**Supplemental Material** [for NWS-16-10-0060]

**Table S1:** Study 1 - Descriptive statistics and correlations

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Name** | **Min** | **Max** | **Mean** | **S.D.** | **1** | **2** | **3** | **4** |
| 1. Status (Group member 1) | 4.75 | 100 | 66.98 | 21.51 | 1 |  |  |  |
| 2. Status (Group member 2) | 19 | 100 | 60.44 | 14.98 | 0.28 | 1 |  |  |
| 3. Status (Group member 3) | 0 | 97.75 | 41.25 | 21.53 | 0.01 | 0.21\*\* | 1 |  |
| 4. Direction | 0 | 1 | 0.50 | 0.50 | -.29\*\* | -0.41\*\* | -0.08 | 1 |
| 5. Relationship type | 1 | 3 | 2.06 | 0.83 | -0.02 | -0.36\* | -0.33\*\* | 0.10 |

\* Correlation is significant at the 0.05 level (2-tailed); \*\* Correlation is significant at the 0.01 level (2-tailed)

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| **Table S2**: Study 2 - Bivariate correlations and descriptive statistics | | | | | | | | | | | | |
| **Name** | **Min** | **Max** | **Mean** | **S.D.** | **1** | **2** | **3** | **4** | **5** | **6** | **7** |
| 1. Status (Group member 1) | 0 | 100 | 65.98 | 21.73 | 1 |  |  |  |  |  |  |
| 2. Status (Group member 2) | 0 | 100 | 62.10 | 15.33 | 0.02 | 1 |  |  |  |  |  |
| 3. Status (Group member 3) | 0 | 100 | 43.93 | 21.75 | -0.45\*\* | 0.40\*\* | 1 |  |  |  |  |
| 4. Direction | 0 | 1 | 0.50 | 0.50 | -0.35\*\* | 0.16\*\* | 0.33\*\* | 1 |  |  |  |
| 5. Relationship-type | 1 | 4 | 2.50 | 1.12 | 0.05 | -0.02 | -0.06 | 0.01 | 1 |  |  |
| 6. Participant gender | 1 | 2 | 1.50 | 0.50 | 0.05 | -0.01 | -0.13\* | -0.03 | 0.05 | 1 |  |
| 7. Participant age | 21 | 70 | 36.93 | 10.94 | 0.02 | 0.02 | -0.11\* | 0.03 | 0.01 | 0.28\*\* | 1 |
| 8. Participant location | 1 | 5 | 2.69 | 1.18 | -0.01 | 0.06 | 0.08 | 0.06 | 0.12 | -0.03 | -0.01 |

\*Correlation is significant at the 0.05 level (2-tailed); \*\* Correlation is significant at the 0.01 level (2-tailed)

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| **Table S3**: Study 3a - Descriptive statistics and correlations | | | | | | | | |
| **Name** | **Min** | **Max** | **Mean** | **S.D.** | **1** | **2** | **3** | **4** |
| 1. Status (Group member 1) | 0 | 100 | 67.46 | 21.60 | 1 |  |  |  |
| 2. Status (Group member 2) | 0.25 | 100 | 62.72 | 18.17 | 0.13\*\* | 1 |  |  |
| 3. Status (Group member 3) | 0 | 100 | 43.38 | 23.16 | -0.34 | 0.40\* | 1 |  |
| 4. Direction | 0 | 1 | 0.50 | 0.50 | -0.09 | -0.37 | 0.40 | 1 |
| 5. Relationship-type | 1 | 3 | 2.00 | 0.82 | -.44\*\* | 0.31\* | 0.49\*\* | 0.10 |

\* Correlation is significant at the 0.05 level (2-tailed); \*\* Correlation is significant at the 0.01 level (2-tailed)

