Multilevel Equations Tested

*Note:* $\beta$ = fixed effect; $b$ = random effect; $e$ = random error; j = between-person effect (Level 2); i = within-person effect (Level 1)

**1. SV + Stressor → Appraisal and Coping (Main effects; Table 2)**

*Control or Coping* $= \beta_0 + b_{oj} + \beta_1 SV + \beta_2 Cohort_j + \beta_3 Gender_j + \beta_4 Stressor\_academic_{ij} + \beta_4 Stressor\_intrapersonal_{ij} + \beta_6 Time_{ij} + b_6 Time_{ij} + e_{ij}$

**2. SV*Stressor → Appraisal and Coping (Interaction effects; Table 2)**

*Control or Coping* $= \beta_0 + b_{oj} + \beta_1 SV_j + \beta_2 Cohort_j + \beta_3 Gender_j + \beta_4 Stressor\_academic_{ij} + \beta_4 Stressor\_intrapersonal_{ij} + \beta_5 Stressor\_academic_{ij}*SV_j + \beta_6 Stressor\_intrapersonal_{ij}*SV_j + \beta_7 Time_{ij} + b_8 Time_{ij} + e_{ij}$

**3. SV → Affect/Somatic Symptoms (Table S1)**

*Affect or Somatic Symptoms* $= \beta_0 + b_{oj} + \beta_1 SV_j + \beta_2 Cohort_j + \beta_3 Gender_j + \beta_4 Time_{ij} + b_5 Time_{ij} + e_{ij}$

**4. Coping → Affect/Somatic Symptoms (Table S2)**

*Affect or Somatic Symptoms* $= \beta_0 + b_{oj} + \beta_1 SV_j + \beta_2 Cohort_j + \beta_3 Gender_j + \beta_4 Stress_j + \beta_5 Stress_i + \beta_6 Control_j + \beta_7 Control_i + \beta_8 Time_{ij} + b_9 Time_{ij} + e_{ij}$

** $\beta_6$ and $\beta_7$ were tested separately for Control, and Problem-Focused/Meaning-Focused/Avoidance Coping. All other covariates remained the same across models.

*Table S1.* Regression Models Predicting Affect and Somatic Symptoms from SV History

| | B (SE) | Beta |
|---|---|---|
| **Positive Affect** on | | |
| **Within-person** | | |
| Time[1] | -0.28 (0.05)*** | -0.10 |
| **Between-person** | | |
| SV History (yes) | -1.97 (1.08) | -0.10 |
| Gender (not male) | -2.10 (1.11) | -0.10 |
| **Intercept** | 26.55 (1.38)*** | - |
| **Negative Affect** on | | |
| **Within-person** | | |
| Time | -0.16 (0.05)*** | -0.06 |
| **Between-person** | | |
| SV History (yes) | 1.65 (0.94) | 0.09 |
| Gender (not male) | -0.13 (0.97) | -0.01 |
| **Intercept** | 19.32 (1.20)*** | |
| **Somatic Symptoms** on | | |
| **Within-person** | | |
| Time | -0.17 (0.03)*** | -0.12 |
| **Between-person** | | |
| SV History (yes) | 1.27 (0.50)* | 0.12 |
| Gender (not male) | 1.50 (0.51)** | 0.14 |
| **Intercept** | 10.28 (0.63)*** | - |

[1]Time is mean-centered; thus, intercepts should be interpreted as representing predicted levels of affect and somatic symptoms at the middle of the study.

[2]Although all models control for between-person cohort effects (timing of study group) as a categorical variable, these coefficients are not reported here for parsimony.

*Note:* All continuous person-level predictors are grand-mean centered. Analyses of daily variables include only days when a worst daily stressor was identified *(n=2238; N=255).*

