|  |  |  |
| --- | --- | --- |
| **Table 1** |  |  |
| *Overview of research questions* | | |
| Hypothesis | Description | Results |
|  | **Assessment** |  |
| H1: Factor structure | The S-DERS will retain its four-factor structure at both the within- and between-person levels | ✓ |
| H2a: Short-form construction | An 8- and 4-item version can be constructed and validated using a split-half strategy, highly correlated to the long-form | ✓ |
| H3: Reliability | The scales will demonstrate strong internal consistency (> .80) at within-/between-person levels, except for the two-item Clarity scale (> .60) | ✓ |
| H4a: Convergent & discriminant validity | Sum/mean scores on subscales will converge well on their intended factor, but Non-Acceptance and Modulate will have low discriminant validity (Lavender et al., 2017; Sicorello et al., 2024) | ✓ |
|  | **Temporal Dynamics** |  |
| H5: Variability | There is substantial within-person variation in the S-DERS, a prerequisite of dynamic associations with other time-variant constructs | ✓ |
| H6a: Stability | S-DERS scores fluctuate more slowly than affective experiences | ✓ |
| H7: State-trait correspondence | The person-mean on the S-DERS will be strongly correlated with the trait DERS and more weakly with the S-DERS following a mood induction. We expect stronger correlations for momentary S-DERS following stressful events in daily life. In post-hoc analysis, we test how many time points are necessary to approximate the trait DERS | (✓) |
|  | **Contextual Associations** |  |
| H8: Preceding stressors (“before”) | S-DERS scores will be associated with more severe prior stressful events | ✓ |
| H9: Momentary affect (“during”) | S-DERS scores will be associated with more negative momentary mood | ✓ |
| H10: Affective recovery (“after”) | S-DERS scores predict an extended duration of negative affective states | ✓ |
| H11: State-trait interactions  (“for whom”) | The impact of stressful events on state emotion regulation difficulties will be moderated by trait emotion regulation difficulties, neuroticism, stress-related psychopathology, and state difficulties in emotion regulation after mood induction | (✓) |
| *Note.* ✓ = support for the hypothesis. (✓) = partial support for the hypothesis. ✕ = no support for the hypothesis. The order of hypotheses does not match the preregistration.  anon-preregistered hypotheses developed during data collection | | |

| **Table 2** |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| *Fit measures for competing confirmatory factor analysis models* | | | | | | |
|  | SRMR (within) | SRMR (between) | RMSEA | χ² | *df* | *p* |
| *Construction sample* | | | | | | |
| Simple Structure; fixed | 0.050 | 0.137 | 0.043 | 1,927.7 | 344 | <.001 |
| Simple Structure; free | 0.049 | 0.093 | 0.043 | 1,912.9 | 328 | <.001 |
| **Cross-loadings; fixed** | **0.026** | **0.067** | **0.039** | **1,686.9** | **296** | **<.001** |
| *Validation sample* | | | | | | |
| Simple Structure; fixed | 0.052 | 0.129 | 0.044 | 2,006.2 | 344 | <.001 |
| Simple Structure; free | 0.052 | 0.141 | 0.044 | 1,961.4 | 328 | <.001 |
| **Cross-loadings; fixed** | **0.022** | **0.074** | **0.037** | **1,544.1** | **296** | **<.001** |
| *Note.* Fixed (versus free) indicates whether factor loadings are fixed to equality on the between- and within-person level (i.e., cross-level invariance is assumed). SRMR = standardized root mean square residual; RMSEA = root mean square error of approximation. Models crossing the preregistered threshold on SRMR (on both levels) and RMSEA are highlighted in bold. | | | | | | |