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| **Table S4**: Study 3b - Bivariate correlations and descriptive statistics | | | | | | | | |  | |  | |  | |  | |
| **Name** | **Min** | **Max** | **Mean** | **S.D.** | **1** | **2** | **3** | **4** | | **5** | | **6** | | **7** | | **8** | |
| 1. Status (Group member 1) | 0 | 100 | 62.83 | 20.98 | 1 |  |  |  | |  | |  | |  | |  | |
| 2. Status (Group member 2) | 5 | 100 | 64.22 | 16.38 | 0.16\*\* | 1 |  |  | |  | |  | |  | |  | |
| 3. Status (Group member 3) | 0 | 100 | 48.45 | 22.55 | -0.16\*\* | 0.41\*\* | 1 |  | |  | |  | |  | |  | |
| 4. Direction | 0 | 1 | 0.50 | 0.50 | -0.22\*\* | 0.24\*\* | 0.33\*\* | 1 | |  | |  | |  | |  | |
| 5. Relationship-type | 1 | 4 | 2.53 | 1.15 | .20\*\* | 0.02 | -0.06 | 0.04 | | 1 | |  | |  | |  | |
| 6. Reading order | 1 | 2 | 1.50 | 0.50 | -0.05 | 0.05 | 0.07 | 0.02 | | 0.01 | | 1 | |  | |  | |
| 7. Participant gender | 1 | 2 | 1.50 | 0.50 | 0.04 | 0.01 | -0.08\* | -0.04 | | -0.02 | | -0.06 | | 1 | |  | |
| 8. Participant age | 18 | 71 | 35 | 9.71 | 0.04 | -0.02 | -0.07 | -0.06 | | -0.03 | | -0.08\* | | 0.13\*\* | | 1 | |
| 9. Participant location | 1 | 5 | 2.71 | 1.26 | 0.13\*\* | 0.18\*\* | 0.18\*\* | -0.03 | | 0.03 | | 0.09\* | | 0.45 | | -0.09\* | |

\*Correlation is significant at the 0.05 level (2-tailed); \*\* Correlation is significant at the 0.01 level (2-tailed)

**Table S5**: Study 3b - ANOVA Results (within-effects)

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| **Model 1:** Status | | | | | | |
| ***Variables*** | ***F*** | | | | ***p*** | ***η2*** |
| Participant gender | | | 1.97 | | 0.14 | 0.01 |
| Participant age | | | 0.59 | | 0.54 | 0.01 |
| Participant culture | | | 1.70 | | 0.18 | 0.01 |
| Direction | | | 96.72 | | 0.001 | 0.14 |
| Relationship-type | | | 22.46 | | 0.001 | 0.10 |
| Reading order | | | 1.92 | | 0.15 | 0.01 |
| Direction\*Relationship-type | | | 26.62 | | 0.001 | 0.12 |
| Direction\*Reading order | | | 0.74 | | 0.47 | 0.01 |
| Relationship-type\*Reading order | | | 1.02 | | 0.41 | 0.01 |
| Direction\*Relationship-type\*Reading order | | | 0.81 | | 0.55 | 0.01 |
| ***R*2**† |  | 0.23 | | 0.13 | | 0.25 |

†The three R2 values represent the R2 of each dependent variable

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| **Table S6:** Study 4 - Bivariate correlations and descriptive statistics | | | | | | | | |  |  |  |  |
| **Name** | **Min** | **Max** | **Mean** | **S.D.** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** |
| 1. Status (Group member 1) | 0 | 100 | 65.44 | 22.69 | 1 |  |  |  |  |  |  |  |
| 2. Status (Group member 2) | 0 | 100 | 59.60 | 19.51 | -0.21\*\* | 1 |  |  |  |  |  |  |
| 3. Status (Group member 3) | 0 | 100 | 46.65 | 20.75 | -0.23\*\* | 0.13\*\* | 1 |  |  |  |  |  |
| 4. Direction | 0 | 1 | 0.50 | 0.50 | -0.23\*\* | 0.35\*\* | 0.03 | 1 |  |  |  |  |
| 5. Relationship-type | 1 | 4 | 2.50 | 1.18 | 0.08 | -0.14\*\* | -0.02 | 0.01 | 1 |  |  |  |
| 6. Gender group members | 1 | 2 | 1.50 | 0.50 | 0.01 | -0.21\*\* | 0.21\*\* | 0.02 | 0.01 | 1 |  |  |
| 7. Participant gender | 1 | 2 | 1.50 | 0.50 | 0.01 | 0.02 | 0.07 | -0.01 | 0.03 | 0.05 | 1 |  |
| 8. Participant age | 20 | 74 | 38.87 | 10.95 | 0.03 | 0.01 | 0.04 | -0.06 | -0.05 | 0.10\* | .21\* | 1 |
| 9. Participant location | 1 | 5 | 2.70 | 1.12 | 0.01 | -0.01 | 0.08 | -0.06 | 0.03 | -0.02 | -0.02 | -0.01 |

\*Correlation is significant at the 0.05 level (2-tailed); \*\* Correlation is significant at the 0.01 level (2-tailed)