***p<.001, **p<.01, *p<.05

*Table S2.* Regression Models Predicting Affect and Somatic Symptoms from Appraisals and Coping

|  | B (SE) | Beta |
|---|---|---|
| **Positive Affect** on | | |
| **Within-person** | | |
| Control Appraisal | 0.38 (0.07)*** | 0.07 |
| Stress Appraisal | -0.42 (0.08)*** | -0.07 |
| Time[1] | -0.26 (0.05)*** | -0.09 |
| **Between-person** | | |
| Control Appraisal | 1.03 (0.41)* | 0.12 |
| Stress appraisal | -0.74 (0.41) | -0.09 |
| Gender (not male) | -2.61 (1.07)* | -0.12 |
| **Intercept** | 26.64 (1.35)*** | - |
| **Positive Affect** on | | |
| **Within-person** | | |
| Problem-Focused Coping | 0.47 (0.06)*** | 0.10 |
| Stress appraisal | -0.57 (0.08)*** | -0.09 |
| Time | -0.24 (0.05)*** | -0.09 |
| **Between-person** | | |
| Problem-focused coping | 1.85 (0.29)*** | 0.31 |
| Stress appraisal | -1.64 (0.40)*** | -0.20 |
| Gender (not male) | -2.34 (1.01)* | -0.11 |
| **Intercept** | 26.73 (1.27)*** | - |
| **Positive Affect** on | | |
| **Within-person** | | |
| Meaning-Focused Coping | 0.54 (0.07)*** | 0.09 |
| Stress appraisal | -0.44 (0.08)*** | -0.07 |
| Time | -0.23 (0.05)*** | -0.08 |
| **Between-person** | | |
| Meaning-focused coping | 2.19 (0.32)*** | 0.31 |
| Stress appraisal | -1.25 (0.38)*** | -0.15 |
| Gender (not male) | -1.84 (1.00) | -0.09 |
| **Intercept** | 25.71 (1.26)*** | - |
| **Positive Affect** on | | |
| **Within-person** | | |
| Avoidance Coping | -0.00 (0.10) | 0.01 |
| Stress appraisal | -0.40 (0.08)*** | -0.06 |
| Time | -0.29 (0.05)*** | -0.10 |

**Between-person**

| | | |
|---|---|---|
| Avoidance coping | 0.10 (0.38) | 0.01 |
| Stress appraisal | -0.92 (0.43)* | -0.11 |
| Gender (not male) | -2.45 (1.09)* | -0.12 |
| **Intercept** | 26.56 (1.37)*** | - |

**Negative Affect** on

**Within-person**

| | | |
|---|---|---|
| Control Appraisal | 0.12 (0.06) | 0.02 |
| Stress Appraisal | 1.41 (0.07)*** | 0.25 |
| Time | -0.12 (0.04)** | -0.05 |

**Between-person**

| | | |
|---|---|---|
| Control Appraisal | -0.12 (0.30) | -0.02 |
| Stress appraisal | 3.20 (0.30)*** | 0.42 |
| Gender (not male) | -0.02 (0.79) | 0.00 |
| **Intercept** | 19.51 (1.00)*** | - |

**Negative Affect** on

**Within-person**

| | | |
|---|---|---|
| Problem-Focused Coping | 0.18 (0.05)*** | 0.04 |
| Stress appraisal | 1.34 (0.07)*** | 0.24 |
| Time | -0.11 (0.04)** | -0.04 |

**Between-person**

| | | |
|---|---|---|
| Problem-focused coping | 0.54 (0.23)* | 0.10 |
| Stress appraisal | 2.97 (0.31)*** | 0.39 |
| Gender (not male) | 0.03 (0.78) | 0.00 |
| **Intercept** | 19.62 (0.99)*** | - |

**Negative Affect** on

**Within-person**

| | | |
|---|---|---|
| Meaning-Focused Coping | 0.07 (0.06) | 0.01 |
| Stress appraisal | 1.41 (0.07)*** | 0.25 |
| Time | -0.12 (0.04)** | -0.05 |

**Between-person**

| | | |
|---|---|---|
| Meaning-focused coping | 0.23 (0.26) | 0.04 |
| Stress appraisal | 3.15 (0.30)*** | 0.42 |
| Gender (not male) | 0.07 (0.80) | 0.00 |
| **Intercept** | 19.44 (1.00)*** | - |

**Negative Affect** on

**Within-person**

| | | |
|---|---|---|
| Avoidance Coping | 0.69 (0.08)*** | 0.10 |
| Stress appraisal | 1.32 (0.07)*** | 0.24 |

| | | |
|---|---|---|
| Time | -0.12 (0.04)*** | -0.05 |
| **Between-person** | | |
| Avoidance coping | 2.46 (0.23)*** | 0.38 |
| Stress appraisal | 2.44 (0.26)*** | 0.32 |
| Gender (not male) | -0.08 (0.66) | 0.00 |
| **Intercept** | 20.30 (0.83)*** | - |

