**ONLINE SUPPLEMENTAL MATERIALS**

**Anger dysregulation and non-suicidal self-injury during adolescence: A test of directionality**

**Table S1**

*Measurement Invariance Testing*

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Anger variable and invariance levels | χ2 (df) | *p* | RMSEA [90% CI] | CFI | TLI | SRMR | Models  compared | Δχ2 (df) | *p* (Δχ2) | ΔCFI |
| **Dysregulated anger expression** | |  |  |  |  |  |  |  |  |  |
| 1. Configural | 260.93 (51) | <0.01 | 0.06 [0.05, 0.06] | 0.95 | 0.94 | 0.04 |  |  |  |  |
| 2. Metric | 266.52 (57) | <0.01 | 0.05 [0.05, 0.06] | 0.95 | 0.95 | 0.04 | 2 vs 1 | 5.59 (6) | 0.47 | 0.00 |
| 3. Scalar | 447.23 (63) | <0.01 | 0.07 [0.06, 0.07] | 0.92 | 0.91 | 0.09 | 3 vs 2 | 180.71 (6) | <0.01 | 0.03 |
| **Anger suppression** |  |  |  |  |  |  |  |  |  |  |
| 1. Configural | 166.51 (51) | <0.01 | 0.04 [0.04, 0.05] | 0.97 | 0.97 | 0.03 |  |  |  |  |
| 2. Metric | 175.71 (57) | <0.01 | 0.04 [0.03, 0.05] | 0.97 | 0.97 | 0.03 | 2 vs 1 | 9.20 (6) | 0.16 | 0.00 |
| 3. Scalar | 190.09 (63) | <0.01 | 0.04 [0.03, 0.05] | 0.97 | 0.97 | 0.04 | 3 vs 2 | 14.38 (6) | 0.03 | 0.00 |
| **Anger reflection** |  |  |  |  |  |  |  |  |  |  |
| 1. Configural | 475.48 (81) | <0.01 | 0.06 [0.06, 0.07] | 0.92 | 0.89 | 0.05 |  |  |  |  |
| 2. Metric | 485.89 (89) | <0.01 | 0.06 [0.05, 0.06] | 0.92 | 0.90 | 0.06 | 2 vs 1 | 10.41 (8) | 0.24 | 0.00 |
| 3. Scalar | 502.67 (97) | <0.01 | 0.06 [0.05, 0.06] | 0.91 | 0.91 | 0.06 | 3 vs 2 | 16.78 (8) | 0.03 | 0.01 |

*Note.* RMSEA = root mean square error of approximation. CFI = comparative fit index. TLI = Tucker–Lewis index. SRMR = standardized root mean squared residual. CI = confidence interval. Δ = change in parameter. df = degree of freedom. Based on modification indices and semantic relations, we freed the residual correlations in two pairs of items in the low reflection scale.

**Table S2**

*Standardized Factor Loadings of Three Anger Dysregulation Scales Across Three Waves*

|  |  |  |  |
| --- | --- | --- | --- |
| Scale and items | Time 1 | Time 2 | Time 3 |
| **Dysregulated anger expression** |  |  |  |
| “Behave aggressively, even though I don’t want to” | 0.60 | 0.61 | 0.62 |
| “Do things that I regret afterwards” | 0.72 | 0.69 | 0.78 |
| “Do things I don’t want to do” | 0.83 | 0.79 | 0.84 |
| “Feel that I’m lacking control over myself” | 0.74 | 0.76 | 0.73 |
| **Anger suppression** |  |  |  |
| “Try not to show that I’m angry” | 0.70 | 0.64 | 0.62 |
| “Hide my feelings” | 0.75 | 0.79 | 0.85 |
| “Keep the anger deep inside of me” | 0.79 | 0.76 | 0.80 |
| “Try to ignore my feelings” | 0.64 | 0.64 | 0.69 |
| **Anger reflection** |  |  |  |
| “Try to understand what made me angry” | 0.77 | 0.78 | 0.74 |
| “Tell the person how I feel” | 0.44 | 0.45 | 0.41 |
| “Try to find ways to solve the problem” | 0.68 | 0.61 | 0.62 |
| “Think about whether it would help if the person sees that I am angry” | 0.47 | 0.48 | 0.36 |
| “Try to understand why I’m angry” | 0.83 | 0.85 | 0.83 |

*Note*. Each item is preceded by the following stem item “What happens when you get REALLY ANGRY at someone”. All factor loadings are significant (i.e., *p* < 0.01).