	.0747751	.0354765	2.11	0.039	.004054	.1454961
wgrp2	-.0351165	.0353075	-0.99	0.323	-.1055007	.0352677
_cons	.7662045	.0254215	30.14	0.000	.7155277	.8168813


```
27 .      clear

28 .
29 .      /*males */
30 .      use question7

31 .      keep if (visit>981 & visit<993 & elg98~= . & sex==1)
      (418,409 observations deleted)

32 .      collapse prs wgrp* (count) np = pupid, by(sch98v1)

33 .      summ prs [aw=np]
```

Variable	Obs	Weight	Mean	Std. Dev.	Min	Max
prs	75	138087	.7882163	.133859	.4045643	1

```
34 .      bys wgrp: summ prs [aw=np]
```

```
-> wgrp = 1
```

Variable	Obs	Weight	Mean	Std. Dev.	Min	Max
prs	25	50013	.8440614	.1274944	.4045643	.9727386

```
-> wgrp = 2
```

Variable	Obs	Weight	Mean	Std. Dev.	Min	Max
prs	25	46854	.7359284	.12586	.5	1

```
-> wgrp = 3
```

Variable	Obs	Weight	Mean	Std. Dev.	Min	Max
prs	25	41220	.7798931	.129284	.4469799	.9580713

```
35 .      tab wgrp, gen(wgrp)
```

(mean) wgrp	Freq.	Percent	Cum.
1	25	33.33	33.33
2	25	33.33	66.67
3	25	33.33	100.00
Total	75	100.00	

```
36 .      regress prs wgrp1 [aw=np]
      (sum of wgt is 1.3809e+05)
```

Source	SS	df	MS	Number of obs	=	75
Model	.132820776	1	.132820776	F(1, 73)	=	8.13
Residual	1.19312859	73	.016344227	Prob > F	=	0.0057
Total	1.32594937	74	.017918235	R-squared	=	0.1002
				Adj R-squared	=	0.0878
				Root MSE	=	.12784

prs	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
wgrp1	.0875568	.0307142	2.85	0.006	.0263435 .1487701
_cons	.7565046	.0184843	40.93	0.000	.7196653 .7933438

```
37 . regress prs wgrp1 wgrp2 [aw=np]
(sum of wgt is 1.3809e+05)
```

Source	SS	df	MS	Number of obs	=	75
Model	.155841807	2	.077920903	F(2, 72)	=	4.79
Residual	1.17010756	72	.016251494	Prob > F	=	0.0111
				R-squared	=	0.1175
				Adj R-squared	=	0.0930
Total	1.32594937	74	.017918235	Root MSE	=	.12748

prs	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	.0641682	.0363892	1.76	0.082	-.0083724	.1367088
wgrp2	-.0439648	.0369393	-1.19	0.238	-.117602	.0296724
_cons	.7798931	.0269425	28.95	0.000	.7261842	.8336021

```
38 . clear
39 .
40 . /*Second year whole sample*/
41 . use question7
42 . keep if (visit>992 & visit<999 & elg98==1)
(377,756 observations deleted)
43 . collapse prs wgrp* (count) np = pupid, by(sch98v1)
44 . summ prs [aw=np]
```

Variable	Obs	Weight	Mean	Std. Dev.	Min	Max
prs	75	178740	.7002415	.0981817	.3927959	.9153963

```
45 . bys wgrp: summ prs [aw=np]
```

-> wgrp = 1

Variable	Obs	Weight	Mean	Std. Dev.	Min	Max
prs	25	60234	.7157943	.091287	.4701018	.8640974

-> wgrp = 2

Variable	Obs	Weight	Mean	Std. Dev.	Min	Max
prs	25	61434	.7182647	.0839325	.6	.9153963

-> wgrp = 3

Variable	Obs	Weight	Mean	Std. Dev.	Min	Max
prs	25	57072	.6644264	.1126229	.3927959	.8565921

```
46 . tab wgrp, gen(wgrp)
```

