

Comparison of Versions of Kinship Links

Joe Rodger's BG Team

November 19, 2013

Outcome: WeightZGenderAge;

Relationship Paths: (Gen1Housemates, Gen2Siblings, Gen2Cousins, ParentChild, AuntNiece) [IDs:(1,2,3,4,5)];

Newer Links Version: 84; **Older Links Version:** 83;

Newer Links: Adds Gen1 back

Older Links: Reverts to V82

R Groups specifically excluded: { }

Drop pair if housemates are not confirmed in the same generation: FALSE

1 Ace - Comparison of R Variants

(See the final table for an explanation of the different R variants.)

R Variant	a_{new}^2	c_{new}^2	e_{new}^2	N_{new}	a_{old}^2	c_{old}^2	e_{old}^2	N_{old}
R	.41	.05	.54	24,976	.63	.02	.34	4,282
RFull	.31	.09	.59	26,441	.24	.21	.55	4,921
RExplicit	.38	.06	.56	24,307	.70	.00	.30	3,871
RImplicit	.28	.11	.61	22,844	.19	.23	.58	3,817
RImplicit2004	.25	.12	.63	19,218	.51	.08	.41	2,316

Table 1: Comparison of R Variants (by rows) and of Links Versions (left vs right side).

2 Subgroups – R

R	Included in SEM	N_{Pairs}	\bar{x}_1	\bar{x}_2	s_1^2	s_2^2	$s_{1,2}$	r	Determinant	PosDefinite
0.016	FALSE	0								FALSE
0.031	TRUE	75	-0.13	-0.27	1.45	0.62	-0.17	-0.18	0.9	TRUE
0.062	TRUE	373	0.11	-0.11	1.13	0.87	0.10	0.10	1.0	TRUE
0.125	TRUE	2480	-0.01	0.02	1.05	1.02	0.14	0.14	1.0	TRUE
0.250	TRUE	7127	-0.01	-0.04	1.02	0.96	0.15	0.15	1.0	TRUE
0.375	TRUE	46	0.22	-0.11	1.07	0.96	0.43	0.42	0.8	TRUE
0.500	TRUE	14848	0.04	-0.01	1.02	0.98	0.25	0.25	0.9	TRUE
0.750	FALSE	0								FALSE
1.000	TRUE	27	-0.13	-0.13	0.95	1.27	0.92	0.84	0.4	TRUE

Table 2: R – Newer Version of Links

R	Included in SEM	N_{Pairs}	\bar{x}_1	\bar{x}_2	s_1^2	s_2^2	$s_{1,2}$	r	Determinant	PosDefinite
0.062	TRUE	40	-0.40	-0.05	0.63	1.03	0.43	0.53	0.5	TRUE
0.125	TRUE	65	0.02	-0.20	0.71	1.16	0.19	0.21	0.8	TRUE
0.250	TRUE	278	0.05	0.08	0.94	1.08	0.07	0.07	1.0	TRUE
0.500	TRUE	3888	0.03	0.00	1.05	1.01	0.35	0.34	0.9	TRUE
1.000	TRUE	11	-0.14	-0.03	0.97	1.68	0.98	0.76	0.7	TRUE

Table 3: R – Older Version of Links

3 Subgroups – RFull

RFull	Included in SEM	N_{Pairs}	\bar{x}_1	\bar{x}_2	s_1^2	s_2^2	$s_{1,2}$	r	Determinant	PosDefinite
0.000	TRUE	1160	-0.08	-0.00	0.84	0.99	0.21	0.23	0.8	TRUE
0.016	TRUE	12	-0.85	0.07	0.34	0.09	0.02	0.12	0.0	TRUE
0.031	TRUE	132	-0.03	-0.23	1.46	0.52	-0.15	-0.18	0.7	TRUE
0.062	TRUE	438	0.13	-0.12	1.08	0.89	0.10	0.11	1.0	TRUE
0.094	TRUE	12	0.23	-0.21	0.85	0.01	0.00	0.05	0.0	TRUE
0.125	TRUE	2516	-0.00	0.02	1.04	1.01	0.14	0.14	1.0	TRUE
0.188	TRUE	22	0.38	-0.04	0.83	0.51	0.04	0.07	0.4	TRUE
0.250	TRUE	7161	-0.00	-0.04	1.03	0.96	0.15	0.15	1.0	TRUE
0.375	TRUE	68	0.22	0.02	1.13	0.84	0.34	0.35	0.8	TRUE
0.500	TRUE	14882	0.04	-0.01	1.02	0.98	0.26	0.26	0.9	TRUE
0.750	TRUE	11	0.04	-0.22	1.45	0.99	0.58	0.49	1.1	TRUE
1.000	TRUE	27	-0.13	-0.13	0.95	1.27	0.92	0.84	0.4	TRUE

