**The Efficacy of Seven Gratitude Interventions for Promoting Subjective Well-Being**

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**Supplementary Online Materials**

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# **Study 1 Pairwise Analysis**

**Table 1**

*Descriptive Scales for State Emotion Items and State Measures*

|  |  |  |  |
| --- | --- | --- | --- |
| State Emotion/Measures | M | SD | McDonalds’ ω |
| Optimism | 4.59 | 1.66 | 0.88 |
| Indebtedness | 3.06 | 1.54 | 0.52 |
| Guilt | 1.94 | 1.45 | NA |
| Social Connection | 3.93 | 0.96 | 0.92 |
| Attitude Towards Life | 5.86 | 1.82 | NA |
| Perceived Self-Size | 3.72 | 1.34 | 0.84 |

## Self-Reported Gratitude

**Table 2**

*Results comparing Self-Reported Gratitude between Control Conditions and Gratitude Interventions*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Control | Gratitude Intervention | t | df | p | Hedges’ g |
|  | 1) Gratitude List | -6.06 | 245.40 | 0.00 | 0.73 |
|  | 2) Gratitude Letter | -9.05 | 244.87 | 0.00 | 1.09 |
| 1) Measurement Only | 3) Gratitude Text | -7.22 | 247.58 | 0.00 | 0.88 |
|  | 4) Naikan Gratitude List | -5.84 | 255.57 | 0.00 | 0.70 |
|  | 5) Mental Subtraction Task | -6.55 | 253.88 | 0.00 | 0.79 |
|  | 1) Gratitude List | -3.60 | 234.88 | 0.00 | 0.45 |
|  | 2) Gratitude Letter | -6.74 | 233.99 | 0.00 | 0.85 |
| 2) Events List | 3) Gratitude Text | -4.90 | 235.86 | 0.00 | 0.62 |
|  | 4) Naikan Gratitude List | -3.46 | 244.36 | 0.00 | 0.43 |
|  | 5) Mental Subtraction Task | -4.19 | 242.71 | 0.00 | 0.52 |
|  | 1) Gratitude List | -4.14 | 245.59 | 0.00 | 0.51 |
|  | 2) Gratitude Letter | -7.43 | 243.06 | 0.00 | 0.93 |
| 3) Interesting Events List | 3) Gratitude Text | -5.47 | 241.00 | 0.00 | 0.69 |
|  | 4) Naikan Gratitude List | -3.96 | 251.65 | 0.00 | 0.49 |
|  | 5) Mental Subtraction Task | -4.73 | 250.22 | 0.00 | 0.59 |
|  | 1) Gratitude List | -8.44 | 230.66 | 0.00 | 1.05 |
|  | 2) Gratitude Letter | -11.45 | 230.42 | 0.00 | 1.43 |
| 2) Hassles List | 3) Gratitude Text | -9.53 | 233.85 | 0.00 | 1.20 |
|  | 4) Naikan Gratitude List | -8.13 | 241.37 | 0.00 | 1.01 |
|  | 5) Mental Subtraction Task | -8.86 | 239.65 | 0.00 | 1.11 |

**Table 3**

*Results comparing Self-Reported Gratitude between Gratitude Interventions*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Gratitude Intervention | t | df | p | Hedges’ g |
| 1) Gratitude List/Gratitude Letter | -3.73 | 257.26 | 0.00 | 0.46 |
| 2) Gratitude List/Gratitude Text | -1.68 | 241.86 | 0.10 | 0.21 |
| 3) Gratitude List/Naikan Gratitude List | 0.00 | 258.25 | 1.00 | 0.00 |
| 4) Gratitude List/Mental Subtraction Task | -0.83 | 257.72 | 0.40 | 0.10 |
| 5) Gratitude Letter/Gratitude Text | 1.87 | 237.69 | 0.06 | -0.24 |
| 6) Gratitude Letter/Naikan Gratitude List | 3.52 | 252.87 | 0.00 | -0.44 |
| 7) Gratitude Letter/Mental Subtraction Task | 2.72 | 252.11 | 0.01 | -0.34 |
| 8) Gratitude Text/Naikan Gratitude List | 1.59 | 244.36 | 0.11 | -0.20 |
| 9) Gratitude Text/Mental Subtraction Task | 0.81 | 243.16 | 0.42 | -0.10 |
| 10) Naikan Gratitude List/Mental Subtraction Task | -0.79 | 256.98 | 0.43 | 0.10 |

**Table 4**

*Results comparing Self-Reported Gratitude between Control Conditions*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Control Condition | t | df | p | Hedges’ g |
| 1) Measurement Only/Events List | -2.32 | 262.94 | 0.02 | 0.28 |
| 2) Measurement Only/Interesting Events List | -2.11 | 261.40 | 0.04 | 0.26 |
| 3) Measurement Only/Hassles List | 1.98 | 263.83 | 0.05 | -0.24 |
| 4) Events List/Interesting Events List | 0.31 | 249.21 | 0.76 | -0.04 |
| 5) Events List/Hassles List | 4.39 | 250.58 | 0.00 | -0.55 |
| 6) Interesting Events List/Hassles List | 4.26 | 248.11 | 0.00 | -0.53 |

## Self-Reported Positive Affect

**Table 5**

*Results comparing Self-Reported Positive Affect between Control Conditions and Gratitude Interventions*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Control Condition | Gratitude Intervention | t | df | P | Hedges’ g |
|  | 1) Gratitude List | -4.09 | 269.95 | 0.00 | 0.49 |
|  | 2) Gratitude Letter | -4.95 | 262.09 | 0.00 | 0.61 |
| 1) Measurement Only | 3) Gratitude Text | -4.47 | 249.41 | 0.00 | 0.56 |
|  | 4) Naikan Gratitude List | -3.46 | 264.73 | 0.00 | 0.42 |
|  | 5) Mental Subtraction Task | -3.83 | 262.76 | 0.00 | 0.47 |
|  | 1) Gratitude List | -2.36 | 247.40 | 0.02 | 0.29 |
|  | 2) Gratitude Letter | -3.26 | 248.11 | 0.00 | 0.41 |
| 2) Events List | 3) Gratitude Text | -2.84 | 240.97 | 0.00 | 0.36 |
|  | 4) Naikan Gratitude List | -1.88 | 253.27 | 0.06 | 0.23 |
|  | 5) Mental Subtraction Task | -2.25 | 252.69 | 0.03 | 0.28 |
|  | 1) Gratitude List | -1.75 | 255.90 | 0.08 | 0.22 |
|  | 2) Gratitude Letter | -2.71 | 250.97 | 0.01 | 0.34 |
| 3) Interesting Events List | 3) Gratitude Text | -2.28 | 240.16 | 0.02 | 0.29 |
|  | 4) Naikan Gratitude List | -1.28 | 254.49 | 0.20 | 0.16 |
|  | 5) Mental Subtraction Task | -1.67 | 252.99 | 0.10 | 0.21 |
|  | 1) Gratitude List | -7.50 | 250.88 | 0.00 | 0.93 |
|  | 2) Gratitude Letter | -8.20 | 250.11 | 0.00 | 1.03 |
| 2) Hassles List | 3) Gratitude Text | -7.69 | 241.93 | 0.00 | 0.98 |
|  | 4) Naikan Gratitude List | -6.70 | 254.83 | 0.00 | 0.83 |
|  | 5) Mental Subtraction Task | -7.03 | 253.99 | 0.00 | 0.88 |

**Table 6**

*Results comparing Self-Reported Positive Affect between Gratitude Interventions*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Gratitude Intervention | t | df | p | Hedges’ g |
| 1) Gratitude List/Gratitude Letter | -1.07 | 254.27 | 0.28 | 0.13 |
| 2) Gratitude List/Gratitude Text | -0.66 | 239.66 | 0.51 | 0.08 |
| 3) Gratitude List/Naikan Gratitude List | 0.37 | 255.92 | 0.71 | -0.05 |
| 4) Gratitude List/Mental Subtraction Task | -0.05 | 253.48 | 0.96 | 0.01 |
| 5) Gratitude Letter/Gratitude Text | 0.37 | 239.59 | 0.71 | -0.05 |
| 6) Gratitude Letter/Naikan Gratitude List | 1.36 | 253.71 | 0.18 | -0.17 |
| 7) Gratitude Letter/Mental Subtraction Task | 0.95 | 252.31 | 0.34 | -0.12 |
| 8) Gratitude Text/Naikan Gratitude List | 0.96 | 244.55 | 0.34 | -0.12 |
| 9) Gratitude Text/Mental Subtraction Task | 0.57 | 243.86 | 0.57 | -0.07 |
| 10) Naikan Gratitude List/Mental Subtraction Task | -0.39 | 256.91 | 0.70 | 0.05 |

**Table 7**

*Results comparing Self-Reported Positive Affect between Control Conditions*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Control Condition | t | df | p | Hedges’ g |
| 1) Measurement Only/Events List | -1.45 | 257.50 | 0.15 | 0.18 |
| 2) Measurement Only/Interesting Events List | -2.24 | 263.40 | 0.03 | 0.27 |
| 3) Measurement Only/Hassles List | 3.45 | 260.34 | 0.00 | -0.42 |
| 4) Events List/Interesting Events List | -0.68 | 248.60 | 0.50 | 0.08 |
| 5) Events List/Hassles List | 4.70 | 250.81 | 0.00 | -0.59 |
| 6) Interesting Events List/Hassles List | 5.61 | 250.75 | 0.00 | -0.70 |

## Self-Reported Optimism

**Table 8**

*Results comparing Self-Reported Optimism between Control Conditions and Gratitude Interventions*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Control Condition | Gratitude Intervention | t | df | P | Hedges’ g |
|  | 1) Gratitude List | -4.76 | 261.46 | 0.00 | 0.57 |
|  | 2) Gratitude Letter | -3.94 | 262.74 | 0.00 | 0.48 |
| 1) Measurement Only | 3) Gratitude Text | -3.74 | 253.83 | 0.00 | 0.46 |
|  | 4) Naikan Gratitude List | -2.72 | 266.60 | 0.01 | 0.33 |
|  | 5) Mental Subtraction Task | -3.66 | 265.95 | 0.00 | 0.45 |
|  | 1) Gratitude List | -2.50 | 244.00 | 0.01 | 0.31 |
|  | 2) Gratitude Letter | -1.81 | 248.42 | 0.07 | 0.23 |
| 2) Events List | 3) Gratitude Text | -1.62 | 240.88 | 0.11 | 0.21 |
|  | 4) Naikan Gratitude List | -0.60 | 252.09 | 0.55 | 0.07 |
|  | 5) Mental Subtraction Task | -1.58 | 252.69 | 0.11 | 0.20 |
|  | 1) Gratitude List | -2.72 | 244.61 | 0.01 | 0.34 |
|  | 2) Gratitude Letter | -2.02 | 249.28 | 0.04 | 0.25 |
| 3) Interesting Events List | 3) Gratitude Text | -1.83 | 241.84 | 0.07 | 0.23 |
|  | 4) Naikan Gratitude List | -0.81 | 252.94 | 0.42 | 0.10 |
|  | 5) Mental Subtraction Task | -1.79 | 253.62 | 0.07 | 0.22 |
|  | 1) Gratitude List | -7.25 | 242.13 | 0.00 | 0.90 |
|  | 2) Gratitude Letter | -6.32 | 248.25 | 0.00 | 0.79 |
| 2) Hassles List | 3) Gratitude Text | -6.09 | 241.44 | 0.00 | 0.77 |
|  | 4) Naikan Gratitude List | -5.11 | 251.81 | 0.00 | 0.64 |
|  | 5) Mental Subtraction Task | -5.98 | 253.06 | 0.00 | 0.75 |

**Table 9**

*Results comparing Self-Reported Optimism between Gratitude Interventions*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Gratitude Intervention | t | df | p | Hedges’ g |
| 1) Gratitude List/Gratitude Letter | 0.62 | 251.40 | 0.54 | -0.08 |
| 2) Gratitude List/Gratitude Text | 0.80 | 237.58 | 0.42 | -0.10 |
| 3) Gratitude List/Naikan Gratitude List | 1.95 | 255.89 | 0.05 | -0.24 |
| 4) Gratitude List/Mental Subtraction Task | 0.80 | 250.46 | 0.43 | -0.10 |
| 5) Gratitude Letter/Gratitude Text | 0.18 | 240.21 | 0.86 | -0.02 |
| 6) Gratitude Letter/Naikan Gratitude List | 1.26 | 253.99 | 0.21 | -0.16 |
| 7) Gratitude Letter/Mental Subtraction Task | 0.19 | 252.50 | 0.85 | -0.02 |
| 8) Gratitude Text/Naikan Gratitude List | 1.07 | 243.98 | 0.29 | -0.14 |
| 9) Gratitude Text/Mental Subtraction Task | 0.01 | 243.96 | 0.99 | -0.00 |
| 10) Naikan Gratitude List/Mental Subtraction Task | -1.03 | 256.31 | 0.30 | 0.13 |

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**Table 10**

*Results comparing Self-Reported Optimism between Control Conditions*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Control Condition | t | df | p | Hedges’ g |
| 1) Measurement Only/Events List | -2.05 | 262.38 | 0.04 | 0.25 |
| 2) Measurement Only/Interesting Events List | -1.84 | 263.29 | 0.07 | 0.22 |
| 3) Measurement Only/Hassles List | 2.34 | 262.55 | 0.02 | -0.29 |
| 4) Events List/Interesting Events List | 0.21 | 251.00 | 0.84 | -0.03 |
| 5) Events List/Hassles List | 4.37 | 250.83 | 0.00 | -0.55 |
| 6) Interesting Events List/Hassles List | 4.15 | 251.87 | 0.00 | -0.52 |

