Heritability by Subgroup

Joe Rodger's BG Team

December 14, 2011

Gen2 Link Version: 2011V28.

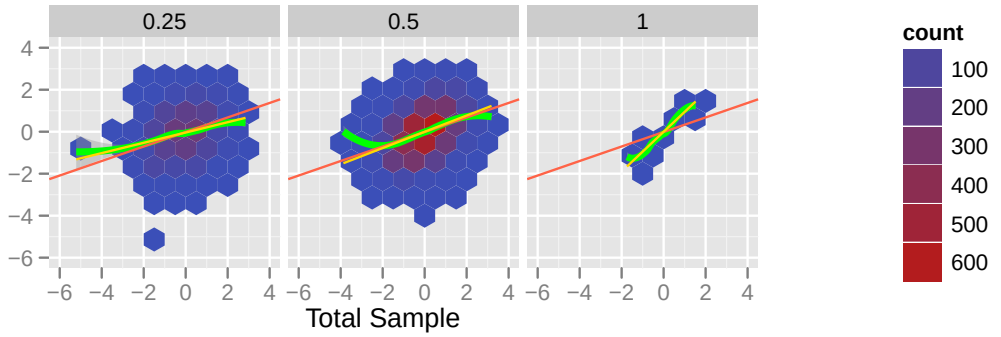
Subjects were 19+ years old. Implicit ambiguous sibs were assigned R=0.375. Z-Scores are restricted to +/-10. All height measures are from 19-25 years of age, standardized by gender (Kelly restandardized early December 2011).

Counts reflect the double entry.

Subgroup	N	h^2	c^2	e^2	$\bar{X}$	σ	σ^3	$N_{.25}$	$N_{.375}$	$N_{.5}$	$N_{.75}$	N_{Mz}	$r_{.25}$	$r_{.375}$	$r_{.5}$	r_{Mz}
Total	6916	0.60	0.09	0.31	-0.02	1.00	-0.04	2114	0	4776	0	26	0.25		0.39	0.95
FF	1744	0.58	0.16	0.25	-0.04	0.97	0.07	562	0	1172	0	10	0.32		0.45	0.95
MF	3444	0.53	0.10	0.37	0.02	1.00	-0.11	1062	0	2382	0	0	0.23		0.36	
MM	1728	0.74	0.00	0.25	-0.08	1.00	-0.03	490	0	1222	0	16	0.20		0.37	0.94
Hispanic	1742	0.28	0.26	0.46	-0.39	0.93	0.11	396	0	1346	0	0	0.33		0.40	
Black	2818	0.52	0.04	0.43	-0.01	1.00	0.03	1324	0	1484	0	10	0.18		0.30	0.88
NBNH	2356	0.40	0.15	0.45	0.23	0.95	-0.28	394	0	1946	0	16	0.27		0.34	0.95
Hisp FF	408	0.23	0.36	0.41	-0.43	0.89	0.15	106	0	302	0	0	0.42		0.47	
Hisp MF	832	0.39	0.17	0.44	-0.34	0.96	0.11	190	0	642	0	0	0.27		0.37	
Hisp MM	502	0.18	0.31	0.52	-0.43	0.92	0.04	100	0	402	0	0	0.35		0.40	
Black FF	768	0.23	0.21	0.56	0.00	0.98	0.08	376	0	388	0	4	0.28		0.31	0.80
Black MF	1414	0.51	0.06	0.44	0.02	1.02	-0.00	664	0	750	0	0	0.18		0.31	
Black MM	636	0.82	-0.15	0.33	-0.08	1.01	0.04	284	0	346	0	6	0.07		0.24	0.89
NBNH FF	568	1.04	-0.05	0.01	0.19	0.94	-0.05	80	0	482	0	6	0.20		0.47	0.97
NBNH MF	1198	0.18	0.21	0.61	0.26	0.95	-0.41	208	0	990	0	0	0.26		0.30	
NBNH MM	590	0.19	0.22	0.59	0.22	0.96	-0.24	106	0	474	0	10	0.32		0.30	0.94