(mean) wgrp	Freq.	Percent	Cum.
1	25	33.33	33.33
2	25	33.33	66.67
3	25	33.33	100.00
Total	75	100.00	

```
47 . regress prs wgrp1 wgrp2 [aw=np]
(sum of wgt is 1.7874e+05)
```

Source	SS	df	MS	Number of obs	=	75
Model	.045205428	2	.022602714	F(2, 72)	=	2.44
Residual	.668127878	72	.009279554	Prob > F	=	0.0947
				R-squared	=	0.0634
				Adj R-squared	=	0.0374
Total	.713333306	74	.009639639	Root MSE	=	.09633

prs	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	.0513679	.0274708	1.87	0.066	-.0033942	.10613
wgrp2	.0538384	.02734	1.97	0.053	-.0006629	.1083396
_cons	.6644264	.0196849	33.75	0.000	.6251853	.7036674

```
48 . clear
49 .
50 . /*males */
51 . use question7
52 . keep if (visit>992 & visit<999 & elg98~= . & sex==1)
(464,438 observations deleted)
53 . collapse prs wgrp* (count) np = pupid, by(sch98v1)
54 . summ prs [aw=np]
```

Variable	Obs	Weight	Mean	Std. Dev.	Min	Max
prs	75	92058	.6842426	.1000323	.3322034	.92

```
55 . bys wgrp: summ prs [aw=np]
```

```
-> wgrp = 1
```

Variable	Obs	Weight	Mean	Std. Dev.	Min	Max
prs	25	33342	.6981885	.0973077	.4368932	.8328381

```
-> wgrp = 2
```

Variable	Obs	Weight	Mean	Std. Dev.	Min	Max
prs	25	31236	.6952869	.0889511	.5625	.92

```
-> wgrp = 3
```

Variable	Obs	Weight	Mean	Std. Dev.	Min	Max
prs	25	27480	.654768	.1125844	.3322034	.8469861

```
56 . tab wgrp, gen(wgrp)
```

(mean) wgrp	Freq.	Percent	Cum.
1	25	33.33	33.33
2	25	33.33	66.67
3	25	33.33	100.00
Total	75	100.00	

```
57 . regress prs wgrp1 wgrp2 [aw=np]
(sum of wgt is 9.2058e+04)
```

Source	SS	df	MS	Number of obs	=	75
Model	.027836803	2	.013918402	F(2, 72)	=	1.41
Residual	.712641933	72	.009897805	Prob > F	=	0.2517
				R-squared	=	0.0376
				Adj R-squared	=	0.0109
Total	.740478736	74	.010006469	Root MSE	=	.09949

prs	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
wgrp1	.0434205	.0283985	1.53	0.131	-.0131909	.100032
wgrp2	.0405189	.0288278	1.41	0.164	-.0169483	.0979861
_cons	.654768	.0210262	31.14	0.000	.612853	.696683

```
58 . clear

59 .
end of do-file

60 . do "C:\Users\Lenovo-V\AppData\Local\Temp\STD01000000.tmp"

61 . clear

62 . global datadir "C:\Users\Lenovo-V\Desktop\econ7910\ECON_7910_Final_Project_Data"

63 . cd "$datadir"
C:\Users\Lenovo-V\Desktop\econ7910\ECON_7910_Final_Project_Data

64 . log using "Log_FinalDEc10.smcl", replace
log file already open
r(604);

end of do-file

r(604);

65 . do "C:\Users\Lenovo-V\AppData\Local\Temp\STD01000000.tmp"

66 . clear

67 . global datadir "C:\Users\Lenovo-V\Desktop\econ7910\ECON_7910_Final_Project_Data"

68 . cd "$datadir"
C:\Users\Lenovo-V\Desktop\econ7910\ECON_7910_Final_Project_Data

69 . log using "Log_FinalDEc10.smcl", replace
log file already open
r(604);

end of do-file

r(604);

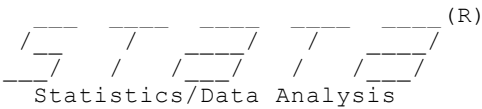
70 . do "C:\Users\Lenovo-V\AppData\Local\Temp\STD01000000.tmp"

71 . clear

72 . global datadir "C:\Users\Lenovo-V\Desktop\econ7910\ECON_7910_Final_Project_Data"

73 . cd "$datadir"
C:\Users\Lenovo-V\Desktop\econ7910\ECON_7910_Final_Project_Data

74 . cap log close
```



