

Comparison of Versions of Kinship Links

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Outcome: WeightZGenderAge;

Relationship Paths: (Gen1Housemates, Gen2Siblings) [IDs:(1,2)];

Newer Links Version: 84; **Older Links Version:** 83;

Newer Links: Adds Gen1 back

Older Links: Reverts to V82

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 | .61 | .07 | .31 | 10,166 | .63 | .02 | .34 | 4,282 |
| RFull | .44 | .15 | .41 | 10,805 | .24 | .21 | .55 | 4,921 |
| RExplicit | .64 | .07 | .30 | 9,716 | .70 | .00 | .30 | 3,871 |
| RImplicit | .49 | .13 | .38 | 9,435 | .19 | .23 | .58 | 3,817 |
| RImplicit2004 | .64 | .07 | .29 | 8,160 | .51 | .08 | .41 | 2,316 |

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 |
|-------|-----------------|-------------|-------------|-------------|---------|---------|-----------|------|-------------|-------------|
| 0.062 | TRUE | 40 | -0.40 | -0.05 | 0.63 | 1.03 | 0.43 | 0.53 | 0.5 | TRUE |
| 0.125 | TRUE | 65 | 0.02 | -0.20 | 0.71 | 1.16 | 0.19 | 0.21 | 0.8 | TRUE |
| 0.250 | TRUE | 2140 | -0.05 | -0.06 | 1.03 | 1.05 | 0.24 | 0.24 | 1.0 | TRUE |
| 0.375 | TRUE | 46 | 0.22 | -0.11 | 1.07 | 0.96 | 0.43 | 0.42 | 0.8 | TRUE |
| 0.500 | TRUE | 7848 | 0.01 | -0.02 | 1.01 | 0.98 | 0.37 | 0.37 | 0.9 | TRUE |
| 0.750 | FALSE | 0 | | | | | | | | FALSE |
| 1.000 | TRUE | 27 | -0.13 | -0.13 | 0.95 | 1.27 | 0.92 | 0.84 | 0.4 | 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 |
|-------|-----------------|-------------|-------------|-------------|---------|---------|-----------|------|-------------|-------------|
| 0.062 | TRUE | 40 | -0.40 | -0.05 | 0.63 | 1.03 | 0.43 | 0.53 | 0.5 | TRUE |
| 0.125 | TRUE | 65 | 0.02 | -0.20 | 0.71 | 1.16 | 0.19 | 0.21 | 0.8 | TRUE |
| 0.250 | TRUE | 278 | 0.05 | 0.08 | 0.94 | 1.08 | 0.07 | 0.07 | 1.0 | TRUE |
| 0.500 | TRUE | 3888 | 0.03 | 0.00 | 1.05 | 1.01 | 0.35 | 0.34 | 0.9 | TRUE |
| 1.000 | TRUE | 11 | -0.14 | -0.03 | 0.97 | 1.68 | 0.98 | 0.76 | 0.7 | 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 |
|-------|-----------------|-------------|-------------|-------------|---------|---------|-----------|------|-------------|-------------|
| 0.000 | TRUE | 537 | -0.13 | -0.10 | 0.77 | 0.90 | 0.20 | 0.24 | 0.7 | TRUE |
| 0.062 | TRUE | 44 | -0.43 | -0.13 | 0.58 | 1.00 | 0.41 | 0.53 | 0.4 | TRUE |
| 0.125 | TRUE | 92 | 0.07 | -0.21 | 0.71 | 1.02 | 0.10 | 0.12 | 0.7 | TRUE |
| 0.250 | TRUE | 2152 | -0.05 | -0.06 | 1.03 | 1.04 | 0.24 | 0.24 | 1.0 | TRUE |
| 0.375 | TRUE | 60 | 0.13 | -0.00 | 0.99 | 0.88 | 0.34 | 0.37 | 0.8 | TRUE |
| 0.500 | TRUE | 7882 | 0.01 | -0.02 | 1.01 | 0.98 | 0.37 | 0.37 | 0.9 | TRUE |
| 0.750 | TRUE | 11 | 0.04 | -0.22 | 1.45 | 0.99 | 0.58 | 0.49 | 1.1 | TRUE |
| 1.000 | TRUE | 27 | -0.13 | -0.13 | 0.95 | 1.27 | 0.92 | 0.84 | 0.4 | 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 |
|-------|-----------------|-------------|-------------|-------------|---------|---------|-----------|------|-------------|-------------|
| 0.000 | TRUE | 537 | -0.13 | -0.10 | 0.77 | 0.90 | 0.20 | 0.24 | 0.7 | TRUE |
| 0.062 | TRUE | 44 | -0.43 | -0.13 | 0.58 | 1.00 | 0.41 | 0.53 | 0.4 | TRUE |
| 0.125 | TRUE | 92 | 0.07 | -0.21 | 0.71 | 1.02 | 0.10 | 0.12 | 0.7 | TRUE |
| 0.250 | TRUE | 290 | 0.04 | 0.07 | 0.94 | 1.05 | 0.07 | 0.07 | 1.0 | TRUE |
| 0.375 | TRUE | 14 | -0.17 | 0.34 | 0.70 | 0.52 | 0.22 | 0.37 | 0.3 | TRUE |
| 0.500 | TRUE | 3922 | 0.03 | 0.00 | 1.06 | 1.01 | 0.35 | 0.34 | 0.9 | TRUE |
| 0.750 | TRUE | 11 | 0.04 | -0.22 | 1.45 | 0.99 | 0.58 | 0.49 | 1.1 | TRUE |
