AMERICAN PSYCHOLOGICAL ASSOCIATION

Emotion

© 2025 The Author(s)
ISSN: 1528-3542

2025, Vol. 25, No. 8, 1944–1957
https://doi.org/10.1037/emo0001541

Why Do Feelings Persist Over Time in Daily Life? Investigating the Role of Emotion-Regulation Strategies in the Process Underlying Emotional Inertia

Lachlan Bagnara[1], Ella K. Moeck[1, 2], Peter Kuppens[3], Valentina Bianchi[1], and Peter Koval[1, 3]
[1] Melbourne School of Psychological Sciences, The University of Melbourne
[2] School of Psychology, The University of Adelaide
[3] Faculty of Psychology and Educational Sciences, Katholieke Universiteit Leuven

Emotions do not simply turn on and off again in an instant; rather, emotions rise and fall gradually, often persisting for a considerable period. Although it is normative for emotions to show a degree of momentum—a phenomenon known as *emotional inertia*—the tendency for emotions to be overly persistent has been associated with psychological maladjustment. However, the mechanisms underlying emotional inertia remain unclear. We aimed to fill this gap in the present study by investigating how the persistence of affect over time (emotional inertia) is mediated—at the within-person level—by the use of emotion-regulation strategies in daily life. We ran secondary analyses on eight experience sampling data sets collected between 2009 and 2021 (total $N = 948$ participants measured at 73,472 occasions), in which participants reported their momentary experiences of positive affect and negative affect and their recent use of four emotion-regulation strategies (distraction, cognitive reappraisal, rumination, and expressive suppression). We used dynamic structural equation modeling to estimate indirect effects of each strategy on the inertia of positive affect and negative affect. All four strategies reliably mediated both negative affect inertia and (to a lesser extent) positive affect inertia, supporting the notion that the use of emotion-regulation strategies represents a mechanism underpinning emotional inertia, at least among highly educated, nonclinical, Australian and Belgian young adults. However, each regulation strategy reduced the total autoregressive slope of affect at $t - 1$ predicting affect at t by no more than 13%, suggesting factors other than emotion-regulation strategies also play important roles in emotional inertia.

Keywords: emotional inertia, emotion regulation, affect dynamics, experience sampling method, dynamic structural equation modeling

Supplemental materials: https://doi.org/10.1037/emo0001541.supp

Emotions tend to persist over time (Verduyn & Lavrijsen, 2015). Frijda (1988) argued that this persistence is so widespread that emotions are universally governed by a "law of conservation of emotional momentum" (p. 354). While a degree of emotional persistence is normal—a phenomenon labeled *emotional inertia*—emotions that are overly resistant to change may be maladaptive. Supporting this view, early work by Suls et al. (1998) linked greater inertia of negative feelings in daily life with higher scores on the Big Five dimension of neuroticism. In recent decades, research on emotional inertia has grown rapidly (for reviews, see Koval & Kuppens, 2024; Koval et al., 2021). Yet, little is known about the mechanisms underlying emotional inertia. The processes by which people seek to influence or manage their emotions, collectively referred to as *emotion regulation* (ER), are theorized to play a key role in how emotions unfold over time (Gross, 2015). Thus, the degree to which emotions persist over time (i.e., their inertia) may be, at least partly, driven by ER processes. The present study aims to investigate this possibility by exploring whether the spontaneous use of ER strategies mediates emotional inertia in daily life.

This article was published Online First May 19, 2025.
Karin G. Coifman served as action editor.
Lachlan Bagnara https://orcid.org/0000-0003-4665-3296
Peter Koval https://orcid.org/0000-0003-2460-0943
This article was funded by Australian Research Council, Discovery Early Career Researcher Award (DE190100203), The University of Melbourne (Dame Kate Campbell Fellowship) awarded to Peter Koval.
Open Access funding provided by The University of Melbourne: This work is licensed under a Creative Commons Attribution 4.0 International License (CC BY 4.0; https://creativecommons.org/licenses/by/4.0). This license permits copying and redistributing the work in any medium or format, as well as adapting the material for any purpose, even commercially.