## Self-Reported Negative Affect

**Table 11**

*Results comparing Self-Reported Negative Affect between Control Conditions and Gratitude Interventions*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Control Condition | Gratitude Intervention | t | df | p | Hedges’ g |
|  | 1) Gratitude List | 2.48 | 263.80 | 0.01 | -0.30 |
|  | 2) Gratitude Letter | 2.09 | 262.99 | 0.04 | -0.26 |
| 1) Measurement Only | 3) Gratitude Text | 2.81 | 252.90 | 0.01 | -0.34 |
|  | 4) Naikan Gratitude List | 1.43 | 266.85 | 0.15 | -0.17 |
|  | 5) Mental Subtraction Task | 0.89 | 265.01 | 0.37 | -0.11 |
|  | 1) Gratitude List | 3.08 | 242.34 | 0.00 | -0.38 |
|  | 2) Gratitude Letter | 2.67 | 248.25 | 0.01 | -0.34 |
| 2) Events List | 3) Gratitude Text | 3.39 | 235.34 | 0.00 | -0.43 |
|  | 4) Naikan Gratitude List | 2.03 | 250.72 | 0.04 | -0.25 |
|  | 5) Mental Subtraction Task | 1.47 | 252.78 | 0.14 | -0.18 |
|  | 1) Gratitude List | 3.15 | 242.31 | 0.00 | -0.39 |
|  | 2) Gratitude Letter | 2.74 | 248.85 | 0.01 | -0.34 |
| 3) Interesting Events List | 3) Gratitude Text | 3.46 | 235.70 | 0.00 | -0.44 |
|  | 4) Naikan Gratitude List | 2.10 | 251.19 | 0.04 | -0.26 |
|  | 5) Mental Subtraction Task | 1.55 | 253.63 | 0.12 | -0.19 |
|  | 1) Gratitude List | 4.00 | 228.70 | 0.00 | -0.50 |
|  | 2) Gratitude Letter | 3.59 | 241.26 | 0.00 | -0.45 |
| 2) Hassles List | 3) Gratitude Text | 4.28 | 225.91 | 0.00 | -0.54 |
|  | 4) Naikan Gratitude List | 2.99 | 242.11 | 0.00 | -0.37 |
|  | 5) Mental Subtraction Task | 2.45 | 248.54 | 0.02 | -0.31 |

**Table 12**

*Results comparing Self-Reported Negative Affect between Gratitude Interventions*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Gratitude Intervention | t | df | p | Hedges’ g |
| 1) Gratitude List/Gratitude Letter | -0.25 | 250.52 | 0.80 | 0.03 |
| 2) Gratitude List/Gratitude Text | 0.40 | 246.50 | 0.69 | -0.05 |
| 3) Gratitude List/Naikan Gratitude List | -1.00 | 256.78 | 0.32 | 0.12 |
| 4) Gratitude List/Mental Subtraction Task | -1.48 | 248.37 | 0.14 | 0.18 |
| 5) Gratitude Letter/Gratitude Text | 0.62 | 239.73 | 0.54 | -0.08 |
| 6) Gratitude Letter/Naikan Gratitude List | -0.69 | 253.77 | 0.49 | 0.09 |
| 7) Gratitude Letter/Mental Subtraction Task | -1.16 | 252.25 | 0.25 | 0.14 |
| 8) Gratitude Text/Naikan Gratitude List | -1.36 | 244.56 | 0.18 | 0.17 |
| 9) Gratitude Text/Mental Subtraction Task | -1.82 | 240.17 | 0.07 | 0.23 |
| 10) Naikan Gratitude List/Mental Subtraction Task | -0.50 | 255.16 | 0.62 | 0.06 |

**Table 13**

*Results comparing Self-Reported Negative Affect between Control Conditions*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Control Condition | t | df | p | Hedges’ g |
| 1) Measurement Only/Events List | -0.61 | 260.85 | 0.54 | 0.07 |
| 2) Measurement Only/Interesting Events List | -0.69 | 261.40 | 0.49 | 0.08 |
| 3) Measurement Only/Hassles List | -1.65 | 252.95 | 0.10 | 0.20 |
| 4) Events List/Interesting Events List | -0.09 | 250.98 | 0.93 | 0.01 |
| 5) Events List/Hassles List | -1.06 | 247.49 | 0.29 | 0.13 |
| 6) Interesting Events List/Hassles List | -0.97 | 248.97 | 0.33 | 0.12 |

## Self-Reported Indebtedness

**Table 14**

*Results comparing Self-Reported Indebtedness between Control Conditions and Gratitude Interventions*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Control Condition | Gratitude Intervention | t | df | P | Hedges’ g |
|  | 1) Gratitude List | 0.33 | 269.48 | 0.74 | -0.04 |
|  | 2) Gratitude Letter | -4.85 | 252.68 | 0.00 | 0.60 |
| 1) Measurement Only | 3) Gratitude Text | -1.92 | 250.39 | 0.06 | 0.24 |
|  | 4) Naikan Gratitude List | -1.75 | 261.77 | 0.08 | 0.21 |
|  | 5) Mental Subtraction Task | -0.99 | 262.77 | 0.32 | 0.12 |
|  | 1) Gratitude List | 1.50 | 256.54 | 0.14 | -0.19 |
|  | 2) Gratitude Letter | -3.50 | 249.31 | 0.00 | 0.44 |
| 2) Events List | 3) Gratitude Text | -0.63 | 240.78 | 0.53 | 0.08 |
|  | 4) Naikan Gratitude List | -0.51 | 253.98 | 0.61 | 0.06 |
|  | 5) Mental Subtraction Task | 0.23 | 252.60 | 0.82 | -0.03 |
|  | 1) Gratitude List | 0.87 | 254.35 | 0.38 | -0.11 |
|  | 2) Gratitude Letter | -3.94 | 250.99 | 0.00 | 0.49 |
| 3) Interesting Events List | 3) Gratitude Text | -1.18 | 240.05 | 0.24 | 0.15 |
|  | 4) Naikan Gratitude List | -1.06 | 253.79 | 0.29 | 0.13 |
|  | 5) Mental Subtraction Task | -0.34 | 251.50 | 0.73 | 0.04 |
|  | 1) Gratitude List | 0.63 | 254.04 | 0.53 | -0.08 |
|  | 2) Gratitude Letter | -4.17 | 250.96 | 0.00 | 0.52 |
| 2) Hassles List | 3) Gratitude Text | -1.43 | 239.85 | 0.16 | 0.18 |
|  | 4) Naikan Gratitude List | -1.29 | 253.63 | 0.20 | 0.16 |
|  | 5) Mental Subtraction Task | -0.58 | 251.27 | 0.56 | 0.07 |

**Table 15**

*Results comparing Self-Reported Indebtedness between Gratitude Interventions*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Gratitude Intervention | t | df | p | Hedges’ g |
| 1) Gratitude List/Gratitude Letter | -5.03 | 253.86 | 0.00 | 0.62 |
| 2) Gratitude List/Gratitude Text | -2.19 | 248.50 | 0.03 | 0.27 |
| 3) Gratitude List/Naikan Gratitude List | -2.02 | 260.85 | 0.04 | 0.25 |
| 4) Gratitude List/Mental Subtraction Task | -1.28 | 260.67 | 0.20 | 0.16 |
| 5) Gratitude Letter/Gratitude Text | 3.01 | 239.36 | 0.00 | -0.38 |
| 6) Gratitude Letter/Naikan Gratitude List | 2.99 | 253.05 | 0.00 | -0.37 |
| 7) Gratitude Letter/Mental Subtraction Task | 3.78 | 250.88 | 0.00 | -0.47 |
| 8) Gratitude Text/Naikan Gratitude List | 0.09 | 244.88 | 0.93 | -0.01 |
| 9) Gratitude Text/Mental Subtraction Task | 0.88 | 243.98 | 0.38 | -0.11 |
| 10) Naikan Gratitude List/Mental Subtraction Task | 0.75 | 256.76 | 0.45 | -0.09 |

**Table 16**

*Results comparing Self-Reported Indebtedness between Control Conditions*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Control Condition | t | df | p | Hedges’ g |
| 1) Measurement Only/Events List | -1.22 | 257.19 | 0.23 | 0.15 |
| 2) Measurement Only/Interesting Events List | -0.59 | 252.90 | 0.56 | 0.07 |
| 3) Measurement Only/Hassles List | -0.33 | 252.45 | 0.74 | 0.04 |
| 4) Events List/Interesting Events List | 0.56 | 250.09 | 0.58 | -0.07 |
| 5) Events List/Hassles List | 0.80 | 249.95 | 0.43 | -0.10 |
| 6) Interesting Events List/Hassles List | 0.23 | 251.99 | 0.82 | -0.03 |

## Self-Reported Guilt

**Table 17**

*Results comparing Self-Reported Guilt between Control Conditions and Gratitude Interventions*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Control Condition | Gratitude Intervention | t | df | P | Hedges’ g |
|  | 1) Gratitude List | 1.21 | 267.42 | 0.23 | -0.15 |
|  | 2) Gratitude Letter | -0.14 | 257.10 | 0.88 | 0.02 |
| 1) Measurement Only | 3) Gratitude Text | 0.89 | 253.86 | 0.38 | -0.11 |
|  | 4) Naikan Gratitude List | -0.23 | 260.16 | 0.82 | 0.03 |
|  | 5) Mental Subtraction Task | 0.60 | 265.77 | 0.55 | -0.07 |
|  | 1) Gratitude List | 1.70 | 236.90 | 0.09 | -0.21 |
|  | 2) Gratitude Letter | 0.39 | 249.66 | 0.69 | -0.05 |
| 2) Events List | 3) Gratitude Text | 1.39 | 234.79 | 0.17 | -0.18 |
|  | 4) Naikan Gratitude List | 0.31 | 253.83 | 0.76 | -0.04 |
|  | 5) Mental Subtraction Task | 1.13 | 241.83 | 0.26 | -0.14 |
|  | 1) Gratitude List | 1.61 | 248.41 | 0.11 | -0.20 |
|  | 2) Gratitude Letter | 0.25 | 250.11 | 0.81 | -0.03 |
| 3) Interesting Events List | 3) Gratitude Text | 1.28 | 240.88 | 0.20 | -0.16 |
|  | 4) Naikan Gratitude List | 0.16 | 253.73 | 0.87 | -0.02 |
|  | 5) Mental Subtraction Task | 1.01 | 250.35 | 0.31 | -0.13 |
|  | 1) Gratitude List | 1.47 | 256.02 | 0.14 | -0.18 |
|  | 2) Gratitude Letter | 0.04 | 244.82 | 0.97 | -0.01 |
| 2) Hassles List | 3) Gratitude Text | 1.12 | 241.76 | 0.26 | -0.14 |
|  | 4) Naikan Gratitude List | -0.04 | 247.91 | 0.97 | 0.01 |
|  | 5) Mental Subtraction Task | 0.83 | 253.89 | 0.41 | -0.10 |

**Table 18**

*Results comparing Self-Reported Guilt between Gratitude Interventions*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Gratitude Intervention | t | df | p | Hedges’ g |
| 1) Gratitude List/Gratitude Letter | -1.29 | 241.20 | 0.20 | 0.16 |
| 2) Gratitude List/Gratitude Text | -0.31 | 244.23 | 0.76 | 0.04 |
| 3) Gratitude List/Naikan Gratitude List | -1.36 | 243.79 | 0.18 | 0.17 |
| 4) Gratitude List/Mental Subtraction Task | -0.61 | 259.04 | 0.54 | 0.08 |
| 5) Gratitude Letter/Gratitude Text | 0.99 | 237.17 | 0.33 | -0.13 |
| 6) Gratitude Letter/Naikan Gratitude List | -0.08 | 253.97 | 0.94 | 0.01 |
| 7) Gratitude Letter/Mental Subtraction Task | 0.72 | 245.11 | 0.47 | -0.09 |
| 8) Gratitude Text/Naikan Gratitude List | -1.06 | 240.46 | 0.29 | 0.13 |
| 9) Gratitude Text/Mental Subtraction Task | -0.29 | 243.33 | 0.77 | 0.04 |
| 10) Naikan Gratitude List/Mental Subtraction Task | 0.79 | 248.08 | 0.43 | -0.10 |

**Table 19**

*Results comparing Self-Reported Guilt between Control Conditions*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Control Condition | t | df | p | Hedges’ g |
| 1) Measurement Only/Events List | -0.55 | 254.04 | 0.58 | 0.07 |
| 2) Measurement Only/Interesting Events List | -0.41 | 261.79 | 0.68 | 0.05 |
| 3) Measurement Only/Hassles List | -0.20 | 263.98 | 0.84 | 0.02 |
| 4) Events List/Interesting Events List | 0.16 | 248.69 | 0.87 | -0.02 |
| 5) Events List/Hassles List | 0.38 | 241.85 | 0.70 | -0.05 |
| 6) Interesting Events List/Hassles List | 0.22 | 249.51 | 0.83 | -0.03 |

## Satisfaction with Life

**Table 20**

*Results comparing Self-Reported Satisfaction with Life between Control Conditions and Gratitude Interventions*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Control Condition | Gratitude Intervention | t | df | P | Hedges’ g |
|  | 1) Gratitude List | -0.30 | 270.80 | 0.77 | 0.04 |
|  | 2) Gratitude Letter | -0.69 | 260.46 | 0.49 | 0.08 |
| 1) Measurement Only | 3) Gratitude Text | -0.18 | 246.84 | 0.86 | 0.02 |
|  | 4) Naikan Gratitude List | 0.20 | 263.92 | 0.84 | -0.02 |
|  | 5) Mental Subtraction Task | -1.61 | 263.35 | 0.11 | 0.20 |
|  | 1) Gratitude List | -0.85 | 257.79 | 0.39 | 0.11 |
|  | 2) Gratitude Letter | -1.24 | 247.55 | 0.22 | 0.16 |
| 2) Events List | 3) Gratitude Text | -0.71 | 234.20 | 0.48 | 0.09 |
|  | 4) Naikan Gratitude List | -0.32 | 251.04 | 0.75 | 0.04 |
|  | 5) Mental Subtraction Task | -2.18 | 250.45 | 0.03 | 0.27 |
|  | 1) Gratitude List | -1.82 | 257.02 | 0.07 | 0.22 |
|  | 2) Gratitude Letter | -2.17 | 250.93 | 0.03 | 0.27 |
| 3) Interesting Events List | 3) Gratitude Text | -1.65 | 241.27 | 0.10 | 0.21 |
|  | 4) Naikan Gratitude List | -1.29 | 254.99 | 0.20 | 0.16 |
|  | 5) Mental Subtraction Task | -3.05 | 253.95 | 0.00 | 0.38 |
|  | 1) Gratitude List | -2.31 | 256.52 | 0.02 | 0.29 |
|  | 2) Gratitude Letter | -2.65 | 250.82 | 0.01 | 0.33 |
| 2) Hassles List | 3) Gratitude Text | -2.13 | 241.53 | 0.03 | 0.27 |
|  | 4) Naikan Gratitude List | -1.77 | 254.92 | 0.08 | 0.22 |
|  | 5) Mental Subtraction Task | -3.52 | 253.84 | 0.00 | 0.44 |

