

# Comparison of Versions of Kinship Links

Joe Rodger's BG Team

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**Outcome:** MathStandard;

**Relationship Paths:** (Gen2Siblings) [IDs:(2)];

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

Newer Links: Adds Gen1 back

Older Links: Adds Gen1 back

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	.62	.21	.17	8,338	.62	.21	.17	8,338
RFull	.62	.21	.17	8,338	.62	.21	.17	8,338
RExplicit	.63	.21	.16	7,674	.63	.21	.16	7,674
RImplicit	.59	.23	.18	7,877	.59	.23	.18	7,877
RImplicit2004	.60	.22	.17	8,196	.60	.22	.17	8,196

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
0.250	TRUE	2691	95.11	95.98	126.89	150.11	42.04	0.30	17279.3	TRUE
0.375	TRUE	133	93.54	93.41	163.07	131.56	46.56	0.32	19285.7	TRUE
0.500	TRUE	5493	99.89	100.02	168.73	172.92	90.12	0.53	21054.6	TRUE
0.750	FALSE	2	108.50	106.00	220.50	18.00	63.00	1.00	0.0	FALSE
1.000	TRUE	21	98.21	96.02	289.44	215.24	229.11	0.92	9807.9	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
0.250	TRUE	2691	95.11	95.98	126.89	150.11	42.04	0.30	17279.3	TRUE
0.375	TRUE	133	93.54	93.41	163.07	131.56	46.56	0.32	19285.7	TRUE
0.500	TRUE	5493	99.89	100.02	168.73	172.92	90.12	0.53	21054.6	TRUE
0.750	FALSE	2	108.50	106.00	220.50	18.00	63.00	1.00	0.0	FALSE
1.000	TRUE	21	98.21	96.02	289.44	215.24	229.11	0.92	9807.9	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
0.250	TRUE	2691	95.11	95.98	126.89	150.11	42.04	0.30	17279.3	TRUE
0.375	TRUE	133	93.54	93.41	163.07	131.56	46.56	0.32	19285.7	TRUE
0.500	TRUE	5493	99.89	100.02	168.73	172.92	90.12	0.53	21054.6	TRUE
0.750	FALSE	2	108.50	106.00	220.50	18.00	63.00	1.00	0.0	FALSE
1.000	TRUE	21	98.21	96.02	289.44	215.24	229.11	0.92	9807.9	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
0.250	TRUE	2691	95.11	95.98	126.89	150.11	42.04	0.30	17279.3	TRUE
0.375	TRUE	133	93.54	93.41	163.07	131.56	46.56	0.32	19285.7	TRUE
0.500	TRUE	5493	99.89	100.02	168.73	172.92	90.12	0.53	21054.6	TRUE
0.750	FALSE	2	108.50	106.00	220.50	18.00	63.00	1.00	0.0	FALSE
1.000	TRUE	21	98.21	96.02	289.44	215.24	229.11	0.92	9807.9	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
0.250	TRUE	2473	95.27	96.34	124.90	148.32	42.42	0.31	16727.0	TRUE
0.375	TRUE	192	92.97	91.55	150.29	157.42	40.83	0.27	21991.7	TRUE
0.500	TRUE	4989	99.65	99.90	168.47	172.52	91.63	0.54	20668.8	TRUE
1.000	TRUE	20	96.88	94.42	265.02	170.06	193.83	0.91	7498.8	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
0.250	TRUE	2473	95.27	96.34	124.90	148.32	42.42	0.31	16727.0	TRUE
0.375	TRUE	192	92.97	91.55	150.29	157.42	40.83	0.27	21991.7	TRUE
0.500	TRUE	4989	99.65	99.90	168.47	172.52	91.63	0.54	20668.8	TRUE
1.000	TRUE	20	96.88	94.42	265.02	170.06	193.83	0.91	7498.8	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
0.250	TRUE	2496	94.86	95.82	128.46	148.17	42.57	0.31	17222.0	TRUE
0.500	TRUE	5360	100.17	100.20	167.95	173.10	89.76	0.53	21015.6	TRUE
0.750	FALSE	2	108.50	106.00	220.50	18.00	63.00	1.00	0.0	FALSE
1.000	TRUE	21	98.21	96.02	289.44	215.24	229.11	0.92	9807.9	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
0.250	TRUE	2496	94.86	95.82	128.46	148.17	42.57	0.31	17222.0	TRUE
0.500	TRUE	5360	100.17	100.20	167.95	173.10	89.76	0.53	21015.6	TRUE
0.750	FALSE	2	108.50	106.00	220.50	18.00	63.00	1.00	0.0	FALSE
1.000	TRUE	21	98.21	96.02	289.44	215.24	229.11	0.92	9807.9	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
0.250	TRUE	1972	94.97	95.52	125.52	146.63	45.02	0.33	16377.4	TRUE
0.375	TRUE	1459	94.26	95.49	133.19	149.81	45.02	0.32	17926.4	TRUE
0.500	TRUE	4743	100.78	100.85	167.71	170.51	89.78	0.53	20536.0	TRUE
1.000	TRUE	22	99.50	97.23	291.67	211.78	226.95	0.91	10261.6	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
0.250	TRUE	1972	94.97	95.52	125.52	146.63	45.02	0.33	16377.4	TRUE
0.375	TRUE	1459	94.26	95.49	133.19	149.81	45.02	0.32	17926.4	TRUE
0.500	TRUE	4743	100.78	100.85	167.71	170.51	89.78	0.53	20536.0	TRUE
1.000	TRUE	22	99.50	97.23	291.67	211.78	226.95	0.91	10261.6	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