Lachlan Bagnara played a lead role in data curation, investigation, project administration, visualization, and writing–original draft and an equal role in formal analysis. Ella K. Moeck played an equal role in investigation and writing–review and editing. Peter Kuppens played an equal role in writing–review and editing. Valentina Bianchi played an equal role in investigation and writing–review and editing. Peter Koval played a lead role in conceptualization, funding acquisition, methodology, and supervision and an equal role in formal analysis and writing–review and editing.

Correspondence concerning this article should be addressed to Peter Koval, Melbourne School of Psychological Sciences, The University of Melbourne, Parkville, VIC 3010, Australia. Email: p.koval@unimelb.edu.au

Most research on emotional inertia has focused on how between-person differences in inertia relate to psychological functioning. Houben et al.'s (2015) meta-analysis of this literature found that individuals with higher negative affect (NA) inertia, and to a lesser extent those with higher positive affect (PA) inertia, tend to also report higher levels of psychological maladjustment and psychopathology symptoms. Although some recent research (e.g., Hawes & Klein, 2024; Schoevers et al., 2021; Zhu et al., 2024) aligns with the conclusion that NA inertia is linked to maladjustment, other studies suggest that inertia may not uniquely predict psychological functioning beyond its overlap with static features of affect, such as mean levels and net variance (Dejonckheere et al., 2019). Overall, although there is debate about the exact role of emotional inertia in psychological functioning, the literature on individual differences in emotional inertia generally supports the idea that higher inertia is related to worse psychological functioning. Yet, the mechanisms underpinning emotional inertia remain poorly understood.

To better understand the phenomenon of emotional inertia, we need research investigating its possible underlying mechanisms (Koval et al., 2021; Kuppens et al., 2010). Researchers have proposed that emotions become more self-predictive when they are resistant to external (e.g., exposure and reactivity to events) and/or internal (e.g., efforts to regulate) influences (Brose et al., 2015; Koval, Butler, et al., 2015; Kuppens et al., 2010), implying that inertia may be a form of psychological inflexibility (Hollenstein, 2015). While some evidence implicates alterations in event exposure and reactivity as contributors to emotional inertia (Koval, Brose, et al., 2015), compelling evidence points to ER processes as the primary mechanism underlying heightened inertia.

The Role of Emotion Regulation in Emotional Inertia

Broadly speaking, ER refers to any process that influences how emotions are experienced and expressed over time (Gross, 2015). From another perspective, whereas "primary" emotional responding refers to processes that generate emotional reactions to salient events, regulation can be considered part of the "secondary" emotional response that determines the offset or "exit gradient" of emotions (Koole, 2009, pp. 8–9). By extension, these secondary (regulatory) processes are likely to determine the extent to which emotions persist over time; that is, their degree of inertia.

People regulate their emotions in a wide variety of ways, ranging from relatively effortful, deliberate, and conscious strategies all the way to effortless, automatic, and unconscious modes of regulation (Braunstein et al., 2017; Rodriguez & Kross, 2023). Most theoretical and empirical work has focused on effortful ER strategies which include—among others—directing attention away from (distraction) or toward (rumination) emotions or emotion-eliciting stimuli; reevaluating the meaning of emotional situations to change their impact (cognitive reappraisal); or directly targeting emotional responding by, for instance, inhibiting expressive behavior (expressive suppression). Although certainly not an exhaustive list, these four regulation strategies are among the most widely studied. Importantly, these four strategies also represent many key distinctions proposed in taxonomies of ER strategies, including Naragon-Gainey et al.'s (2017) *disengagement* (distraction, expressive suppression), *aversive cognitive perseveration* (rumination), and *adaptive engagement* (reappraisal) factors; Gross (2015) *attentional deployment* (rumination, distraction), *cognitive change* (reappraisal), and *response modulation* (expressive suppression) strategy families; and Parkinson and Totterdell's (1999) distinctions between *behavioral* (distraction, expressive suppression) versus *cognitive* (distraction, rumination, reappraisal), and *engagement* (reappraisal, rumination) versus *diversion* (distraction, expressive suppression) strategies.