**<u>Somatic Symptoms</u> on**

| | | |
|---|---|---|
| **Within-person** | | |
| Control Appraisal | -0.04 (0.04) | -0.01 |
| Stress Appraisal | 0.28 (0.04)*** | 0.09 |
| Time | -0.17 (0.03)*** | -0.12 |
| **Between-person** | | |
| Control Appraisal | -0.29 (0.18) | -0.07 |
| Stress Appraisal | 0.93 (0.18)*** | 0.22 |
| Gender (not male) | 1.76 (0.47)*** | 0.16 |
| **Intercept** | 10.27 (0.60)*** | - |

**<u>Somatic Symptoms</u> on**

| | | |
|---|---|---|
| **Within-person** | | |
| Problem-Focused Coping | 0.04 (0.03) | 0.02 |
| Stress appraisal | 0.26 (0.04)*** | 0.08 |
| Time | -0.16 (0.04)*** | -0.11 |
| **Between-person** | | |
| Problem-focused coping | -0.03 (0.14) | -0.01 |
| Stress appraisal | 0.99 (0.19)*** | 0.23 |
| Gender (not male) | 1.73 (0.48)*** | 0.16 |
| **Intercept** | 10.28 (0.60)*** | - |

**<u>Somatic Symptoms</u> on**

| | | |
|---|---|---|
| **Within-person** | | |
| Meaning-Focused Coping | 0.07 (0.04) | 0.03 |
| Stress appraisal | 0.26 (0.04)*** | 0.08 |
| Time | -0.16 (0.03)*** | -0.11 |
| **Between-person** | | |
| Meaning-focused coping | -0.00 (0.15) | 0.00 |
| Stress appraisal | 0.97 (0.18)*** | 0.23 |
| Gender (not male) | 1.71 (0.48)*** | 0.16 |
| **Intercept** | 10.29 (0.60)*** | - |

**<u>Somatic Symptoms</u> on**

| | | |
|---|---|---|
| **Within-person** | | |
| Avoidance Coping | 0.31 (0.05)*** | 0.08 |

| | | |
|---|---|---|
| Stress appraisal | 0.24 (0.04)*** | 0.08 |
| Time | -0.16 (0.03)*** | -0.11 |
| **Between-person** | | |
| Avoidance coping | 1.12 (0.15)*** | 0.31 |
| Stress appraisal | 0.63 (0.17)*** | 0.15 |
| Gender (not male) | 1.70 (0.44)*** | 0.16 |
| **Intercept** | 10.65 (0.55)*** | - |

[1]Time is mean-centered; thus, intercepts should be interpreted as representing predicted levels of affect and somatic symptoms at the middle of the study.

[2]Although all models control for between-person cohort effects (timing of study group) as a categorical variable, these coefficients are not reported here for parsimony.

*Note:* All continuous person-level predictors are grand-mean centered. Analyses of daily variables include only days when a worst daily stressor was identified *(n=2238; N=255)*.

****p<.001, **p<.01, *p<.05*

*Table S3.* Between-Person Mediation Model

|  | Estimate [95% CI] | Proportion Mediated [95% CI] |
|---|---|---|
| *SV-Meaning-Positive* |  |  |
| Indirect Effect (AB) | **-0.75 [-1.52, -0.03]** | 0.39 [-0.15, 2.01] |
| Direct Effect (C') | -1.18 [-3.17, 0.61] |  |
| Total Effect | -1.93 [-4.12, -0.14] |  |

