### Heritability by Subgroup

#### Joe Rodger's BG Team

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Gen2 Link Version: 2011V28. DV Names: 'HtSt1' and 'HtSt2' in

'F:/Projects/Nls/Links2011/Analysis/Df/2011-12-18/DoubleEntered.csv'.

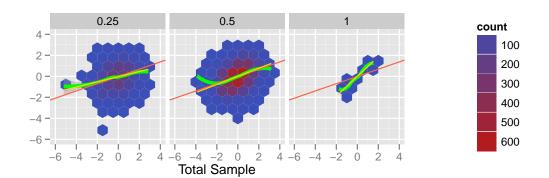
This uses OpenMX, based off the example that David emailed Dec 16, 2011. The dataset was reduced to single entered.

Implicit ambiguous sibs were assigned R=0.375. Z-Scores are restricted to +/-10. 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	3458	0.81	0.00	0.19	-0.02	1.00	-0.04	2114	0	4776	0	26	0.25		0.39	0.95
FF	872	0.94	0.00	0.05	-0.04	0.97	0.07	562	0	1172	0	10	0.32		0.45	0.95
MF	1722	0.57	0.08	0.35	0.02	1.00	-0.11	1062	0	2382	0	0	0.23		0.36	
MM	864	0.81	0.00	0.19	-0.08	1.00	-0.03	490	0	1222	0	16	0.20		0.37	0.94
Hispanic	871	0.28	0.26	0.46	-0.39	0.93	0.11	396	0	1346	0	0	0.33		0.40	
Black	1409	0.59	0.02	0.39	-0.01	1.00	0.03	1324	0	1484	0	10	0.18		0.30	0.88
NBNH	1178	0.74	0.00	0.26	0.23	0.95	-0.28	394	0	1946	0	16	0.27		0.34	0.95
Hisp FF	204	0.02	0.45	0.53	-0.43	0.89	0.15	106	0	302	0	0	0.42		0.47	
Hisp MF	416	0.47	0.14	0.39	-0.34	0.96	0.11	190	0	642	0	0	0.27		0.37	
$Hisp\ MM$	251	0.08	0.35	0.57	-0.43	0.92	0.04	100	0	402	0	0	0.35		0.40	
Black FF	384	0.15	0.24	0.61	0.00	0.98	0.08	376	0	388	0	4	0.28		0.31	0.80
Black MF	707	0.48	0.07	0.46	0.02	1.02	-0.00	664	0	750	0	0	0.18		0.31	
Black MM	318	0.53	0.00	0.47	-0.08	1.01	0.04	284	0	346	0	6	0.07		0.24	0.89
NBNH FF	284	0.98	0.00	0.02	0.19	0.94	-0.05	80	0	482	0	6	0.20		0.47	0.97
NBNH MF	599	0.32	0.15	0.53	0.26	0.95	-0.41	208	0	990	0	0	0.26		0.30	
NBNH MM	295	0.71	0.00	0.29	0.22	0.96	-0.24	106	0	474	0	10	0.32		0.30	0.94

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.

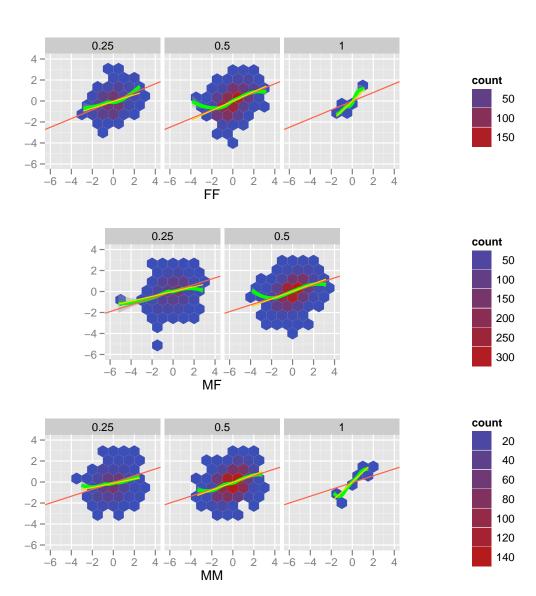
The green line is the loess for each cell. It's bandwidth is not constant across allrows.

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			26			0.39	
FF	0.94	0.00	0.05	562	0	1172	0	10	0.32		0.45	0.95
MF	0.57	0.08	0.35	1062	0	2382	0	0	0.23		0.36	
MM	0.81	0.00	0.19	490	0	1222	0	16	0.20		0.37	0.94



## 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	0.81		0.19		0	4776	0	26	0.25		0.39	0.95
Hispanic	0.28	0.26	0.46	396	0	1346	0	0	0.33		0.40	
Black	0.59	0.02	0.39	1324	0	1484	0	10	0.18		0.30	0.88
NBNH	0.74	0.00	0.26	394	0	1946	0	16	0.27		0.34	0.95