name: <unnamed>
log: C:\Users\Lenovo-V\Desktop\econ7910\ECON_7910_Final_Project_Data\Question8Final.sm
log type: smcl
opened on: 10 Dec 2020, 21:58:38

```
1 .      /*Question 8*/
2 . * Incorporate Namelist data
3 .      use "namelist"

4 .
5 . * Create further school assistance controls
6 .      gen      Y98 = 0

7 .      replace Y98 = 1 if (visit>980 & visit<990)
      (278,248 real changes made)

8 .      gen Y98sap1 = sap1*Y98
9 .      gen Y98sap2 = sap2*Y98
10 .     gen Y98sap3 = sap3*Y98
11 .     gen Y98sap4 = sap4*Y98

12 .     save "namelistq8final", replace
file namelistq8final.dta saved

13 .
14 . * Incorporate school and zonal variables
15 .     use "schoolvar"

16 .     keep schid z9899* distlake pup_pop zoneid z_inf98
17 .     rename schid sch98v1
18 .     sort sch98v1

19 .     save "schoolvarq8final", replace
file schoolvarq8final.dta saved

20 .     clear
21 .     use "namelistq8final"
22 .     sort sch98v1

23 .     merge sch98v1 using "schoolvarq8final"
      (note: you are using old merge syntax; see [D] merge for new syntax)
      variable sch98v1 does not uniquely identify observations in the master data

24 .     sum _merge
```

Variable	Obs	Mean	Std. Dev.	Min	Max
_merge	556,496	3	0	3	3

```
25 .     drop _merge
26 .
```

```

27 .
28 . * Generate year measure
29 .     gen     yr = .
    (556,496 missing values generated)

30 .     replace yr = 1 if (visit>981 & visit<993)
    (313,029 real changes made)

31 .     replace yr = 2 if (visit>992 & visit<999)
    (208,686 real changes made)

32 .
33 . * Create treatment indicators
34 .     * First year of treatment
35 .     gen     t1 = 0

36 .     replace t1 = 1 if (wgrp==1 & visit>981 & visit<993)
    (104,706 real changes made)

37 .     replace t1 = 1 if (wgrp==2 & visit>992 & visit<999)
    (71,940 real changes made)

38 .     replace t1 = . if wgrp==.
    (0 real changes made)

39 .     * Second year of treatment
40 .     gen     t2 = 0

41 .     replace t2 = 1 if (wgrp==1 & visit>992 & visit<999)
    (69,804 real changes made)

42 .     replace t2 = . if wgrp==.
    (0 real changes made)

43 .
44 . * Other indicators
45 .     gen t1e = elg98*t1
    (19,216 missing values generated)

46 .     gen t2e = elg98*t2
    (19,216 missing values generated)

47 .
48 . * Create standard-specific measure of zonal infection rate
49 .     gen     p1 = z9899_34

50 .     replace p1 = z9899_56 if (std98v1==5 | std98v1==6)
    (100,496 real changes made)

51 .     replace p1 = z9899_78 if (std98v1==7 | std98v1==8)
    (70,752 real changes made)

52 .     drop z9899*

53 .
54 . * Create standard indicators, based on 1998 visit 1 standard
55 .     gen std_fs = std98v1 if (std98v1>-1 & std98v1<9)
    (37,552 missing values generated)

56 .     replace std_fs = -1 if (std98v1==55)
    (22,416 real changes made)