| 1.000 | TRUE | 11 | -0.14 | -0.03 | 0.97 | 1.68 | 0.98 | 0.76 | 0.7 | 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 |
|-----------|-----------------|-------------|-------------|-------------|---------|---------|-----------|------|-------------|-------------|
| 0.000 | TRUE | 41 | -0.07 | -0.04 | 0.61 | 0.57 | 0.07 | 0.12 | 0.3 | TRUE |
| 0.062 | FALSE | 2 | -0.66 | -0.61 | 0.25 | 0.48 | 0.34 | 1.00 | -0.0 | FALSE |
| 0.250 | TRUE | 2033 | -0.06 | -0.06 | 1.04 | 1.03 | 0.26 | 0.25 | 1.0 | TRUE |
| 0.375 | TRUE | 216 | 0.06 | 0.02 | 0.94 | 1.08 | 0.18 | 0.18 | 1.0 | TRUE |
| 0.500 | TRUE | 7410 | 0.02 | -0.02 | 1.01 | 0.97 | 0.38 | 0.38 | 0.8 | TRUE |
| 1.000 | TRUE | 16 | -0.13 | -0.21 | 0.99 | 1.06 | 0.95 | 0.92 | 0.2 | 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 |
|-----------|-----------------|-------------|-------------|-------------|---------|---------|-----------|------|-------------|-------------|
| 0.000 | TRUE | 41 | -0.07 | -0.04 | 0.61 | 0.57 | 0.07 | 0.12 | 0.3 | TRUE |
| 0.062 | FALSE | 2 | -0.66 | -0.61 | 0.25 | 0.48 | 0.34 | 1.00 | -0.0 | FALSE |
| 0.250 | TRUE | 266 | 0.07 | 0.08 | 0.96 | 1.01 | 0.07 | 0.07 | 1.0 | TRUE |
| 0.375 | TRUE | 36 | 0.04 | 0.07 | 1.16 | 0.72 | 0.40 | 0.44 | 0.7 | TRUE |
| 0.500 | TRUE | 3528 | 0.04 | 0.01 | 1.04 | 0.99 | 0.36 | 0.35 | 0.9 | 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 |
|-----------|-----------------|-------------|-------------|-------------|---------|---------|-----------|------|-------------|-------------|
| 0.000 | TRUE | 185 | -0.07 | -0.06 | 1.00 | 0.87 | 0.23 | 0.24 | 0.8 | TRUE |
| 0.250 | TRUE | 1905 | -0.06 | -0.09 | 1.01 | 1.03 | 0.26 | 0.25 | 1.0 | TRUE |
| 0.500 | TRUE | 7329 | 0.01 | -0.02 | 1.01 | 0.99 | 0.37 | 0.37 | 0.9 | TRUE |
| 0.750 | FALSE | 0 | | | | | | | | FALSE |
| 1.000 | TRUE | 16 | -0.13 | -0.21 | 0.99 | 1.06 | 0.95 | 0.92 | 0.2 | 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 |
|-----------|-----------------|-------------|-------------|-------------|---------|---------|-----------|------|-------------|-------------|
| 0.000 | TRUE | 185 | -0.07 | -0.06 | 1.00 | 0.87 | 0.23 | 0.24 | 0.8 | TRUE |
| 0.250 | TRUE | 162 | -0.05 | 0.01 | 0.68 | 0.89 | 0.11 | 0.14 | 0.6 | TRUE |
| 0.500 | TRUE | 3470 | 0.02 | -0.00 | 1.04 | 1.00 | 0.34 | 0.33 | 0.9 | 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 |
|---------------|-----------------|-------------|-------------|-------------|---------|---------|-----------|------|-------------|-------------|
| 0.125 | TRUE | 74 | 0.00 | -0.27 | 0.65 | 0.93 | 0.17 | 0.22 | 0.6 | TRUE |
| 0.250 | TRUE | 1509 | -0.08 | -0.10 | 1.01 | 1.02 | 0.26 | 0.26 | 1.0 | TRUE |
| 0.375 | TRUE | 1268 | -0.04 | -0.02 | 1.02 | 1.00 | 0.32 | 0.31 | 0.9 | TRUE |
| 0.500 | TRUE | 5264 | 0.02 | -0.02 | 1.01 | 0.97 | 0.38 | 0.38 | 0.8 | TRUE |
| 0.750 | TRUE | 30 | -0.22 | -0.00 | 0.77 | 1.25 | 0.72 | 0.74 | 0.4 | TRUE |
| 1.000 | TRUE | 15 | -0.07 | -0.19 | 1.01 | 1.13 | 1.00 | 0.93 | 0.2 | 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 |
|---------------|-----------------|-------------|-------------|-------------|---------|---------|-----------|------|-------------|-------------|
| 0.125 | TRUE | 74 | 0.00 | -0.27 | 0.65 | 0.93 | 0.17 | 0.22 | 0.6 | TRUE |
| 0.250 | TRUE | 43 | 0.10 | -0.09 | 1.22 | 0.75 | 0.27 | 0.29 | 0.8 | TRUE |
| 0.375 | TRUE | 306 | 0.06 | 0.14 | 1.06 | 1.20 | 0.34 | 0.30 | 1.2 | TRUE |
| 0.500 | TRUE | 1863 | 0.04 | -0.02 | 1.07 | 0.95 | 0.33 | 0.33 | 0.9 | TRUE |
| 0.750 | TRUE | 30 | -0.22 | -0.00 | 0.77 | 1.25 | 0.72 | 0.74 | 0.4 | 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 |