

Table 1: Mean and Variance Comparisons.

Estimated Means and Variances for MZ and DZ Twins

| <i>Mean Effects</i> | <u>MZ</u> | <u>DZ</u> | <u>p-value</u> |
|-------------------------|-----------|-----------|----------------|
| Liberal - Conservative | 5.882 | 6.452 | 0.279 |
| Left - Right | 6.68 | 6.48 | 0.721 |
| Participation | 3.3025 | 3.1215 | 0.2 |
| Age | 40.3955 | 44.0285 | 0.281 |
| <i>Variance Effects</i> | <u>MZ</u> | <u>DZ</u> | <u>p-value</u> |
| Liberal - Conservative | 5.824 | 3.695 | 0.1208 |
| Left - Right | 4.491 | 5.068 | 0.6061 |
| Participation | 0.48 | 0.524 | 0.7514 |

Estimated Means and Variances for Males and Females

| <i>Mean Effects</i> | <u>Male</u> | <u>Female</u> | <u>p-value</u> |
|-------------------------|-------------|---------------|----------------|
| Liberal - Conservative | 6.243 | 6.091 | 0.839 |
| Left - Right | 6.9445 | 6.2155 | 0.259 |
| Participation | 3.288 | 3.136 | 0.308 |
| Age | 39.515 | 44.909 | 0.089 |
| <i>Variance Effects</i> | <u>Male</u> | <u>Female</u> | <u>p-value</u> |
| Liberal - Conservative | 5.483 | 4.719 | 0.4205 |
| Left - Right | 5.386 | 6.337 | 0.2578 |
| Participation | 0.364 | 0.538 | 0.3684 |

Table 2: Regression Coefficients in Corrected Saturated Model

| | Age | Female |
|----------------------|---------|--------|
| Participation | 0.009 + | -0.181 |
| Left-Right | -0.005 | -0.53 |
| Liberal-Conservative | 0.022 | -0.427 |

Table 3: Age and Sex Corrected Partial Correlations of Co-twins (Saturated Model)

| | rMZ | low | high | rDZ | low | high | rDZS | low | high | rDZO | low | high |
|----------------------|--------------|-------|-------|---------------|--------|-------|---------------|--------|-------|---------------|--------|-------|
| Left-Right | 0.657 | 0.39 | 0.846 | 0.822 | 0.634 | 0.917 | 0.795 | 0.536 | 0.941 | 0.867 | 0.593 | 0.964 |
| Liberal-Conservative | 0.659 | 0.422 | 0.823 | 0.696 | 0.404 | 0.872 | 0.515 | -0.84 | 0.822 | 0.876 | 0.717 | 0.955 |
| Participation | 0.737 | 0.538 | 0.885 | -0.112 | -0.729 | 0.72 | -0.053 | -0.853 | 0.816 | -0.282 | -0.972 | 0.757 |

Table 4: ACE model results

Intended Participation

| | AIC | BIC | LL | -2LL | Dif | df change | p-value | A | A low | A high | C | C low | C high | D | D low | D high | E | E low | E high | | |
|-----------|----------------|----------------|-----------------|----------------|--------------|-----------|-------------------|----------|--------------|--------|---------|--------------|--------|---------|--------------|--------|-------|--------------|--------------|-------|-------|
| ACE | 283.575 | 298.088 | -135.788 | 271.576 | | | | | 0.724 | 0.414 | 0.899 | 0 | 0 | 0 - | - | - | | 0.276 | 0.103 | 0.516 | |
| AE | 281.575 | 293.669 | -135.788 | 271.576 | | | | 1 | 0.724 | 0.484 | 0.894 - | - | - | - | - | - | | 0.276 | 0.104 | 0.515 | |
| CE | 291.041 | 303.136 | -140.521 | 281.042 | 9.466 | 1 | 0.00209315 | - | - | - | - | 0.475 | 0.191 | 0.769 - | - | - | | 0.525 | 0.23 | 0.806 | |
| ADE | 281.252 | 295.765 | -134.626 | 269.252 | | | | | 0 | 0 | 0.899 - | - | - | - | 0.734 | 0.01 | 0.908 | | 0.266 | 0.107 | 0.462 |
| AE | 281.575 | 293.669 | -135.788 | 271.576 | 2.324 | 1 | 0.12739206 | | 0.724 | 0.484 | 0.894 - | - | - | - | - | - | | 0.276 | 0.104 | 0.515 | |