```

57 . tab std_fs, gen(Istd)

std_fs	Freq.	Percent	Cum.
-1	22,416	4.14	4.14
0	62,720	11.59	15.73
1	86,032	15.89	31.62
2	72,208	13.34	44.96
3	64,928	11.99	56.95
4	61,808	11.42	68.37
5	53,680	9.92	78.28
6	46,816	8.65	86.93
7	44,832	8.28	95.21
8	25,920	4.79	100.00
Total	541,360	100.00	

58 . summ Istd*

Variable	Obs	Mean	Std. Dev.	Min	Max
Istd1	541,360	.0414068	.1992295	0	1
Istd2	541,360	.1158564	.3200529	0	1
Istd3	541,360	.1589183	.3656002	0	1
Istd4	541,360	.1333826	.3399881	0	1
Istd5	541,360	.119935	.3248858	0	1
Istd6	541,360	.1141717	.31802	0	1
Istd7	541,360	.0991577	.2988739	0	1
Istd8	541,360	.0864785	.2810696	0	1
Istd9	541,360	.0828137	.2756006	0	1
Istd10	541,360	.0478794	.2135113	0	1

59 . drop Istd10 std_fs

60 . save "namelistq8final", replace
file namelistq8final.dta saved

61 . clear

62 .
63 . * Incorporate compliance data
64 . use "comply"

65 . gen any98=.
(44,461 missing values generated)

66 . replace any98=0 if a981==0 | a982==0 | p98==0
(28,058 real changes made)

67 . replace any98=1 if a981==1 | a982==1 | p98==1
(7,020 real changes made)

68 . gen any99=.
(44,461 missing values generated)

69 . replace any99=0 if a991==0 | a992==0 | p99==0
(26,193 real changes made)

70 . replace any99=1 if a991==1 | a992==1 | p99==1
(9,926 real changes made)

```

71 .      keep pupil any98 any99
72 .      sort pupil
73 .      save "complyq8final", replace
      file complyq8final.dta saved
74 .      clear
75 .      use "namelistq8final"
76 .      sort pupil
77 .      merge pupil using "complyq8final"
      (note: you are using old merge syntax; see [D] merge for new syntax)
      variable pupil does not uniquely identify observations in the master data

```

```

78 .      tab _merge

```

_merge	Freq.	Percent	Cum.
1	11,152	1.97	1.97
2	10,377	1.83	3.80
3	545,344	96.20	100.00
Total	566,873	100.00	

```

79 .      drop _merge

```

```

80 .
81 .      compress
      variable Y98 was float now byte
      variable Y98sap1 was float now byte
      variable Y98sap2 was float now byte
      variable Y98sap3 was float now byte
      variable Y98sap4 was float now byte
      variable yr was float now byte
      variable t1 was float now byte
      variable t2 was float now byte
      variable t1e was float now byte
      variable t2e was float now byte
      variable any98 was float now byte
      variable any99 was float now byte
      (20,407,428 bytes saved)

```

```

82 .      save "namelistq8final", replace
      file namelistq8final.dta saved

```

```

83 .
84 . * Collapse data by pupil and year, where YEAR1 = 982-992, YEAR2 = 983-998
85 .      sort pupil yr

```

```

86 .      drop if yr==.
      (45,158 observations deleted)

```

```

87 .      collapse (mean) sch98v1 prs t1 t2 elg98 p1 sex ///
      >      Y98sap1 Y98sap2 Y98sap3 Y98sap4 sap1 sap2 sap3 sap4 ///
      >      Istd1 Istd2 Istd3 Istd4 Istd5 Istd6 Istd7 Istd8 Istd9 ///
      >      Isem1 Isem2 Isem3 ///
      >      any98 any99 wgrp (sum) obs ///
      >      if (t1~=. & elg98~=. & sch98v1~=. & p1~=. & Istd2~=.), by(pupil yr)