**Table 21**

*Results comparing Self-Reported Satisfaction of Life between Gratitude Interventions*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Gratitude Intervention | t | df | p | Hedges’ g |
| 1) Gratitude List/Gratitude Letter | -0.39 | 256.69 | 0.69 | 0.05 |
| 2) Gratitude List/Gratitude Text | 0.10 | 244.02 | 0.92 | -0.01 |
| 3) Gratitude List/Naikan Gratitude List | 0.49 | 260.30 | 0.63 | -0.06 |
| 4) Gratitude List/Mental Subtraction Task | -1.32 | 259.61 | 0.19 | 0.16 |
| 5) Gratitude Letter/Gratitude Text | 0.48 | 239.78 | 0.63 | -0.06 |
| 6) Gratitude Letter/Naikan Gratitude List | 0.86 | 253.98 | 0.39 | -0.11 |
| 7) Gratitude Letter/Mental Subtraction Task | -0.91 | 253.00 | 0.36 | 0.11 |
| 8) Gratitude Text/Naikan Gratitude List | 0.37 | 244.06 | 0.71 | -0.05 |
| 9) Gratitude Text/Mental Subtraction Task | -1.37 | 242.82 | 0.17 | 0.17 |
| 10) Naikan Gratitude List/Mental Subtraction Task | -1.75 | 256.98 | 0.08 | 0.22 |

**Table 22**

*Results comparing Self-Reported Satisfaction of Life between Control Conditions*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Control Condition | t | df | p | Hedges’ g |
| 1) Measurement Only/Events List | 0.55 | 263.00 | 0.58 | -0.07 |
| 2) Measurement Only/Interesting Events List | 1.54 | 260.55 | 0.12 | -0.19 |
| 3) Measurement Only/Hassles List | 2.04 | 259.89 | 0.04 | -0.25 |
| 4) Events List/Interesting Events List | 1.04 | 247.69 | 0.30 | -0.13 |
| 5) Events List/Hassles List | 1.55 | 247.07 | 0.12 | -0.19 |
| 6) Interesting Events List/Hassles List | 0.49 | 251.97 | 0.63 | -0.06 |

## Social Connection

**Table 23**

*Results comparing Self-Reported Social Connection between Control Conditions and Gratitude Interventions*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Control Condition | Gratitude Intervention | t | df | P | Hedges’ g |
|  | 1) Gratitude List | -1.72 | 269.71 | 0.09 | 0.21 |
|  | 2) Gratitude Letter | -2.37 | 263.00 | 0.02 | 0.29 |
| 1) Measurement Only | 3) Gratitude Text | -1.51 | 253.98 | 0.13 | 0.19 |
|  | 4) Naikan Gratitude List | -1.17 | 263.44 | 0.24 | 0.14 |
|  | 5) Mental Subtraction Task | -2.21 | 265.99 | 0.03 | 0.27 |
|  | 1) Gratitude List | -1.19 | 251.44 | 0.24 | 0.15 |
|  | 2) Gratitude Letter | -1.83 | 247.91 | 0.07 | 0.23 |
| 2) Events List | 3) Gratitude Text | -0.98 | 239.37 | 0.33 | 0.13 |
|  | 4) Naikan Gratitude List | -0.69 | 253.86 | 0.49 | 0.09 |
|  | 5) Mental Subtraction Task | -1.68 | 251.06 | 0.09 | 0.21 |
|  | 1) Gratitude List | -2.33 | 254.11 | 0.02 | 0.29 |
|  | 2) Gratitude Letter | -2.96 | 249.82 | 0.00 | 0.37 |
| 3) Interesting Events List | 3) Gratitude Text | -2.13 | 241.14 | 0.03 | 0.27 |
|  | 4) Naikan Gratitude List | -1.74 | 254.45 | 0.08 | 0.22 |
|  | 5) Mental Subtraction Task | -2.81 | 252.93 | 0.01 | 0.35 |
|  | 1) Gratitude List | -3.50 | 230.70 | 0.00 | 0.44 |
|  | 2) Gratitude Letter | -4.04 | 232.32 | 0.00 | 0.51 |
| 2) Hassles List | 3) Gratitude Text | -3.32 | 225.30 | 0.00 | 0.42 |
|  | 4) Naikan Gratitude List | -2.92 | 247.44 | 0.00 | 0.36 |
|  | 5) Mental Subtraction Task | -3.90 | 235.42 | 0.00 | 0.49 |

**Table 24**

*Results comparing Self-Reported Social Connection between Gratitude Interventions*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Gratitude Intervention | t | df | p | Hedges’ g |
| 1) Gratitude List/Gratitude Letter | -0.71 | 256.73 | 0.48 | 0.09 |
| 2) Gratitude List/Gratitude Text | 0.21 | 247.44 | 0.83 | -0.03 |
| 3) Gratitude List/Naikan Gratitude List | 0.43 | 253.40 | 0.67 | -0.05 |
| 4) Gratitude List/Mental Subtraction Task | -0.56 | 259.58 | 0.58 | 0.07 |
| 5) Gratitude Letter/Gratitude Text | 0.91 | 240.98 | 0.36 | -0.12 |
| 6) Gratitude Letter/Naikan Gratitude List | 1.07 | 250.69 | 0.29 | -0.13 |
| 7) Gratitude Letter/Mental Subtraction Task | 0.14 | 253.00 | 0.89 | -0.02 |
| 8) Gratitude Text/Naikan Gratitude List | 0.24 | 242.30 | 0.81 | -0.03 |
| 9) Gratitude Text/Mental Subtraction Task | -0.76 | 243.99 | 0.45 | 0.10 |
| 10) Naikan Gratitude List/Mental Subtraction Task | -0.71 | 256.73 | 0.48 | 0.09 |

**Table 25**

*Results comparing Self-Reported Social Connection between Control Conditions*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Control Condition | t | df | p | Hedges’ g |
| 1) Measurement Only/Events List | -0.47 | 260.75 | 0.64 | 0.06 |
| 2) Measurement Only/Interesting Events List | 0.61 | 262.72 | 0.54 | -0.07 |
| 3) Measurement Only/Hassles List | 1.96 | 243.77 | 0.05 | -0.24 |
| 4) Events List/Interesting Events List | 1.07 | 250.87 | 0.29 | -0.13 |
| 5) Events List/Hassles List | 2.34 | 241.61 | 0.02 | -0.29 |
| 6) Interesting Events List/Hassles List | 1.41 | 240.44 | 0.16 | -0.18 |

## Attitude towards Life

**Table 26**

*Results comparing Self-Reported Attitude towards Life between Control Conditions and Gratitude Interventions*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Control Condition | Gratitude Intervention | t | df | p | Hedges’ g |
|  | 1) Gratitude List | -0.68 | 269.06 | 0.50 | 0.08 |
|  | 2) Gratitude Letter | -0.15 | 262.47 | 0.88 | 0.02 |
| 1) Measurement Only | 3) Gratitude Text | -1.16 | 250.00 | 0.25 | 0.14 |
|  | 4) Naikan Gratitude List | 0.17 | 266.49 | 0.86 | -0.02 |
|  | 5) Mental Subtraction Task | -0.69 | 265.57 | 0.49 | 0.08 |
|  | 1) Gratitude List | -0.49 | 257.00 | 0.63 | 0.06 |
|  | 2) Gratitude Letter | 0.08 | 249.97 | 0.94 | -0.01 |
| 2) Events List | 3) Gratitude Text | -0.99 | 233.33 | 0.32 | 0.13 |
|  | 4) Naikan Gratitude List | 0.40 | 251.52 | 0.69 | -0.05 |
|  | 5) Mental Subtraction Task | -0.50 | 250.71 | 0.62 | 0.06 |
|  | 1) Gratitude List | -1.39 | 257.72 | 0.17 | 0.17 |
|  | 2) Gratitude Letter | -0.85 | 250.91 | 0.40 | 0.11 |
| 3) Interesting Events List | 3) Gratitude Text | -1.84 | 236.53 | 0.07 | 0.24 |
|  | 4) Naikan Gratitude List | -0.47 | 253.76 | 0.64 | 0.06 |
|  | 5) Mental Subtraction Task | -1.37 | 252.90 | 0.17 | 0.17 |
|  | 1) Gratitude List | -2.68 | 250.05 | 0.01 | 0.33 |
|  | 2) Gratitude Letter | -2.18 | 244.46 | 0.03 | 0.27 |
| 2) Hassles List | 3) Gratitude Text | -3.03 | 241.99 | 0.00 | 0.39 |
|  | 4) Naikan Gratitude List | -1.78 | 253.52 | 0.08 | 0.22 |
|  | 5) Mental Subtraction Task | -2.61 | 252.38 | 0.01 | 0.33 |

**Table 27**

*Results comparing Self-Reported Attitude towards Life between Gratitude Interventions*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Gratitude Intervention | t | df | p | Hedges’ g |
| 1) Gratitude List/Gratitude Letter | 0.56 | 256.95 | 0.58 | -0.07 |
| 2) Gratitude List/Gratitude Text | -0.53 | 239.77 | 0.59 | 0.07 |
| 3) Gratitude List/Naikan Gratitude List | 0.86 | 258.27 | 0.39 | -0.11 |
| 4) Gratitude List/Mental Subtraction Task | -0.04 | 257.47 | 0.97 | 0.00 |
| 5) Gratitude Letter/Gratitude Text | -1.06 | 234.19 | 0.29 | 0.14 |
| 6) Gratitude Letter/Naikan Gratitude List | 0.33 | 252.03 | 0.74 | -0.04 |
| 7) Gratitude Letter/Mental Subtraction Task | -0.57 | 251.20 | 0.57 | 0.07 |
| 8) Gratitude Text/Naikan Gratitude List | 1.32 | 243.35 | 0.19 | -0.17 |
| 9) Gratitude Text/Mental Subtraction Task | 0.48 | 242.20 | 0.63 | -0.06 |
| 10) Naikan Gratitude List/Mental Subtraction Task | -0.86 | 257.00 | 0.39 | 0.11 |

**Table 28**

*Results comparing Self-Reported Attitude towards Life between Control Conditions*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Control Condition | t | df | p | Hedges’ g |
| 1) Measurement Only/Events List | -0.22 | 262.19 | 0.82 | 0.03 |
| 2) Measurement Only/Interesting Events List | 0.66 | 263.82 | 0.51 | -0.08 |
| 3) Measurement Only/Hassles List | 1.95 | 260.24 | 0.05 | -0.24 |
| 4) Events List/Interesting Events List | 0.93 | 250.78 | 0.36 | -0.12 |
| 5) Events List/Hassles List | 2.26 | 243.60 | 0.02 | -0.28 |
| 6) Interesting Events List/Hassles List | 1.38 | 246.78 | 0.17 | -0.17 |

## Perceived Self-Size

**Table 29**

*Results comparing Self-Reported Perceived Self-Size between Control Conditions and Gratitude Interventions*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Control Condition | Gratitude Intervention | t | df | P | Hedges’ g |
|  | 1) Gratitude List | -1.80 | 269.16 | 0.07 | 0.22 |
|  | 2) Gratitude Letter | -0.25 | 258.64 | 0.81 | 0.03 |
| 1) Measurement Only | 3) Gratitude Text | -1.12 | 252.81 | 0.26 | 0.14 |
|  | 4) Naikan Gratitude List | -0.91 | 266.58 | 0.36 | 0.11 |
|  | 5) Mental Subtraction Task | -1.38 | 259.62 | 0.17 | 0.17 |
|  | 1) Gratitude List | -0.82 | 247.82 | 0.41 | 0.10 |
|  | 2) Gratitude Letter | 0.60 | 249.98 | 0.55 | -0.07 |
| 2) Events List | 3) Gratitude Text | -0.20 | 240.33 | 0.84 | 0.03 |
|  | 4) Naikan Gratitude List | -0.01 | 252.31 | 0.99 | 0.00 |
|  | 5) Mental Subtraction Task | -0.51 | 252.68 | 0.61 | 0.06 |
|  | 1) Gratitude List | -2.24 | 255.02 | 0.03 | 0.28 |
|  | 2) Gratitude Letter | -0.65 | 249.10 | 0.52 | 0.08 |
| 3) Interesting Events List | 3) Gratitude Text | -1.54 | 241.83 | 0.12 | 0.20 |
|  | 4) Naikan Gratitude List | -1.33 | 255.00 | 0.19 | 0.16 |
|  | 5) Mental Subtraction Task | -1.77 | 250.72 | 0.08 | 0.22 |
|  | 1) Gratitude List | -2.36 | 240.85 | 0.02 | 0.29 |
|  | 2) Gratitude Letter | -0.89 | 249.88 | 0.37 | 0.11 |
| 2) Hassles List | 3) Gratitude Text | -1.72 | 238.18 | 0.09 | 0.22 |
|  | 4) Naikan Gratitude List | -1.52 | 248.93 | 0.13 | 0.19 |
|  | 5) Mental Subtraction Task | -1.93 | 253.60 | 0.05 | 0.24 |

**Table 30**

*Results comparing Self-Reported Perceived Self-Size between Gratitude Interventions*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Gratitude Intervention | t | df | p | Hedges’ g |
| 1) Gratitude List/Gratitude Letter | 1.46 | 247.02 | 0.14 | -0.18 |
| 2) Gratitude List/Gratitude Text | 0.64 | 243.41 | 0.52 | -0.08 |
| 3) Gratitude List/Naikan Gratitude List | 0.84 | 258.15 | 0.40 | -0.10 |
| 4) Gratitude List/Mental Subtraction Task | 0.24 | 247.15 | 0.81 | -0.03 |
| 5) Gratitude Letter/Gratitude Text | -0.83 | 240.11 | 0.41 | 0.11 |
| 6) Gratitude Letter/Naikan Gratitude List | -0.63 | 251.95 | 0.53 | 0.08 |
| 7) Gratitude Letter/Mental Subtraction Task | -1.09 | 252.81 | 0.27 | 0.14 |
| 8) Gratitude Text/Naikan Gratitude List | 0.20 | 244.79 | 0.84 | -0.03 |
| 9) Gratitude Text/Mental Subtraction Task | -0.34 | 242.13 | 0.74 | 0.04 |
| 10) Naikan Gratitude List/Mental Subtraction Task | -0.52 | 253.52 | 0.60 | 0.06 |

