

# Heritability by Subgroup

Joe Rodger's BG Team

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Gen2 Link Version: 2011V28. DV Names: 'MathStd<sub>1</sub>' and 'MathStd<sub>2</sub>' in

'F:/Projects/Nls/Links2011/Analysis/Df/2012-01-07/BMI<sub>sex</sub>Intell<sub>DoubleEntry</sub>Linked.csv'.

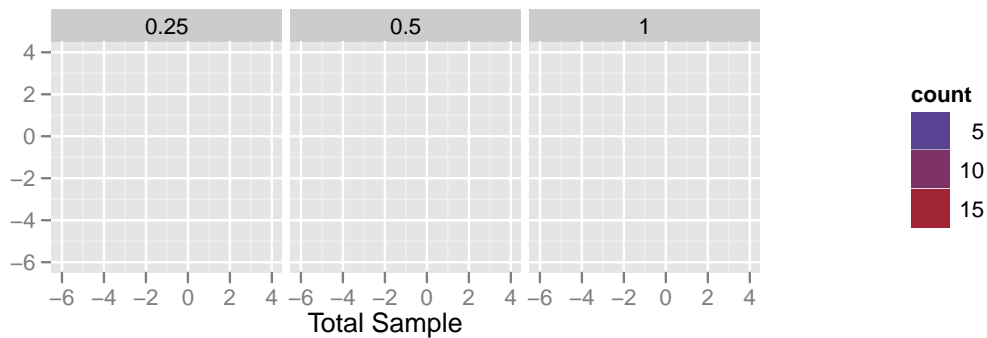
This uses OpenMX, based off the example that David emailed Dec 16, 2011. The dataset was reduced to single entered.

Implicit ambiguous sibs were assigned R=0.375. All height measures are from 19-25 years of age, standardized by gender (Kelly restandardized early December 2011). Counts reflect the double entry.

Subgroup	$N$	$h^2$	$c^2$	$e^2$	$\bar{X}$	$\sigma$	$\sigma^3$	$N_{.25}$	$N_{.375}$	$N_{.5}$	$N_{.75}$	$N_{Mz}$	$r_{.25}$	$r_{.375}$	$r_{.5}$	$r_{Mz}$
Total	6868	0.92	-0.01	0.09	95.57	13.97	0.06	2148	0	4692	0	28	0.21		0.45	0.72
FF	1720	0.90	0.04	0.06	94.39	14.06	0.15	562	0	1148	0	10	0.26		0.49	0.55
MF	3420	0.97	-0.04	0.07	95.59	13.82	0.07	1076	0	2344	0	0	0.20		0.44	
MM	1728	0.98	-0.07	0.09	96.70	14.09	-0.03	510	0	1200	0	18	0.14		0.43	0.64
Hispanic	1700	1.14	-0.21	0.07	94.53	13.52	0.08	390	0	1308	0	2	0.07		0.37	-1.00
Black	2820	0.66	0.03	0.31	91.23	12.67	-0.01	1352	0	1458	0	10	0.20		0.35	0.95
NBNH	2348	1.22	-0.19	-0.02	101.52	13.68	-0.06	406	0	1926	0	16	0.05		0.43	0.64
Hisp FF	390	1.42	-0.22	-0.20	93.50	13.16	0.33	104	0	286	0	0	0.13		0.49	
Hisp MF	820	1.37	-0.34	-0.03	94.26	13.34	-0.02	186	0	634	0	0	0.00		0.35	
Hisp MM	490	0.57	0.01	0.43	95.81	14.03	0.01	100	0	388	0	2	0.13		0.30	-1.00
Black FF	760	0.95	-0.08	0.12	90.16	12.56	-0.09	378	0	378	0	4	0.17		0.38	0.97
Black MF	1408	0.37	0.15	0.48	91.42	12.60	0.04	672	0	736	0	0	0.25		0.34	
Black MM	652	1.17	-0.22	0.06	92.06	12.88	-0.04	302	0	344	0	6	0.07		0.36	0.69
NBNH FF	570	1.07	-0.12	0.04	100.63	14.33	-0.01	80	0	484	0	6	-0.01		0.44	-0.64
NBNH MF	1192	1.54	-0.35	-0.19	101.42	13.51	-0.02	218	0	974	0	0	0.03		0.42	
NBNH MM	586	0.76	0.02	0.22	102.60	13.32	-0.19	108	0	468	0	10	0.13		0.42	0.58

Table 1: Height Heritability

## 1 Total Sample



Plot Explanation: Each row of graphs isolates a subgroup.

Each cell in a row isolates a unique value of R; this is displayed in the gray header above each cell.

Axis and hexbin sizes are constants across all rows.

