

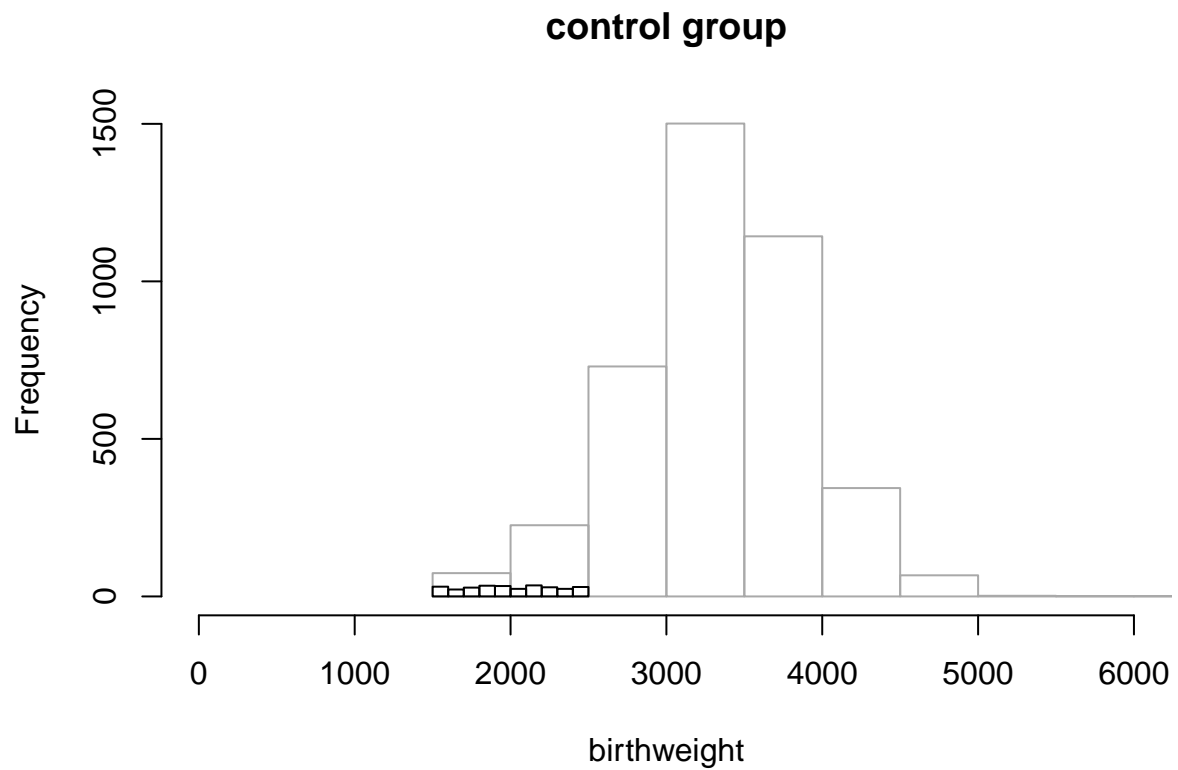
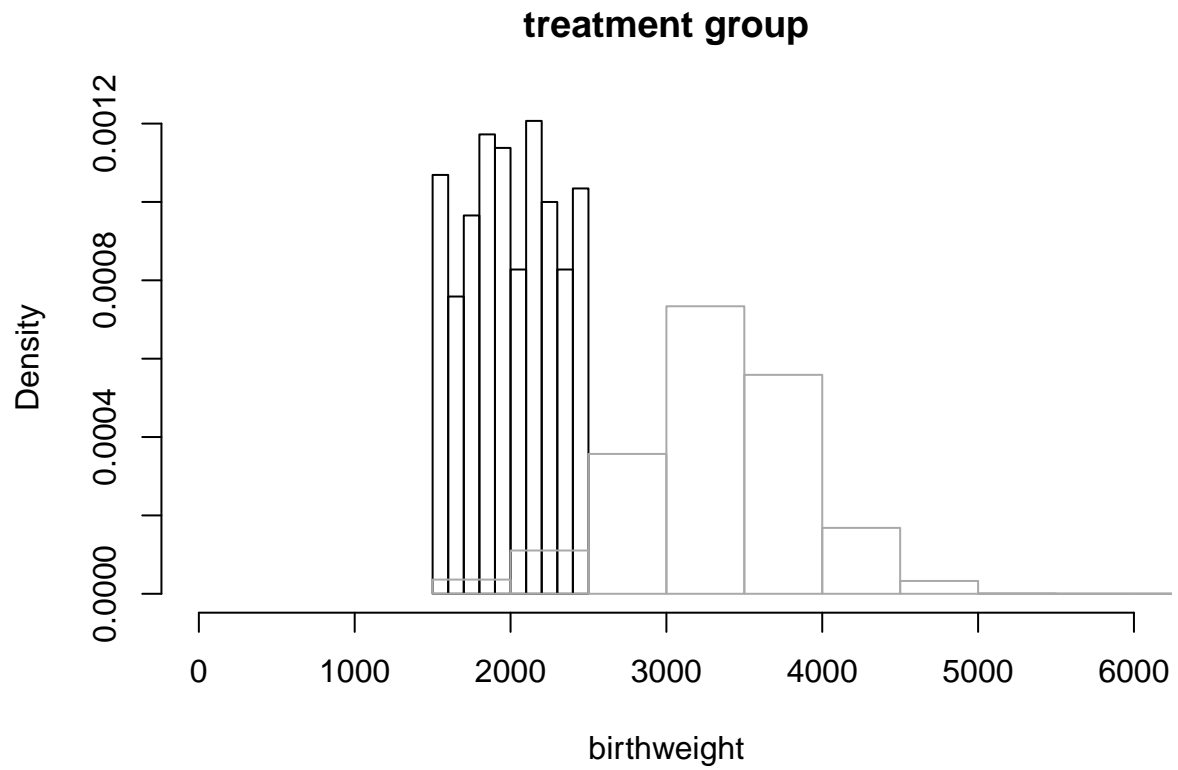
# IHDP analyses for CH10 of GH