Researchers have identified reliable differences in how distraction, rumination, reappraisal, and expressive suppression impact emotional intensity when they are deployed at a single occasion (Webb et al., 2012) or used habitually across time and context (Aldao et al., 2010). Moreover, theory suggests that regulation processes also play a role in the temporal dynamics of emotion, including inertia (Cole et al., 2019; Kuppens & Verduyn, 2015). For example, ruminating about a negative experience may amplify a person's negative feelings at one moment and also increase the tendency for NA to persist over time (Blanke et al., 2022; Rogers et al., 2022). Indeed, Suls and Martin (2005) suggested the use of ineffective ER strategies, such as rumination, may be a key driver of heightened NA inertia among more neurotic individuals. Although research directly investigating the role of ER strategies in the process underlying emotional inertia is still lacking, there is growing evidence that emotional experience and ER strategies are bidirectionally associated within individuals. This evidence provides an empirical foundation for the theorized role of ER in the emotional inertia process.

Bidirectional Associations Between Emotion and Emotion Regulation

Theory and empirical evidence suggest that affective experience and ER strategies are reciprocally related (Gross, 2015; Koval et al., 2023). That is, how a person is feeling at one moment relates to their ER strategy use at the next moment, and vice versa (Wang et al., 2024). This aligns with seminal work on the bidirectional associations between emotions and coping efforts in stressful encounters (Folkman & Lazarus, 1988). Thus, emotional inertia may be partly driven by the tendency for emotional experience to predict greater or lesser use of certain ER strategies which, in turn, influence subsequent emotional experience.

A recent meta-analysis by Boemo et al. (2022) examined how ER strategy use predicts affective experience across 37 studies using the experience sampling method (ESM) and found that momentary use of suppression and rumination tend to predict increases in NA, whereas using reappraisal and distraction predicts increases in PA. In contrast, Boemo et al. found no reliable effects of reappraisal or distraction on future NA, or rumination and suppression on future PA. How affective experience is related to future ER strategy use has received less empirical attention. However, a consistent finding is that higher levels of NA and lower PA are associated with greater use of rumination in daily life (e.g., Blanke et al., 2022; Hjartarson et al., 2021), with a similar pattern emerging for distraction and suppression (e.g., Keller et al., 2014; Smith et al., 2023). Findings for reappraisal are more mixed, with some studies showing that NA predicts greater reappraisal use whereas PA is associated with lesser use of reappraisal (e.g., Brans et al., 2013; Smith et al., 2023). However, other studies have found no prospective relationships between current affect and future reappraisal use (e.g., Hoorelbeke et al., 2016; Wang et al., 2024).

In sum, substantial evidence indicates that affective experience and ER strategies are bidirectionally linked. Rumination and

suppression show positive (i.e., mutually reinforcing) reciprocal relations with NA. Evidence of reciprocal relations among NA and other ER strategies, or among ER strategies and PA, is more limited. However, distraction and reappraisal have been found to reliably predict increases in PA, whereas PA has been found to predict decreases in rumination and suppression over time. Taken together, these findings provide indirect support for the notion that ER strategy use may mediate the degree to which emotions persist over time. In other words, emotional inertia may partly result from the use of particular ER strategies.

Indirect Evidence for the Association Between Emotion Regulation and Emotional Inertia

Several lines of research provide further support for the view that ER may be a mechanism underlying emotional inertia. First, Koval et al. (2013, 2016) developed an emotional film task to study individual differences in emotional inertia in response to a fixed sequence of emotional events (i.e., film-clips). Mirroring findings from ESM studies, in this task individuals with higher NA inertia scored higher on indicators of psychological maladjustment (e.g., neuroticism, depressive symptoms). Since all participants experienced the same sequence of events, Koval et al.'s findings suggest that endogenous processes, rather than environmental factors, contributed to the observed association between heightened inertia and maladjustment. ER is likely one of these endogenous processes. Second, aligning with this view, Koval, Brose, et al. (2015) found that individual differences in NA inertia were related to impaired recovery from negative events rather than differing degrees of exposure or reactivity to events. Since emotional recovery is theorized to be driven largely by ER processes (Hemenover et al., 2008; Koole, 2009), these findings also support the role of ER processes in emotional inertia. Finally, additional studies suggest that emotional inertia is inversely associated with various factors linked to ER capacity, including distress tolerance (Simons et al., 2021), physical activity (Bernstein et al., 2019), healthier sleep (Sullivan et al., 2024; Wen et al., 2022), and activation in the prefrontal brain regions associated with ER (Waugh et al., 2017). In other words, individuals with profiles indicating increased ER capacity also tend to show lower emotional inertia.