**Table 31**

*Results comparing Self-Reported Perceived Self-Size between Control Conditions*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Control Condition | t | df | p | Hedges’ g |
| 1) Measurement Only/Events List | -0.87 | 259.18 | 0.39 | 0.11 |
| 2) Measurement Only/Interesting Events List | 0.42 | 263.53 | 0.68 | -0.05 |
| 3) Measurement Only/Hassles List | 0.69 | 254.25 | 0.49 | -0.08 |
| 4) Events List/Interesting Events List | 1.27 | 249.45 | 0.21 | -0.16 |
| 5) Events List/Hassles List | 1.47 | 249.59 | 0.14 | -0.18 |
| 6) Interesting Events List/Hassles List | 0.30 | 246.22 | 0.76 | -0.04 |

# **Study 2 Pairwise Analysis**

**Table 32**

*Descriptive Scales for State Emotion Items and State Measures*

|  |  |  |  |
| --- | --- | --- | --- |
| State Emotion/Measures | M | SD | McDonalds’ ω |
| Optimism | 4.60 | 1.61 | 0.87 |
| Indebtedness | 3.07 | 1.58 | 0.53 |
| Guilt | 1.87 | 1.41 | NA |
| Envy | 1.74 | 1.08 | 0.81 |
| Social Connection | 4.03 | 0.97 | 0.92 |
| Attitude Towards Life | 5.93 | 1.90 | NA |
| Perceived Self-Size | 3.77 | 1.37 | 0.84 |

## Self-Reported Gratitude

**Table 33**

*Results comparing Self-Reported Gratitude between Control Conditions and Gratitude Interventions*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Control Condition | Gratitude Intervention | t | df | p | Hedges’ g |
|  | 1) Gratitude List | -5.95 | 280.78 | 0.00 | 0.68 |
|  | 2) Gratitude Letter | -8.88 | 282.82 | 0.00 | 1.02 |
|  | 3) Gratitude Text | -9.11 | 273.34 | 0.00 | 1.05 |
| 1) No Treatment Control | 4) Naikan Gratitude List | -6.10 | 284.12 | 0.00 | 0.70 |
|  | 5) Mental Subtraction Task | -5.98 | 285.64 | 0.00 | 0.70 |
|  | 6) Gratitude to God List | -5.98 | 285.64 | 0.00 | 0.29 |
|  | 7) Gratitude to God Letter | -3.26 | 281.65 | 0.00 | 0.38 |
|  | 1) Gratitude List | -4.71 | 253.97 | 0.00 | 0.56 |
|  | 2) Gratitude Letter | -7.54 | 258.91 | 0.00 | 0.89 |
|  | 3) Gratitude Text | -7.72 | 248.91 | 0.00 | 0.92 |
| 2) Events List | 4) Naikan Gratitude List | -4.89 | 260.65 | 0.00 | 0.58 |
|  | 5) Mental Subtraction Task | -4.82 | 267.25 | 0.00 | 0.58 |
|  | 6) Gratitude to God List | -1.62 | 283.94 | 0.11 | 0.19 |
|  | 7) Gratitude to God Letter | -2.35 | 278.04 | 0.02 | 0.28 |
|  | 1) Gratitude List | -4.37 | 259.73 | 0.00 | 0.52 |
|  | 2) Gratitude Letter | -7.27 | 263.82 | 0.00 | 0.86 |
|  | 3) Gratitude Text | -7.46 | 253.90 | 0.00 | 0.89 |
| 3) Interesting Events List | 4) Naikan Gratitude List | -4.56 | 265.43 | 0.00 | 0.54 |
|  | 5) Mental Subtraction Task | -4.50 | 270.46 | 0.00 | 0.54 |
|  | 6) Gratitude to God List | -1.24 | 284.86 | 0.21 | 0.15 |
|  | 7) Gratitude to God Letter | -2.01 | 276.37 | 0.05 | 0.24 |
|  | 1) Gratitude List | -8.88 | 251.27 | 0.00 | 1.03 |
|  | 2) Gratitude Letter | -11.51 | 257.06 | 0.00 | 1.35 |
|  | 3) Gratitude Text | -11.75 | 247.12 | 0.00 | 1.38 |
| 2) Hassles List | 4) Naikan Gratitude List | -8.96 | 258.91 | 0.00 | 1.05 |
|  | 5) Mental Subtraction Task | -8.78 | 267.21 | 0.00 | 1.03 |
|  | 6) Gratitude to God List | -5.46 | 286.51 | 0.00 | 0.64 |
|  | 7) Gratitude to God Letter | -6.00 | 283.98 | 0.00 | 0.71 |

**Table 34**

*Results comparing Self-Reported Gratitude between Gratitude Interventions*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Gratitude Intervention | t | df | p | Hedges’ g |
| 1) Gratitude List/Gratitude Letter | -3.57 | 290.71 | 0.00 | 0.41 |
| 2) Gratitude List/Gratitude Text | -3.71 | 286.24 | 0.00 | 0.43 |
| 3) Gratitude List/Naikan Gratitude List | -0.35 | 289.97 | 0.72 | 0.04 |
| 4) Gratitude List/Mental Subtraction Task | -0.46 | 274.70 | 0.65 | 0.05 |
| 5) Gratitude List/Gratitude to God List | 2.96 | 267.71 | 0.00 | 0.00 |
| 6) Gratitude List/Gratitude to God Letter | 1.84 | 244.17 | 0.07 | -0.22 |
| 7) Gratitude Letter/Gratitude Text | -0.03 | 277.62 | 0.97 | 0.00 |
| 8) Gratitude Letter/Naikan Gratitude List | 3.10 | 283.95 | 0.00 | -0.37 |
| 9) Gratitude Letter/Mental Subtraction Task | 2.84 | 273.82 | 0.00 | -0.34 |
| 10) Gratitude Letter/Gratitude to God List | 5.90 | 271.28 | 0.00 | -0.69 |
| 11) Gratitude Letter/Gratitude to God Letter | 4.62 | 250.04 | 0.00 | -0.55 |
| 12) Gratitude Text/Naikan Gratitude List | 3.22 | 277.29 | 0.00 | -0.38 |
| 13) Gratitude Text/Mental Subtraction Task | 2.94 | 265.24 | 0.00 | -0.35 |
| 14) Gratitude Text/Gratitude to God List | 6.06 | 261.45 | 0.00 | -0.71 |
| 15) Gratitude Text/Gratitude to God Letter | 4.73 | 240.12 | 0.00 | -0.56 |
| 16) Naikan Gratitude List/Mental Subtraction Task | -0.12 | 274.67 | 0.91 | 0.01 |
| 17) Naikan Gratitude List/Gratitude to God List | 3.18 | 272.82 | 0.00 | -0.37 |
| 18) Naikan Gratitude List/Gratitude to God Letter | 2.07 | 251.90 | 0.04 | -0.25 |
| 19) Mental Subtraction Task/Gratitude to God List | 3.18 | 276.93 | 0.00 | -0.37 |
| 20) Mental Subtraction Task/Gratitude to God Letter | 2.11 | 260.38 | 0.04 | -0.25 |
| 21) Gratitude to God List/Gratitude to God Letter | -0.83 | 279.99 | 0.41 | 0.10 |

**Table 35**

*Results comparing Self-Reported Gratitude between Control Conditions*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Control Condition | t | df | p | Hedges’ g |
| 1) No Treatment Control/Events List | -0.85 | 287.27 | 0.40 | 0.10 |
| 2) No Treatment Control/Interesting Events List | -1.28 | 289.37 | 0.20 | 0.15 |
| 3) No Treatment Control/Hassles List | 3.14 | 288.37 | 0.00 | -0.36 |
| 4) Events List /Interesting Events List | -0.40 | 279.57 | 0.69 | 0.05 |
| 5) Events List /Hassles List | 3.82 | 284.30 | 0.00 | -0.45 |
| 6) Interesting Events List/Hassles List | 4.27 | 282.80 | 0.00 | -0.50 |

## Self-Reported Positive Affect

**Table 36**

*Results comparing Self-Reported Positive Affect between Control Conditions and Gratitude Interventions*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Control Condition | Gratitude Intervention | t | df | P | Hedges’ g |
|  | 1) Gratitude List | -3.22 | 301.48 | 0.00 | 0.37 |
|  | 2) Gratitude Letter | -4.18 | 292.51 | 0.00 | 0.49 |
|  | 3) Gratitude Text | -5.28 | 286.69 | 0.00 | 0.62 |
| 1) No Treatment Control | 4) Naikan Gratitude List | -4.74 | 292.13 | 0.00 | 0.55 |
|  | 5) Mental Subtraction Task | -3.09 | 282.86 | 0.00 | 0.36 |
|  | 6) Gratitude to God List | -3.09 | 282.86 | 0.00 | 0.33 |
|  | 7) Gratitude to God Letter | -2.80 | 281.58 | 0.01 | 0.33 |
|  | 1) Gratitude List | -2.94 | 281.68 | 0.00 | 0.34 |
|  | 2) Gratitude Letter | -3.86 | 279.20 | 0.00 | 0.46 |
|  | 3) Gratitude Text | -4.89 | 272.82 | 0.00 | 0.58 |
| 2) Events List | 4) Naikan Gratitude List | -4.37 | 271.80 | 0.00 | 0.52 |
|  | 5) Mental Subtraction Task | -2.84 | 275.89 | 0.00 | 0.34 |
|  | 6) Gratitude to God List | -2.59 | 283.73 | 0.01 | 0.31 |
|  | 7) Gratitude to God Letter | -2.57 | 278.71 | 0.01 | 0.31 |
|  | 1) Gratitude List | -1.46 | 286.09 | 0.14 | 0.17 |
|  | 2) Gratitude Letter | -2.44 | 281.33 | 0.02 | 0.29 |
|  | 3) Gratitude Text | -3.48 | 275.11 | 0.00 | 0.42 |
| 3) Interesting Events List | 4) Naikan Gratitude List | -2.90 | 276.32 | 0.00 | 0.34 |
|  | 5) Mental Subtraction Task | -1.43 | 275.73 | 0.15 | 0.17 |
|  | 6) Gratitude to God List | -1.16 | 284.93 | 0.25 | 0.14 |
|  | 7) Gratitude to God Letter | -1.20 | 277.06 | 0.23 | 0.14 |
|  | 1) Gratitude List | -5.95 | 285.39 | 0.00 | 0.69 |
|  | 2) Gratitude Letter | -6.79 | 283.48 | 0.00 | 0.80 |
|  | 3) Gratitude Text | -7.84 | 277.06 | 0.00 | 0.93 |
| 2) Hassles List | 4) Naikan Gratitude List | -7.41 | 275.50 | 0.00 | 0.87 |
|  | 5) Mental Subtraction Task | -5.71 | 280.71 | 0.00 | 0.68 |
|  | 6) Gratitude to God List | -5.49 | 288.23 | 0.00 | 0.64 |
|  | 7) Gratitude to God Letter | -5.36 | 283.88 | 0.00 | 0.63 |

**Table 37**

*Results comparing Self-Reported Positive Affect between Gratitude Interventions*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Gratitude Intervention | t | df | p | Hedges’ g |
| 1) Gratitude List/Gratitude Letter | -1.06 | 291.02 | 0.29 | 0.12 |
| 2) Gratitude List/Gratitude Text | -2.13 | 285.43 | 0.03 | 0.25 |
| 3) Gratitude List/Naikan Gratitude List | -1.49 | 292.95 | 0.14 | 0.17 |
| 4) Gratitude List/Mental Subtraction Task | -0.04 | 279.64 | 0.97 | 0.00 |
| 5) Gratitude List/Gratitude to God List | 0.24 | 292.09 | 0.81 | 0.00 |
| 6) Gratitude List/Gratitude to God Letter | 0.15 | 277.36 | 0.88 | -0.02 |
| 7) Gratitude Letter/Gratitude Text | -1.03 | 277.98 | 0.30 | 0.12 |
| 8) Gratitude Letter/Naikan Gratitude List | -0.36 | 281.45 | 0.72 | 0.04 |
| 9) Gratitude Letter/Mental Subtraction Task | 0.96 | 276.23 | 0.34 | -0.11 |
| 10) Gratitude Letter/Gratitude to God List | 1.25 | 286.68 | 0.21 | -0.15 |
| 11) Gratitude Letter/Gratitude to God Letter | 1.11 | 276.18 | 0.27 | -0.13 |
| 12) Gratitude Text/Naikan Gratitude List | 0.71 | 275.90 | 0.48 | -0.08 |
| 13) Gratitude Text/Mental Subtraction Task | 1.97 | 269.91 | 0.05 | -0.24 |
| 14) Gratitude Text/Gratitude to God List | 2.27 | 280.51 | 0.02 | -0.27 |
| 15) Gratitude Text/Gratitude to God Letter | 2.09 | 269.73 | 0.04 | -0.25 |
| 16) Naikan Gratitude List/Mental Subtraction Task | 1.36 | 269.79 | 0.18 | -0.16 |
| 17)  Naikan Gratitude List/Gratitude to God List | 1.66 | 282.36 | 0.10 | -0.19 |
| 18) Naikan Gratitude List/Gratitude to God Letter | 1.50 | 267.48 | 0.14 | -0.18 |
| 19) Mental Subtraction Task/Gratitude to God List | 0.27 | 280.39 | 0.79 | -0.03 |
| 20) Mental Subtraction Task/Gratitude to God Letter | 0.18 | 274.24 | 0.86 | -0.02 |
| 21) Gratitude to God List/Gratitude to God Letter | -0.08 | 281.24 | 0.93 | 0.01 |

**Table 38**

*Results comparing Self-Reported Positive Affect between Control Conditions*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Control Condition | t | df | p | Hedges’ g |
| 1) No Treatment Control/Events List | -0.10 | 285.33 | 0.92 | 0.01 |
| 2) No Treatment Control/Interesting Events List | -1.64 | 288.68 | 0.10 | 0.19 |
| 3) No Treatment Control/Hassles List | 2.91 | 289.29 | 0.00 | -0.34 |
| 4) Events List /Interesting Events List | -1.46 | 279.26 | 0.15 | 0.17 |
| 5) Events List /Hassles List | 2.87 | 284.96 | 0.00 | -0.34 |
| 6) Interesting Events List/Hassles List | 4.38 | 283.87 | 0.00 | -0.51 |