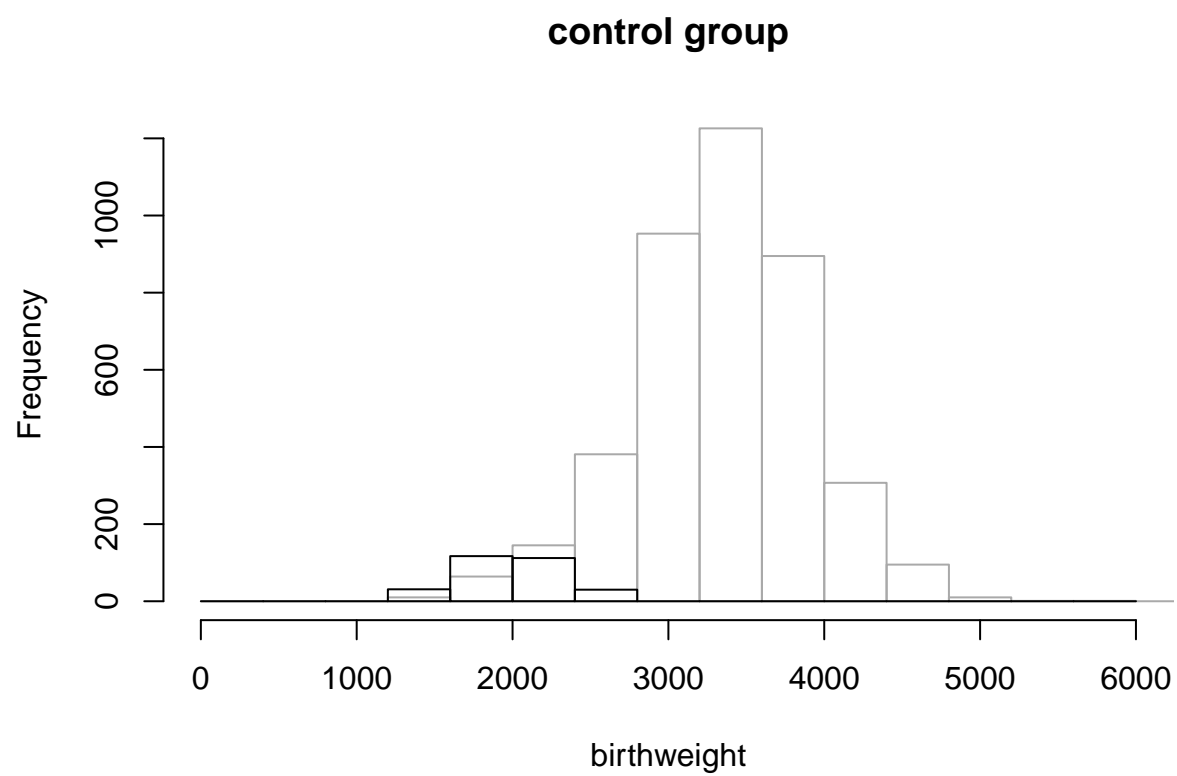
## Data prep

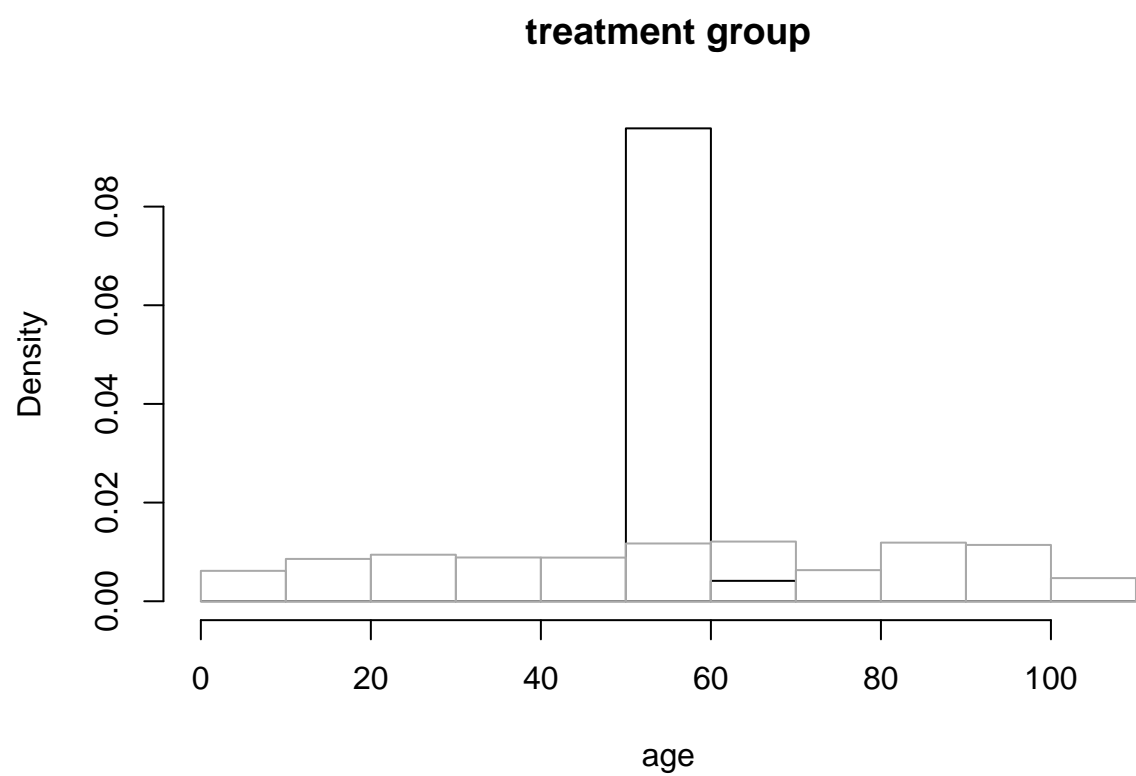
```
##
## Call:
## lm(formula = data.ba)
##
## Coefficients:
## (Intercept)      treat      dayskidh          bw      preterm
##   9.240e+01   1.169e+01  -1.396e-01   5.084e-04  -8.446e-03
##   hispanic      black      white      b.marr      lths
##  -1.383e+01  -1.734e+01      NA    3.053e+00  -1.464e+01
##      hs      ltcoll      college      work.dur      prenatal
##  -8.533e+00  -6.426e+00      NA    2.793e+00   4.299e+00
##      momage      sex      