```



```

88 .      keep e* t* p* sap* Y98sap* sch98v1 prs* Istd* Isem* sch* obs yr sex
89 .
90 . * Create an indicator for whether the school received treatment
91 .      gen      t_any = 0
92 .      replace t_any=1 if (t1==1 | t2==1)
      (33,554 real changes made)
93 .      replace t_any=. if t1==. | t2==.
      (0 real changes made)
94 .      save "namelistq8final", replace
      file namelistq8final.dta saved
95 .
96 . **** TABLE 12 ***
97 .      sum prs [aw=obs] if (t1~= . & elg98~= . & sch98v1~= . & p1~= . & Istd2~= .)

```

Variable	Obs	Weight	Mean	Std. Dev.	Min	Max
prs	56,496	207532	.7467041	.3152257	0	1

```

98 .      /*any treatment*/
99 .      regress prs t_any elg98 p1 Y98sap* sap* Istd* Isem* [aw=obs] if (t1~= . & elg98~= . & s
      (sum of wgt is 2.0753e+05)

```

```

Linear regression                                Number of obs    =    56,496
                                                F(23, 74)         =    471.16
                                                Prob > F          =    0.0000
                                                R-squared         =    0.2098
                                                Root MSE         =    .28027

```

(Std. Err. adjusted for 75 clusters in sch98v1)

prs	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
t_any	.0484582	.0165884	2.92	0.005	.0154051	.0815113
elg98	.0628643	.0070364	8.93	0.000	.048844	.0768846
p1	-.1004239	.0563685	-1.78	0.079	-.2127406	.0118928
Y98sap1	-.2554636	.0326294	-7.83	0.000	-.320479	-.1904482
Y98sap2	-.2879817	.0316405	-9.10	0.000	-.3510269	-.2249366
Y98sap3	-.2455194	.0342696	-7.16	0.000	-.313803	-.1772359
Y98sap4	-.1663233	.0502605	-3.31	0.001	-.2664696	-.066177
sap1	.0291811	.0206753	1.41	0.162	-.0120153	.0703774
sap2	.0581781	.0223267	2.61	0.011	.0136912	.102665
sap3	.0081942	.0317336	0.26	0.797	-.0550363	.0714247
sap4	-.017606	.0417649	-0.42	0.675	-.1008243	.0656124
Istd1	-.754999	.0252263	-29.93	0.000	-.8052635	-.7047345
Istd2	-.1963159	.0293551	-6.69	0.000	-.2548073	-.1378245
Istd3	-.2134004	.0221588	-9.63	0.000	-.2575527	-.1692481
Istd4	-.2106308	.0207875	-10.13	0.000	-.2520508	-.1692107
Istd5	-.1867224	.0219563	-8.50	0.000	-.2304712	-.1429735
Istd6	-.1125459	.0194218	-5.79	0.000	-.1512446	-.0738471
Istd7	-.1216379	.0155559	-7.82	0.000	-.1526337	-.0906421
Istd8	-.1121271	.0158211	-7.09	0.000	-.1436515	-.0806028
Istd9	-.1078613	.0156386	-6.90	0.000	-.139022	-.0767006
Isem1	.3554951	.0446737	7.96	0.000	.2664807	.4445094
Isem2	.4803362	.086206	5.57	0.000	.308567	.6521054
Isem3	.0625465	.042552	1.47	0.146	-.0222402	.1473333
_cons	.7981677	.0284478	28.06	0.000	.7414843	.8548512

```
100 .          /*first and second year treatment*/
101 .          regress prs t1 t2 elg98 p1 Y98sap* sap* Istd* Isem* [aw=obs] if (t1~= . & elg98~= . & s
(sum of wgt is 2.0753e+05)
```