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| **Table S7:** Means per experimental conditions across Study 1 & 3a | | | | | | | | | | | |
|  |  |  |  |  | Asymmetric | | | Symmetric | | | |
| Study | Person | Gender names | Diagram | Reading order | Advice | Influence | Friendship | Advice | Influence | Friendship | |
| S1 | GM 1 | Male | Vertical | L | 83.15 | 85.76 | 56.59 | 55.36 | 60.13 | | 57.04 | |
| S3a | GM 1 | Male | Horizontal | R | 78.44 | 81.59 | 70.59 | 60.68 | 56.21 | | 57.28 | |
|  |  |  |  |  |  |  |  |  |  | |  | |
| S1 | GM 2 | Male | Vertical | L | 60.13 | 58.05 | 58.63 | 66.17 | 60.33 | | 64.88 | |
| S3a | GM 2 | Male | Horizontal | R | 61.33 | 56.12 | 53.77 | 65.52 | 70.28 | | 51.94 | |
|  |  |  |  |  |  |  |  |  |  | |  | |
| S1 | GM 3 | Male | Vertical | L | 30.03 | 27.37 | 46.43 | 55.58 | 47.98 | | 48.80 | |
| S3a | GM 3 | Male | Horizontal | R | 36.31 | 24.44 | 35.54 | 51.94 | 59.32 | | 52.73 | |

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| **Table S8**: Means per experimental conditions across all experimental studies | | | | | | | | | | | | | | | | | |
|  |  |  |  |  | Asymmetric | | | | Symmetric | | | | | | | |
| Study | Person | Gender names | Diagram | Reading order | Neutral | Influence | Friendship | Cross | Neutral | Influence | Friendship | | Cross | |
| S2 | GM 1 | Male | Vertical | L | 68.64 | 85.18 | 58.65 | 81.27 | 57.85 | 58.94 | | 56.43 | | 60.84 | |
| S3b | GM 1 | Male | Horizontal | L | 62.23 | 79.68 | 59.55 | 83.17 | 57.61 | 51.44 | | 56.74 | | 61.87 | |
| S3b | GM 1 | Male | Horizontal | R | 60.56 | 76.67 | 55.85 | 78.11 | 57.28 | 56.50 | | 62.65 | | 59.30 | |
| S4 | GM 1 | Female | Vertical | L | 69.15 | 82.84 | 47.33 | 85.52 | 58.38 | 58.36 | | 61.67 | | 60.42 | |
| S4 | GM 1 | Neutral | Vertical | L | 59.92 | 84.81 | 53.55 | 82.47 | 57.58 | 60.85 | | 66.36 | | 58.54 | |
|  |  |  |  |  |  |  |  |  |  |  | |  | |  | |
| S2 | GM 2 | Male | Vertical | L | 60.17 | 59.17 | 59.01 | 60.12 | 66.95 | 60.69 | | 62.26 | | 61.94 | |
| S3b | GM 2 | Male | Horizontal | L | 56.31 | 58.46 | 62.79 | 57.04 | 65.88 | 58.17 | | 67.29 | | 75.23 | |
| S3b | GM 2 | Male | Horizontal | R | 55.42 | 60.57 | 64.55 | 57.35 | 70.17 | 70.38 | | 74.82 | | 63.85 | |
| S4 | GM 2 | Female | Vertical | L | 57.66 | 60.40 | 63.18 | 56.07 | 70.38 | 70.29 | | 70.97 | | 62.09 | |
| S4 | GM 2 | Neutral | Vertical | L | 52.10 | 58.11 | 59.91 | 60.49 | 67.16 | 64.96 | | 62.97 | | 63.12 | |
|  |  |  |  |  |  |  |  |  |  |  | |  | |  | |
| S2 | GM 3 | Male | Vertical | L | 46.06 | 28.25 | 44.59 | 28.29 | 48.18 | 53.33 | | 49.04 | | 53.97 | |
| S3b | GM 3 | Male | Horizontal | L | 52.76 | 28.35 | 48.38 | 33.18 | 49.35 | 47.27 | | 54.05 | | 60.85 | |
| S3b | GM 3 | Male | Horizontal | R | 51.01 | 32.79 | 41.72 | 31.61 | 56.81 | 57.39 | | 61.37 | | 59.79 | |
| S4 | GM 3 | Female | Vertical | L | 40.20 | 34.87 | 50.86 | 20.86 | 50.68 | 46.66 | | 53.68 | | 49.01 | |
| S4 | GM 3 | Neutral | Vertical | L | 52.10 | 58.11 | 59.91 | 60.49 | 45.95 | 45.74 | | 49.35 | | 46.15 | |

GM1 refers to Group member 1: Edward (male); Maria (female); Morgan (neutral)

GM2 refers to Group member 2: John (male); Susan (female); Jesse/Casey (neutral)

GM3 refers to Group member 3: Albert (male); Linda (female); Pat (neutral)

L = Left to right; R = Right to left