first      age
##   2.400e-02   1.181e+00   4.595e+00  -2.663e-02

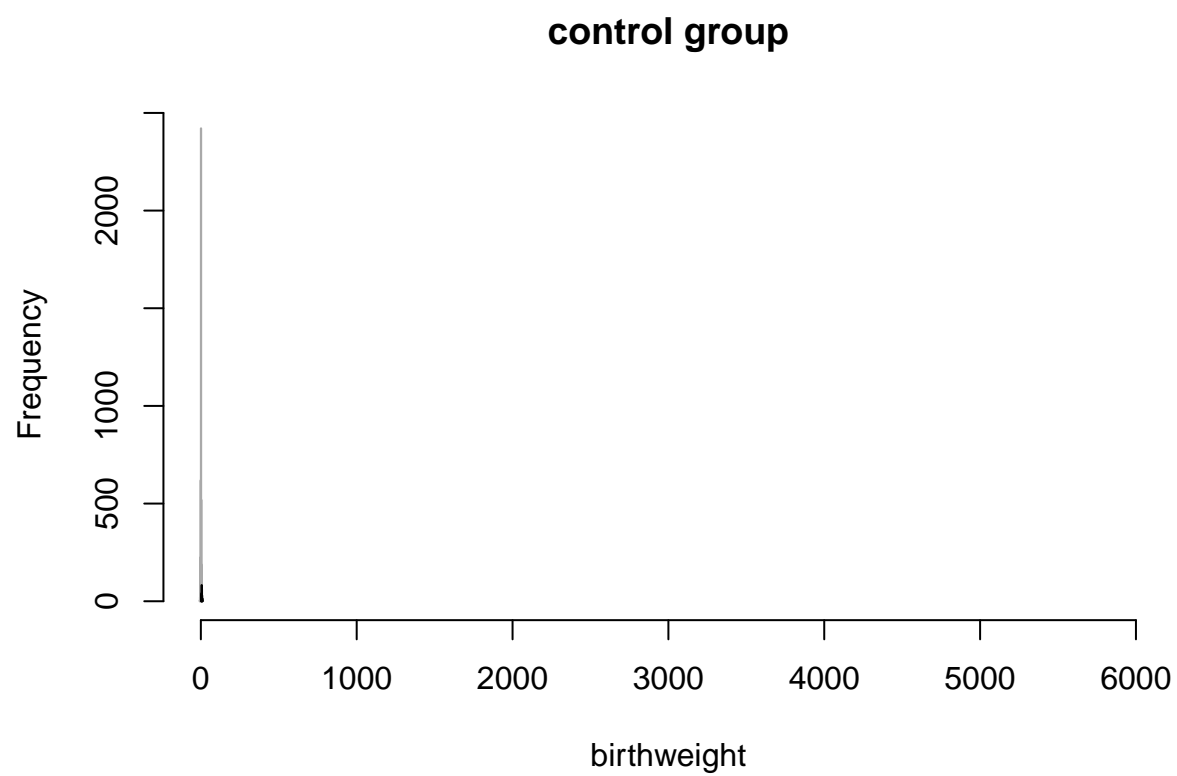
##
## Call:
## lm(formula = data.nba)
##
## Coefficients:
## (Intercept)      treat      hispanic      black      white
##   93.64649    9.56810   -13.81386   -17.38376      NA
##      b.marr      lths      hs      ltcoll      college
##    3.17895   -14.61671   -8.53332   -6.38220      NA
##      work.dur      prenatal      momage      sex      first
##    2.84278    4.48057    0.01170    1.16377    4.52370
##      age
##   -0.02874
```

