Regressions and Balance Tests

Simon Heuberger

12/13/2020

```
group_by(df.all, hc.group) %>% summarize(count = n())
```

```
## `summarise()` ungrouping output (override with `.groups` argument)
```

```
## # A tibble: 5 x 2
##   hc.group count
##   <chr>    <int>
## 1 control    208
## 2 m.opp      215
## 3 m.supp     225
## 4 si.opp     206
## 5 si.supp    249
```

```
group_by(df.all, ev.group) %>% summarize(count = n())
```

```
## `summarise()` ungrouping output (override with `.groups` argument)
```

```
## # A tibble: 5 x 2
##   ev.group count
##   <chr>    <int>
## 1 control    218
## 2 m.opp      222
## 3 m.supp     220
## 4 si.opp     218
## 5 si.supp    225
```

Table 1: Healthcare Regression Results

	Dependent variable:
	hc.likert
hc.groupm.opp	−0.400 (0.106)
hc.groupm.supp	−0.194 (0.105)
hc.groupsi.opp	−0.325 (0.107)
hc.groupsi.supp	−0.125 (0.103)
mor.all	0.315 (0.034)
si.all	0.040 (0.035)
dem	0.650 (0.068)
emplEmployed part time	−0.042 (0.096)
emplHomemaker	0.010 (0.138)
emplRetired	−0.183 (0.095)
emplStudent	−0.062 (0.161)
emplUnemployed	0.041 (0.112)
150 000 or more	0.348 (0.158)
39 999	0.297 (0.124)
59 999	0.410 (0.125)
79 999	0.156 (0.132)
99 999	0.173 (0.134)
20 000	0.254 (0.134)
Constant	1.562 (0.229)
Observations	1,103
R^2	0.178
Adjusted R^2	0.164
Residual Std. Error	1.088 (df = 1084)
F Statistic	13.045 (df = 18; 1084)

Table 2: Environment Regression Results

	Dependent variable:
	ev.likert
ev.groupm.opp	−0.151 (0.104)
ev.groupm.supp	−0.069 (0.104)
ev.groupsi.opp	−0.070 (0.104)
ev.groupsi.supp	0.010 (0.104)
mor.all	0.319 (0.034)
si.all	−0.096 (0.035)
dem	0.429 (0.068)
emplEmployed part time	0.021 (0.096)
emplHomemaker	−0.032 (0.137)
emplRetired	0.079 (0.095)
emplStudent	−0.291 (0.160)
emplUnemployed	−0.014 (0.111)
150 000 or more	0.142 (0.158)
39 999	0.003 (0.123)
59 999	0.046 (0.124)
79 999	−0.109 (0.132)
99 999	−0.008 (0.134)
20 000	−0.127 (0.134)
Constant	2.365 (0.229)
Observations	1,103
R^2	0.137
Adjusted R^2	0.123
Residual Std. Error	1.083 (df = 1084)
F Statistic	9.547 (df = 18; 1084)

```
group.num ~ race + gender + empl + inc + pid + educ + age, data = df.first.omit,
    report = c("std.diffs", "z.scores", "adj.means", "adj.mean.diffs",
    "adj.mean.diffs.null.sd", "chisquare.test", "p.values")
```

