# Comparison of Versions of Kinship Links

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

```
R Groups specifically excluded: {  }
Drop pair if housemates are not confirmed in the same generation: FALSE
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## 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 | 442 | -0.18 | -0.14 | 1.19 | 0.97 | 0.27 | 0.26 | 1.1 | TRUE |
| 0.375 | TRUE | 16 | 0.25 | -0.07 | 1.30 | 1.19 | 0.72 | 0.58 | 1.0 | TRUE |
| 0.500 | TRUE | 1038 | -0.00 | -0.09 | 0.92 | 0.98 | 0.35 | 0.37 | 0.8 | TRUE |
| 0.750 | FALSE | 0 | | | | | | | | FALSE |
| 1.000 | TRUE | 11 | -0.06 | -0.22 | 0.98 | 1.23 | 1.02 | 0.93 | 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 |
|---|---|---|---|---|---|---|---|---|---|---|
| 0.250 | TRUE | 442 | -0.18 | -0.14 | 1.19 | 0.97 | 0.27 | 0.26 | 1.1 | TRUE |
| 0.375 | TRUE | 16 | 0.25 | -0.07 | 1.30 | 1.19 | 0.72 | 0.58 | 1.0 | TRUE |
| 0.500 | TRUE | 1038 | -0.00 | -0.09 | 0.92 | 0.98 | 0.35 | 0.37 | 0.8 | TRUE |
| 0.750 | FALSE | 0 | | | | | | | | FALSE |
| 1.000 | TRUE | 11 | -0.06 | -0.22 | 0.98 | 1.23 | 1.02 | 0.93 | 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 |
|---|---|---|---|---|---|---|---|---|---|---|
| 0.250 | TRUE | 421 | -0.21 | -0.16 | 1.19 | 0.98 | 0.30 | 0.28 | 1.1 | TRUE |
| 0.375 | TRUE | 50 | -0.00 | -0.00 | 0.97 | 1.00 | 0.12 | 0.12 | 1.0 | TRUE |
| 0.500 | TRUE | 1013 | 0.01 | -0.09 | 0.92 | 0.98 | 0.36 | 0.38 | 0.8 | TRUE |
| 1.000 | TRUE | 11 | -0.06 | -0.22 | 0.98 | 1.23 | 1.02 | 0.93 | 0.2 | 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 | 403 | -0.19 | -0.18 | 1.14 | 0.97 | 0.23 | 0.22 | 1.1 | TRUE |
| 0.500 | TRUE | 1022 | -0.01 | -0.08 | 0.92 | 0.98 | 0.35 | 0.36 | 0.8 | TRUE |
| 0.750 | FALSE | 0 | | | | | | | | FALSE |
| 1.000 | TRUE | 11 | -0.06 | -0.22 | 0.98 | 1.23 | 1.02 | 0.93 | 0.2 | 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 | 343 | -0.18 | -0.17 | 1.10 | 1.01 | 0.25 | 0.24 | 1.1 | TRUE |
| 0.375 | TRUE | 233 | -0.14 | -0.15 | 1.01 | 0.90 | 0.31 | 0.33 | 0.8 | TRUE |
| 0.500 | TRUE | 912 | 0.02 | -0.07 | 0.94 | 0.98 | 0.36 | 0.38 | 0.8 | TRUE |
| 1.000 | TRUE | 11 | -0.06 | -0.22 | 0.98 | 1.23 | 1.02 | 0.93 | 0.2 | 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 | .06 | 0 | .05 | 1,507 |
| RFull | .82 | 0 | .18 | .06 | 0 | .05 | 1,507 |
| RExplicit | .82 | 0 | .18 | .06 | 0 | .05 | 1,495 |
| RImplicit | .79 | 0 | .21 | .06 | 0 | .05 | 1,436 |
| RImplicit2004 | .82 | 0 | .18 | .06 | 0 | .05 | 1,499 |

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 |