Direct Evidence for the Association Between Emotion Regulation and Emotional Inertia

A handful of studies provide more direct evidence for the relationship between ER and inertia. First, several studies have shown that individuals who report habitually engaging in rumination, an ER strategy implicated in depression and other psychopathologies (e.g., Spasojević & Alloy, 2001), also tend to have higher emotional inertia (e.g., Brose et al., 2015; Koval et al., 2012; but see Moeck et al., 2022). Furthermore, Koval, Butler, et al. (2015) investigated how the inertia of experiential, behavioral, and physiological components of emotions were related to expressive suppression and reappraisal in two studies. In both studies, suppression—another strategy often linked with psychopathology (e.g., Dryman & Heimberg, 2018)—was related to higher inertia of negative emotional behaviors. In contrast, reappraisal—a putatively adaptive ER strategy linked with greater well-being (e.g., Kivity & Huppert, 2016)—was not consistently associated with emotional inertia in Koval, Butler, et al.'s (2015) studies.

Research on the link between inertia and ER has almost exclusively focused on their between-person association, which does necessarily reveal whether ER strategies play a role in the within-person process underlying emotional inertia (Fisher et al., 2018; Hamaker, 2012; Schuurman, 2023). The only study, to our knowledge, that has investigated the association between ER and inertia using a within-person design was a 28-day ESM study by Rónai and Polner (2021). These authors showed that during 3-day periods in which participants tended to ruminate more than usual, they also showed higher NA inertia. Rónai and Polner's study provides important initial evidence for the possible contribution of ER to within-person variation in emotional inertia. However, it still leaves open the question of how ER strategies are involved in the moment-to-moment persistence of affect (i.e., the within-person process that produces emotional inertia)—this was our focus in the present study.

Taken together, direct and indirect evidence for the relationship between ER and emotional inertia is accumulating, yet much remains unknown. Most research has focused on the between-person level, which cannot necessarily tell us about within-person processes. One previous study by Rónai and Polner (2021) has investigated the relation between ER strategies and inertia within individuals. Yet, the role of ER in the process underlying emotional inertia in daily life remains unclear. In other words, no previous research has investigated how the persistence of affect over time may be (partly) accounted for by ER strategies deployed in the intervening time interval. Additionally, most research on emotional inertia (and affect dynamics more broadly) has modeled the dynamics of PA and NA separately, which implicitly treats pleasant and unpleasant feelings as independent. This contrasts with mounting evidence that PA and NA are often inversely related within individuals (Eisele et al., 2021). Therefore, our understanding of the possible roles of ER strategies in the process underlying NA and PA inertia may be biased due to the tendency to model their dynamics as completely independent.

The Present Study

Little is known about the (within-person) processes underlying emotional inertia. We addressed this gap by investigating the extent to which four ER strategies (distraction, cognitive reappraisal, rumination, and expressive suppression) indirectly account for moment-to-moment persistence of affect in daily life. That is, we tested whether the extent to which affect predicts itself over time is statistically mediated by the use of these four widely studied ER strategies, within individuals. We conducted secondary analyses of eight ESM data sets including measures of momentary PA, NA, and recent ER strategy use in daily life.

Hypotheses

As there is a scarcity of previous research examining ER strategies as possible mediators of emotional inertia within individuals, our preregistered hypotheses were based on research on the within-person bidirectional relationships between affect and ER. First, given consistent evidence of bidirectional associations between rumination and suppression on the one hand, and NA on the other

hand, we hypothesized that rumination and suppression would (partly) mediate NA inertia within individuals. Put otherwise, we expected that higher-than-usual NA at one occasion would predict greater use of rumination and suppression, which, in turn, would predict greater NA at the next occasion (i.e., greater NA inertia). We made no a priori hypotheses regarding the potential mediating roles of distraction and reappraisal for NA inertia, given the lack of consistent evidence for their bidirectional associations. Despite there being consistent evidence for bidirectional associations between PA and ER, no *single* ER strategy was bidirectionally associated with PA. As such, we made no a priori hypotheses for the mediating roles of any ER strategy in PA inertia.