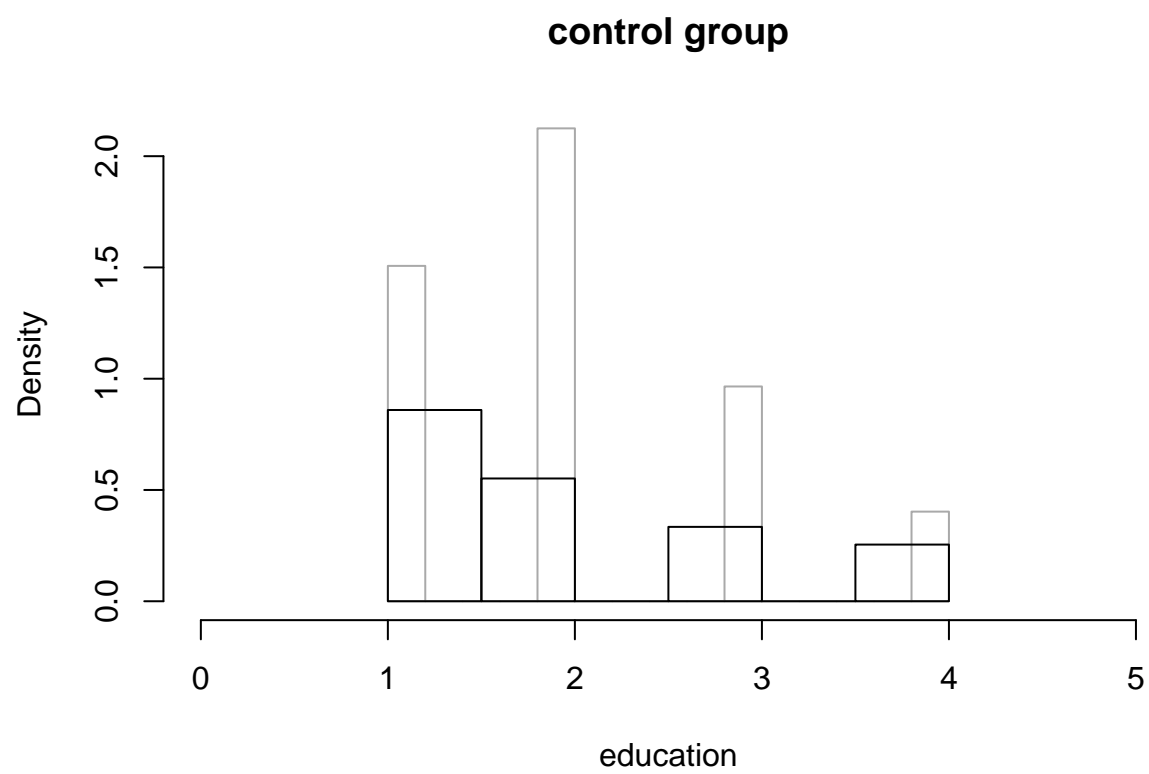
## Univariate



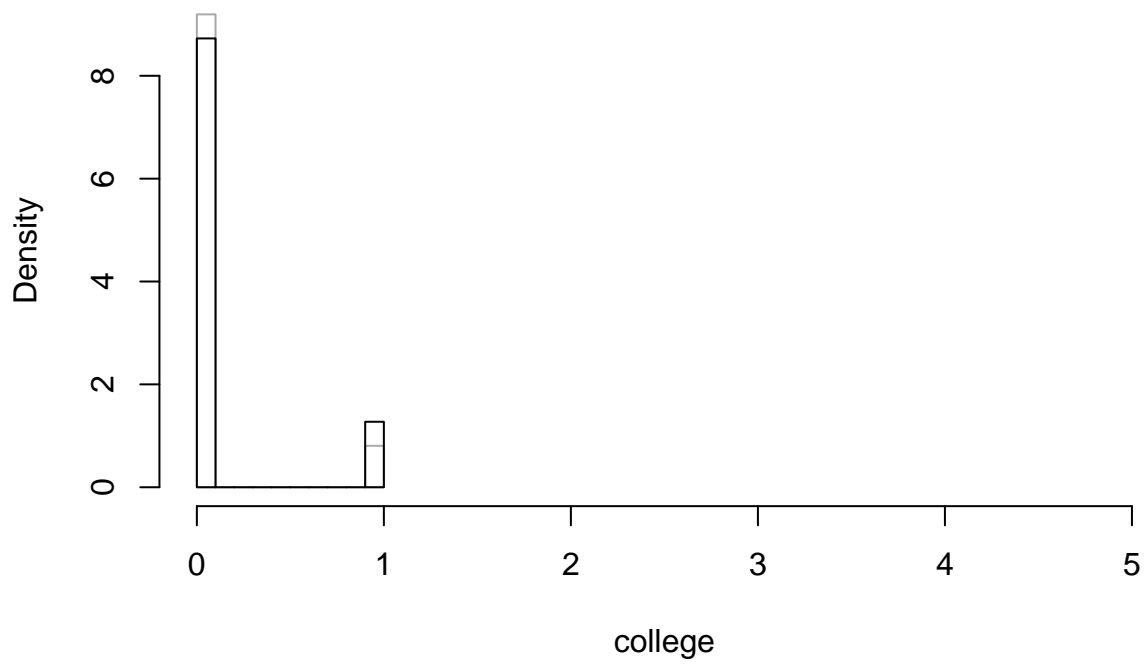


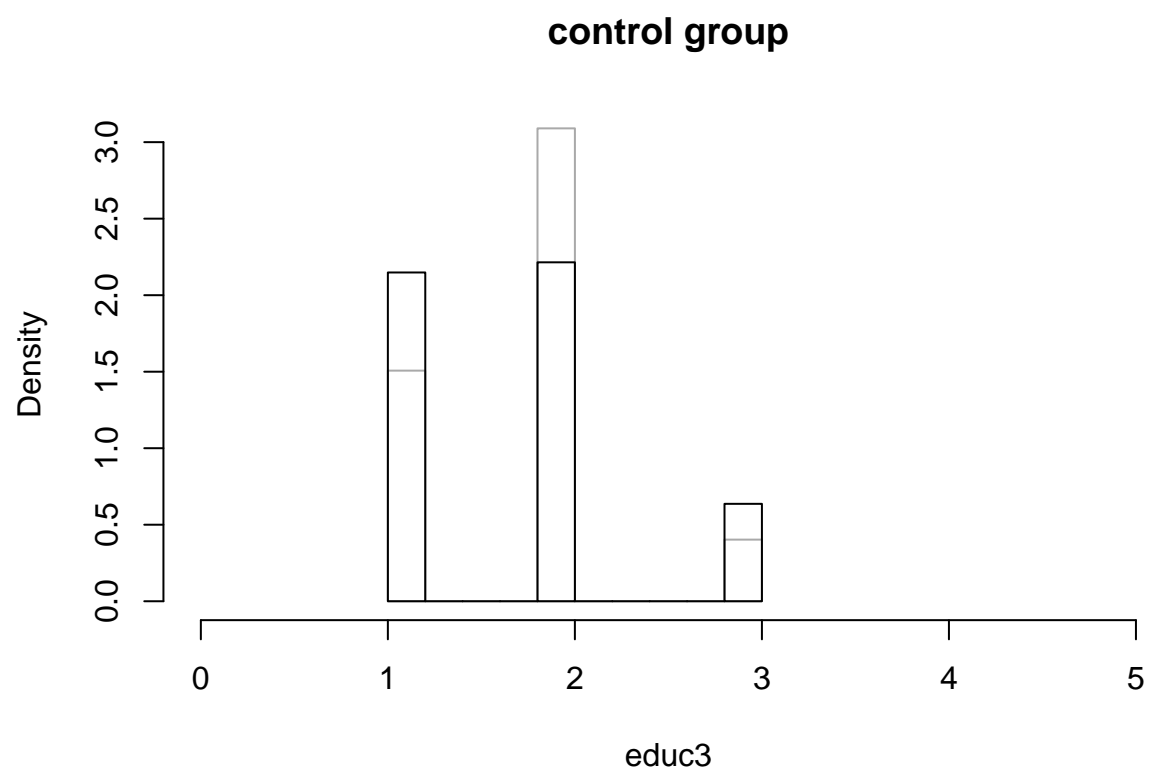






## control group

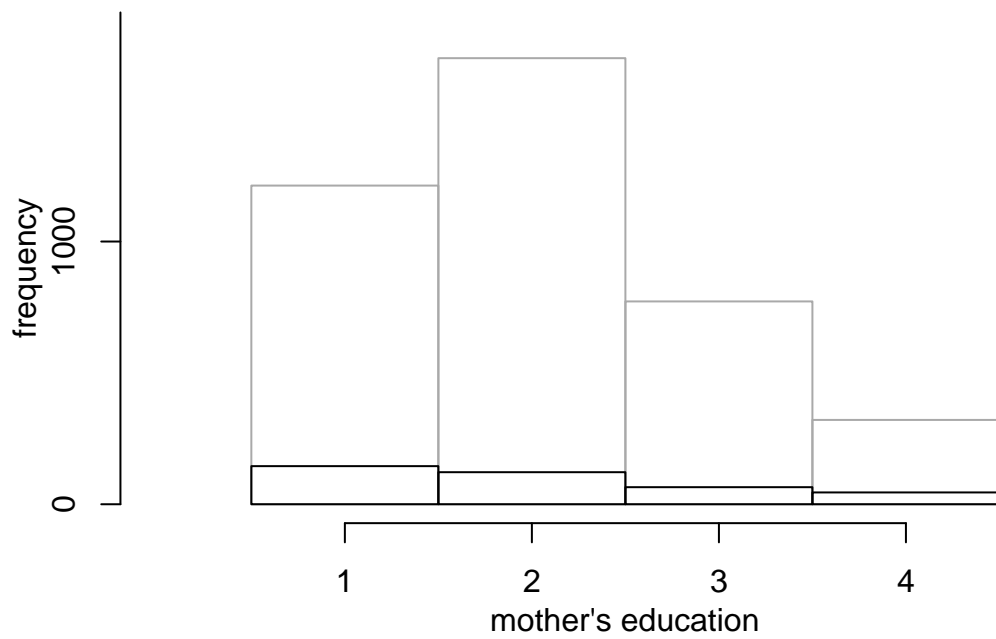


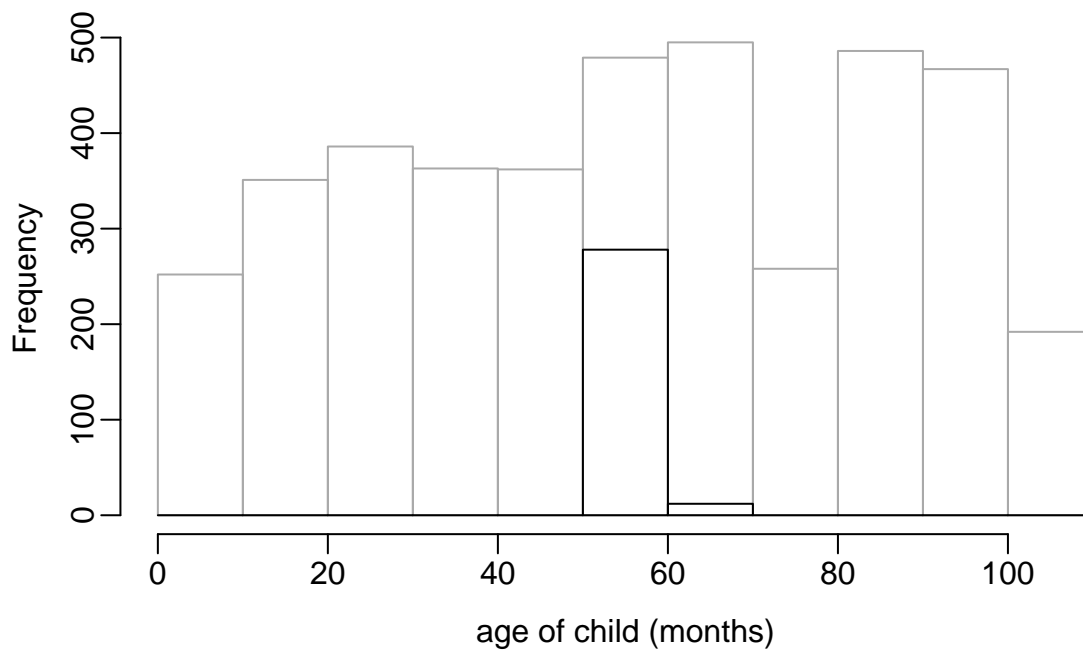


**Figure 10.5**

Matches text





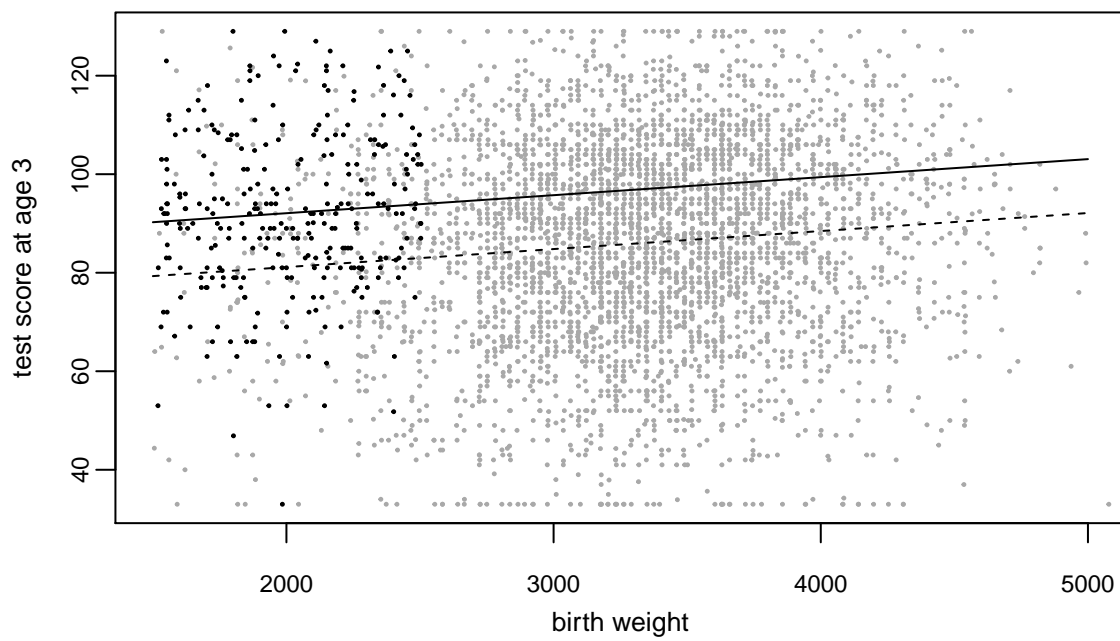


##	treat	control	diff	diff.std	se	sd
## neg.bw	491.35	-835.27	1326.62	2.98	18.81	444.70
## preterm	6.07	1.18	4.89	2.49	0.12	1.97
## dayskidh	14.69	4.17	10.52	1.19	0.67	8.86
## sex	0.51	0.50	0.01	0.02	0.03	0.50
## first	0.48	0.42	