## Comparison of Versions of Kinship Links Joe Rodger's BG Team

September 29, 2015

 ${\bf Outcome} \hbox{: } {\rm HeightZGenderAge};$ 

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

R Groups specifically excluded: { 0.375 }

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

#### 1 Subgroups – R

$\overline{R}$	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	406	0.10	0.13	0.85	1.01	0.22	0.24	0.8	TRUE
0.375	FALSE	6	0.29	-0.65	0.73	0.27	-0.07	-0.17	0.2	TRUE
0.500	TRUE	1746	0.24	0.18	0.91	0.91	0.36	0.40	0.7	TRUE
0.750	FALSE	0								FALSE
1.000	TRUE	8	0.22	0.32	0.90	0.74	0.79	0.97	0.0	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
0.250	TRUE	406	0.10	0.13	0.85	1.01	0.22	0.24	0.8	TRUE
0.375	FALSE	6	0.29	-0.65	0.73	0.27	-0.07	-0.17	0.2	TRUE
0.500	TRUE	1746	0.24	0.18	0.91	0.91	0.36	0.40	0.7	TRUE
0.750	FALSE	0								FALSE
1.000	TRUE	8	0.22	0.32	0.90	0.74	0.79	0.97	0.0	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
0.250	TRUE	402	0.08	0.13	0.84	1.00	0.22	0.24	0.8	TRUE
0.375	FALSE	27	0.44	0.21	0.51	1.00	0.14	0.19	0.5	TRUE
0.500	TRUE	1715	0.24	0.17	0.91	0.91	0.36	0.40	0.7	TRUE
1.000	TRUE	8	0.22	0.32	0.90	0.74	0.79	0.97	0.0	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
0.250	TRUE	376	0.09	0.14	0.87	1.00	0.23	0.25	0.8	TRUE
0.500	TRUE	1737	0.25	0.18	0.91	0.91	0.36	0.39	0.7	TRUE
0.750	FALSE	0								FALSE
1.000	TRUE	8	0.22	0.32	0.90	0.74	0.79	0.97	0.0	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
0.250	TRUE	312	0.10	0.17	0.90	1.01	0.22	0.24	0.9	TRUE
0.375	FALSE	220	0.06	0.10	0.71	0.85	0.21	0.27	0.6	TRUE
0.500	TRUE	1617	0.26	0.18	0.92	0.92	0.37	0.40	0.7	TRUE
1.000	TRUE	7	0.39	0.44	0.79	0.73	0.74	0.97	0.0	TRUE

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	.82	0	.18	.05	0	.04	2,160
RFull	.82	0	.18	.05	0	.04	2,160
RExplicit	.82	0	.18	.05	0	.04	2,125
RImplicit	.82	0	.18	.05	0	.04	2,121
RImplicit2004	.84	0	.16	.05	0	.04	1,936

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