*Notes:* \****p<.001***, \*\**p<.01*, \**p<.05*. Bold text indicates significant indirect effect (i.e., 95% confidence interval does not include 0) indirect effects.
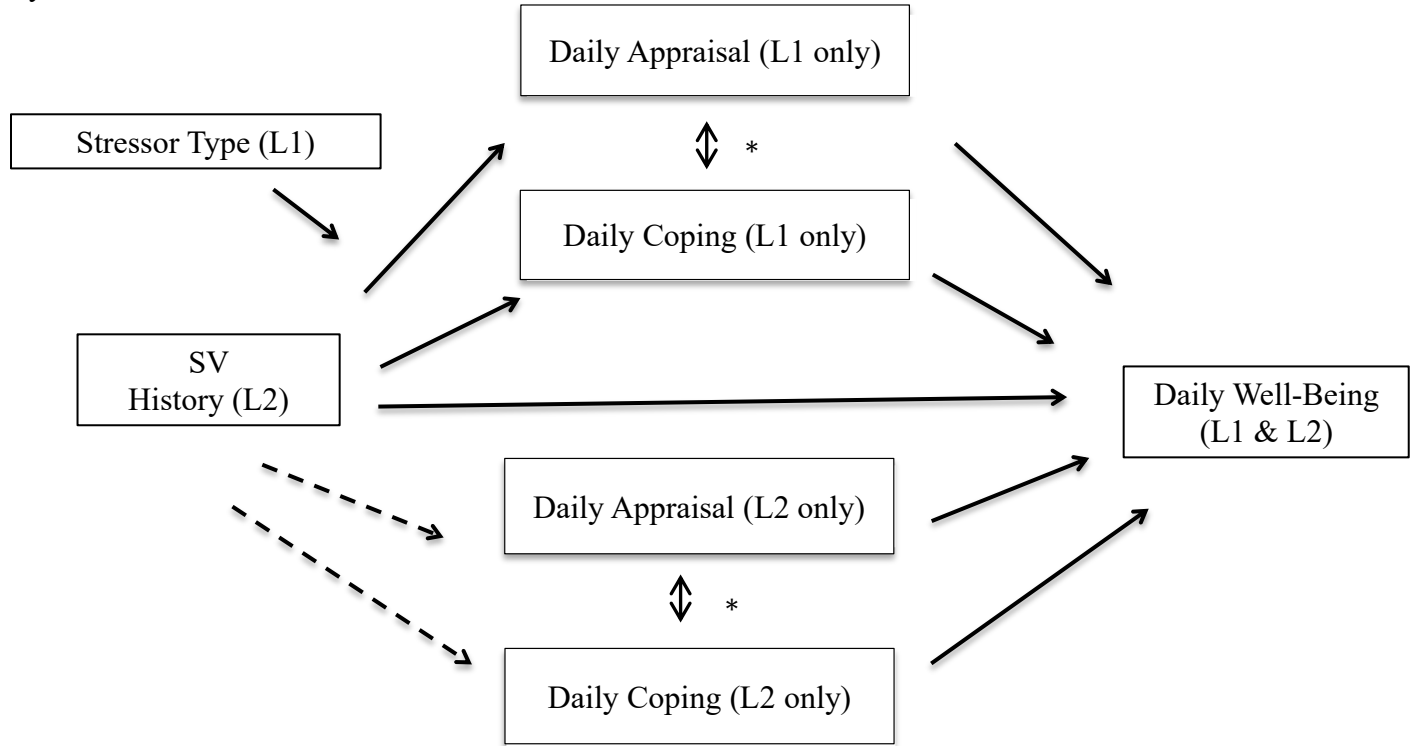
*Table S4*. Within-Person Mediation Models

| | | Estimate [95% CI] | Proportion Mediated [95% CI] |
|---|---|---|---|
| **SV-Control-Positive**[1] | | | |
| *Interpersonal* | Indirect (AB) | 0.05 [-0.03, 0.15] | -0.02 [-0.15, 0.03] |
| | Direct (C') | -2.06* [-4.04, -0.12] | |
| | Total (C) | -2.00* [-3.94, -0.11] | |
| *Academic* | Indirect (AB) | **0.18*** [0.05, 0.31]** | -0.10 [-2.25, 0.27] |
| | Direct (C') | -1.72 [-3.40, 0.75] | |
| | Total (C) | -1.54 [-3.25, 0.81] | |
| *Intrapersonal* | Indirect (AB) | **-0.10***[-0.21, -0.02]** | 0.04 [-1.21, 0.21] |
| | Direct (C') | -1.71 [-3.72, 0.40] | |
| | Total (C) | -1.81 [-3.81, 0.31] | |
| **SV-Problem-Positive** | | | |
| *Interpersonal* | Indirect (AB) | 0.13 [0.00, 0.29] | -0.06 [-0.34, 0.00] |
| | Direct (C') | -2.22*** [-4.20, -0.50] | |
| | Total (C) | -2.09* [-4.03, -0.38] | |
| *Academic* | Indirect (AB) | 0.04 [-0.20, 0.22] | -0.04 [-2.17, 0.63] |
| | Direct (C') | -1.36 [-3.67, 0.55] | |
| | Total (C) | -1.31 [-3.66, 0.50] | |
| *Intrapersonal* | Indirect (AB) | **-0.16* [-0.30, -0.03]** | 0.10 [-0.68, 1.22] |
| | Direct (C') | -1.15 [-3.60, 0.81] | |
| | Total (C) | -1.31 [-3.72, 0.60] | |
| **SV-Problem-Negative** | | | |
| *Interpersonal* | Indirect (AB) | **0.06*** [0.01, 0.14]** | 0.03* [0.00, 0.54] |
| | Direct (C') | 1.65 [0.01, 3.43] | |
| | Total (C) | 1.70* [0.08, 3.47] | |
| *Academic* | Indirect (AB) | 0.03 [-0.05, 0.11] | 0.02 [-0.02, 0.09] |
| | Direct (C') | 2.01* [0.59, 3.86] | |
| | Total (C) | 2.04* [0.61, 3.89] | |
| *Intrapersonal* | Indirect (AB) | **-0.07*** [-0.15, -0.02]** | -0.04* [-0.36, -0.01] |
| | Direct (C') | 1.58* [0.07, 3.05] | |
| | Total (C) | 1.51* [0.02, 3.01] | |