Method

Transparency and Openness

We report how we determined our sample size, all data exclusions, all manipulations, and all measures in the study. This study's hypotheses and data analyses were preregistered after data had been collected but before undertaking the analyses (see at https://osf.io/vu9k3). All code behind our data preparation and analyses is available at https://osf.io/y9a3d.

We sourced all but one of our data sets from the EMOTE database (Kalokerinos et al., 2023). We reviewed all studies in the database ($N = 26$) and selected ESM data sets that included sufficiently similar measures of momentary PA, NA, and ER strategy use to enable pooled analyses of the combined data. There were seven data sets available on EMOTE that included (a) at least two PA items and two NA items, and (b) measures of at least two of the four ER strategies relevant to the current research. The exact variables we requested can be accessed at https://emotedatabase.com/requestid/19KU8IN9Q1. We included one additional data set, unavailable on EMOTE at the time of article preparation, that met these criteria. This data set is publicly available at https://osf.io/y9a3d. The included studies were conducted between 2009 and 2021 and each received ethical clearance. For further study details, including links to lists of all measures included in each study, see Supplemental Table S1.

Overview of Participants and Sampling Designs

In addition to the original data exclusions applied by the researchers who collected each data set, we applied exclusions to remove potentially careless responses (1.21% of all attempted items and 0.89% of all completed surveys; see p. 3 of the Supplemental Materials, for more information). After cleaning, the final sample comprised 73,472 ESM surveys nested within 948 participants. Participants ranged in age from 17 to 71 years ($M = 24.20$; $SD = 8.66$), were predominantly female (63.9%); Belgian (39.2%) or Australian (29.1%) nationals; of European/Caucasian (45.1%) or Asian (12.6%) descent; and university educated (63.3%; see Supplemental Table S2, for additional demographic data available in each data set). All studies used signal-contingent designs: Participants were prompted to complete an ESM survey at a random moment within 9–10 daily intervals. All studies, except Study 4, ran for 7 consecutive days, whereas Study 4 ran for 21 consecutive days. Participants completed 78.87% ($SD = 19.42\%$) of all delivered ESM surveys, representing good compliance (Wrzus & Neubauer, 2023). The mean intersurvey interval was 76 min 19 s ($SD = 24$ min 14 s; see Supplemental Table S3, for further detail).

Measures of Affect and Emotion-Regulation Strategies

In each study, participants reported their momentary feelings at each ESM survey in response to 2–4 items for PA (e.g., "Right now, how happy do you feel?") and 3–6 items for NA (e.g., "Right now, how sad do you feel?"). Our measures of affect are not specific to emotions but rather captured affective experiences in general, which may include more diffuse and possibly longer lasting feelings (e.g., moods).

Participants reported their use of ER strategies "since the last survey/beep" (all except Study 2) or "in the last hour" (Study 2). Distraction (e.g., "Since the last beep, have you distracted yourself from your feelings?"), reappraisal (e.g., "Since the last beep, have you looked at the cause of your feelings from another perspective?"), rumination[1] (e.g., "Since the last beep, have you ruminated about something in the past?"), and suppression (e.g., "Since the last beep, have you suppressed the need to show your emotions?") were measured with single items, except for reappraisal in Studies 1 and 4 (two items), and rumination in Study 3 (three items) and Study 8 (two items). Supplemental Table S4 has full details of all items assessing affect and ER strategies in each study.

Combining Data Sets for Integrative Analysis

To maximize power, reliability, and generalizability, we combined data from all studies for an integrative or pooled data analysis (Curran & Hussong, 2009). Before combining the data sets, we created composite scales for PA and NA (and ER when assessed by multiple items) by averaging participants' ratings on the relevant items at each ESM survey. We estimated within-person and between-person reliability using McDonald's ω (McNeish, 2018) for composite scales, separately in each study (see Supplemental Table S5). To harmonize measures across data sets, we rescaled all variables using the proportion of maximum scaling method per data set (Moeller, 2015) so that all variables ranged from 0 to 1 (see Supplemental Table S3, for descriptive statistics and Supplemental Table S6, for multilevel correlations among all variables).