vars	hc.group.num.0	hc.group.num.1	adj.diff	adj.diff.null.sd	std.diff	z	p
White	0.00	-0.00	-0.00	0.00	-0.00	-0.20	0.84
Black	0.00	0.00	0.00	0.00	0.02	1.03	0.30
Hispanic	0.00	-0.00	-0.00	0.01	-0.01	-0.49	0.62
Asian	0.00	0.01	0.01	0.01	0.03	1.21	0.23
Arab	0.00	-0.01	-0.01	0.01	-0.02	-0.93	0.35
Indian	0.00	0.00	0.00	0.00	0.03	1.54	0.12
Hawaiian	0.00	-0.01	-0.01	0.00	-0.04	-1.83	0.07
Other	0.00	0.00	0.00	0.01	0.00	0.21	0.84
genderFemale	0.00	-0.00	-0.00	0.01	-0.00	-0.10	0.92
genderMale	0.00	0.00	0.00	0.01	0.01	0.32	0.75
genderOther	0.00	-0.00	-0.00	0.00	-0.04	-1.67	0.09
emplEmployed full time	0.00	0.00	0.00	0.01	0.01	0.30	0.77
emplEmployed part time	0.00	-0.01	-0.01	0.01	-0.03	-1.26	0.21
emplHomemaker	0.00	-0.00	-0.00	0.01	-0.00	-0.00	1.00
emplRetired	0.00	0.01	0.01	0.01	0.02	0.74	0.46
emplStudent	0.00	0.00	0.00	0.00	0.00	0.05	0.96
emplUnemployed	0.00	0.00	0.00	0.01	0.00	0.09	0.93
inc$100 000 to $149 999	0.00	0.00	0.00	0.01	0.01	0.31	0.76
inc$150 000 or more	0.00	0.00	0.00	0.01	0.01	0.58	0.56
inc$20 000 to $39 999	0.00	-0.00	-0.00	0.01	-0.00	-0.17	0.86
inc$40 000 to $59 999	0.00	-0.01	-0.01	0.01	-0.02	-0.85	0.40
inc$60 000 to $79 999	0.00	0.00	0.00	0.01	0.01	0.24	0.81
inc$80 000 to $99 999	0.00	0.00	0.00	0.01	0.01	0.48	0.63
incLess than $20 000	0.00	-0.00	-0.00	0.01	-0.01	-0.25	0.80
pidDemocrat	0.00	0.01	0.01	0.01	0.01	0.57	0.57
pidIndependent	0.00	-0.02	-0.02	0.01	-0.04	-2.07	0.04
pidRepublican	0.00	0.01	0.01	0.01	0.03	1.25	0.21
pidSomething else	0.00	0.00	0.00	0.00	0.01	0.24	0.81
educAssociate degree	0.00	-0.01	-0.01	0.01	-0.02	-0.90	0.37
educBachelor	0.00	-0.00	-0.00	0.01	-0.01	-0.42	0.67
educHigh school or lower	0.00	-0.00	-0.00	0.01	-0.00	-0.06	0.96
educMaster or higher	0.00	0.00	0.00	0.01	0.01	0.62	0.54
educSome college	0.00	0.01	0.01	0.01	0.02	0.75	0.45
age	0.00	0.59	0.59	0.39	0.03	1.52	0.13

