

Comparison of Versions of Kinship Links

Joe Rodger's BG Team

September 18, 2012

Outcome: HeightZGenderYob;

RelationshipPath: Gen1Housemates [ID:1]; **Newer Links Version:** 48; **Older Links Version:** 47;

Newer: Implements MzManual for Gen1

Older: Moved DZ assignment after MZ

R Groups specifically excluded: { }

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 | .49 | .20 | .31 | 4543 | .46 | .21 | .33 | 4550 |
| RExplicit | .78 | .06 | .17 | 3702 | .78 | .06 | .17 | 3702 |
| RImplicit2004 | .77 | .08 | .15 | 2262 | .77 | .08 | .15 | 2262 |

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} | s_1^2 | s_2^2 | $s_{1,2}$ | r | Determinant | PosDefinite |
|-------|-----------------|-------------|---------|---------|-----------|------|-------------|-------------|
| 0.000 | TRUE | 439 | 0.94 | 0.82 | 0.23 | 0.26 | 0.7 | TRUE |
| 0.125 | TRUE | 95 | 0.87 | 0.91 | 0.16 | 0.18 | 0.8 | TRUE |
| 0.250 | TRUE | 249 | 1.02 | 1.14 | 0.27 | 0.25 | 1.1 | TRUE |
| 0.375 | TRUE | 91 | 1.22 | 1.34 | 0.64 | 0.50 | 1.2 | TRUE |
| 0.500 | TRUE | 3644 | 0.97 | 1.02 | 0.44 | 0.44 | 0.8 | TRUE |
| 0.750 | TRUE | 14 | 0.79 | 0.56 | 0.38 | 0.56 | 0.3 | TRUE |
| 1.000 | TRUE | 11 | 0.27 | 0.59 | 0.36 | 0.89 | 0.0 | TRUE |

Table 2: R – Newer Version of Links

| R | Included in SEM | N_{Pairs} | s_1^2 | s_2^2 | $s_{1,2}$ | r | Determinant | PosDefinite |
|-------|-----------------|-------------|---------|---------|-----------|------|-------------|-------------|
| 0.000 | TRUE | 398 | 0.95 | 0.79 | 0.21 | 0.24 | 0.7 | TRUE |
| 0.125 | TRUE | 88 | 0.85 | 0.93 | 0.14 | 0.16 | 0.8 | TRUE |
| 0.250 | TRUE | 256 | 1.04 | 1.18 | 0.30 | 0.27 | 1.1 | TRUE |
| 0.375 | TRUE | 90 | 1.23 | 1.36 | 0.65 | 0.51 | 1.2 | TRUE |
| 0.500 | TRUE | 3655 | 0.97 | 1.01 | 0.44 | 0.44 | 0.8 | TRUE |
| 0.750 | TRUE | 41 | 0.71 | 0.74 | 0.23 | 0.32 | 0.5 | TRUE |
| 1.000 | TRUE | 22 | 0.81 | 0.84 | 0.55 | 0.66 | 0.4 | TRUE |

Table 3: R – Older Version of Links

3 Subgroups – RExplicit

| RExplicit | Included in SEM | N_{Pairs} | s_1^2 | s_2^2 | $s_{1,2}$ | r | Determinant | PosDefinite |
|-----------|-----------------|-------------|---------|---------|-----------|------|-------------|-------------|
| 0.250 | TRUE | 245 | 1.03 | 1.18 | 0.29 | 0.26 | 1.1 | TRUE |
| 0.375 | TRUE | 45 | 1.01 | 1.19 | 0.49 | 0.45 | 1.0 | TRUE |
| 0.500 | TRUE | 3412 | 0.97 | 1.01 | 0.44 | 0.44 | 0.8 | TRUE |

Table 4: RExplicit – Newer Version of Links

| RExplicit | Included in SEM | N_{Pairs} | s_1^2 | s_2^2 | $s_{1,2}$ | r | Determinant | PosDefinite |
|-----------|-----------------|-------------|---------|---------|-----------|------|-------------|-------------|
| 0.250 | TRUE | 245 | 1.03 | 1.18 | 0.29 | 0.26 | 1.1 | TRUE |
| 0.375 | TRUE | 45 | 1.01 | 1.19 | 0.49 | 0.45 | 1.0 | TRUE |
| 0.500 | TRUE | 3412 | 0.97 | 1.01 | 0.44 | 0.44 | 0.8 | TRUE |

Table 5: RExplicit – Older Version of Links

4 Subgroups – RImplicit2004

| RImplicit2004 | Included in SEM | N_{Pairs} | s_1^2 | s_2^2 | $s_{1,2}$ | r | Determinant | PosDefinite |
|---------------|-----------------|-------------|---------|---------|-----------|------|-------------|-------------|
| 0.125 | TRUE | 70 | 0.77 | 0.91 | 0.02 | 0.03 | 0.7 | TRUE |
| 0.250 | TRUE | 42 | 0.78 | 0.99 | 0.20 | 0.23 | 0.7 | TRUE |
| 0.375 | TRUE | 297 | 0.97 | 1.21 | 0.51 | 0.47 | 0.9 | TRUE |
| 0.500 | TRUE | 1823 | 0.95 | 0.96 | 0.44 | 0.46 | 0.7 | TRUE |
| 0.750 | TRUE | 30 | 0.62 | 0.88 | 0.44 | 0.59 | 0.4 | TRUE |

Table 6: RImplicit2004 – Newer Version of Links

| RImplicit2004 | Included in SEM | N_{Pairs} | s_1^2 | s_2^2 | $s_{1,2}$ | r | Determinant | PosDefinite |
|---------------|-----------------|-------------|---------|---------|-----------|------|-------------|-------------|
| 0.125 | TRUE | 70 | 0.77 | 0.91 | 0.02 | 0.03 | 0.7 | TRUE |
| 0.250 | TRUE | 42 | 0.78 | 0.99 | 0.20 | 0.23 | 0.7 | TRUE |
| 0.375 | TRUE | 297 | 0.97 | 1.21 | 0.51 | 0.47 | 0.9 | TRUE |
| 0.500 | TRUE | 1823 | 0.95 | 0.96 | 0.44 | 0.46 | 0.7 | TRUE |
| 0.750 | TRUE | 30 | 0.62 | 0.88 | 0.44 | 0.59 | 0.4 | TRUE |

Table 7: RImplicit2004 – Older Version of Links

5 Explanation of R Variants

| Variant | Explanation |
|--------------------------|---|
| R | We recommend researchers typical use this version. |
| R_{Pass1} | Supposed to be fooled only by errors in the subject’s/mother’s knowledge |
| $R_{Implicit}$ | Uses only implicit items |
| $R_{Implicit_{Pass1}}$ | Uses only implicit items & supposed to be fooled only by knowledge errors |
| $R_{Implicit_{Mother}}$ | Uses only mother’s implicit items (exists only for Gen2) |
| $R_{Implicit_{Subject}}$ | Uses only subject’s implicit items |
| $R_{Implicit_{2004}}$ | The state of the links in 2004. Rodgers & Rowe for Gen1; Rodgers, Johnson & Bard for Gen2 |
| $R_{Explicit}$ | Uses only explicit items |
| $R_{Explicit_{Pass1}}$ | Uses only explicit items & supposed to be fooled only by knowledge errors |