## Self-Reported Optimism

**Table 39**

*Results comparing Self-Reported Optimism between Control Conditions and Gratitude Interventions*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Control Condition | Gratitude Intervention | t | df | P | Hedges’ g |
|  | 1) Gratitude List | -3.30 | 294.13 | 0.00 | 0.38 |
|  | 2) Gratitude Letter | -3.02 | 293.00 | 0.00 | 0.35 |
|  | 3) Gratitude Text | -3.73 | 286.65 | 0.00 | 0.44 |
| 1) No Treatment Control | 4) Naikan Gratitude List | -4.04 | 289.46 | 0.00 | 0.47 |
|  | 5) Mental Subtraction Task | -2.60 | 286.12 | 0.01 | 0.30 |
|  | 6) Gratitude to God List | -2.60 | 286.12 | 0.01 | 0.21 |
|  | 7) Gratitude to God Letter | -2.73 | 286.20 | 0.01 | 0.32 |
|  | 1) Gratitude List | -3.01 | 280.33 | 0.00 | 0.35 |
|  | 2) Gratitude Letter | -2.74 | 281.67 | 0.01 | 0.32 |
|  | 3) Gratitude Text | -3.46 | 276.00 | 0.00 | 0.41 |
| 2) Events List | 4) Naikan Gratitude List | -3.75 | 276.43 | 0.00 | 0.44 |
|  | 5) Mental Subtraction Task | -2.33 | 275.84 | 0.02 | 0.28 |
|  | 6) Gratitude to God List | -1.53 | 284.83 | 0.13 | 0.18 |
|  | 7) Gratitude to God Letter | -2.47 | 277.05 | 0.01 | 0.29 |
|  | 1) Gratitude List | -2.04 | 282.37 | 0.04 | 0.24 |
|  | 2) Gratitude Letter | -1.83 | 281.95 | 0.07 | 0.22 |
|  | 3) Gratitude Text | -2.56 | 275.83 | 0.01 | 0.31 |
| 3) Interesting Events List | 4) Naikan Gratitude List | -2.80 | 277.89 | 0.01 | 0.33 |
|  | 5) Mental Subtraction Task | -1.42 | 275.44 | 0.16 | 0.17 |
|  | 6) Gratitude to God List | -0.61 | 285.00 | 0.54 | 0.07 |
|  | 7) Gratitude to God Letter | -1.60 | 276.00 | 0.11 | 0.19 |
|  | 1) Gratitude List | -5.99 | 279.42 | 0.00 | 0.70 |
|  | 2) Gratitude Letter | -5.58 | 284.93 | 0.00 | 0.65 |
|  | 3) Gratitude Text | -6.25 | 280.38 | 0.00 | 0.74 |
| 2) Hassles List | 4) Naikan Gratitude List | -6.68 | 276.90 | 0.00 | 0.78 |
|  | 5) Mental Subtraction Task | -5.13 | 280.80 | 0.00 | 0.61 |
|  | 6) Gratitude to God List | -4.39 | 288.35 | 0.00 | 0.51 |
|  | 7) Gratitude to God Letter | -5.18 | 283.69 | 0.00 | 0.61 |

**Table 40**

*Results comparing Self-Reported Optimism between Gratitude Interventions*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Gratitude Intervention | t | df | p | Hedges’ g |
| 1) Gratitude List/Gratitude Letter | 0.10 | 285.58 | 0.92 | -0.01 |
| 2) Gratitude List/Gratitude Text | -0.70 | 276.03 | 0.48 | 0.08 |
| 3) Gratitude List/Naikan Gratitude List | -0.84 | 292.16 | 0.40 | 0.10 |
| 4) Gratitude List/Mental Subtraction Task | 0.49 | 273.84 | 0.62 | -0.06 |
| 5) Gratitude List/Gratitude to God List | 1.37 | 287.65 | 0.17 | 0.00 |
| 6) Gratitude List/Gratitude to God Letter | 0.23 | 269.46 | 0.82 | -0.03 |
| 7) Gratitude Letter/Gratitude Text | -0.75 | 277.59 | 0.45 | 0.09 |
| 8) Gratitude Letter/Naikan Gratitude List | -0.88 | 280.73 | 0.38 | 0.10 |
| 9) Gratitude Letter/Mental Subtraction Task | 0.37 | 277.05 | 0.71 | -0.04 |
| 10) Gratitude Letter/Gratitude to God List | 1.20 | 286.97 | 0.23 | -0.14 |
| 11) Gratitude Letter/Gratitude to God Letter | 0.13 | 277.14 | 0.90 | -0.02 |
| 12) Gratitude Text/Naikan Gratitude List | -0.09 | 272.20 | 0.93 | 0.01 |
| 13) Gratitude Text/Mental Subtraction Task | 1.11 | 271.89 | 0.27 | -0.13 |
| 14) Gratitude Text/Gratitude to God List | 1.94 | 280.77 | 0.05 | -0.23 |
| 15) Gratitude Text/Gratitude to God Letter | 0.84 | 273.26 | 0.40 | -0.10 |
| 16) Naikan Gratitude List/Mental Subtraction Task | 1.26 | 270.54 | 0.21 | -0.15 |
| 17)  Naikan Gratitude List/Gratitude to God List | 2.14 | 283.11 | 0.03 | -0.25 |
| 18) Naikan Gratitude List/Gratitude to God Letter | 0.97 | 267.63 | 0.33 | -0.11 |
| 19) Mental Subtraction Task/Gratitude to God List | 0.81 | 280.33 | 0.42 | -0.10 |
| 20) Mental Subtraction Task/Gratitude to God Letter | -0.23 | 274.03 | 0.82 | 0.03 |
| 21) Gratitude to God List/Gratitude to God Letter | -1.01 | 280.69 | 0.31 | 0.12 |

**Table 41**

*Results comparing Self-Reported Optimism between Control Conditions*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Control Condition | t | df | p | Hedges’ g |
| 1) No Treatment Control/Events List | -0.28 | 290.72 | 0.78 | 0.03 |
| 2) No Treatment Control/Interesting Events List | -1.21 | 290.97 | 0.23 | 0.14 |
| 3) No Treatment Control/Hassles List | 2.62 | 294.01 | 0.01 | -0.30 |
| 4) Events List /Interesting Events List | -0.93 | 279.88 | 0.35 | 0.11 |
| 5) Events List /Hassles List | 2.90 | 284.26 | 0.00 | -0.34 |
| 6) Interesting Events List/Hassles List | 3.83 | 283.55 | 0.00 | -0.45 |

## Self-Reported Negative Affect

**Table 42**

*Results comparing Self-Reported Negative Affect between Control Conditions and Gratitude Interventions*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Control Condition | Gratitude Intervention | t | df | P | Hedges’ g |
|  | 1) Gratitude List | 3.06 | 298.56 | 0.00 | -0.35 |
|  | 2) Gratitude Letter | 3.04 | 292.83 | 0.00 | -0.35 |
|  | 3) Gratitude Text | 3.02 | 285.97 | 0.00 | -0.35 |
| 1) No Treatment Control | 4) Naikan Gratitude List | 2.44 | 291.85 | 0.02 | -0.28 |
|  | 5) Mental Subtraction Task | 2.90 | 286.93 | 0.00 | -0.34 |
|  | 6) Gratitude to God List | 2.90 | 286.93 | 0.00 | -0.26 |
|  | 7) Gratitude to God Letter | 2.38 | 289.49 | 0.02 | -0.28 |
|  | 1) Gratitude List | 2.28 | 274.56 | 0.02 | -0.27 |
|  | 2) Gratitude Letter | 2.28 | 274.74 | 0.02 | -0.27 |
|  | 3) Gratitude Text | 2.29 | 274.26 | 0.02 | -0.27 |
| 2) Events List | 4) Naikan Gratitude List | 1.70 | 271.12 | 0.09 | -0.20 |
|  | 5) Mental Subtraction Task | 2.14 | 269.63 | 0.03 | -0.26 |
|  | 6) Gratitude to God List | 1.55 | 280.53 | 0.12 | -0.18 |
|  | 7) Gratitude to God Letter | 1.68 | 276.37 | 0.09 | -0.20 |
|  | 1) Gratitude List | 1.27 | 284.16 | 0.21 | -0.15 |
|  | 2) Gratitude Letter | 1.29 | 280.56 | 0.20 | -0.15 |
|  | 3) Gratitude Text | 1.32 | 275.96 | 0.19 | -0.16 |
| 3) Interesting Events List | 4) Naikan Gratitude List | 0.66 | 278.61 | 0.51 | -0.08 |
|  | 5) Mental Subtraction Task | 1.14 | 274.91 | 0.26 | -0.14 |
|  | 6) Gratitude to God List | 0.54 | 284.66 | 0.59 | -0.06 |
|  | 7) Gratitude to God Letter | 0.68 | 278.99 | 0.50 | -0.08 |
|  | 1) Gratitude List | 3.39 | 287.23 | 0.00 | -0.39 |
|  | 2) Gratitude Letter | 3.36 | 284.60 | 0.00 | -0.39 |
|  | 3) Gratitude Text | 3.34 | 280.98 | 0.00 | -0.40 |
| 2) Hassles List | 4) Naikan Gratitude List | 2.78 | 282.22 | 0.01 | -0.33 |
|  | 5) Mental Subtraction Task | 3.23 | 279.07 | 0.00 | -0.38 |
|  | 6) Gratitude to God List | 2.58 | 289.13 | 0.01 | -0.30 |
|  | 7) Gratitude to God Letter | 2.71 | 283.80 | 0.01 | -0.32 |

**Table 43**

*Results comparing Self-Reported Negative Affect between Gratitude Interventions*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Gratitude Intervention | t | df | p | Hedges’ g |
| 1) Gratitude List/Gratitude Letter | 0.06 | 290.96 | 0.96 | -0.01 |
| 2) Gratitude List/Gratitude Text | 0.13 | 279.19 | 0.90 | -0.02 |
| 3) Gratitude List/Naikan Gratitude List | -0.63 | 292.41 | 0.53 | 0.07 |
| 4) Gratitude List/Mental Subtraction Task | -0.11 | 284.57 | 0.91 | 0.01 |
| 5) Gratitude List/Gratitude to God List | -0.71 | 291.75 | 0.48 | 0.00 |
| 6) Gratitude List/Gratitude to God Letter | -0.55 | 283.68 | 0.58 | 0.06 |
| 7) Gratitude Letter/Gratitude Text | 0.08 | 276.06 | 0.94 | -0.01 |
| 8) Gratitude Letter/Naikan Gratitude List | -0.67 | 283.57 | 0.50 | 0.08 |
| 9) Gratitude Letter/Mental Subtraction Task | -0.16 | 277.98 | 0.87 | 0.02 |
| 10) Gratitude Letter/Gratitude to God List | -0.74 | 286.60 | 0.46 | 0.09 |
| 11) Gratitude Letter/Gratitude to God Letter | -0.59 | 279.79 | 0.55 | 0.07 |
| 12) Gratitude Text/Naikan Gratitude List | -0.73 | 273.90 | 0.47 | 0.09 |
| 13) Gratitude Text/Mental Subtraction Task | -0.23 | 270.47 | 0.82 | 0.03 |
| 14) Gratitude Text/Gratitude to God List | -0.80 | 280.39 | 0.43 | 0.09 |
| 15) Gratitude Text/Gratitude to God Letter | -0.65 | 274.91 | 0.52 | 0.08 |
| 16) Naikan Gratitude List/Mental Subtraction Task | 0.51 | 277.37 | 0.61 | -0.06 |
| 17) Naikan Gratitude List/Gratitude to God List | -0.10 | 285.35 | 0.92 | 0.01 |
| 18) Naikan Gratitude List/Gratitude to God Letter | 0.05 | 277.96 | 0.96 | -0.01 |
| 19) Mental Subtraction Task/Gratitude to God List | -0.59 | 280.77 | 0.56 | 0.07 |
| 20) Mental Subtraction Task/Gratitude to God Letter | -0.44 | 274.10 | 0.66 | 0.05 |
| 21) Gratitude to God List/Gratitude to God Letter | 0.15 | 283.77 | 0.88 | -0.02 |

**Table 44**

*Results comparing Self-Reported Negative Affect between Control Conditions*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Control Condition | t | df | p | Hedges’ g |
| 1) No Treatment Control/Events List | 0.58 | 285.44 | 0.56 | -0.07 |
| 2) No Treatment Control/Interesting Events List | 1.69 | 290.34 | 0.09 | -0.20 |
| 3) No Treatment Control/Hassles List | -0.39 | 294.63 | 0.70 | 0.05 |
| 4) Events List /Interesting Events List | 1.03 | 277.66 | 0.31 | -0.12 |
| 5) Events List /Hassles List | -0.94 | 283.55 | 0.35 | 0.11 |
| 6) Interesting Events List/Hassles List | -2.04 | 284.88 | 0.04 | 0.24 |

## Self-Reported Indebtedness

**Table 45**

*Results comparing Self-Reported Indebtedness between Control Conditions and Gratitude Interventions*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Control Condition | Gratitude Intervention | t | df | P | Hedges’ g |
|  | 1) Gratitude List | 0.50 | 301.77 | 0.62 | -0.06 |
|  | 2) Gratitude Letter | -2.20 | 292.07 | 0.03 | 0.26 |
|  | 3) Gratitude Text | -2.49 | 274.33 | 0.01 | 0.29 |
| 1) No Treatment Control | 4) Naikan Gratitude List | -1.12 | 292.67 | 0.26 | 0.13 |
|  | 5) Mental Subtraction Task | -0.72 | 281.29 | 0.47 | 0.08 |
|  | 6) Gratitude to God List | -0.72 | 281.29 | 0.47 | -0.16 |
|  | 7) Gratitude to God Letter | -0.54 | 287.30 | 0.59 | 0.06 |
|  | 1) Gratitude List | -0.80 | 287.43 | 0.42 | 0.09 |
|  | 2) Gratitude Letter | -3.40 | 281.78 | 0.00 | 0.40 |
|  | 3) Gratitude Text | -3.61 | 271.30 | 0.00 | 0.43 |
| 2) Events List | 4) Naikan Gratitude List | -2.36 | 281.28 | 0.02 | 0.28 |
|  | 5) Mental Subtraction Task | -1.92 | 275.06 | 0.06 | 0.23 |
|  | 6) Gratitude to God List | 0.07 | 284.13 | 0.94 | -0.01 |
|  | 7) Gratitude to God Letter | -1.76 | 278.95 | 0.08 | 0.21 |
|  | 1) Gratitude List | 0.61 | 288.47 | 0.54 | -0.07 |
|  | 2) Gratitude Letter | -2.05 | 281.97 | 0.04 | 0.24 |
|  | 3) Gratitude Text | -2.35 | 269.99 | 0.02 | 0.28 |
| 3) Interesting Events List | 4) Naikan Gratitude List | -0.99 | 281.70 | 0.32 | 0.12 |
|  | 5) Mental Subtraction Task | -0.60 | 274.40 | 0.55 | 0.07 |
|  | 6) Gratitude to God List | 1.47 | 284.60 | 0.14 | -0.17 |
|  | 7) Gratitude to God Letter | -0.42 | 278.74 | 0.67 | 0.05 |
|  | 1) Gratitude List | -1.39 | 295.26 | 0.17 | 0.16 |
|  | 2) Gratitude Letter | -4.15 | 281.97 | 0.00 | 0.49 |
|  | 3) Gratitude Text | -4.29 | 259.45 | 0.00 | 0.51 |
| 2) Hassles List | 4) Naikan Gratitude List | -3.05 | 283.51 | 0.00 | 0.36 |
|  | 5) Mental Subtraction Task | -2.54 | 268.23 | 0.01 | 0.30 |
|  | 6) Gratitude to God List | -0.44 | 286.78 | 0.66 | 0.05 |
|  | 7) Gratitude to God Letter | -2.39 | 275.70 | 0.02 | 0.28 |