Table 1: Height Heritability

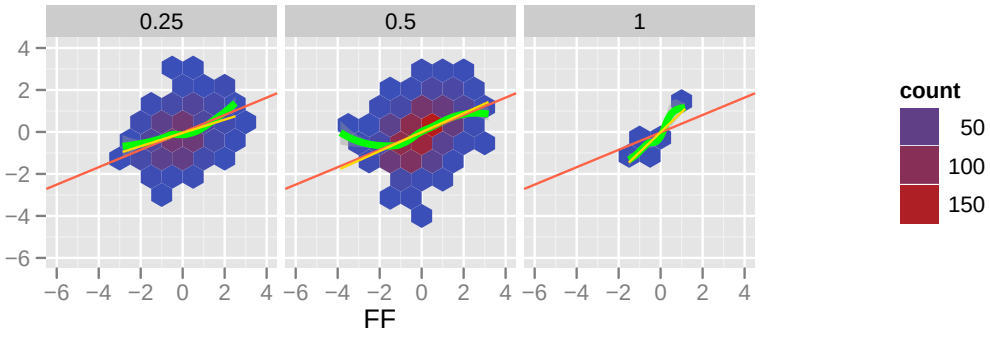
1 Total Sample

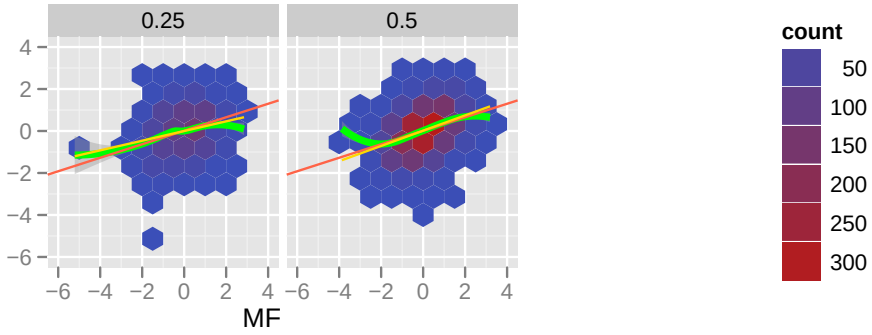


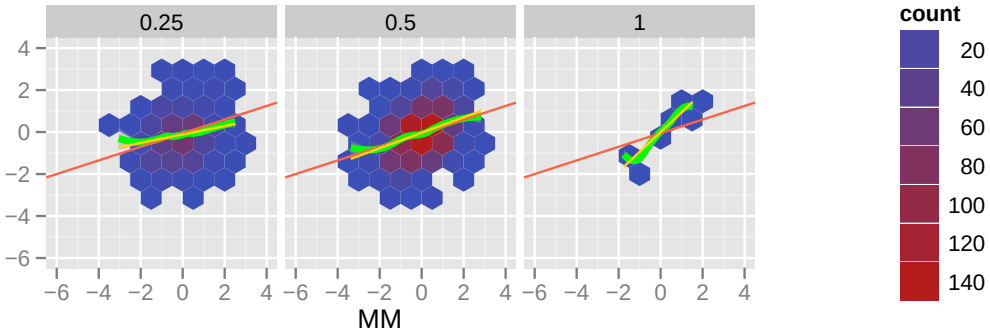
Plot Explanation: Each row of graphs isolates a subgroup.
Each cell in a row isolates a unique value of R; this is displayed in the gray header above each cell.
Axis and hexbin sizes are constants across all rows.
The orange line is the LS regression for the row (repeated in each cell).
The yellow line 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	0.60	0.09	0.31	2114	0	4776	0	26	0.25		0.39	0.95
FF	0.58	0.16	0.25	562	0	1172	0	10	0.32		0.45	0.95
MF	0.53	0.10	0.37	1062	0	2382	0	0	0.23		0.36	
MM	0.74	0.00	0.25	490	0	1222	0	16	0.20		0.37	0.94

