Comparison of Versions of Kinship Links

Joe Rodger's BG Team

November 20, 2013

Outcome: Afi;
Relationship Paths: (Gen1Housemates) [IDs:(1)];
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^2_{new}	c^2_{new}	e^2_{new}	N_{new}	a^2_{old}	c^2_{old}	e^2_{old}	N_{old}
R	0	.24	.76	3,592	0	.24	.76	3,592
RFull	0	.25	.75	4,171	0	.25	.75	4,171
RExplicit	0	.24	.76	3,270	0	.24	.76	3,270
RImplicit	0	.24	.76	3,202	0	.24	.76	3,202
RImplicit2004	0	.24	.76	1,956	0	.24	.76	1,956

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^2_1	s^2_2	$s_{1,2}$	r	Determinant	PosDefinite
0.062	TRUE	35	15.57	16.03	6.13	5.73	1.95	0.33	31.4	TRUE
0.125	TRUE	56	16.30	16.11	3.45	4.86	0.77	0.19	16.2	TRUE
0.250	TRUE	259	15.55	15.35	7.98	7.03	1.36	0.18	54.2	TRUE
0.500	TRUE	3234	16.97	16.49	7.18	6.16	1.59	0.24	41.7	TRUE
1.000	TRUE	8	16.88	17.25	14.98	6.79	8.61	0.85	27.6	TRUE

Table 2: R – Newer Version of Links

R	Included in SEM	N_{Pairs}	$\bar{x}_1$	$\bar{x}_2$	s^2_1	s^2_2	$s_{1,2}$	r	Determinant	PosDefinite
0.062	TRUE	35	15.57	16.03	6.13	5.73	1.95	0.33	31.4	TRUE
0.125	TRUE	56	16.30	16.11	3.45	4.86	0.77	0.19	16.2	TRUE
0.250	TRUE	259	15.55	15.35	7.98	7.03	1.36	0.18	54.2	TRUE
0.500	TRUE	3234	16.97	16.49	7.18	6.16	1.59	0.24	41.7	TRUE
1.000	TRUE	8	16.88	17.25	14.98	6.79	8.61	0.85	27.6	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	484	16.81	16.68	7.25	6.43	2.13	0.31	42.1	TRUE
0.062	TRUE	39	15.67	16.10	5.70	5.25	1.75	0.32	26.9	TRUE
0.125	TRUE	82	16.45	16.02	4.42	5.46	0.57	0.12	23.8	TRUE
0.250	TRUE	270	15.66	15.49	8.12	7.44	1.77	0.23	57.3	TRUE
0.375	TRUE	12	15.42	15.67	4.08	5.33	1.52	0.32	19.5	TRUE
0.500	TRUE	3265	16.98	16.50	7.22	6.23	1.63	0.24	42.3	TRUE
0.750	TRUE	11	17.64	17.00	4.65	2.00	1.90	0.62	5.7	TRUE
1.000	TRUE	8	16.88	17.25	14.98	6.79	8.61	0.85	27.6	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	484	16.81	16.68	7.25	6.43	2.13	0.31	42.1	TRUE
0.062	TRUE	39	15.67	16.10	5.70	5.25	1.75	0.32	26.9	TRUE
0.125	TRUE	82	16.45	16.02	4.42	5.46	0.57	0.12	23.8	TRUE
0.250	TRUE	270	15.66	15.49	8.12	7.44	1.77	0.23	57.3	TRUE
0.375	TRUE	12	15.42	15.67	4.08	5.33	1.52	0.32	19.5	TRUE
0.500	TRUE	3265	16.98	16.50	7.22	6.23	1.63	0.24	42.3	TRUE
0.750	TRUE	11	17.64	17.00	4.65	2.00	1.90	0.62	5.7	TRUE
1.000	TRUE	8	16.88	17.25	14.98	6.79	8.61	0.85	27.6	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	32	16.53	16.41	6.84	7.35	2.45	0.35	44.2	TRUE
0.062	FALSE	2	13.50	17.00	4.50	8.00	6.00	1.00	0.0	FALSE
0.250	TRUE	248	15.54	15.35	8.04	6.89	1.31	0.18	53.7	TRUE
0.375	TRUE	33	15.79	15.12	4.67	6.11	-0.94	-0.18	27.7	TRUE
0.500	TRUE	2957	16.98	16.49	7.25	6.28	1.65	0.24	42.8	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	32	16.53	16.41	6.84	7.35	2.45	0.35	44.2	TRUE
0.062	FALSE	2	13.50	17.00	4.50	8.00	6.00	1.00	0.0	FALSE
0.250	TRUE	248	15.54	15.35	8.04	6.89	1.31	0.18	53.7	TRUE
0.375	TRUE	33	15.79	15.12	4.67	6.11	-0.94	-0.18	27.7	TRUE
0.500	TRUE	2957	16.98	16.49	7.25	6.28	1.65	0.24	42.8	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	166	16.44	16.03	8.44	7.98	2.99	0.36	58.4	TRUE
0.250	TRUE	152	16.80	16.85	5.74	5.63	1.46	0.26	30.2	TRUE
0.500	TRUE	2884	17.20	16.68	7.00	6.07	1.59	0.24	39.9	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	166	16.44	16.03	8.44	7.98	2.99	0.36	58.4	TRUE
0.250	TRUE	152	16.80	16.85	5.74	5.63	1.46	0.26	30.2	TRUE
0.500	TRUE	2884	17.20	16.68	7.00	6.07	1.59	0.24	39.9	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
0.125	TRUE	63	16.02	16.24	3.24	3.76	0.83	0.24	11.5	TRUE
0.250	TRUE	41	16.24	15.56	2.74	3.40	0.58	0.19	9.0	TRUE
0.375	TRUE	278	16.54	16.06	4.86	6.01	1.30	0.24	27.5	TRUE
0.500	TRUE	1547	17.44	16.99	7.27	5.87	1.50	0.23	40.4	TRUE
0.750	TRUE	27	17.00	17.00	5.92	7.38	3.27	0.49	33.1	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	63	16.02	16.24	3.24	3.76	0.83	0.24	11.5	TRUE
0.250	TRUE	41	16.24	15.56	2.74	3.40	0.58	0.19	9.0	TRUE
0.375	TRUE	278	16.54	16.06	4.86	6.01	1.30	0.24	27.5	TRUE
0.500	TRUE	1547	17.44	16.99	7.27	5.87	1.50	0.23	40.4	TRUE
0.750	TRUE	27	17.00	17.00	5.92	7.38	3.27	0.49	33.1	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