**Table 46**

*Results comparing Self-Reported Indebtedness between Gratitude Interventions*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Gratitude Intervention | t | df | p | Hedges’ g |
| 1) Gratitude List/Gratitude Letter | -2.72 | 290.95 | 0.01 | 0.32 |
| 2) Gratitude List/Gratitude Text | -2.97 | 271.17 | 0.00 | 0.35 |
| 3) Gratitude List/Naikan Gratitude List | -1.63 | 291.91 | 0.10 | 0.19 |
| 4) Gratitude List/Mental Subtraction Task | -1.20 | 278.97 | 0.23 | 0.14 |
| 5) Gratitude List/Gratitude to God List | 0.89 | 295.07 | 0.37 | 0.00 |
| 6) Gratitude List/Gratitude to God Letter | -1.03 | 285.59 | 0.30 | 0.12 |
| 7) Gratitude Letter/Gratitude Text | -0.44 | 271.15 | 0.66 | 0.05 |
| 8) Gratitude Letter/Naikan Gratitude List | 1.09 | 283.85 | 0.28 | -0.13 |
| 9) Gratitude Letter/Mental Subtraction Task | 1.39 | 275.95 | 0.17 | -0.17 |
| 10) Gratitude Letter/Gratitude to God List | 3.54 | 286.78 | 0.00 | -0.42 |
| 11) Gratitude Letter/Gratitude to God Letter | 1.61 | 280.54 | 0.11 | -0.19 |
| 12) Gratitude Text/Naikan Gratitude List | 1.46 | 269.15 | 0.15 | -0.17 |
| 13) Gratitude Text/Mental Subtraction Task | 1.73 | 270.54 | 0.09 | -0.21 |
| 14) Gratitude Text/Gratitude to God List | 3.73 | 271.57 | 0.00 | -0.44 |
| 15) Gratitude Text/Gratitude to God Letter | 1.93 | 271.17 | 0.05 | -0.23 |
| 16) Naikan Gratitude List/Mental Subtraction Task | 0.35 | 274.75 | 0.73 | -0.04 |
| 17)  Naikan Gratitude List/Gratitude to God List | 2.48 | 286.99 | 0.01 | -0.29 |
| 18) Naikan Gratitude List/Gratitude to God Letter | 0.55 | 279.88 | 0.58 | -0.07 |
| 19) Mental Subtraction Task/Gratitude to God List | 2.02 | 277.41 | 0.04 | -0.24 |
| 20) Mental Subtraction Task/Gratitude to God Letter | 0.18 | 274.43 | 0.85 | -0.02 |
| 21) Gratitude to God List/Gratitude to God Letter | -1.87 | 282.68 | 0.06 | 0.22 |

**Table 47**

*Results comparing Self-Reported Indebtedness between Control Conditions*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Control Condition | t | df | p | Hedges’ g |
| 1) No Treatment Control/Events List | 1.27 | 288.96 | 0.20 | -0.15 |
| 2) No Treatment Control/Interesting Events List | -0.11 | 289.73 | 0.91 | 0.01 |
| 3) No Treatment Control/Hassles List | 1.88 | 294.23 | 0.06 | -0.22 |
| 4) Events List /Interesting Events List | -1.37 | 279.91 | 0.17 | 0.16 |
| 5) Events List /Hassles List | 0.50 | 277.81 | 0.61 | -0.06 |
| 6) Interesting Events List/Hassles List | 1.97 | 279.27 | 0.05 | -0.23 |

## Self-Reported Guilt

**Table 48**

*Results comparing Self-Reported Guilt between Control Conditions and Gratitude Interventions*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Control Condition | Gratitude Intervention | t | df | P | Hedges’ g |
|  | 1) Gratitude List | 1.00 | 290.98 | 0.32 | -0.12 |
|  | 2) Gratitude Letter | 0.91 | 285.90 | 0.36 | -0.11 |
|  | 3) Gratitude Text | 0.45 | 292.31 | 0.65 | -0.05 |
| 1) No Treatment Control | 4) Naikan Gratitude List | 0.71 | 286.49 | 0.48 | -0.08 |
|  | 5) Mental Subtraction Task | 0.71 | 286.49 | 0.48 | -0.25 |
|  | 6) Gratitude to God List | 1.97 | 274.00 | 0.05 | -0.23 |
|  | 7) Gratitude to God Letter | 1.00 | 290.98 | 0.32 | -0.12 |
|  | 1) Gratitude List | 1.54 | 270.61 | 0.12 | -0.18 |
|  | 2) Gratitude Letter | 1.41 | 267.30 | 0.16 | -0.17 |
|  | 3) Gratitude Text | 1.30 | 273.66 | 0.19 | -0.16 |
| 2) Events List | 4) Naikan Gratitude List | 0.89 | 271.05 | 0.37 | -0.11 |
|  | 5) Mental Subtraction Task | 1.12 | 272.59 | 0.26 | -0.13 |
|  | 6) Gratitude to God List | 2.52 | 246.56 | 0.01 | -0.30 |
|  | 7) Gratitude to God Letter | 2.32 | 243.32 | 0.02 | -0.28 |
|  | 1) Gratitude List | 0.64 | 286.65 | 0.52 | -0.08 |
|  | 2) Gratitude Letter | 0.50 | 280.08 | 0.61 | -0.06 |
|  | 3) Gratitude Text | 0.43 | 274.92 | 0.66 | -0.05 |
| 3) Interesting Events List | 4) Naikan Gratitude List | -0.05 | 281.36 | 0.96 | 0.01 |
|  | 5) Mental Subtraction Task | 0.23 | 275.49 | 0.82 | -0.03 |
|  | 6) Gratitude to God List | 1.68 | 267.69 | 0.09 | -0.20 |
|  | 7) Gratitude to God Letter | 1.46 | 263.41 | 0.15 | -0.17 |
|  | 1) Gratitude List | 0.89 | 288.30 | 0.38 | -0.10 |
|  | 2) Gratitude Letter | 0.75 | 282.71 | 0.45 | -0.09 |
|  | 3) Gratitude Text | 0.67 | 280.87 | 0.50 | -0.08 |
| 2) Hassles List | 4) Naikan Gratitude List | 0.21 | 284.76 | 0.83 | -0.02 |
|  | 5) Mental Subtraction Task | 0.47 | 281.00 | 0.64 | -0.06 |
|  | 6) Gratitude to God List | 1.90 | 267.32 | 0.06 | -0.22 |
|  | 7) Gratitude to God Letter | 1.68 | 263.34 | 0.09 | -0.20 |

**Table 49**

*Results comparing Self-Reported Guilt between Gratitude Interventions*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Gratitude Intervention | t | df | p | Hedges’ g |
| 1) Gratitude List/Gratitude Letter | -0.14 | 292.52 | 0.89 | 0.02 |
| 2) Gratitude List/Gratitude Text | -0.18 | 277.45 | 0.86 | 0.02 |
| 3) Gratitude List/Naikan Gratitude List | -0.71 | 291.34 | 0.48 | 0.08 |
| 4) Gratitude List/Mental Subtraction Task | -0.40 | 279.30 | 0.69 | 0.05 |
| 5) Gratitude List/Gratitude to God List | 1.05 | 290.76 | 0.30 | 0.00 |
| 6) Gratitude List/Gratitude to God Letter | 0.81 | 285.62 | 0.42 | -0.09 |
| 7) Gratitude Letter/Gratitude Text | -0.04 | 272.26 | 0.97 | 0.00 |
| 8) Gratitude Letter/Naikan Gratitude List | -0.57 | 283.65 | 0.57 | 0.07 |
| 9) Gratitude Letter/Mental Subtraction Task | -0.26 | 273.68 | 0.79 | 0.03 |
| 10) Gratitude Letter/Gratitude to God List | 1.19 | 278.53 | 0.23 | -0.14 |
| 11) Gratitude Letter/Gratitude to God Letter | 0.96 | 273.66 | 0.34 | -0.11 |
| 12) Gratitude Text/Naikan Gratitude List | -0.49 | 274.65 | 0.62 | 0.06 |
| 13) Gratitude Text/Mental Subtraction Task | -0.21 | 271.89 | 0.84 | 0.02 |
| 14) Gratitude Text/Gratitude to God List | 1.15 | 255.79 | 0.25 | -0.14 |
| 15) Gratitude Text/Gratitude to God Letter | 0.93 | 251.93 | 0.35 | -0.11 |
| 16) Naikan Gratitude List/Mental Subtraction Task | 0.28 | 275.73 | 0.78 | -0.03 |
| 17) Naikan Gratitude List/Gratitude to God List | 1.78 | 275.06 | 0.08 | -0.21 |
| 18) Naikan Gratitude List/Gratitude to God Letter | 1.55 | 270.44 | 0.12 | -0.18 |
| 19) Mental Subtraction Task/Gratitude to God List | 1.40 | 258.41 | 0.16 | -0.17 |
| 20) Mental Subtraction Task/Gratitude to God Letter | 1.18 | 254.41 | 0.24 | -0.14 |
| 21) Gratitude to God List/Gratitude to God Letter | -0.26 | 283.97 | 0.79 | 0.03 |

**Table 50**

*Results comparing Self-Reported Guilt between Control Conditions*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Control Condition | t | df | p | Hedges’ g |
| 1) No Treatment Control/Events List | -0.45 | 284.23 | 0.65 | 0.05 |
| 2) No Treatment Control/Interesting Events List | 0.49 | 291.00 | 0.62 | -0.06 |
| 3) No Treatment Control/Hassles List | 0.23 | 295.52 | 0.82 | -0.03 |
| 4) Events List /Interesting Events List | 0.92 | 273.48 | 0.36 | -0.11 |
| 5) Events List /Hassles List | 0.66 | 281.33 | 0.51 | -0.08 |
| 6) Interesting Events List/Hassles List | -0.25 | 284.52 | 0.80 | 0.03 |

## Self-Reported Envy

**Table 51**

*Results comparing Self-Reported Envy between Control Conditions and Gratitude Interventions*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Control Condition | Gratitude Intervention | t | df | P | Hedges’ g |
|  | 1) Gratitude List | 3.14 | 281.93 | 0.00 | -0.36 |
|  | 2) Gratitude Letter | 4.16 | 282.83 | 0.00 | -0.48 |
|  | 3) Gratitude Text | 4.53 | 281.54 | 0.00 | -0.53 |
| 1) No Treatment Control | 4) Naikan Gratitude List | 2.16 | 291.69 | 0.03 | -0.25 |
|  | 5) Mental Subtraction Task | 3.63 | 278.80 | 0.00 | -0.42 |
|  | 6) Gratitude to God List | 3.63 | 278.80 | 0.00 | -0.18 |
|  | 7) Gratitude to God Letter | 2.40 | 288.74 | 0.02 | -0.28 |
|  | 1) Gratitude List | 1.57 | 253.49 | 0.12 | -0.18 |
|  | 2) Gratitude Letter | 2.55 | 257.36 | 0.01 | -0.30 |
|  | 3) Gratitude Text | 2.93 | 258.50 | 0.00 | -0.35 |
| 2) Events List | 4) Naikan Gratitude List | 0.74 | 272.06 | 0.46 | -0.09 |
|  | 5) Mental Subtraction Task | 2.06 | 254.45 | 0.04 | -0.25 |
|  | 6) Gratitude to God List | 0.22 | 278.34 | 0.83 | -0.03 |
|  | 7) Gratitude to God Letter | 0.96 | 269.29 | 0.34 | -0.11 |
|  | 1) Gratitude List | 1.83 | 263.53 | 0.07 | -0.22 |
|  | 2) Gratitude Letter | 2.85 | 265.93 | 0.00 | -0.34 |
|  | 3) Gratitude Text | 3.24 | 265.83 | 0.00 | -0.39 |
| 3) Interesting Events List | 4) Naikan Gratitude List | 0.95 | 277.73 | 0.34 | -0.11 |
|  | 5) Mental Subtraction Task | 2.34 | 262.41 | 0.02 | -0.28 |
|  | 6) Gratitude to God List | 0.40 | 282.87 | 0.69 | -0.05 |
|  | 7) Gratitude to God Letter | 1.18 | 274.84 | 0.24 | -0.14 |
|  | 1) Gratitude List | 3.75 | 274.74 | 0.00 | -0.44 |
|  | 2) Gratitude Letter | 4.76 | 275.90 | 0.00 | -0.56 |
|  | 3) Gratitude Text | 5.13 | 274.81 | 0.00 | -0.60 |
| 2) Hassles List | 4) Naikan Gratitude List | 2.72 | 285.28 | 0.01 | -0.32 |
|  | 5) Mental Subtraction Task | 4.23 | 271.95 | 0.00 | -0.50 |
|  | 6) Gratitude to God List | 2.12 | 289.53 | 0.03 | -0.25 |
|  | 7) Gratitude to God Letter | 2.96 | 282.34 | 0.00 | -0.35 |