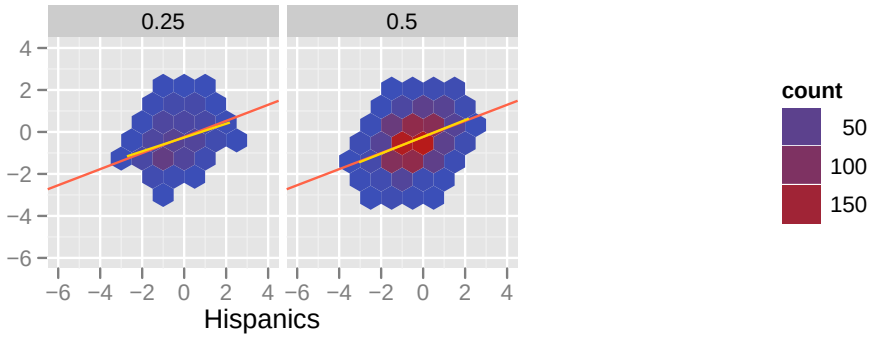


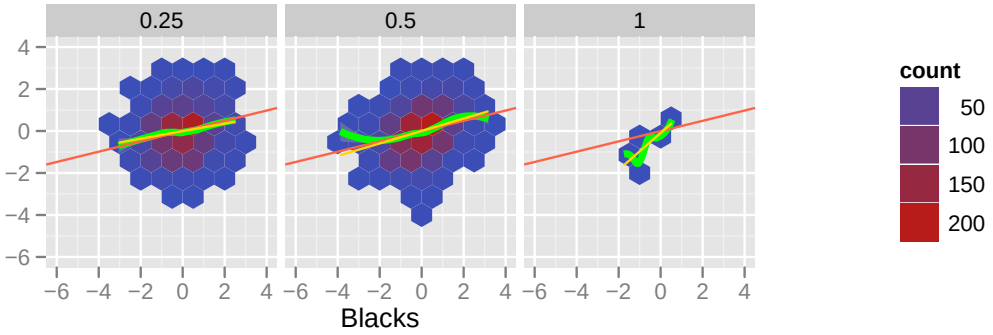


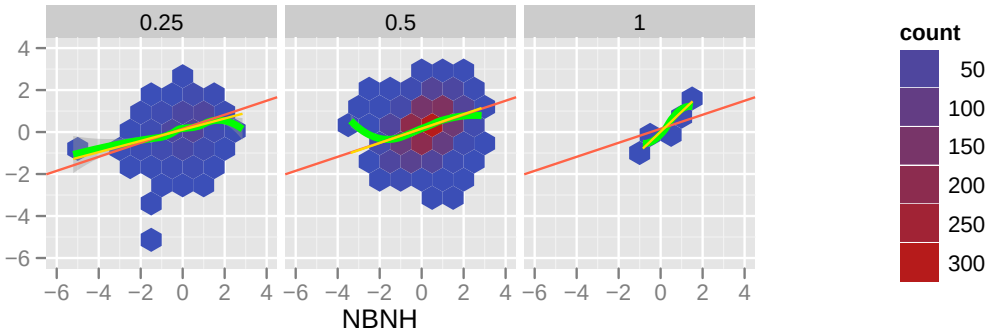


3 By Race

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	0.60	0.09	0.31	2114	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	0.52	0.04	0.43	1324	0	1484	0	10	0.18		0.30	0.88
NBNH	0.40	0.15	0.45	394	0	1946	0	16	0.27		0.34	0.95