Table 4: RFull – Newer Version of Links

RFull	Included in SEM	N_{Pairs}	\bar{x}_1	\bar{x}_2	s_1^2	s_2^2	$s_{1,2}$	r	Determinant	PosDefinite
0.000	TRUE	537	-0.13	-0.10	0.77	0.90	0.20	0.24	0.7	TRUE
0.062	TRUE	44	-0.43	-0.13	0.58	1.00	0.41	0.53	0.4	TRUE
0.125	TRUE	92	0.07	-0.21	0.71	1.02	0.10	0.12	0.7	TRUE
0.250	TRUE	290	0.04	0.07	0.94	1.05	0.07	0.07	1.0	TRUE
0.375	TRUE	14	-0.17	0.34	0.70	0.52	0.22	0.37	0.3	TRUE
0.500	TRUE	3922	0.03	0.00	1.06	1.01	0.35	0.34	0.9	TRUE
0.750	TRUE	11	0.04	-0.22	1.45	0.99	0.58	0.49	1.1	TRUE
1.000	TRUE	11	-0.14	-0.03	0.97	1.68	0.98	0.76	0.7	TRUE

Table 5: RFull – Older Version of Links

4 Subgroups – RExplicit

RExplicit	Included in SEM	N_{Pairs}	\bar{x}_1	\bar{x}_2	s_1^2	s_2^2	$s_{1,2}$	r	Determinant	PosDefinite
0.000	TRUE	94	0.06	-0.07	0.69	0.62	0.09	0.13	0.4	TRUE
0.031	TRUE	3	-0.54	-0.14	0.16	2.78	-0.62	-0.92	0.1	TRUE
0.062	TRUE	203	0.22	-0.08	1.05	0.83	0.11	0.12	0.9	TRUE
0.094	TRUE	14	0.30	-0.00	0.87	0.27	0.09	0.19	0.2	TRUE
0.125	TRUE	2396	-0.01	0.01	1.06	0.96	0.13	0.13	1.0	TRUE
0.188	TRUE	48	0.11	-0.00	1.10	0.74	0.03	0.03	0.8	TRUE
0.250	TRUE	6919	-0.00	-0.04	1.04	0.96	0.15	0.15	1.0	TRUE
0.375	TRUE	216	0.06	0.02	0.94	1.08	0.18	0.18	1.0	TRUE
0.500	TRUE	14398	0.04	-0.01	1.02	0.98	0.25	0.25	0.9	TRUE
1.000	TRUE	16	-0.13	-0.21	0.99	1.06	0.95	0.92	0.2	TRUE

Table 6: RExplicit – Newer Version of Links

RExplicit	Included in SEM	N_{Pairs}	\bar{x}_1	\bar{x}_2	s_1^2	s_2^2	$s_{1,2}$	r	Determinant	PosDefinite
0.000	TRUE	41	-0.07	-0.04	0.61	0.57	0.07	0.12	0.3	TRUE
0.062	FALSE	2	-0.66	-0.61	0.25	0.48	0.34	1.00	-0.0	FALSE
0.250	TRUE	266	0.07	0.08	0.96	1.01	0.07	0.07	1.0	TRUE
0.375	TRUE	36	0.04	0.07	1.16	0.72	0.40	0.44	0.7	TRUE
0.500	TRUE	3528	0.04	0.01	1.04	0.99	0.36	0.35	0.9	TRUE