*Notes:* ***p< .001*, **p< .01*, *p< .05. Bold text indicates significant indirect effects (i.e., 95% confidence interval does not include 0).
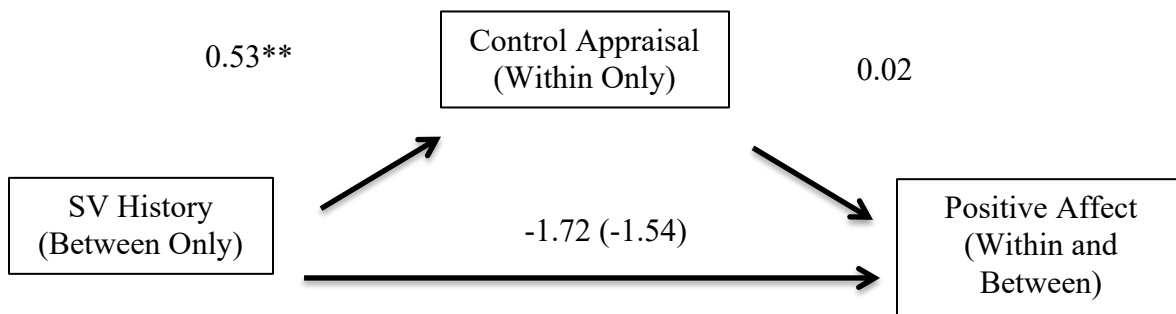
[1]Within-person mediation path run without random effect of time to improve model fit

*Figure S1.* Theoretical Moderated Covariance Model of Coping and Well-Being in a Causal System

```
          ┌─────────────────────────────┐
          │  Daily Appraisal (L1 only)  │
          └─────────────────────────────┘
┌──────────────────────┐        ↕  *
│  Stressor Type (L1)  │    ┌─────────────────────────┐
└──────────────────────┘    │  Daily Coping (L1 only) │
                            └─────────────────────────┘
┌──────────────────┐
│       SV         │                                      ┌──────────────────────┐
│   History (L2)   │─────────────────────────────────────▶│  Daily Well-Being    │
└──────────────────┘                                      │     (L1 & L2)        │
                            ┌─────────────────────────┐   └──────────────────────┘
                            │ Daily Appraisal (L2 only)│
                            └─────────────────────────┘
                                     ↕  *
                            ┌─────────────────────────┐
                            │  Daily Coping (L2 only) │
                            └─────────────────────────┘
```

*Note:* Dotted line indicates hypothesized null between-person effect. *Indicates theoretical path not tested in mediation models

*Figure S2.* Significant Within-Person Covariance Model 2: L1 SV→ control → positive affect (academic)

```
          0.53**          ┌──────────────────────┐         0.02
                          │  Control Appraisal   │
                          │   (Within Only)      │
                          └──────────────────────┘
┌──────────────────┐                                    ┌──────────────────────┐
│   SV History     │            -1.72 (-1.54)           │   Positive Affect    │
│  (Between Only)  │───────────────────────────────────▶│    (Within and       │
└──────────────────┘                                    │     Between)         │
                                                         └──────────────────────┘
```

*Note:* ***p<.001*, **p<.01*, *p<.05*. Path values represent unstandardized coefficients. The value in parentheses represents the total effect of SV history on positive affect on days when academic stressors were selected as most stressful, whereas the value outside of the parentheses represents the direct effect. Total and direct were extracted from bootstrapped mediation analyses, whereas paths between SV history, control appraisal, and affect were extracted from separate regression models.