**Table 52**

*Results comparing Self-Reported Envy between Gratitude Interventions*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Gratitude Intervention | t | df | p | Hedges’ g |
| 1) Gratitude List/Gratitude Letter | 1.24 | 291.13 | 0.22 | -0.14 |
| 2) Gratitude List/Gratitude Text | 1.72 | 282.08 | 0.09 | -0.20 |
| 3) Gratitude List/Naikan Gratitude List | -0.87 | 281.24 | 0.38 | 0.10 |
| 4) Gratitude List/Mental Subtraction Task | 0.63 | 284.25 | 0.53 | -0.07 |
| 5) Gratitude List/Gratitude to God List | -1.45 | 279.84 | 0.15 | 0.00 |
| 6) Gratitude List/Gratitude to God Letter | -0.62 | 278.23 | 0.54 | 0.07 |
| 7) Gratitude Letter/Gratitude Text | 0.48 | 277.26 | 0.63 | -0.06 |
| 8) Gratitude Letter/Naikan Gratitude List | -1.99 | 279.61 | 0.05 | 0.23 |
| 9) Gratitude Letter/Mental Subtraction Task | -0.60 | 277.91 | 0.55 | 0.07 |
| 10) Gratitude Letter/Gratitude to God List | -2.53 | 279.67 | 0.01 | 0.30 |
| 11) Gratitude Letter/Gratitude to God Letter | -1.74 | 276.59 | 0.08 | 0.21 |
| 12) Gratitude Text/Naikan Gratitude List | -2.41 | 276.49 | 0.02 | 0.29 |
| 13) Gratitude Text/Mental Subtraction Task | -1.07 | 271.69 | 0.29 | 0.13 |
| 14) Gratitude Text/Gratitude to God List | -2.93 | 277.59 | 0.00 | 0.35 |
| 15) Gratitude Text/Gratitude to God Letter | -2.17 | 273.47 | 0.03 | 0.26 |
| 16) Naikan Gratitude List/Mental Subtraction Task | 1.43 | 274.84 | 0.15 | -0.17 |
| 17) Naikan Gratitude List/Gratitude to God List | -0.56 | 286.59 | 0.57 | 0.07 |
| 18) Naikan Gratitude List/Gratitude to God Letter | 0.24 | 281.00 | 0.81 | -0.03 |
| 19) Mental Subtraction Task/Gratitude to God List | -1.99 | 275.31 | 0.05 | 0.23 |
| 20) Mental Subtraction Task/Gratitude to God Letter | -1.18 | 271.82 | 0.24 | 0.14 |
| 21) Gratitude to God List/Gratitude to God Letter | 0.80 | 283.62 | 0.43 | -0.09 |

**Table 53**

*Results comparing Self-Reported Envy between Control Conditions*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Control Condition | t | df | p | Hedges’ g |
| 1) No Treatment Control/Events List | 1.26 | 286.47 | 0.21 | -0.15 |
| 2) No Treatment Control/Interesting Events List | 1.14 | 290.05 | 0.26 | -0.13 |
| 3) No Treatment Control/Hassles List | -0.52 | 295.97 | 0.60 | 0.06 |
| 4) Events List /Interesting Events List | -0.16 | 278.69 | 0.87 | 0.02 |
| 5) Events List /Hassles List | -1.76 | 281.28 | 0.08 | 0.21 |
| 6) Interesting Events List/Hassles List | -1.66 | 284.38 | 0.10 | 0.20 |

## Satisfaction with Life

**Table 54**

*Results comparing Satisfaction with Life between Control Conditions and Gratitude Interventions*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Control Condition | Gratitude Intervention | T | df | P | Hedges’ g |
|  | 1) Gratitude List | -1.53 | 298.25 | 0.13 | 0.18 |
|  | 2) Gratitude Letter | -0.36 | 292.91 | 0.72 | 0.04 |
|  | 3) Gratitude Text | -2.31 | 284.21 | 0.02 | 0.27 |
| 1) No Treatment Control | 4) Naikan Gratitude List | -1.91 | 292.97 | 0.06 | 0.22 |
|  | 5) Mental Subtraction Task | -1.67 | 286.67 | 0.10 | 0.20 |
|  | 6) Gratitude to God List | -1.67 | 286.67 | 0.10 | 0.23 |
|  | 7) Gratitude to God Letter | -2.25 | 289.86 | 0.03 | 0.26 |
|  | 1) Gratitude List | -1.25 | 281.54 | 0.21 | 0.15 |
|  | 2) Gratitude Letter | -0.11 | 281.18 | 0.91 | 0.01 |
|  | 3) Gratitude Text | -2.04 | 275.79 | 0.04 | 0.24 |
| 2) Events List | 4) Naikan Gratitude List | -1.63 | 280.94 | 0.11 | 0.19 |
|  | 5) Mental Subtraction Task | -1.40 | 275.61 | 0.16 | 0.17 |
|  | 6) Gratitude to God List | -1.70 | 283.94 | 0.09 | 0.20 |
|  | 7) Gratitude to God Letter | -1.96 | 278.32 | 0.05 | 0.23 |
|  | 1) Gratitude List | 0.84 | 285.84 | 0.40 | -0.10 |
|  | 2) Gratitude Letter | 1.92 | 281.99 | 0.06 | -0.23 |
|  | 3) Gratitude Text | -0.12 | 274.37 | 0.91 | 0.01 |
| 3) Interesting Events List | 4) Naikan Gratitude List | 0.37 | 281.96 | 0.71 | -0.04 |
|  | 5) Mental Subtraction Task | 0.60 | 275.96 | 0.55 | -0.07 |
|  | 6) Gratitude to God List | 0.28 | 284.96 | 0.78 | -0.03 |
|  | 7) Gratitude to God Letter | 0.02 | 279.00 | 0.98 | -0.00 |
|  | 1) Gratitude List | -1.02 | 290.64 | 0.31 | 0.12 |
|  | 2) Gratitude Letter | 0.13 | 286.99 | 0.90 | -0.02 |
|  | 3) Gratitude Text | -1.83 | 279.41 | 0.07 | 0.22 |
| 2) Hassles List | 4) Naikan Gratitude List | -1.41 | 286.95 | 0.16 | 0.17 |
|  | 5) Mental Subtraction Task | -1.18 | 280.97 | 0.24 | 0.14 |
|  | 6) Gratitude to God List | -1.49 | 289.95 | 0.14 | 0.17 |
|  | 7) Gratitude to God Letter | -1.75 | 284.00 | 0.08 | 0.21 |

**Table 55**

*Results comparing Satisfaction with Life between Gratitude Interventions*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Gratitude Intervention | t | df | p | Hedges’ g |
| 1) Gratitude List/Gratitude Letter | 1.16 | 288.13 | 0.25 | -0.14 |
| 2) Gratitude List/Gratitude Text | -0.94 | 274.82 | 0.35 | 0.11 |
| 3) Gratitude List/Naikan Gratitude List | -0.46 | 288.67 | 0.64 | 0.05 |
| 4) Gratitude List/Mental Subtraction Task | -0.22 | 280.97 | 0.83 | 0.03 |
| 5) Gratitude List/Gratitude to God List | -0.55 | 291.61 | 0.58 | 0.00 |
| 6) Gratitude List/Gratitude to God Letter | -0.83 | 284.85 | 0.41 | 0.10 |
| 7) Gratitude Letter/Gratitude Text | -1.98 | 276.17 | 0.05 | 0.24 |
| 8) Gratitude Letter/Naikan Gratitude List | -1.56 | 283.98 | 0.12 | 0.18 |
| 9) Gratitude Letter/Mental Subtraction Task | -1.32 | 277.93 | 0.19 | 0.16 |
| 10) Gratitude Letter/Gratitude to God List | -1.63 | 286.99 | 0.10 | 0.19 |
| 11) Gratitude Letter/Gratitude to God Letter | -1.90 | 280.99 | 0.06 | 0.23 |
| 12) Gratitude Text/Naikan Gratitude List | 0.47 | 275.82 | 0.64 | -0.06 |
| 13) Gratitude Text/Mental Subtraction Task | 0.70 | 270.86 | 0.48 | -0.08 |
| 14) Gratitude Text/Gratitude to God List | 0.39 | 278.82 | 0.70 | -0.05 |
| 15) Gratitude Text/Gratitude to God Letter | 0.14 | 273.38 | 0.89 | -0.02 |
| 16) Naikan Gratitude List/Mental Subtraction Task | 0.24 | 277.84 | 0.81 | -0.03 |
| 17) Naikan Gratitude List/Gratitude to God List | -0.09 | 287.00 | 0.93 | 0.01 |
| 18) Naikan Gratitude List/Gratitude to God Letter | -0.35 | 280.96 | 0.73 | 0.04 |
| 19) Mental Subtraction Task/Gratitude to God List | -0.32 | 280.84 | 0.75 | 0.04 |
| 20) Mental Subtraction Task/Gratitude to God Letter | -0.58 | 274.96 | 0.56 | 0.07 |
| 21) Gratitude to God List/Gratitude to God Letter | -0.26 | 283.96 | 0.79 | 0.03 |

**Table 56**

*Results comparing Satisfaction with Life between Control Conditions*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Control Condition | t | df | P | Hedges’ g |
| 1) No Treatment Control/Events List | -0.24 | 289.52 | 0.81 | 0.03 |
| 2) No Treatment Control/Interesting Events List | -2.26 | 290.86 | 0.02 | 0.26 |
| 3) No Treatment Control/Hassles List | -0.49 | 295.83 | 0.63 | 0.06 |
| 4) Events List /Interesting Events List | -1.98 | 279.31 | 0.05 | 0.24 |
| 5) Events List /Hassles List | -0.23 | 284.35 | 0.82 | 0.03 |
| 6) Interesting Events List/Hassles List | 1.77 | 285.00 | 0.08 | -0.21 |

## Social Connection

**Table 57**

*Results comparing Social Connection between Control Conditions and Gratitude Interventions*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Control Condition | Gratitude Intervention | t | df | P | Hedges’ g |
|  | 1) Gratitude List | -2.03 | 297.64 | 0.04 | 0.23 |
|  | 2) Gratitude Letter | -1.42 | 292.75 | 0.16 | 0.17 |
|  | 3) Gratitude Text | -3.10 | 282.43 | 0.00 | 0.36 |
| 1) No Treatment Control | 4) Naikan Gratitude List | -2.02 | 291.55 | 0.04 | 0.23 |
|  | 5) Mental Subtraction Task | -2.79 | 286.81 | 0.01 | 0.33 |
|  | 6) Gratitude to God List | -2.79 | 286.81 | 0.01 | 0.19 |
|  | 7) Gratitude to God Letter | -1.35 | 285.49 | 0.18 | 0.16 |
|  | 1) Gratitude List | -0.90 | 286.52 | 0.37 | 0.10 |
|  | 2) Gratitude Letter | -0.35 | 281.81 | 0.73 | 0.04 |
|  | 3) Gratitude Text | -1.96 | 271.31 | 0.05 | 0.23 |
| 2) Events List | 4) Naikan Gratitude List | -0.90 | 280.45 | 0.37 | 0.11 |
|  | 5) Mental Subtraction Task | -1.69 | 275.77 | 0.09 | 0.20 |
|  | 6) Gratitude to God List | -0.55 | 284.74 | 0.58 | 0.06 |
|  | 7) Gratitude to God Letter | -0.32 | 274.93 | 0.75 | 0.04 |
|  | 1) Gratitude List | -1.76 | 284.14 | 0.08 | 0.21 |
|  | 2) Gratitude Letter | -1.17 | 281.99 | 0.24 | 0.14 |
|  | 3) Gratitude Text | -2.83 | 269.01 | 0.01 | 0.34 |
| 3) Interesting Events List | 4) Naikan Gratitude List | -1.75 | 278.94 | 0.08 | 0.21 |
|  | 5) Mental Subtraction Task | -2.53 | 275.03 | 0.01 | 0.30 |
|  | 6) Gratitude to God List | -1.39 | 283.94 | 0.16 | 0.16 |
|  | 7) Gratitude to God Letter | -1.11 | 276.69 | 0.27 | 0.13 |
|  | 1) Gratitude List | -1.26 | 289.21 | 0.21 | 0.15 |
|  | 2) Gratitude Letter | -0.71 | 287.00 | 0.48 | 0.08 |
|  | 3) Gratitude Text | -2.30 | 274.08 | 0.02 | 0.27 |
| 2) Hassles List | 4) Naikan Gratitude List | -1.26 | 284.00 | 0.21 | 0.15 |
|  | 5) Mental Subtraction Task | -2.03 | 280.07 | 0.04 | 0.24 |
|  | 6) Gratitude to God List | -0.91 | 288.99 | 0.36 | 0.11 |
|  | 7) Gratitude to God Letter | -0.66 | 281.54 | 0.51 | 0.08 |

**Table 58**

*Results comparing Self-Reported Social Connection between Gratitude Interventions*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Gratitude Intervention | t | df | p | Hedges’ g |
| 1) Gratitude List/Gratitude Letter | 0.52 | 286.51 | 0.60 | -0.06 |
| 2) Gratitude List/Gratitude Text | -1.09 | 286.98 | 0.28 | 0.13 |
| 3) Gratitude List/Naikan Gratitude List | -0.01 | 292.25 | 0.99 | 0.00 |
| 4) Gratitude List/Mental Subtraction Task | -0.85 | 284.37 | 0.40 | 0.10 |
| 5) Gratitude List/Gratitude to God List | 0.33 | 293.37 | 0.74 | 0.00 |
| 6) Gratitude List/Gratitude to God Letter | 0.51 | 273.61 | 0.61 | -0.06 |
| 7) Gratitude Letter/Gratitude Text | -1.55 | 271.36 | 0.12 | 0.18 |
| 8) Gratitude Letter/Naikan Gratitude List | -0.52 | 281.19 | 0.60 | 0.06 |
| 9) Gratitude Letter/Mental Subtraction Task | -1.31 | 277.17 | 0.19 | 0.16 |
| 10) Gratitude Letter/Gratitude to God List | -0.19 | 286.10 | 0.85 | 0.02 |
| 11) Gratitude Letter/Gratitude to God Letter | 0.01 | 278.42 | 0.99 | 0.00 |
| 12) Gratitude Text/Naikan Gratitude List | 1.07 | 277.07 | 0.29 | -0.13 |
| 13) Gratitude Text/Mental Subtraction Task | 0.19 | 269.14 | 0.85 | -0.02 |
| 14) Gratitude Text/Gratitude to God List | 1.38 | 278.14 | 0.17 | -0.16 |
| 15) Gratitude Text/Gratitude to God Letter | 1.49 | 258.99 | 0.14 | -0.18 |
| 16) Naikan Gratitude List/Mental Subtraction Task | -0.83 | 277.43 | 0.40 | 0.10 |
| 17) Naikan Gratitude List/Gratitude to God List | 0.33 | 286.44 | 0.74 | -0.04 |
| 18) Naikan Gratitude List/Gratitude to God Letter | 0.51 | 270.75 | 0.61 | -0.06 |
| 19) Mental Subtraction Task/Gratitude to God List | 1.14 | 281.00 | 0.26 | -0.14 |
| 20) Mental Subtraction Task/Gratitude to God Letter | 1.26 | 268.96 | 0.21 | -0.15 |
| 21) Gratitude to God List/Gratitude to God Letter | 1.26 | 268.96 | 0.21 | -0.15 |