The orange line is the LS regression for the row (repeated in each cell).

The yellow line is the LS regression for the cell.

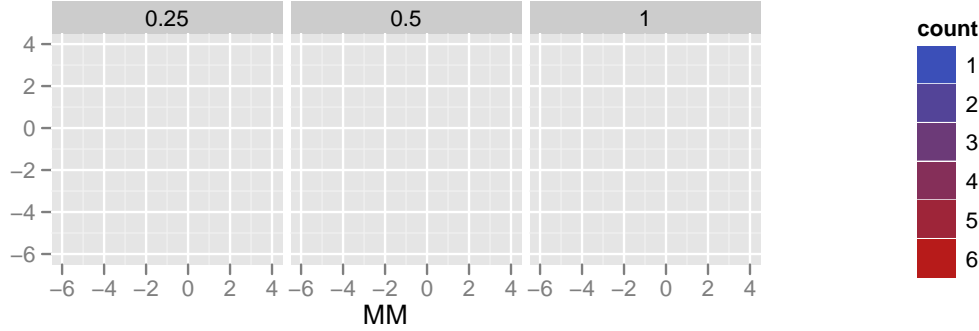
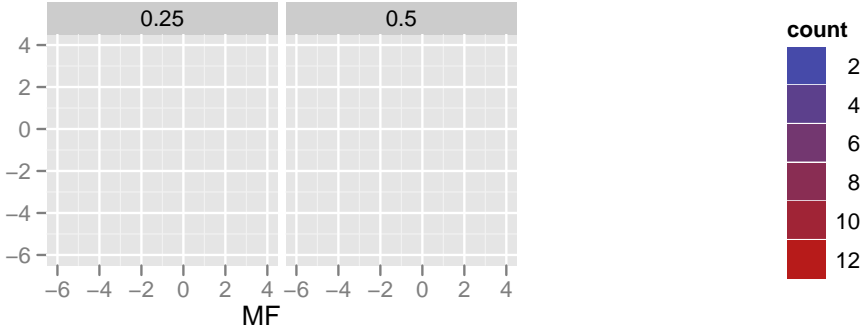
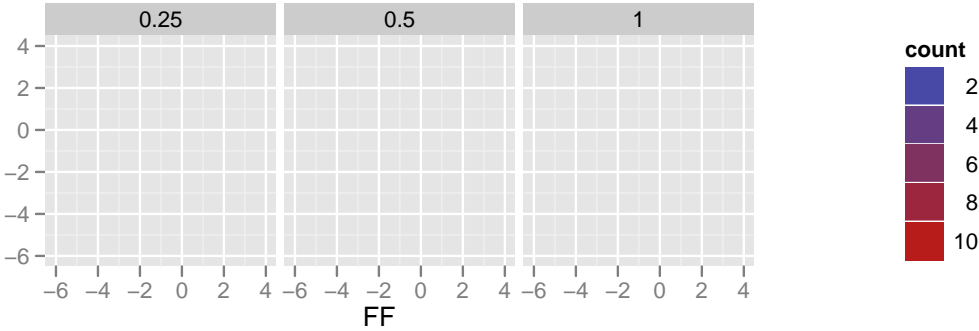
The green line is the loess for each cell. It's bandwidth is not constant across all rows.

The hexbin density color is not constant across rows.

Relevant portions of the table are repeated on each page.

2 By Gender

Subgroup	$h^2$	$c^2$	$e^2$	$N_{.25}$	$N_{.375}$	$N_{.5}$	$N_{.75}$	$N_{Mz}$	$r_{.25}$	$r_{.375}$	$r_{.5}$	$r_{Mz}$
Total	0.92	-0.01	0.09	2148	0	4692	0	28	0.21		0.45	0.72
FF	0.90	0.04	0.06	562	0	1148	0	10	0.26		0.49	0.55
MF	0.97	-0.04	0.07	1076	0	2344	0	0	0.20		0.44	
MM	0.98	-0.07	0.09	510	0	1200	0	18	0.14		0.43	0.64



3 By Race

Subgroup	$h^2$	$c^2$	$e^2$	$N_{.25}$	$N_{.375}$	$N_{.5}$	$N_{.75}$	$N_{Mz}$	$r_{.25}$	$r_{.375}$	$r_{.5}$	$r_{Mz}$
Total	0.92	-0.01	0.09	2148	0	4692	0	28	0.21		0.45	0.72
Hispanic	1.14	-0.21	0.07	390	0	1308	0	2	0.07		0.37	-1.00
Black	0.66	0.03	0.31	1352	0	1458	0	10	0.20		0.35	0.95
NBNH	1.22	-0.19	-0.02	406	0	1926	0	16	0.05		0.43	0.64