Left - Right

| | AIC | BIC | LL | -2LL | Dif | df change | p-value | A | A low | A high | C | C low | C high | D | D low | D high | E | E low | E high | |
|-----------|----------------|----------------|-----------------|----------------|----------|-----------|------------|---|--------------|--------|---------|--------------|--------|---------|-------|--------|---|--------------|--------|-------|
| ACE | 520.173 | 534.158 | -254.087 | 508.174 | | | | | 0 | 0 | 0 | 0.708 | 0.515 | 0.833 - | - | - | | 0.292 | 0.148 | 0.485 |
| AE | 525.858 | 537.511 | -257.929 | 515.858 | 7.684 | 1 | 0.00557125 | - | 0.681 | 0.469 | 0.851 - | - | - | - | - | - | | 0.319 | 0.146 | 0.531 |
| CE | 518.173 | 529.827 | -254.087 | 508.174 | 0 | 1 | 1 - | | - | - | - | 0.708 | 0.512 | 0.839 - | - | - | | 0.292 | 0.16 | 0.487 |

Liberal - Conservative

| | AIC | BIC | LL | -2LL | Dif | df change | p-value | A | A low | A high | C | C low | C high | D | D low | D high | E | E low | E high | |
|-----------|----------------|----------------|-----------------|----------------|----------|-----------|------------|---|--------------|--------|---------|--------------|--------|---------|-------|--------|---|--------------|--------|-------|
| ACE | 504.362 | 518.105 | -246.181 | 492.362 | | | | | 0 | 0 | 0.055 | 0.668 | 0.485 | 0.835 - | - | - | | 0.332 | 0.189 | 0.548 |
| AE | 505.029 | 516.481 | -247.514 | 495.028 | 2.666 | 1 | 0.10251338 | - | 0.665 | 0.451 | 0.819 - | - | - | - | - | - | | 0.335 | 0.178 | 0.544 |
| CE | 502.362 | 513.814 | -246.181 | 492.362 | 0 | 1 | 1 - | | - | - | - | 0.668 | 0.468 | 0.807 - | - | - | | 0.332 | 0.192 | 0.531 |

Left/Right - Liberal/Conservative Cholesky Decomposition. Phenotypic Correlation ($r=0.536$, 95% c.i.=0.256, 0.731). The A, C and E estimates presented are the standardized estimates for proportion of covariance explained. The variance estimates are comparable to the univariate results

| | AIC | BIC | LL | -2LL | Dif | df change | p-value | A | A low | A high | C | C low | C high | D | D low | D high | E | E low | E high | |
|-----------|---------------|-----------------|-----------------|---------------|-------------|-----------|-------------------|---|--------------|--------|--------|--------------|--------|---------|-------|--------|---|--------------|--------|-------|
| ACE | 998.411 | 1028.71 | -486.205 | 972.41 | | | | | -0.04 | -0.75 | 0.133 | 0.914 | 0.618 | 1.362 - | - | - | | 0.127 | -0.171 | 0.465 |
| AE | 1012.085 | 1035.392 | -496.043 | 992.086 | 19.676 | 3 | 0.00019811 | - | 1.07 | 0.65 | 1.64 - | - | - | - | - | - | | -0.07 | -0.647 | 0.345 |
| CE | 992.55 | 1015.858 | -486.275 | 972.55 | 0.14 | 3 | 0.98663886 | - | - | - | - | 0.873 | 0.536 | 1.142 - | - | - | | 0.127 | -0.144 | 0.46 |