| **Table S2** |  |  |  |  |
| --- | --- | --- | --- | --- |
| *Multilevel factor loadings for the construction sample* | | | | |
|  | Non-Acceptance | Modulate | Awareness | Clarity |
| Item 8 | **0.69 (0.91)** | -0.03 (-0.04) | 0.00 (0.01) | -0.01 (-0.01) |
| Item 4 | **0.67 (0.89)** | -0.05 (-0.07) | -0.03 (-0.04) | 0.01 (0.02) |
| Item 1 | **0.72 (1.02)** | -0.05 (-0.07) | 0.02 (0.03) | -0.04 (-0.06) |
| Item 5 | **0.78 (0.92)** | -0.03 (-0.03) | 0.06 (0.08) | -0.07 (-0.09) |
| Item 12 | **0.97 (1.29)** | -0.15 (-0.18) | 0.02 (0.03) | -0.15 (-0.22) |
| Item 20 | **0.74 (1.00)** | -0.05 (-0.06) | 0.00 (0.00) | -0.01 (-0.02) |
| Item 18 | **0.99 (1.30)** | -0.17 (-0.21) | 0.05 (0.07) | -0.17 (-0.25) |
| Item 13 | 0.25 (0.34) | **0.50 (0.65)** | 0.10 (0.15) | -0.08 (-0.13) |
| Item 17 | 0.07 (0.10) | **0.70 (0.91)** | -0.02 (-0.03) | -0.00 (-0.00) |
| Item 3 | 0.09 (0.12) | **0.73 (0.93)** | 0.02 (0.04) | -0.05 (-0.08) |
| Item 15 | **0.52 (0.64)** | 0.09 (0.11) | 0.03 (0.04) | 0.01 (0.02) |
| Item 21 | 0.15 (0.21) | **0.46 (0.59)** | -0.11 (-0.17) | 0.09 (0.14) |
| Item 9 | 0.34 **(0.48)** | 0.21 (0.28) | 0.10 (0.16) | -0.04 (-0.07) |
| Item 6 | 0.12 (0.14) | -0.05 (-0.06) | **0.63 (0.88)** | 0.05 (0.07) |
| Item 11 | 0.25 (0.30) | -0.05 (-0.05) | **0.60 (0.82)** | -0.12 (-0.16) |
| Item 2 | 0.02 (0.02) | -0.04 (-0.05) | **0.62 (0.98)** | 0.00 (0.00) |
| Item 19 | 0.28 (0.34) | -0.06 (-0.06) | **0.50 (0.69)** | -0.07 (-0.09) |
| Item 16 | -0.02 (-0.03) | -0.01 (-0.01) | **0.58 (0.89)** | 0.01 (0.01) |
| Item 14 | 0.08 (0.10) | -0.02 (-0.03) | -0.04 (-0.06) | **0.63 (0.96)** |
| Item 7 | -0.06 (-0.09) | -0.07 (-0.09) | 0.11 (0.18) | **0.55 (0.89)** |
| *Note.* Main entries represent within-person loadings; entries in parentheses between-person loadings. Loadings > .40 are highlighted in bold. Horizontal section lines mark items belonging to the same scale according to the original S-DERS. | | | | |