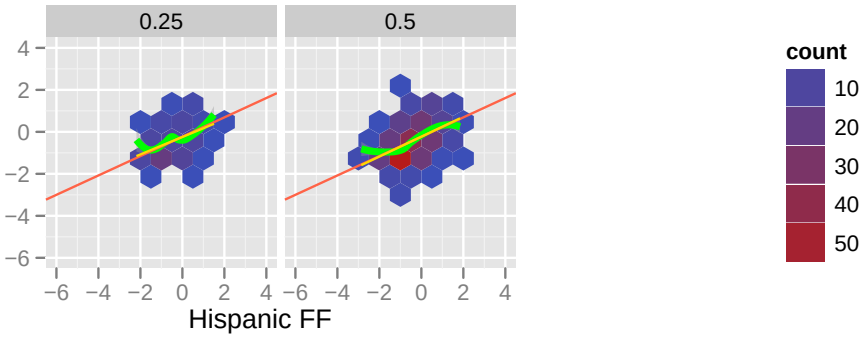


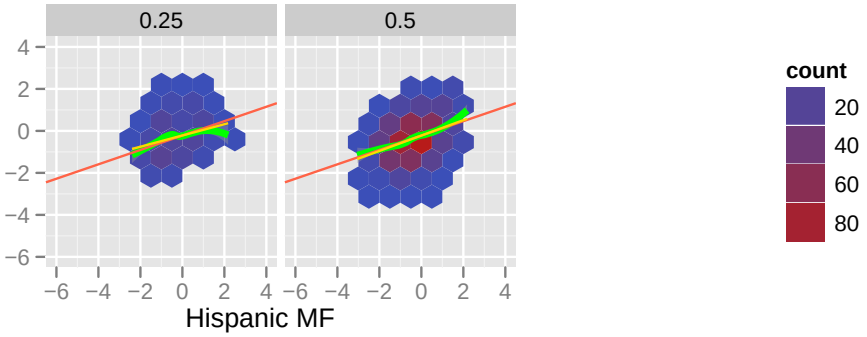


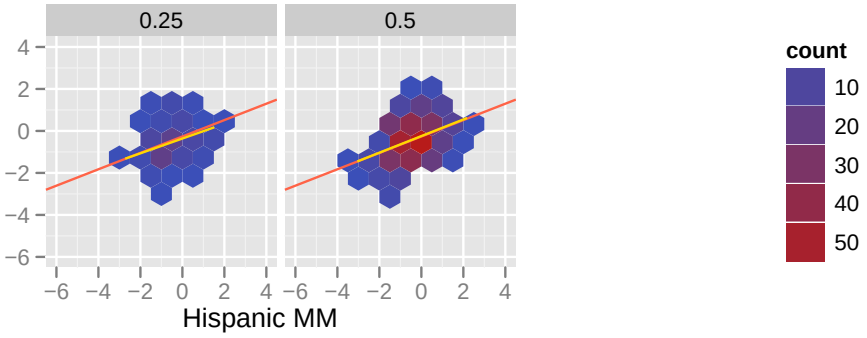


4 By Gender for Hispanics

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	0.60	0.09	0.31	2114	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	
Hisp FF	0.23	0.36	0.41	106	0	302	0	0	0.42		0.47	
Hisp MF	0.39	0.17	0.44	190	0	642	0	0	0.27		0.37	
Hisp MM	0.18	0.31	0.52	100	0	402	0	0	0.35		0.40	