Table 7: RExplicit – Older Version of Links

5 Subgroups – RImplicit

RImplicit	Included in SEM	N_{Pairs}	\bar{x}_1	\bar{x}_2	s_1^2	s_2^2	$s_{1,2}$	r	Determinant	PosDefinite
0.000	TRUE	526	0.06	0.10	1.05	0.85	0.17	0.18	0.9	TRUE
0.062	TRUE	94	-0.36	-0.23	1.20	0.85	0.29	0.28	0.9	TRUE
0.125	TRUE	1835	-0.01	0.06	1.03	1.05	0.16	0.16	1.1	TRUE
0.250	TRUE	6056	-0.00	-0.05	1.04	0.96	0.16	0.16	1.0	TRUE
0.500	TRUE	14317	0.04	-0.01	1.02	0.98	0.25	0.25	0.9	TRUE
0.750	FALSE	0								FALSE
1.000	TRUE	16	-0.13	-0.21	0.99	1.06	0.95	0.92	0.2	TRUE

Table 8: RImplicit – Newer Version of Links

RImplicit	Included in SEM	N_{Pairs}	\bar{x}_1	\bar{x}_2	s_1^2	s_2^2	$s_{1,2}$	r	Determinant	PosDefinite
0.000	TRUE	185	-0.07	-0.06	1.00	0.87	0.23	0.24	0.8	TRUE
0.250	TRUE	162	-0.05	0.01	0.68	0.89	0.11	0.14	0.6	TRUE
0.500	TRUE	3470	0.02	-0.00	1.04	1.00	0.34	0.33	0.9	TRUE

Table 9: RImplicit – Older Version of Links

6 Subgroups – RImplicit2004

RImplicit2004	Included in SEM	N_{Pairs}	\bar{x}_1	\bar{x}_2	s_1^2	s_2^2	$s_{1,2}$	r	Determinant	PosDefinite
0.031	TRUE	80	0.29	-0.03	1.36	0.60	0.19	0.21	0.8	TRUE
0.062	TRUE	161	-0.00	-0.22	1.17	0.64	-0.05	-0.05	0.7	TRUE
0.094	TRUE	184	0.12	0.13	0.95	0.94	0.14	0.14	0.9	TRUE
0.125	TRUE	986	-0.11	0.03	0.91	1.03	0.18	0.18	0.9	TRUE
0.188	TRUE	442	0.09	0.03	1.03	1.07	-0.01	-0.01	1.1	TRUE
0.250	TRUE	3773	-0.00	-0.05	1.05	0.97	0.20	0.20	1.0	TRUE
0.375	TRUE	1295	-0.04	-0.02	1.01	0.99	0.31	0.31	0.9	TRUE
0.500	TRUE	12252	0.05	-0.01	1.02	0.98	0.23	0.23	0.9	TRUE
0.750	TRUE	30	-0.22	-0.00	0.77	1.25	0.72	0.74	0.4	TRUE
1.000	TRUE	15	-0.07	-0.19	1.01	1.13	1.00	0.93	0.2	TRUE

Table 10: RImplicit2004 – Newer Version of Links

RImplicit2004	Included in SEM	N_{Pairs}	\bar{x}_1	\bar{x}_2	s_1^2	s_2^2	$s_{1,2}$	r	Determinant	PosDefinite
0.125	TRUE	74	0.00	-0.27	0.65	0.93	0.17	0.22	0.6	TRUE
0.250	TRUE	43	0.10	-0.09	1.22	0.75	0.27	0.29	0.8	TRUE
0.375	TRUE	306	0.06	0.14	1.06	1.20	0.34	0.30	1.2	TRUE
0.500	TRUE	1863	0.04	-0.02	1.07	0.95	0.33	0.33	0.9	TRUE
0.750	TRUE	30	-0.22	-0.00	0.77	1.25	0.72	0.74	0.4	TRUE

Table 11: RImplicit2004 – Older Version of Links

7 Explanation of R Variants

Variant	Explanation
R	We recommend researchers typical use this version.
R_{Full}	The most complete version we have; doesn't exclude groups like $R=0$.
R_{Pass1}	Supposed to be fooled only by errors in the subject's/mother's knowledge
$RImplicit$	Uses only implicit items
$RImplicit_{Pass1}$	Uses only implicit items & supposed to be fooled only by knowledge errors
$RImplicit_{Mother}$	Uses only mother's implicit items (exists only for Gen2)
$RImplicit_{Subject}$	Uses only subject's implicit items
$RImplicit_{2004}$	The state of the links in 2004. Rodgers & Rowe for Gen1; Rodgers, Johnson & Bard for Gen2
$RExplicit$	Uses only explicit items
$RExplicit_{Pass1}$	Uses only explicit items & supposed to be fooled only by knowledge errors