| **Table S3** |  |  |  |  |
| --- | --- | --- | --- | --- |
| *Multilevel factor loadings for the validation sample* | | | | |
|  | Non-Acceptance | Modulate | Awareness | Clarity |
| Item 8 | **0.87 (1.10)** | -0.13 (-0.17) | -0.02 (-0.03) | 0.01 (0.01) |
| Item 4 | **0.85 (1.12)** | -0.18 (-0.24) | -0.03 (-0.05) | 0.02 (0.04) |
| Item 1 | **0.83 (1.12)** | -0.17 (-0.23) | -0.01 (-0.02) | 0.05 (0.09) |
| Item 5 | **0.72 (0.76)** | 0.03 (0.03) | 0.03 (0.04) | 0.03 (0.04) |
| Item 12 | **0.75 (0.92)** | 0.02 (0.02) | -0.02 (-0.04) | 0.02 (0.03) |
| Item 20 | **0.72 (0.79)** | 0.02 (0.02) | 0.00 (0.00) | 0.03 (0.05) |
| Item 18 | **0.78 (0.93)** | -0.04 (-0.05) | -0.00 (-0.00) | 0.06 (0.11) |
| Item 13 | 0.17 (0.21) | **0.51 (0.65)** | 0.04 (0.07) | 0.03 (0.05) |
| Item 17 | -0.05 (-0.06) | **0.79 (1.03)** | -0.00 (-0.01) | 0.02 (0.03) |
| Item 3 | -0.07 (-0.09) | **0.81 (1.06)** | 0.00 (0.00) | -0.00 (-0.00) |
| Item 15 | **0.47 (0.48)** | 0.18 (0.19) | 0.03 (0.04) | 0.05 (0.07) |
| Item 21 | 0.07 (0.09) | **0.61 (0.78)** | -0.11 (-0.18) | -0.01 (-0.01) |
| Item 9 | 0.29 (0.35) | 0.25 (0.31) | 0.02 (0.03) | 0.11 (0.19) |
| Item 6 | -0.02 (-0.02) | 0.06 (0.06) | **0.64 (0.87)** | 0.03 (0.05) |
| Item 11 | -0.02 (-0.02) | 0.11 (0.11) | **0.57 (0.81)** | -0.05 (-0.07) |
| Item 2 | -0.18 (-0.19) | 0.03 (0.04) | **0.67 (0.99)** | 0.03 (0.04) |
| Item 19 | 0.14 (0.15) | 0.02 (0.02) | **0.50 (0.73)** | -0.07 (-0.10) |
| Item 16 | -0.19 (-0.20) | 0.06 (0.06) | **0.63 (0.93)** | 0.04 (0.05) |
| Item 14 | 0.27 (0.31) | 0.05 (0.06) | -0.02 (-0.03) | **0.43 (0.70)** |
| Item 7 | 0.07 (0.08) | -0.07 (-0.08) | 0.11 (0.16) | **0.56 (0.83)** |
| *Note.* Main entries represent within-person loadings; entries in parentheses between-person loadings. Loadings > .40 are highlighted in bold. Horizontal section lines mark items belonging to the same scale according to the original S-DERS. | | | | |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Table S4** | | | | | |
| *Assignment of items to the three daily life versions* | | | | | |
| **Scale** | **Item#** | **Original Item (English)** | **v18** | **v8** | **v4** |
| **Non- Acceptance** | 8 | I feel ashamed with myself for feeling this way. | ✓ |  |  |
| 4 | I am embarrassed for feeling this way. | ✓ |  |  |
| 1 | I feel guilty for feeling this way. | ✓ |  |  |
| 5 | I am feeling very bad about myself. | ✓ |  |  |
| 12 | I am angry with myself for feeling this way. | ✓ | ✓ |  |
| 20 | I feel like I’m a weak person for feeling this way. | ✓ |  |  |
| 18 | I am irritated with myself for feeling this way. | ✓ | ✓ | ✓ |
| **Modulate** | 13 | I am having difficulty controlling my behaviors. | ✓ |  |  |
| 17 | My emotions feel out of control. | ✓ | ✓ | ✓ |
| 10 | I believe that I will continue feeling this way for a long time. |  |  |  |
| 3 | I feel out of control. | ✓ | ✓ |  |
| 15 | I believe that I am going to end up feeling very depressed. |  |  |  |
| 21 | My emotions feel overwhelming. | ✓ |  |  |
| 9 | I am having difficulty doing the things I need to do right now. |  |  |  |
| **Awareness** | 6 | I am acknowledging my emotions. | ✓ | ✓ |  |
| 11 | I care about what I am feeling. | ✓ |  |  |
| 2 | I am paying attention to how I feel. | ✓ | ✓ | ✓ |
| 19 | I believe that my feelings are valid and important. | ✓ |  |  |
| 16 | I am taking time to figure out what I am really feeling. | ✓ |  |  |
| **Clarity** | 14 | I am confused about how I feel. | ✓ | ✓ |  |
| 7 | I have no idea how I am feeling. | ✓ | ✓ | ✓ |

| V1 | Factor: NonAccept | Factor: Modulate | Factor: Awareness | Factor: Clarity |
| --- | --- | --- | --- | --- |
| Composite: NonAccept | 0.95 (0.99) | 0.71 (0.75) | 0.11 (0.14) | 0.26 (0.49) |
| Composite: Modulate | 0.71 (0.79) | 0.90 (0.98) | -0.06 (0.02) | 0.31 (0.42) |
| Composite: Awareness | 0.08 (0.12) | -0.03 (0.05) | 0.86 (0.97) | 0.02 (0.30) |
| Composite: Clarity | 0.36 (0.59) | 0.35 (0.50) | 0.09 (0.36) | 0.66 (0.93) |

| **Table S6** | | | | | |
| --- | --- | --- | --- | --- | --- |
| *Correlations between latent factors* | | | | | |
|  |  | *Latent factors* | | | |
|  | | Non-Acceptance | Modulate | Awareness | Clarity |
| *Observed scores* | Non-Acceptance | 0.95 (0.99) | 0.71 (0.75) | 0.11 (0.14) | 0.26 (0.49) |
| Modulate | 0.71 (0.79) | 0.90 (0.98) | -0.06 (0.02) | 0.31 (0.42) |
| Awareness | 0.08 (0.12) | -0.03 (0.05) | 0.86 (0.97) | 0.02 (0.30) |
| Clarity | 0.36 (0.59) | 0.35 (0.50) | 0.09 (0.36) | 0.66 (0.93) |
| *Note.* Main entries represent within-person correlations; entries in parentheses represent between-person correlations. Observed scores refer to unit-weighted composite scores (e.g., sum or mean values) as they are most commonly used in questionnaire scaling. Correlations between these observed scores and their latent factors are calculated from the factor loadings of the confirmatory factor analysis model in the validation sample. | | | | | |