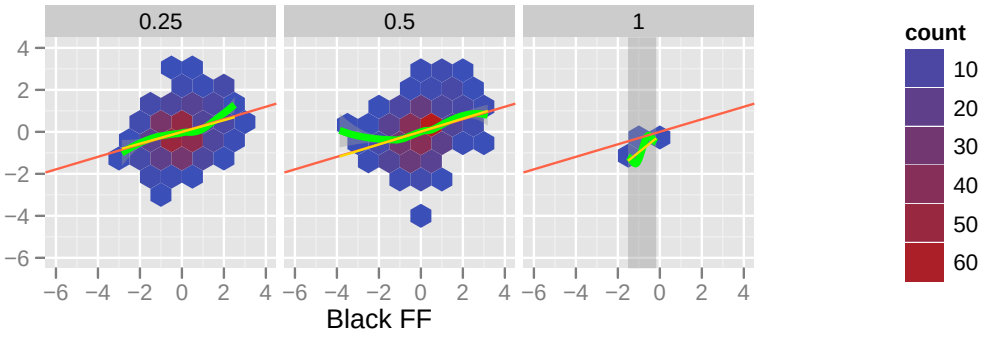


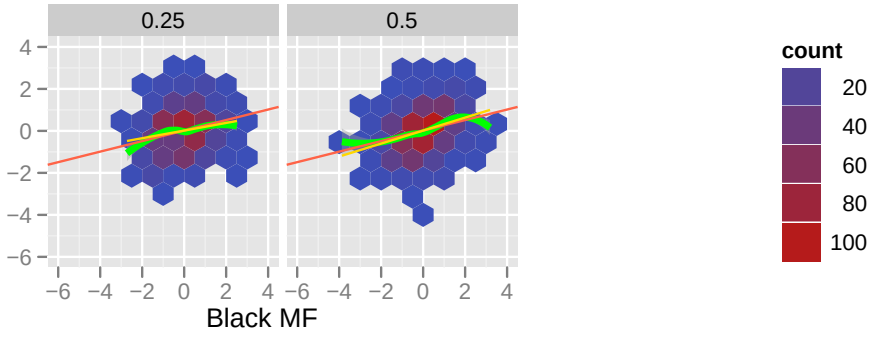


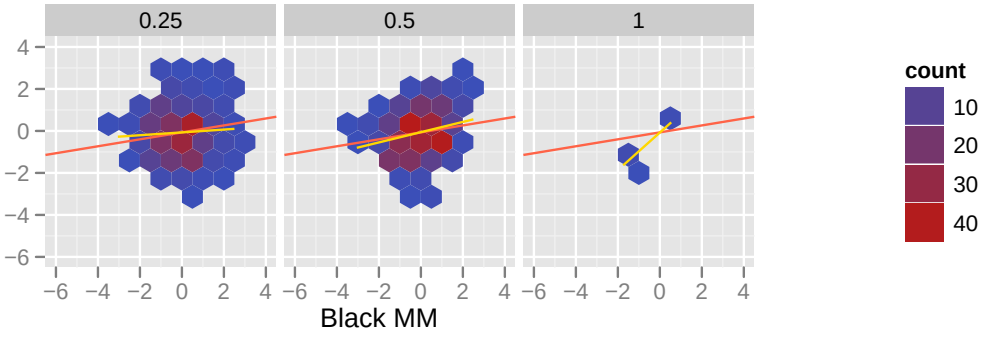


5 By Gender for Blacks

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	0.60	0.09	0.31	2114	0	4776	0	26	0.25		0.39	0.95
Black	0.52	0.04	0.43	1324	0	1484	0	10	0.18		0.30	0.88
Black FF	0.23	0.21	0.56	376	0	388	0	4	0.28		0.31	0.80
Black MF	0.51	0.06	0.44	664	0	750	0	0	0.18		0.31	
Black MM	0.82	-0.15	0.33	284	0	346	0	6	0.07		0.24	0.89







6 By Gender for NBNHs

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	0.60	0.09	0.31	2114	0	4776	0	26	0.25		0.39	0.95
NBNH	0.40	0.15	0.45	394	0	1946	0	16	0.27		0.34	0.95
NBNH FF	1.04	-0.05	0.01	80	0	482	0	6	0.20		0.47	0.97
NBNH MF	0.18	0.21	0.61	208	0	990	0	0	0.26		0.30	
NBNH MM	0.19	0.22	0.59	106	0	474	0	10	0.32		0.30	0.94