Statistical Analyses

We analyzed data using dynamic structural equation modeling (DSEM; Hamaker et al., 2023) implemented in M*plus* 8.10 (Muthén & Muthén, 2017). DSEM incorporates features of multilevel modeling (to account for nesting of ESM surveys within participants), time-series analysis (to estimate lagged effects among variables), and structural equation modeling (allowing multiple outcomes, latent variables, and estimation of indirect effects). These features made DSEM ideal for addressing the current research question. Further, DSEM can handle unequally spaced measurements, a common feature of ESM studies—including all ESM data sets we analyzed—due to stratified random sampling (Myin-Germeys et al., 2018). We used the TINTERVAL function to rescale time into 1-hr intervals and

[1] We refer to the construct as rumination, but in a few studies the measures of rumination may overlap with worry which is a closely related form of negative perseverative cognition (McEvoy et al., 2013).

insert missing values where no data were observed within a particular time interval. Consequently, autoregressive and cross-lagged parameters can be interpreted as representing carryover from 1 hr prior (see Hamaker et al., 2023; McNeish & Hamaker, 2020).

DSEM uses Bayesian Markov chain Monte Carlo estimation resulting in an entire distribution of possible values per parameter (van de Schoot et al., 2021). We used M*plus*' default diffuse priors, meaning our results were asymptotically equivalent to those obtained using maximum likelihood estimation (Hamaker et al., 2018). We used eight chains and checked for model convergence using the potential scale reduction method with a threshold of $\hat{R} \leq 1.10$ after at least 5,000 Bayesian iterations. We considered effects with 95% Bayesian credible intervals (CIs) not containing zero as significant (Levy & McNeish, 2023).

As illustrated in Figure 1, our main analysis consisted of four DSEM models, each testing the indirect effect of a single ER strategy as a mediator of PA and NA inertia, with PA and NA dynamics modeled together. DSEM uses latent centering to decompose observed variables into orthogonal within-person (see variables with *w* superscripts in Figure 1) and between-person components (see variables with *b* superscripts in Figure 1).

At the within-person level, we specified a first-order vector autoregressive (VAR[1]) model with an ER strategy, NA, and PA as outcomes. We included autoregressive slopes, representing inertia (ϕ_{ER}; ϕ_{NA}; ϕ_{PA}), by regressing each outcome at t onto itself at the preceding timepoint, $t-1$. We also introduced cross-lagged effects between the affect variables by regressing NA at time t onto PA at time $t-1$ ($\beta_{PA\rightarrow NA}$), and vice versa ($\beta_{NA\rightarrow PA}$). This allowed us to account for the mutual influence of NA and PA over time, known as augmentation or blunting (Hamaker et al., 2018; Krone et al., 2018).

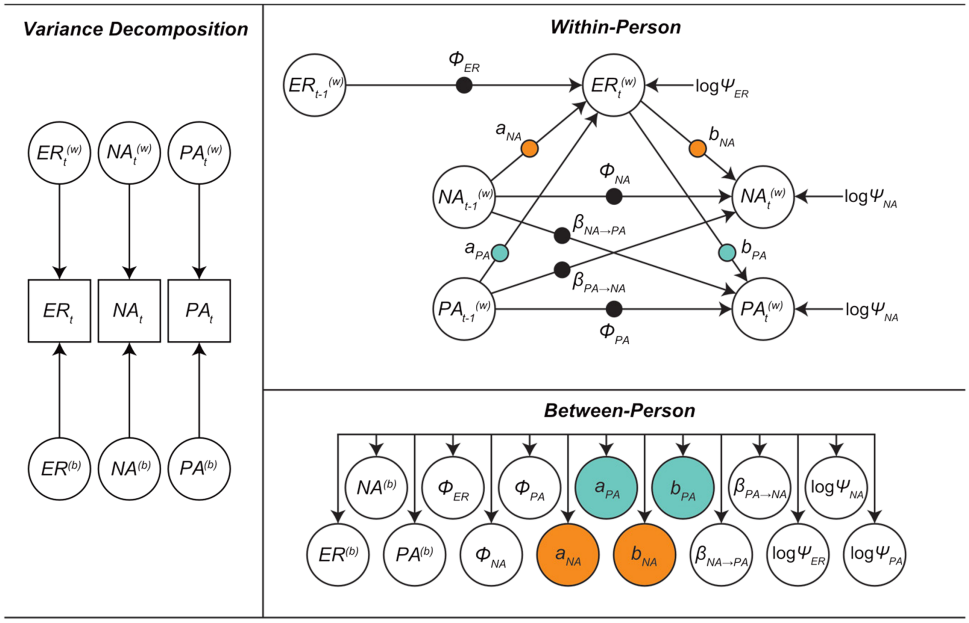
Four further slopes were included to calculate the indirect effects of each ER strategy on PA and NA inertia. ER strategy use at time t was regressed onto affect at time $t-1$, constituting the a paths for NA (a_{NA}) and PA (a_{PA}), respectively. Further, affect at time t was regressed onto ER strategy use at time t, constituting the b paths for NA (b_{NA}) and PA (b_{PA}), respectively. Note that because ER strategies were measured retrospectively (e.g., "since the last survey"), we considered these measures implicitly lagged (i.e., occurring between occasions $t-1$ and t; see Luo & Hu, 2024). We therefore modeled how the persistence of affect from $t-1$ to t was mediated by ER strategy use between $t-1$ and t (reported at time t). To quantify between-study variation, we included effect-coded study membership as a between-person predictor of all parameters.