**Table 59**

*Results comparing Social Connection between Control Conditions*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Control Condition | t | df | P | Hedges’ g |
| 1) No Treatment Control/Events List | -1.10 | 291.00 | 0.27 | 0.13 |
| 2) No Treatment Control/Interesting Events List | -0.26 | 290.66 | 0.80 | 0.03 |
| 3) No Treatment Control/Hassles List | -0.71 | 295.69 | 0.48 | 0.08 |
| 4) Events List /Interesting Events List | 0.85 | 279.74 | 0.40 | -0.10 |
| 5) Events List /Hassles List | 0.37 | 284.77 | 0.71 | -0.04 |
| 6) Interesting Events List/Hassles List | -0.46 | 285.00 | 0.65 | 0.05 |

## Attitude Towards Life

**Table 60**

*Results comparing Attitude towards Life between Control Conditions and Gratitude Interventions*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Control Condition | Gratitude Intervention | t | df | p | Hedges’ g |
|  | 1) Gratitude List | -0.88 | 301.49 | 0.38 | 0.10 |
|  | 2) Gratitude Letter | -0.39 | 293.00 | 0.70 | 0.05 |
|  | 3) Gratitude Text | -0.69 | 282.34 | 0.49 | 0.08 |
| 1) No Treatment Control | 4) Naikan Gratitude List | -1.32 | 292.97 | 0.19 | 0.15 |
|  | 5) Mental Subtraction Task | -1.77 | 283.80 | 0.08 | 0.21 |
|  | 6) Gratitude to God List | -1.77 | 283.80 | 0.08 | 0.12 |
|  | 7) Gratitude to God Letter | -1.19 | 287.80 | 0.24 | 0.14 |
|  | 1) Gratitude List | -1.24 | 290.07 | 0.22 | 0.14 |
|  | 2) Gratitude Letter | -0.74 | 281.95 | 0.46 | 0.09 |
|  | 3) Gratitude Text | -1.03 | 272.53 | 0.31 | 0.12 |
| 2) Events List | 4) Naikan Gratitude List | -1.68 | 281.99 | 0.10 | 0.20 |
|  | 5) Mental Subtraction Task | -2.11 | 273.76 | 0.04 | 0.25 |
|  | 6) Gratitude to God List | -1.35 | 283.69 | 0.18 | 0.16 |
|  | 7) Gratitude to God Letter | -1.53 | 277.57 | 0.13 | 0.18 |
|  | 1) Gratitude List | 0.83 | 290.64 | 0.41 | -0.10 |
|  | 2) Gratitude Letter | 1.33 | 281.98 | 0.19 | -0.16 |
|  | 3) Gratitude Text | 0.92 | 271.13 | 0.36 | -0.11 |
| 3) Interesting Events List | 4) Naikan Gratitude List | 0.37 | 281.93 | 0.71 | -0.04 |
|  | 5) Mental Subtraction Task | -0.15 | 272.59 | 0.88 | 0.02 |
|  | 6) Gratitude to God List | 0.61 | 282.74 | 0.54 | -0.07 |
|  | 7) Gratitude to God Letter | 0.45 | 276.60 | 0.65 | -0.05 |
|  | 1) Gratitude List | -1.40 | 294.69 | 0.16 | 0.16 |
|  | 2) Gratitude Letter | -0.90 | 286.84 | 0.37 | 0.11 |
|  | 3) Gratitude Text | -1.18 | 278.06 | 0.24 | 0.14 |
| 2) Hassles List | 4) Naikan Gratitude List | -1.83 | 286.93 | 0.07 | 0.21 |
|  | 5) Mental Subtraction Task | -2.25 | 279.19 | 0.02 | 0.27 |
|  | 6) Gratitude to God List | -1.50 | 289.03 | 0.13 | 0.18 |
|  | 7) Gratitude to God Letter | -1.68 | 282.92 | 0.09 | 0.20 |

**Table 61**

*Results comparing Attitude towards Life between Gratitude Interventions*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Gratitude Intervention | t | df | p | Hedges’ g |
| 1) Gratitude List/Gratitude Letter | 0.50 | 292.45 | 0.62 | -0.06 |
| 2) Gratitude List/Gratitude Text | 0.14 | 279.00 | 0.89 | -0.02 |
| 3) Gratitude List/Naikan Gratitude List | -0.45 | 292.25 | 0.65 | 0.05 |
| 4) Gratitude List/Mental Subtraction Task | -0.94 | 280.92 | 0.35 | 0.11 |
| 5) Gratitude List/Gratitude to God List | -0.18 | 291.48 | 0.86 | 0.00 |
| 6) Gratitude List/Gratitude to God Letter | -0.35 | 285.30 | 0.73 | 0.04 |
| 7) Gratitude Letter/Gratitude Text | -0.33 | 273.66 | 0.74 | 0.04 |
| 8) Gratitude Letter/Naikan Gratitude List | -0.94 | 283.98 | 0.35 | 0.11 |
| 9) Gratitude Letter/Mental Subtraction Task | -1.41 | 275.04 | 0.16 | 0.17 |
| 10) Gratitude Letter/Gratitude to God List | -0.65 | 285.12 | 0.51 | 0.08 |
| 11) Gratitude Letter/Gratitude to God Letter | -0.82 | 278.98 | 0.41 | 0.10 |
| 12) Gratitude Text/Naikan Gratitude List | -0.57 | 274.13 | 0.57 | 0.07 |
| 13) Gratitude Text/Mental Subtraction Task | -1.03 | 271.86 | 0.31 | 0.12 |
| 14) Gratitude Text/Gratitude to God List | -0.31 | 280.43 | 0.76 | 0.04 |
| 15) Gratitude Text/Gratitude to God Letter | -0.46 | 274.53 | 0.64 | 0.06 |
| 16) Naikan Gratitude List/Mental Subtraction Task | -0.50 | 275.44 | 0.62 | 0.06 |
| 17) Naikan Gratitude List/Gratitude to God List | 0.25 | 285.44 | 0.80 | -0.03 |
| 18) Naikan Gratitude List/Gratitude to God Letter | 0.09 | 279.31 | 0.93 | -0.01 |
| 19) Mental Subtraction Task/Gratitude to God List | 0.72 | 280.86 | 0.47 | -0.09 |
| 20) Mental Subtraction Task/Gratitude to God Letter | 0.57 | 274.90 | 0.57 | -0.07 |
| 21) Gratitude to God List/Gratitude to God Letter | 0.57 | 274.90 | 0.57 | -0.07 |

**Table 62**

*Results comparing Attitude towards Life between Control Conditions*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Control Condition | t | df | P | Hedges’ g |
| 1) No Treatment Control/Events List | 0.34 | 290.93 | 0.74 | -0.04 |
| 2) No Treatment Control/Interesting Events List | -1.70 | 290.99 | 0.09 | 0.20 |
| 3) No Treatment Control/Hassles List | 0.51 | 295.81 | 0.61 | -0.06 |
| 4) Events List /Interesting Events List | -2.07 | 279.87 | 0.04 | 0.25 |
| 5) Events List /Hassles List | 0.17 | 284.97 | 0.86 | -0.02 |
| 6) Interesting Events List/Hassles List | 2.21 | 284.71 | 0.03 | -0.26 |

## Perceived Self-Size

**Table 63**

*Results comparing Perceived Self-Size between Control Conditions and Gratitude Interventions*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Control Condition | Gratitude Intervention | t | df | P | Hedges’ g |
|  | 1) Gratitude List | -1.23 | 301.71 | 0.22 | 0.14 |
|  | 2) Gratitude Letter | 0.07 | 293.00 | 0.94 | -0.01 |
|  | 3) Gratitude Text | -1.50 | 281.48 | 0.14 | 0.18 |
| 1) No Treatment Control | 4) Naikan Gratitude List | -0.95 | 291.85 | 0.34 | 0.11 |
|  | 5) Mental Subtraction Task | -1.50 | 283.26 | 0.14 | 0.18 |
|  | 6) Gratitude to God List | -1.50 | 283.26 | 0.14 | 0.07 |
|  | 7) Gratitude to God Letter | -0.41 | 289.82 | 0.68 | 0.05 |
|  | 1) Gratitude List | -1.53 | 290.54 | 0.13 | 0.18 |
|  | 2) Gratitude Letter | -0.21 | 281.96 | 0.84 | 0.02 |
|  | 3) Gratitude Text | -1.78 | 271.38 | 0.08 | 0.21 |
| 2) Events List | 4) Naikan Gratitude List | -1.25 | 280.54 | 0.21 | 0.15 |
|  | 5) Mental Subtraction Task | -1.78 | 272.96 | 0.08 | 0.21 |
|  | 6) Gratitude to God List | -0.88 | 284.85 | 0.38 | 0.10 |
|  | 7) Gratitude to God Letter | -0.69 | 278.93 | 0.49 | 0.08 |
|  | 1) Gratitude List | -0.05 | 288.98 | 0.96 | 0.01 |
|  | 2) Gratitude Letter | 1.24 | 281.12 | 0.22 | -0.15 |
|  | 3) Gratitude Text | -0.39 | 273.91 | 0.70 | 0.05 |
| 3) Interesting Events List | 4) Naikan Gratitude List | 0.26 | 278.29 | 0.80 | -0.03 |
|  | 5) Mental Subtraction Task | -0.38 | 274.94 | 0.71 | 0.05 |
|  | 6) Gratitude to God List | 0.54 | 284.88 | 0.59 | -0.06 |
|  | 7) Gratitude to God Letter | 0.75 | 278.78 | 0.46 | -0.09 |
|  | 1) Gratitude List | -0.33 | 294.57 | 0.74 | 0.04 |
|  | 2) Gratitude Letter | 0.96 | 286.49 | 0.34 | -0.11 |
|  | 3) Gratitude Text | -0.65 | 278.16 | 0.52 | 0.08 |
| 2) Hassles List | 4) Naikan Gratitude List | -0.02 | 284.06 | 0.98 | 0.00 |
|  | 5) Mental Subtraction Task | -0.64 | 279.39 | 0.53 | 0.08 |
|  | 6) Gratitude to God List | 0.28 | 289.99 | 0.78 | -0.03 |
|  | 7) Gratitude to God Letter | 0.48 | 283.94 | 0.63 | -0.06 |

**Table 64**

*Results comparing Perceived Self-Size between Gratitude Interventions*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Gratitude Intervention | t | df | p | Hedges’ g |
| 1) Gratitude List/Gratitude Letter | 1.32 | 292.78 | 0.19 | -0.15 |
| 2) Gratitude List/Gratitude Text | -0.35 | 278.89 | 0.73 | 0.04 |
| 3) Gratitude List/Naikan Gratitude List | 0.32 | 292.70 | 0.75 | -0.04 |
| 4) Gratitude List/Mental Subtraction Task | -0.33 | 281.05 | 0.74 | 0.04 |
| 5) Gratitude List/Gratitude to God List | 0.61 | 294.82 | 0.54 | 0.00 |
| 6) Gratitude List/Gratitude to God Letter | 0.82 | 289.11 | 0.41 | -0.10 |
| 7) Gratitude Letter/Gratitude Text | -1.59 | 272.44 | 0.11 | 0.19 |
| 8) Gratitude Letter/Naikan Gratitude List | -1.04 | 282.99 | 0.30 | 0.12 |
| 9) Gratitude Letter/Mental Subtraction Task | -1.59 | 274.19 | 0.11 | 0.19 |
| 10) Gratitude Letter/Gratitude to God List | -0.68 | 286.63 | 0.49 | 0.08 |
| 11) Gratitude Letter/Gratitude to God Letter | -0.49 | 280.78 | 0.62 | 0.06 |
| 12) Gratitude Text/Naikan Gratitude List | 0.66 | 267.17 | 0.51 | -0.08 |
| 13) Gratitude Text/Mental Subtraction Task | 0.02 | 271.83 | 0.98 | 0.00 |
| 14) Gratitude Text/Gratitude to God List | 0.91 | 277.78 | 0.36 | -0.11 |
| 15) Gratitude Text/Gratitude to God Letter | 1.12 | 271.40 | 0.27 | -0.13 |
| 16) Naikan Gratitude List/Mental Subtraction Task | -0.65 | 269.58 | 0.52 | 0.08 |
| 17) Naikan Gratitude List/Gratitude to God List | 0.31 | 284.43 | 0.76 | -0.04 |
| 18) Naikan Gratitude List/Gratitude to God Letter | 0.53 | 278.86 | 0.60 | -0.06 |
| 19) Mental Subtraction Task/Gratitude to God List | 0.91 | 279.10 | 0.37 | -0.11 |
| 20) Mental Subtraction Task/Gratitude to God Letter | 1.11 | 272.79 | 0.27 | -0.13 |
| 21) Gratitude to God List/Gratitude to God Letter | 1.11 | 272.79 | 0.27 | -0.13 |

**Table 65**

*Results comparing Perceived Self-Size between Control Conditions*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Control Condition | t | df | P | Hedges’ g |
| 1) No Treatment Control/Events List | 0.28 | 290.98 | 0.78 | -0.03 |
| 2) No Treatment Control/Interesting Events List | -1.14 | 290.19 | 0.25 | 0.13 |
| 3) No Treatment Control/Hassles List | -0.88 | 295.55 | 0.38 | 0.10 |
| 4) Events List /Interesting Events List | -1.44 | 279.47 | 0.15 | 0.17 |
| 5) Events List /Hassles List | -1.16 | 284.75 | 0.25 | 0.14 |
| 6) Interesting Events List/Hassles List | 0.27 | 284.95 | 0.79 | -0.03 |