0.06	0.12	0.03	0.50
## age	56.67	56.35	0.32	0.02	0.47	20.59
## black	0.50	0.28	0.22	0.46	0.03	0.48
## hispanic	0.09	0.21	-0.12	-0.34	0.02	0.36
## white	0.40	0.50	-0.10	-0.20	0.03	0.50
## b.unmarr	0.57	0.31	0.26	0.53	0.03	0.48
## lths	0.43	0.30	0.13	0.28	0.03	0.48
## hs	0.28	0.42	-0.14	-0.30	0.03	0.47
## ltcoll	0.17	0.19	-0.03	-0.07	0.02	0.38
## college	0.12	0.08	0.04	0.12	0.02	0.30
## work.dur	0.59	0.62	-0.03	-0.06	0.03	0.49
## no.prenatal	0.04	0.01	0.03	0.19	0.01	0.17
## momage	24.44	23.75	0.69	0.15	0.35	4.71

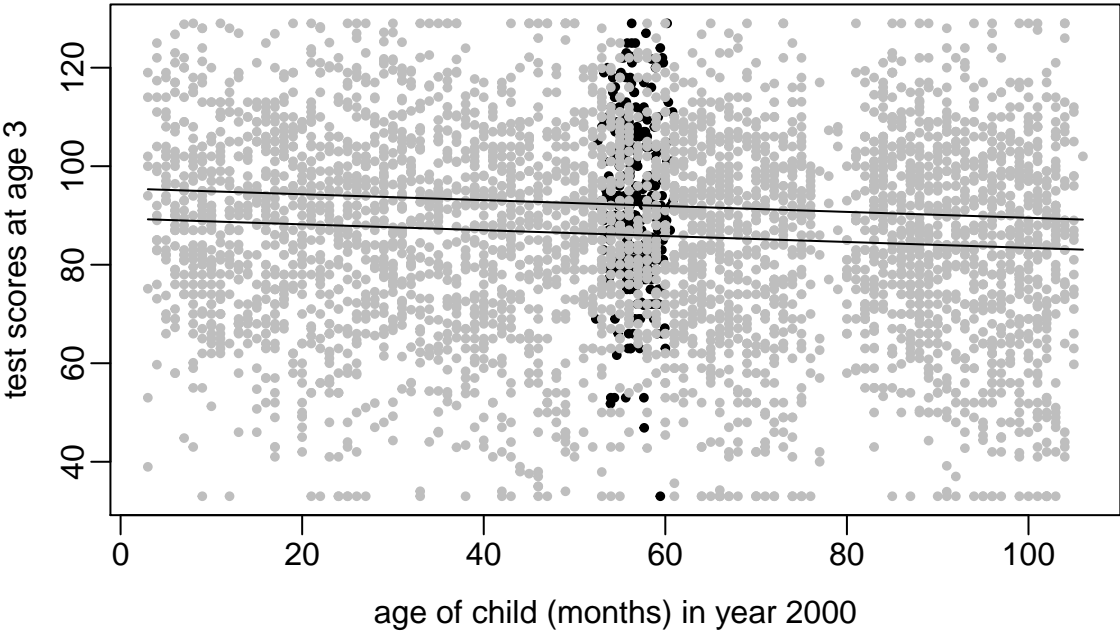
## Bivariate

Figure 10.4

matches text



**data and estimated regression line**



**Stratification**

**Figure 10.6**

matches text

	trt_eff	n_trt	n_ctrl	se
lths	9.30	126	1358	1.34
hs	4.06	82	1820	1.82
ltcoll	7.87	48	837	2.31
college	4.62	34	366	2.14

**Formula 10.2**

matches text

```
##           [,1]
## [1,] 7.032178

##           [,1]
## [1,] 6.457971

##           [,1]
## [1,] 0.9016809
## [1] 0.9018942
```

```
##      [,1] [,2] [,3]
## [1,]  7.64 142 4159
## [2,] 10.87 148  222

##      [,1]
## [1,] 9.284831

##      [,1]
## [1,] 7.799905
```