| **Table S5** | | | | |
| --- | --- | --- | --- | --- |
| *Correlations between latent factors* | | | | |
|  | Non-Acceptance | Modulate | Awareness | Clarity |
| Non-Acceptance | 1.00 | 0.79 | 0.14 | 0.46 |
| Modulate | 0.79 | 1.00 | 0.04 | 0.42 |
| Awareness | 0.14 | 0.04 | 1.00 | 0.32 |
| Clarity | 0.46 | 0.42 | 0.32 | 1.00 |
|  | | | | |

| **Table S7** |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| *Linear mixed model results predicting S-DERS from affective valence and arousal* | | | | | |
| Term | β | 95% *CI* | *t* | *df* | *p* |
| *Within-person effects* | | | | | |
| Valence | -0.14 | [-0.17, -0.12] | -10.69 | 6616 | < .001\*\*\* |
| Arousal | -0.19 | [-0.21, -0.16] | -12.41 | 6616 | < .001\*\*\* |
| Valence² | 0.04 | [0.03, 0.05] | 6.57 | 6616 | < .001\*\*\* |
| Arousal × Valence | 0.01 | [-0.01, 0.02] | 0.94 | 6616 | .347 |
| Arousal² | 0.03 | [0.01, 0.04] | 4.13 | 6616 | < .001\*\*\* |
| *Between-person effects* | | | | | |
| Valence | -0.14 | [-0.24, -0.04] | -2.71 | 221 | .007\*\* |
| Arousal | -0.19 | [-0.28, -0.11] | -4.36 | 221 | < .001\*\*\* |
| Valence² | 0.13 | [0.02, 0.24] | 2.29 | 221 | .023\* |
| Arousal × Valence | 0.05 | [-0.06, 0.16] | 0.88 | 221 | .379 |
| Arousal² | -0.12 | [-0.20, -0.04] | -2.97 | 221 | .003\*\* |
| \* indicates *p* < .05. \*\* indicates *p* < .01. \*\*\* indicates *p* < .001. | | | | | |

**Table S1**

*Means, standard deviations, and correlations with confidence intervals*

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Variable | *M* | *SD* | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1. DERS | 2.25 | 0.60 |  |  |  |  |  |  |  |  |  |  |
| 2. Neuroticism | 1.96 | 0.69 | .70\*\* |  |  |  |  |  |  |  |  |  |
| 3. DASS | 0.69 | 0.53 | .61\*\* | .67\*\* |  |  |  |  |  |  |  |  |
| 4. S-DERS: Global | 1.91 | 0.44 | .67\*\* | .56\*\* | .60\*\* |  |  |  |  |  |  |  |
| 5. S-DERS: Non-Acceptance | 1.43 | 0.52 | .59\*\* | .55\*\* | .60\*\* | .86\*\* |  |  |  |  |  |  |
| 6. S-DERS: Modulate | 1.41 | 0.49 | .47\*\* | .44\*\* | .53\*\* | .74\*\* | .77\*\* |  |  |  |  |  |
| 7. S-DERS: Awareness | 3.06 | 0.75 | .48\*\* | .32\*\* | .32\*\* | .68\*\* | .28\*\* | .13\* |  |  |  |  |
| 8. S-DERS: Clarity | 1.69 | 0.59 | .48\*\* | .36\*\* | .37\*\* | .71\*\* | .59\*\* | .52\*\* | .36\*\* |  |  |  |
| 9. Affect: Valence | 5.98 | 1.05 | -.31\*\* | -.29\*\* | -.20\*\* | -.41\*\* | -.35\*\* | -.37\*\* | -.25\*\* | -.28\*\* |  |  |
| 10. Affect: Arousal | 5.75 | 1.16 | -.35\*\* | -.33\*\* | -.24\*\* | -.40\*\* | -.34\*\* | -.20\*\* | -.31\*\* | -.33\*\* | .43\*\* |  |
| 11. Stressors | 1.77 | 0.63 | .20\*\* | .23\*\* | .28\*\* | .27\*\* | .33\*\* | .45\*\* | -.01 | .13\* | -.25\*\* | -.07 |

*Note.* Descriptives are based on mean scores (in contrast to sum scores) with the following response ranges: DERS = Difficulties in Emotion Regulation Scale [1-5], Neuroticism [0-4], DASS = Depression, Anxiety and Stress Scale [0-3], S-DERS = State-DERS [1-5], Affect [1-10], Stressors [1-7]

\* indicates *p* < .05.

\*\* indicates *p* < .01.