Linear regression

Number of obs

=

56,496

F(24, 74)

=

510.80

Prob > F

=

0.0000

R-squared

=

0.2107

Root MSE

=

.28012

(Std. Err. adjusted for 75 clusters in sch98v1)

prs	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
t1	.0567895	.0165896	3.42	0.001	.0237341	.089845
t2	.0235563	.0259687	0.91	0.367	-.0281874	.0753
elg98	.0628782	.0070448	8.93	0.000	.0488412	.0769151
p1	-.0993878	.0565081	-1.76	0.083	-.2119826	.013207
Y98sap1	-.2496295	.0336292	-7.42	0.000	-.3166371	-.182622
Y98sap2	-.2915289	.0318936	-9.14	0.000	-.3550782	-.2279796
Y98sap3	-.2419663	.0393157	-6.15	0.000	-.3203045	-.1636281
Y98sap4	-.1541188	.0539162	-2.86	0.006	-.2615492	-.0466883
sap1	.026082	.022209	1.17	0.244	-.0181705	.0703345
sap2	.0615506	.0227744	2.70	0.009	.0161716	.1069297
sap3	.0071397	.0320507	0.22	0.824	-.0567227	.0710021
sap4	-.0244538	.0420625	-0.58	0.563	-.1082651	.0593576
Istd1	-.7540412	.0251765	-29.95	0.000	-.8042066	-.7038759
Istd2	-.195871	.0292999	-6.69	0.000	-.2542523	-.1374897
Istd3	-.2130962	.0221884	-9.60	0.000	-.2573076	-.1688848
Istd4	-.2104063	.0207967	-10.12	0.000	-.2518447	-.168968
Istd5	-.1863257	.0219907	-8.47	0.000	-.2301431	-.1425082
Istd6	-.1119515	.0193942	-5.77	0.000	-.1505952	-.0733077
Istd7	-.1211156	.0155445	-7.79	0.000	-.1520887	-.0901424
Istd8	-.1114977	.0158201	-7.05	0.000	-.14302	-.0799755
Istd9	-.1070556	.0156132	-6.86	0.000	-.1381655	-.0759456
Isem1	.355614	.0445009	7.99	0.000	.2669441	.4442839
Isem2	.4709881	.0866022	5.44	0.000	.2984294	.6435469
Isem3	.0791053	.0446087	1.77	0.080	-.0097795	.1679901
_cons	.7947588	.0286558	27.73	0.000	.7376609	.8518566

```
102 .
103 .
104 .          /*males*/
105 .          keep if sex==1
(36,198 observations deleted)

106 .          /*any treatment*/
107 .          regress prs t_any p1 Y98sap* sap* Istd* Isem* [aw=obs] if (t1~= . & elg98~= . & sch98v1
(sum of wgt is 1.0093e+05)
```

Linear regression

Number of obs

=

27,108

F(22, 74)

=

318.62

Prob > F

=

0.0000

R-squared

=

0.2447

Root MSE

=

.27514

(Std. Err. adjusted for 75 clusters in sch98v1)

prs	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
t_any	.0460613	.0180773	2.55	0.013	.0100414	.0820812
p1	-.1277345	.0576485	-2.22	0.030	-.2426016	-.0128674
Y98sap1	-.2531131	.0361292	-7.01	0.000	-.325102	-.1811242
Y98sap2	-.2697668	.0285293	-9.46	0.000	-.3266126	-.2129209
Y98sap3	-.2451294	.0343893	-7.13	0.000	-.3136515	-.1766073
Y98sap4	-.173999	.0581449	-2.99	0.004	-.2898552	-.0581428
sap1	.0359363	.027853	1.29	0.201	-.0195619	.0914346
sap2	.0381893	.0251275	1.52	0.133	-.0118784	.0882569
sap3	.0087376	.0244931	0.36	0.722	-.040066	.0575413