## P-Score Matchinng

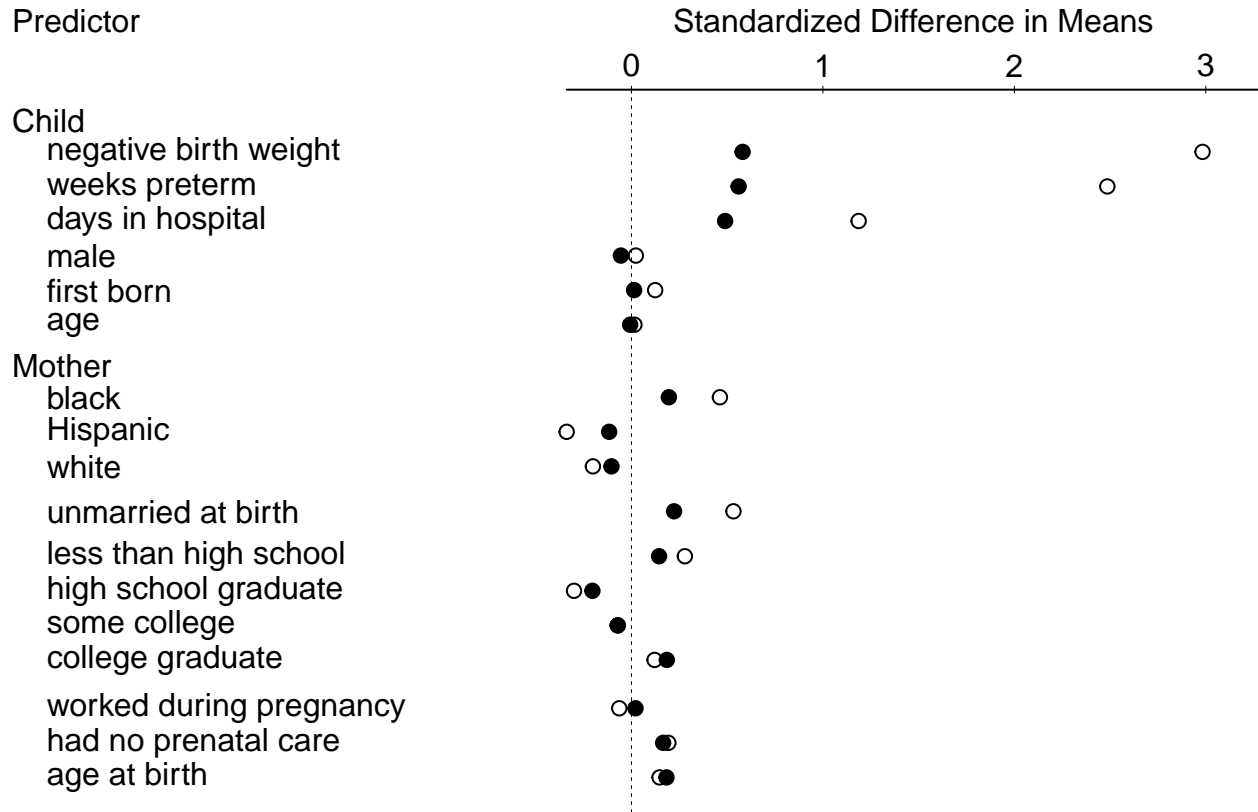
```
## [1] 16

##      Estimate Std. Error    t value    Pr(>|t|)
##      10.51      1.55      6.77      0.00

##      treat control    diff diff.std    se    sd
## neg.bw      491.35  233.16 258.19    0.58 18.81 444.70
## preterm      6.07    4.97   1.10    0.56 0.12   1.97
## dayskidh     14.69  10.35   4.34    0.49 0.67   8.86
## sex          0.51    0.53  -0.03   -0.06 0.03   0.50
## first        0.48    0.48   0.01    0.01 0.03   0.50
## age         56.67   56.81  -0.14   -0.01 0.47  20.59
## black        0.50    0.41   0.09    0.20 0.03   0.48
## hispanic     0.09    0.13  -0.04   -0.12 0.02   0.36
## white        0.40    0.46  -0.05   -0.10 0.03   0.50
## b.unmarr     0.57    0.46   0.11    0.22 0.03   0.48
## lths         0.43    0.37   0.07    0.14 0.03   0.48
## hs           0.28    0.38  -0.10   -0.20 0.03   0.47
## ltcoll       0.17    0.19  -0.03   -0.07 0.02   0.38
## college      0.12    0.06   0.06    0.18 0.02   0.30
## work.dur     0.59    0.58   0.01    0.02 0.03   0.49
## no.prenatal  0.04    0.02   0.03    0.17 0.01   0.17
## momage       24.44   23.58   0.86    0.18 0.35   4.71

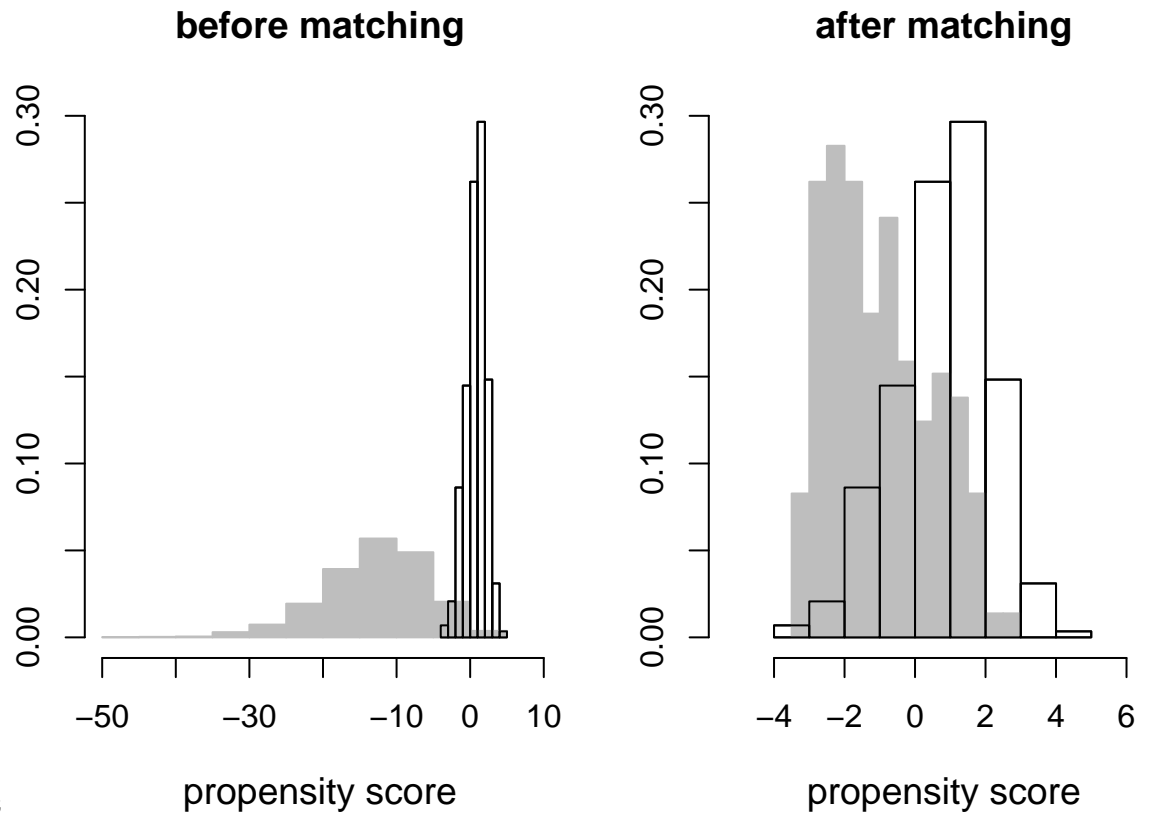
##      unmatched ratio matched ratio
## neg.bw      0.50      0.85
## preterm     0.95      0.85
## dayskidh    2.07      0.88
## age         0.07      0.07
## momage      1.86      1.75

##      Estimate Std. Error    t value    Pr(>|t|)
##      10.34      2.26      4.58      0.00
```



```
## null device
##          1
```