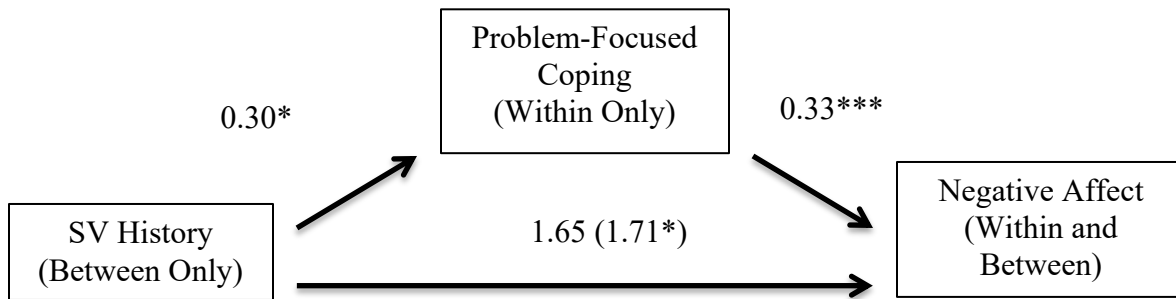*Figure S3.* Significant Within-Person Covariance Model 3: L1 SV→ control → positive affect (intrapersonal)
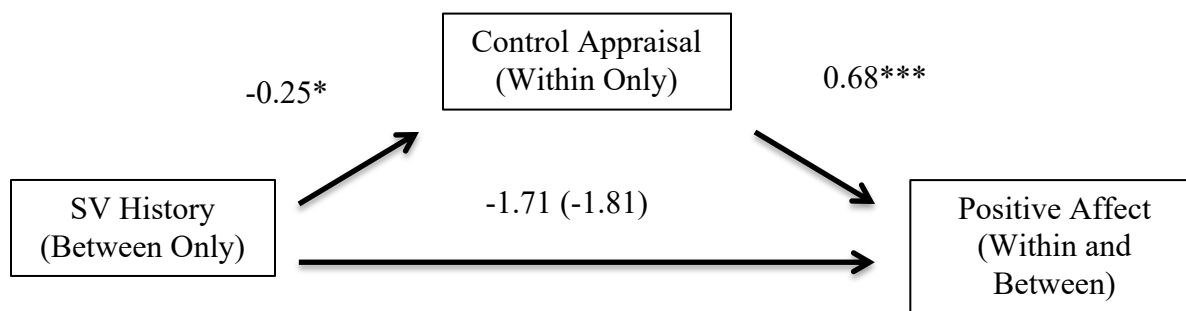


*Note:* ***p<.001*, **p<.01*, *p<.05*. Path values represent unstandardized coefficients. The value in parentheses represents the total effect of SV history on positive affect on days when intrapersonal stressors were selected as most stressful, whereas the value outside of the parentheses represents the direct effect. Total and direct were extracted from bootstrapped mediation analyses, whereas paths between SV history, control appraisal, and affect were extracted from separate regression models.

*Figure S4.* Significant Within-Person Covariance Model 6: SV→ problem → positive affect (intrapersonal)
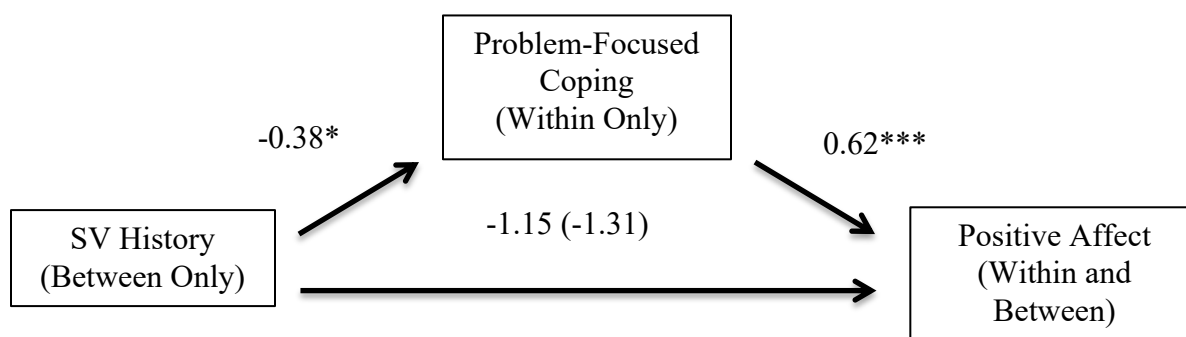


