

# Comparison of Versions of Kinship Links

Joe Rodger's BG Team

September 28, 2015

**Outcome:** HeightZGenderAge;

**Relationship Paths:** (Gen1Housemates) [IDs:(1)];

R Groups specifically excluded: { }

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

## 1 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	280	0.05	0.06	1.02	1.18	0.27	0.24	1.1	TRUE
0.500	TRUE	3894	-0.05	-0.03	0.97	1.02	0.47	0.47	0.8	TRUE
1.000	TRUE	11	-0.09	-0.01	0.32	0.95	0.36	0.65	0.2	TRUE

Table 1: R

## 2 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	537	0.02	-0.02	0.95	0.81	0.21	0.24	0.7	TRUE
0.062	TRUE	43	-0.45	-0.14	0.81	0.81	0.19	0.24	0.6	TRUE
0.125	TRUE	92	-0.02	-0.47	0.95	0.99	0.16	0.17	0.9	TRUE
0.250	TRUE	292	0.04	0.07	1.00	1.16	0.25	0.23	1.1	TRUE
0.375	TRUE	14	0.24	0.44	1.61	0.86	0.31	0.26	1.3	TRUE
0.500	TRUE	3928	-0.05	-0.03	0.97	1.02	0.46	0.47	0.8	TRUE
0.750	TRUE	11	-0.14	0.10	0.87	0.81	0.66	0.79	0.3	TRUE
1.000	TRUE	11	-0.09	-0.01	0.32	0.95	0.36	0.65	0.2	TRUE

Table 2: RFull

## 3 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	41	-0.06	0.34	0.82	1.05	0.22	0.24	0.8	TRUE
0.062	FALSE	2	-0.01	-1.21	0.22	0.26	0.24	1.00	0.0	FALSE
0.250	TRUE	268	0.06	0.07	1.07	1.21	0.29	0.26	1.2	TRUE
0.375	TRUE	36	-0.07	0.04	1.03	1.08	0.33	0.32	1.0	TRUE
0.500	TRUE	3533	-0.05	-0.02	0.96	1.02	0.47	0.47	0.8	TRUE

Table 3: RExplicit

## 4 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	183	0.07	-0.04	0.90	0.72	0.14	0.17	0.6	TRUE
0.250	TRUE	163	-0.02	0.01	0.83	0.87	0.19	0.22	0.7	TRUE
0.500	TRUE	3472	-0.03	-0.02	0.98	1.02	0.44	0.45	0.8	TRUE

Table 4: RImplicit

## 5 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	73	-0.07	-0.25	0.79	1.01	0.12	0.13	0.8	TRUE
0.250	TRUE	43	-0.13	-0.07	0.75	1.04	0.22	0.25	0.7	TRUE
0.375	TRUE	306	-0.02	0.02	0.94	1.14	0.46	0.44	0.9	TRUE
0.500	TRUE	1865	-0.00	-0.00	0.95	0.98	0.45	0.47	0.7	TRUE
0.750	TRUE	30	0.02	0.03	0.60	0.91	0.42	0.57	0.4	TRUE

Table 5: RImplicit2004

## 6 Ace - Comparison of $R$ Variants

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

$R$ Variant	$a^2$	$c^2$	$e^2$	$N$
R	.70	.11	.18	4,185
RFull	.55	.19	.27	4,928
RExplicit	.85	.05	.10	3,878
RImplicit	.52	.18	.30	3,818
RImplicit2004	.69	.13	.18	2,317

Table 6: Comparison of  $R$  Variants (by rows) and of Links Versions (left vs right side).

## 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