Figure 10.7



does not match text

```
## null device
##      1

## [1] 6

## null device
##      1

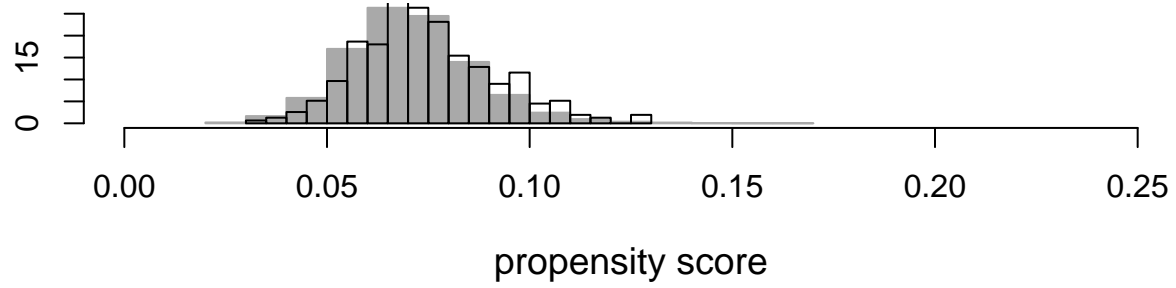
## null device
##      1

## [1] 3652

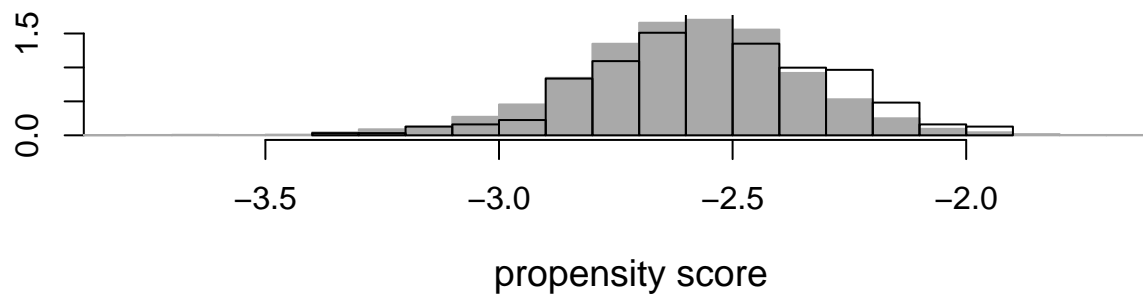
## [1] 16
```

## UNIVARIATE

**before matching**

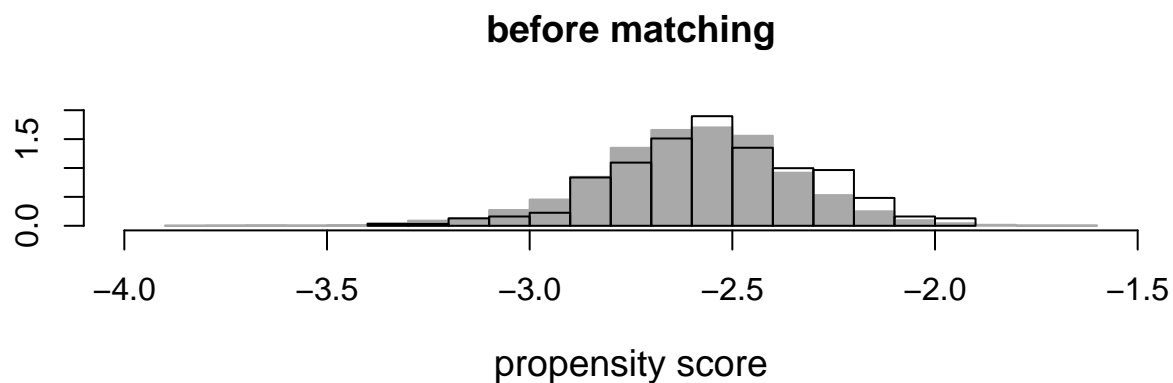


**before matching**



```
## [1] 0
```





## Geographic information

does not match text, slightly greater (8.9 vs 8.8)

```
##      Estimate Std. Error    t value  Pr(>|t|)
##          8.92      2.09      4.27      0.00

##          treat control  diff diff.std   se   sd
## neg.bw      491.35 -167.57 658.92    1.48 18.81 444.70
## preterm       6.07   2.90   3.17    1.61  0.12  1.97
## dayskidh     14.69   6.79   7.90    0.89  0.67  8.86
## sex           0.51   0.54  -0.03   -0.06  0.03  0.50
## first         0.48   0.44   0.04    0.09  0.03  0.50
## age          56.67  56.99  -0.32   -0.02  0.47 20.59
## black         0.50   0.40   0.10    0.22  0.03  0.48
## hispanic      0.09   0.24  -0.14   -0.41  0.02  0.36
## white         0.40   0.36   0.04    0.08  0.03  0.50
## b.unmarr      0.57   0.43   0.13    0.28  0.03  0.48
## lths          0.43   0.36   0.08    0.17  0.03  0.48
## hs            0.28   0.36  -0.07   -0.15  0.03  0.47
## ltcoll        0.17   0.23  -0.06   -0.16  0.02  0.38
## college       0.12   0.06   0.06    0.18  0.02  0.30
## work.dur      0.59   0.57   0.02    0.04  0.03  0.49
## no.prenatal   0.04   0.02   0.03    0.17  0.01  0.17
## momage       24.44  23.69   0.76    0.16  0.35  4.71

##          unmatched ratio matched ratio
```

## neg.bw	0.50	0.72
## preterm	0.95	0.86
## dayskidh	2.07	0.96
## sex	1.00	1.00
## first	1.01	1.01
## age	0.07	0.07
## black	1.11	1.02
## hispanic	0.71	0.68
## white	0.98	1.02
## b.unmarr	1.07	1.00
## lths	1.08	1.04
## hs	0.91	0.94
## ltcoll	0.94	0.89
## college	1.18	1.33
## work.dur	1.02	0.99
## no.prenatal	1.85	1.59
## momage	1.86	1.79