*Note:* ***p<.001*, **p<.01*, *p<.05*. Path values represent unstandardized coefficients. The value in parentheses represents the total effect of SV history on positive affect on days when intrapersonal stressors were selected as most stressful, whereas the value outside of the parentheses represents the direct effect. Total and direct were extracted from bootstrapped mediation analyses, whereas paths between SV history, control appraisal, and affect were extracted from separate regression models.

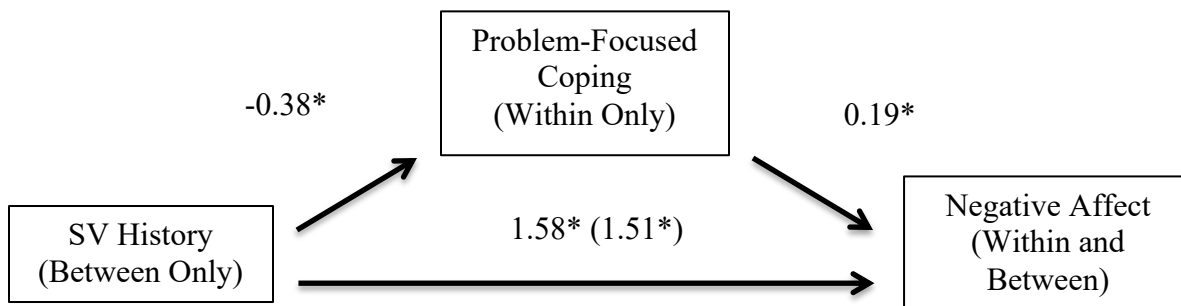*Figure S5.* Significant Within-Person Covariance Model 7: SV→ problem → negative affect (interpersonal)

```
                        ┌─────────────────────┐
                        │  Problem-Focused    │
                        │      Coping         │
    0.30*               │   (Within Only)     │        0.33***
                        └─────────────────────┘

┌──────────────────┐                              ┌─────────────────────┐
│   SV History     │        1.65 (1.71*)          │  Negative Affect    │
│  (Between Only)  │                              │   (Within and       │
└──────────────────┘                              │     Between)        │
                                                  └─────────────────────┘
```

*Note:* ***p<.001*, **p<.01*, *p<.05*. Path values represent unstandardized coefficients. The value in parentheses represents the total effect of SV history on positive affect on days when interpersonal stressors were selected as most stressful, whereas the value outside of the parentheses represents the direct effect. Total and direct were extracted from bootstrapped mediation analyses, whereas paths between SV history, control appraisal, and affect were extracted from separate regression models.

*Figure S6.* Significant Within-Person Covariance Model 6: SV→ problem → negative affect (intrapersonal)

```
                        ┌─────────────────────┐
                        │  Problem-Focused    │
                        │      Coping         │
    -0.38*              │   (Within Only)     │        0.19*
                        └─────────────────────┘

┌──────────────────┐                              ┌─────────────────────┐
│   SV History     │        1.58* (1.51*)         │  Negative Affect    │
│  (Between Only)  │                              │   (Within and       │
└──────────────────┘                              │     Between)        │
                                                  └─────────────────────┘
```

*Note:* ***p<.001*, **p<.01*, *p<.05*. Path values represent unstandardized coefficients. The value in parentheses represents the total effect of SV history on positive affect on days when intrapersonal stressors were selected as most stressful, whereas the value outside of the parentheses represents the direct effect. Total and direct were extracted from bootstrapped mediation analyses, whereas paths between SV history, control appraisal, and affect were extracted from separate regression models.