

File S1

Method

For the additional SEM analyses that are not described in the main text, we fit latent state-trait (LST) models, rank-order stability models, and mean-level growth curves for each construct. All constructs were fit with unidimensional models as this best mirrored the composite variables used for each construct in the preregistered analyses. The lavaan (Rosseel, 2012) and ltttheory (Mayer, 2025) R packages were used to conduct all SEM analyses. All models adhered to a frequentist framework with $\alpha = .05$. Additional SEM analyses were not conducted for within-person residual variability nor ipsative consistency because there were not clear counterparts to our preregistered models that estimated similar parameters nor did so within the same statistical software.

To complement prior research on maladaptive personality traits (Zimmermann et al., 2017), we ran LST models to evaluate what percentage of variance in each variable's scores could be attributed to stable traits (i.e., consistency) versus external factors (i.e., occasion-specificity). We fit multistate-multitrait (MSMT) models with indicator-specific traits (Eid & Hoffmann, 1998) for each construct with its i items over t timepoints. For each Big Five trait, 12 manifest variables were available ($i = 3, t = 4$). For personality functioning, 48 manifest variables were available ($i = 12, t = 4$). We assumed equal variances over time for latent traits (ξ_{it}), state residuals (ζ_{it}), and measurement errors (ε_{it}), but not state variables (τ_{it}). Thus, the reliability $Rel(Y_{it})$, stable-trait (i.e., consistency) $Con(Y_{it})$, and occasion-specificity $Spe(Y_{it})$ coefficients were identical for all manifest variables per construct. Following the revised LST theory (LST-R; Steyer et al., 2015), we computed these coefficients as follows:

$$Rel(Y_{it}) = \frac{Var(\tau_{it})}{Var(Y_{it})}, Con(Y_{it}) = \frac{Var(\xi_{it})}{Var(Y_{it})}, Spe(Y_{it}) = \frac{Var(\zeta_{it})}{Var(Y_{it})}$$

To examine latent rank-order stability and mean-level changes, we set item loadings, intercepts, and variances equal over time for each construct. Item residuals could covary at each wave. In the mean-level models, we additionally set latent variable intercepts and variances equal. To best match our preregistered analyses for unconditional development, we fit second-order linear and quadratic growth models. All latent variables had a loading of 1 on the latent intercept and loadings on the latent linear slope from T1-T4 were 0, .50, .75, and 1. These values were chosen as T2 spanned approximately half of the study duration (i.e., 6/12 months).

Models with event variables had a structure similar to our preregistered models. For rank-order stability, we used the same logic to specify the two waves of each construct analyzed per group, controlled for the time lag, and included a product variable of the T1 personality construct and between-person event variable to estimate group differences in rank-order stability. In the mean-level models, we adopted a multilevel structure so event variables at both levels could be associated with latent traits. We assumed the same factor structure and loadings across levels. The cross-level interaction of the time and between-person event variables was specified at Level 1 via creating a product term of these variables.

Results

LST Models

Most of the models ranged from acceptable to good fit (average CFI = .887, TLI = .907, RMSEA = .091). The exceptions to this were the models for conscientiousness and neuroticism, which had RMSEA values exceeding .10 (Table S5). Regarding the LST-R coefficients, for personality functioning, these were $Rel(Y_{it}) = .687$, $Con(Y_{it}) = .644$, and $Spe(Y_{it}) = .043$. Average coefficients for the Big Five traits were $Rel(Y_{it}) = .741$, $Con(Y_{it}) = .713$, and $Spe(Y_{it}) = .027$. Conscientiousness had the largest stable-trait (i.e., consistency) at .815 and agreeableness

had the smallest at .671. For occasion-specificity, neuroticism had the largest at .051 whereas conscientiousness had the smallest at .014. Full results, including reliability, consistency, and occasion-specificity coefficients for each construct as well as the model fit indices, are available on [OSF](#) (Table S5).

Unconditional Rank-Order Stability

We found 1-year stability of $r = .81$ for personality functioning. For the Big Five, stability ranged from $r = .85$ for neuroticism to $r = .92$ for conscientiousness. Thus, in line with our other models, conscientiousness continued to have the largest 1-year stability across constructs. When viewing 95% confidence intervals for these estimates, only extraversion and conscientiousness did not overlap with personality functioning. As such, conscientiousness again likely has a larger rank-order stability than personality functioning, in line with the other results. Full results can be found on [OSF](#) (Table S6).

Unconditional Mean-Level Change

We found significant linear decreases for all Big Five traits, with the largest slope for agreeableness ($-0.08, p < .001$) and smallest slope for neuroticism ($-0.04, p = .045$). Excluding the marginally significant neuroticism slope, these results aligned well with our preregistered models in terms of significant changes and relative magnitudes thereof across constructs. Personality functioning had no significant linear mean-level change in either set of models. In the quadratic SEM analyses, personality functioning had significant increases that attenuated over time. For the Big Five, we found linear decreases for agreeableness and conscientiousness and curvilinear mean-level change for openness that was opposite in direction to personality functioning's trends (i.e., decreases that attenuated over time). Extraversion and neuroticism had no linear nor quadratic mean-level changes. These developmental patterns mirror the results from

our preregistered analyses. Full results can be found on [OSF](#) (Table S6).

Event-Related Rank-Order Stability

Event-related effects on rank-order stability mirrored our preregistered analyses such that no effects emerged. Full results can be found on [OSF](#) (Table S8).

Event-Related Mean-Level Changes

Event-related effects on mean-level development were very similar to the preregistered models. Here, only personality functioning had significant effects. There were again group differences in slopes such that the event group had pre-event increases (.03 units, $p = .004$) whereas the no event group had no changes. Similarly, the event group again had pre- to post-event within-person decreases (-.05 units, $p < .001$). Then, a new effect emerged for mean-level differences in group intercepts (i.e., selection effects), with the intercept for the event group estimated to be .09 units higher than the no event group ($p = .033$). Thus, these results highlight possibly even greater pre-event differences in functioning for the event versus no event groups, with the event group having higher levels of dysfunction and slight increases across time. Similar effects of increased functioning from pre- to post-event periods were also identified for the event group. For the Big Five traits, the previously significant effects for extraversion and openness from the linear contrasts were not significant ($p = .064$ and $p = .067$, respectively). Full results can be found on [OSF](#) (Table S8).

References

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