Table 3: Balance Across Covariates

chisquare	df	p.value
21.50	28.00	0.80

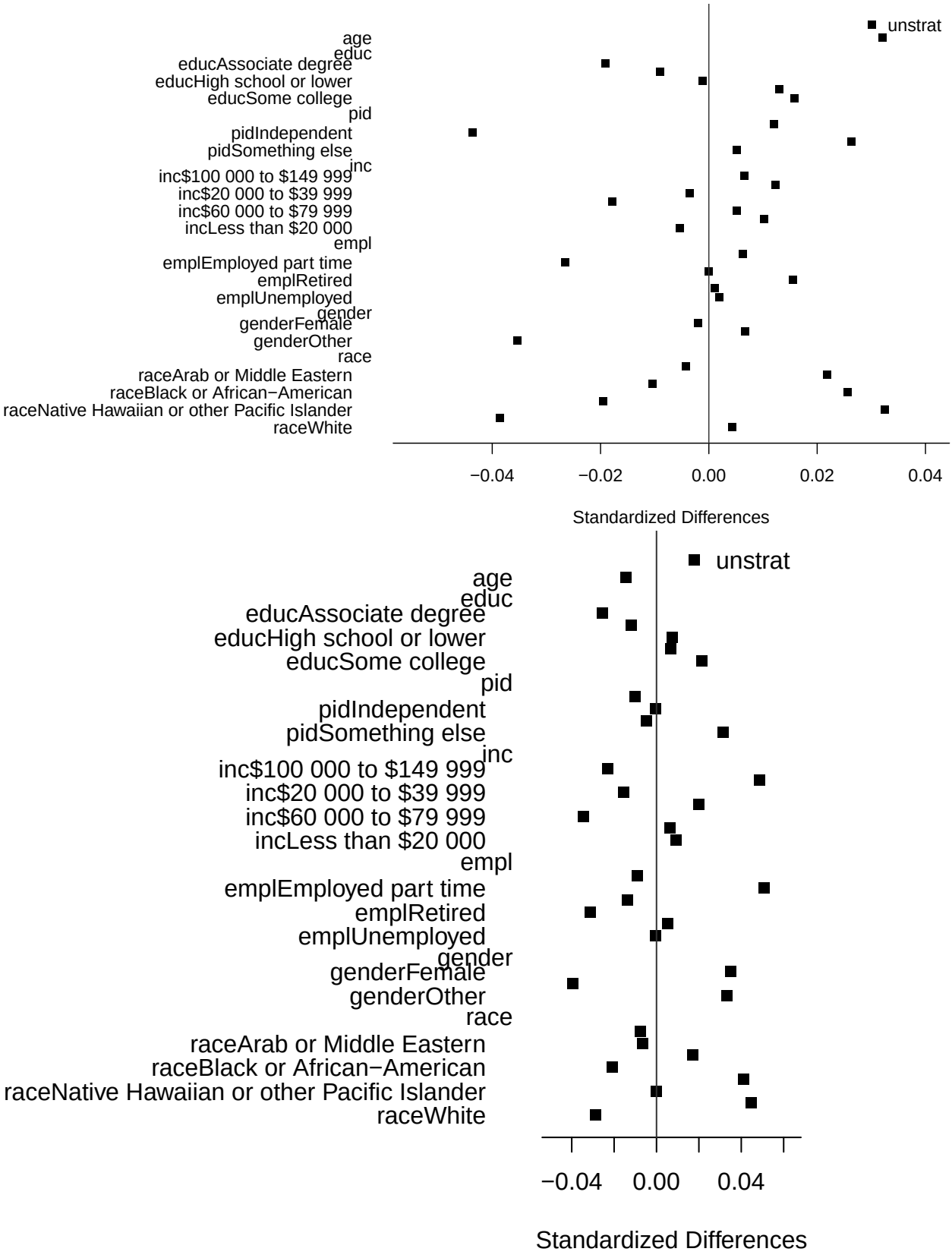
Table 4: Chi-squared test

vars	ev.group.num.0	ev.group.num.1	adj.diff	adj.diff.null.sd	std.diff	z	p
White	0.00	-0.00	-0.00	0.00	-0.01	-0.36	0.72
Black	0.00	-0.00	-0.00	0.00	-0.01	-0.30	0.76
Hispanic	0.00	0.00	0.00	0.01	0.02	0.80	0.42
Asian	0.00	-0.01	-0.01	0.01	-0.02	-0.98	0.33
Arab	0.00	0.01	0.01	0.01	0.04	1.93	0.05
Indian	0.00	-0.00	-0.00	0.00	-0.00	-0.01	0.99
Hawaiian	0.00	0.01	0.01	0.00	0.04	2.10	0.04
Other	0.00	-0.01	-0.01	0.01	-0.03	-1.35	0.18
genderFemale	0.00	0.02	0.02	0.01	0.04	1.65	0.10
genderMale	0.00	-0.02	-0.02	0.01	-0.04	-1.86	0.06
genderOther	0.00	0.00	0.00	0.00	0.03	1.57	0.12
emplEmployed full time	0.00	-0.00	-0.00	0.01	-0.01	-0.43	0.66
emplEmployed part time	0.00	0.02	0.02	0.01	0.05	2.40	0.02
emplHomemaker	0.00	-0.00	-0.00	0.01	-0.01	-0.65	0.52
emplRetired	0.00	-0.01	-0.01	0.01	-0.03	-1.47	0.14
emplStudent	0.00	0.00	0.00	0.00	0.01	0.25	0.80
emplUnemployed	0.00	-0.00	-0.00	0.01	-0.00	-0.02	0.98
inc$100 000 to $149 999	0.00	-0.01	-0.01	0.01	-0.02	-1.08	0.28
inc$150 000 or more	0.00	0.01	0.01	0.01	0.05	2.29	0.02
inc$20 000 to $39 999	0.00	-0.01	-0.01	0.01	-0.02	-0.74	0.46
inc$40 000 to $59 999	0.00	0.01	0.01	0.01	0.02	0.93	0.35
inc$60 000 to $79 999	0.00	-0.01	-0.01	0.01	-0.03	-1.63	0.10
inc$80 000 to $99 999	0.00	0.00	0.00	0.01	0.01	0.30	0.76
incLess than $20 000	0.00	0.00	0.00	0.01	0.01	0.44	0.66
pidDemocrat	0.00	-0.00	-0.00	0.01	-0.01	-0.47	0.64
pidIndependent	0.00	-0.00	-0.00	0.01	-0.00	-0.03	0.98
pidRepublican	0.00	-0.00	-0.00	0.01	-0.00	-0.23	0.82
pidSomething else	0.00	0.01	0.01	0.01	0.03	1.48	0.14
educAssociate degree	0.00	-0.01	-0.01	0.01	-0.03	-1.19	0.23
educBachelor	0.00	-0.01	-0.01	0.01	-0.01	-0.57	0.57
educHigh school or lower	0.00	0.00	0.00	0.01	0.01	0.35	0.73
educMaster or higher	0.00	0.00	0.00	0.01	0.01	0.32	0.75
educSome college	0.00	0.01	0.01	0.01	0.02	1.01	0.31
age	0.00	-0.26	-0.26	0.39	-0.01	-0.67	0.50

Table 5: Balance Across Covariates

chisquare	df	p.value
34.03	28.00	0.20

Table 6: Chi-squared test


unstrat
age
educ
educAssociate degree
educHigh school or lower
educSome college
pid
pidIndependent
pidSomething else
inc
inc$100 000 to $149 999
inc$20 000 to $39 999
inc$60 000 to $79 999
incLess than $20 000
empl
emplEmployed part time
emplRetired
emplUnemployed
gender
genderFemale
genderOther
race
raceArab or Middle Eastern
raceBlack or African−American
raceNative Hawaiian or other Pacific Islander
raceWhite
−0.04
−0.02
0.00
0.02
0.04
Standardized Differences