sap4	.0081739	.0425147	0.19	0.848	-.0765385	.0928863
Istd1	-.7664547	.0297	-25.81	0.000	-.8256331	-.7072762
Istd2	-.1593734	.0278775	-5.72	0.000	-.2149205	-.1038263
Istd3	-.1880765	.0241755	-7.78	0.000	-.2362472	-.1399058
Istd4	-.1976711	.0249877	-7.91	0.000	-.2474602	-.1478821
Istd5	-.1738678	.0235346	-7.39	0.000	-.2207616	-.1269741
Istd6	-.1028544	.0205121	-5.01	0.000	-.1437256	-.0619832
Istd7	-.1227384	.0185621	-6.61	0.000	-.1597241	-.0857526
Istd8	-.1126291	.0190031	-5.93	0.000	-.1504935	-.0747647
Istd9	-.1010747	.0170365	-5.93	0.000	-.1350207	-.0671287
Isem1	.3157866	.0468312	6.74	0.000	.2224734	.4090999
Isem2	.5528337	.1121391	4.93	0.000	.3293916	.7762757
Isem3	.0417997	.0425893	0.98	0.330	-.0430614	.1266608
_cons	.8616024	.0326246	26.41	0.000	.7965964	.9266084

```
108 .          /*first and second year treatment*/
109 .          regress prs t1 t2 p1 Y98sap* sap* Istd* Isem* [aw=obs] if (t1~=. & elg98~=. & sch98v1
(sum of wgt is 1.0093e+05)
```

Linear regression	Number of obs	=	27,108
	F(23, 74)	=	319.58
	Prob > F	=	0.0000
	R-squared	=	0.2453
	Root MSE	=	.27502

(Std. Err. adjusted for 75 clusters in sch98v1)

prs	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
t1	.0530803	.0177083	3.00	0.004	.0177958	.0883649
t2	.024748	.0285391	0.87	0.389	-.0321173	.0816133
p1	-.1258817	.0580104	-2.17	0.033	-.2414699	-.0102935
Y98sap1	-.2488408	.0364971	-6.82	0.000	-.3215629	-.1761188
Y98sap2	-.2749479	.0294884	-9.32	0.000	-.3337048	-.216191
Y98sap3	-.2427242	.0392999	-6.18	0.000	-.321031	-.1644174
Y98sap4	-.1645534	.0613898	-2.68	0.009	-.2868752	-.0422315
sap1	.0335556	.029424	1.14	0.258	-.025073	.0921842
sap2	.0422631	.0260606	1.62	0.109	-.0096638	.09419
sap3	.0080666	.0247712	0.33	0.746	-.041291	.0574242
sap4	.0027173	.0426172	0.06	0.949	-.0821993	.0876339
Istd1	-.7657011	.0296039	-25.86	0.000	-.824688	-.7067141
Istd2	-.1584153	.0276398	-5.73	0.000	-.2134888	-.1033418
Istd3	-.188033	.0242327	-7.76	0.000	-.2363177	-.1397482
Istd4	-.1977919	.0250079	-7.91	0.000	-.2476212	-.1479626
Istd5	-.1737165	.0235491	-7.38	0.000	-.2206391	-.1267938
Istd6	-.1026644	.020581	-4.99	0.000	-.1436729	-.0616559
Istd7	-.1225011	.0185412	-6.61	0.000	-.1594453	-.0855569
Istd8	-.1124185	.0190333	-5.91	0.000	-.1503433	-.0744938
Istd9	-.1004758	.016926	-5.94	0.000	-.1342016	-.06675
Isem1	.3174251	.0462983	6.86	0.000	.2251736	.4096765
Isem2	.5466995	.1114308	4.91	0.000	.3246688	.7687302
Isem3	.0579646	.045487	1.27	0.207	-.0326702	.1485995
_cons	.8576373	.0327224	26.21	0.000	.7924364	.9228381

```
110 .
111 .
112 . clear

113 .
end of do-file
```