

# Comparison of Versions of Kinship Links

Joe Rodger's BG Team

September 29, 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 <sub>Pairs</sub>	$\bar{x}_1$	$\bar{x}_2$	$s_1^2$	$s_2^2$	$s_{1,2}$	r	Determinant	PosDefinite
0.250	TRUE	127	0.08	0.02	0.96	1.19	0.27	0.26	1.1	TRUE
0.500	TRUE	1882	-0.05	-0.03	0.96	1.04	0.45	0.45	0.8	TRUE

Table 1: R

## 2 Subgroups – RFull

RFull	Included in SEM	N <sub>Pairs</sub>	$\bar{x}_1$	$\bar{x}_2$	$s_1^2$	$s_2^2$	$s_{1,2}$	r	Determinant	PosDefinite
0.000	TRUE	271	-0.10	-0.04	1.04	0.97	0.28	0.28	0.9	TRUE
0.062	TRUE	19	-0.57	-0.17	0.80	0.97	0.39	0.44	0.6	TRUE
0.125	TRUE	43	0.05	-0.47	0.99	1.12	0.25	0.24	1.0	TRUE
0.250	TRUE	128	0.08	0.02	0.95	1.18	0.27	0.25	1.0	TRUE
0.375	TRUE	5	0.70	0.97	0.96	0.93	-0.05	-0.05	0.9	TRUE
0.500	TRUE	1887	-0.05	-0.03	0.96	1.04	0.44	0.45	0.8	TRUE

Table 2: RFull

## 3 Subgroups – RExplicit

RExplicit	Included in SEM	N <sub>Pairs</sub>	$\bar{x}_1$	$\bar{x}_2$	$s_1^2$	$s_2^2$	$s_{1,2}$	r	Determinant	PosDefinite
0.000	TRUE	22	-0.01	0.35	1.05	1.42	0.25	0.21	1.4	TRUE
0.062	FALSE	2	-0.01	-1.21	0.22	0.26	0.24	1.00	0.0	FALSE
0.250	TRUE	123	0.11	0.02	1.02	1.21	0.31	0.28	1.1	TRUE
0.375	TRUE	17	0.04	0.25	0.92	1.32	0.25	0.23	1.1	TRUE
0.500	TRUE	1713	-0.05	-0.03	0.96	1.05	0.45	0.45	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	83	-0.06	-0.14	0.98	0.79	0.16	0.19	0.7	TRUE
0.250	TRUE	78	0.02	0.09	0.77	0.95	0.13	0.15	0.7	TRUE
0.500	TRUE	1632	-0.04	-0.03	0.95	1.05	0.43	0.43	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	26	-0.17	-0.28	0.78	1.22	0.01	0.01	0.9	TRUE
0.250	TRUE	22	-0.29	-0.12	0.75	1.02	0.10	0.11	0.8	TRUE
0.375	TRUE	145	-0.01	-0.03	0.94	1.34	0.54	0.48	1.0	TRUE
0.500	TRUE	872	-0.02	-0.01	0.97	0.99	0.48	0.49	0.7	TRUE
0.750		1	-0.35	-0.85						

Table 5: RImplicit2004

## 6 Ace - Comparison of $R$ Variants

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

dAcePretty[, 1]	$a^2$	$c^2$	$e^2$	$se_{a^2}$	$se_{c^2}$	$se_{e^2}$	$N$
R	.81	.04	.15	.32	.16	.16	2,009
RFull	.40	.24	.36	.11	.05	.06	2,353
RExplicit	.70	.10	.20	.24	.12	.12	1,875
RImplicit	.55	.15	.30	.21	.10	.11	1,793
RImplicit2004	.93	.04	.03	.34	.16	.18	1,065

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