All intercepts and slopes were allowed to be random (i.e., person-specific). We also modeled random residual variances for each outcome (ψ_{ER}; ψ_{NA}; ψ_{PA}) to account for individual differences in the impact of unobserved factors (e.g., exposure to events) on the process under investigation (Jongerling et al., 2015). At the between-person level, we thus had 15 random effects (three random intercepts, nine random slopes, and three random residual variances) that were all allowed to freely covary.

To address our focal research question, we calculated *indirect effects* as the product of the fixed a and b paths plus the covariance among the a and b path random effects (McNeish & MacKinnon, 2025; Preacher et al., 2010). We also calculated *total effects* by summing the indirect effect and the direct effect. Note that in our models, direct effects reflect the unmediated PA and NA autoregressive (inertia) slopes—that is, the degree to which NA or PA persists over time independent of each ER strategy. Finally, we calculated a *mediation ratio* by dividing the indirect effect by

Figure 1

Representation of the General Dynamic Structural Equation Model



Note. NA = negative affect; PA = positive affect; ER = emotion-regulation strategy. See the online article for the color version of this figure.

the total effect (Preacher & Kelley, 2011), which represents the proportion by which the slope of affect at $t-1$ predicting affect at t decreases when introducing each ER strategy into the model.

Results

Unstandardized posterior means and 95% CIs for all within-level fixed parameters from the four DSEM models are shown in Figure 2 (all fixed and random parameter estimates from our main analyses are reported in Supplemental Table S7).

Autoregressive and Cross-Lagged Effects

Across all models, we found significant direct (i.e., unmediated) autoregressive effects for PA and NA, representing emotional inertia not accounted for by each ER strategy (e.g., in the rumination model: $\phi_{PA} = 0.365$, 95% CI [0.344, 0.386]; $\phi_{NA} = 0.228$, 95% CI [0.205, 0.250]). We also found significant positive autoregressive effects for all ER strategies (distraction: $\phi_{ER} = 0.217$, 95% CI [0.198, 0.236]; reappraisal: $\phi_{ER} = 0.201$, 95% CI [0.181, 0.222]; rumination: $\phi_{ER} = 0.254$, 95% CI [0.236, 0.274]; suppression: $\phi_{ER} = 0.196$, 95% CI [0.174, 0.217]). These results suggest that both affective experience and ER strategies show substantial carryover or inertia from one occasion to the next, even when controlling for the cross-lagged effects of all other predictors in the model. We also found significant negative cross-lagged relations among NA and PA across all models (e.g., in the rumination model: $\beta_{NA \to PA} = -0.055$, 95% CI [−0.081, −0.029]; $\beta_{PA \to NA} = -0.101$, 95% CI [−0.115, −0.088]), indicating blunting effects between opposite-valenced affect (Krone et al., 2018; Pe & Kuppens, 2012).

Mediation Paths

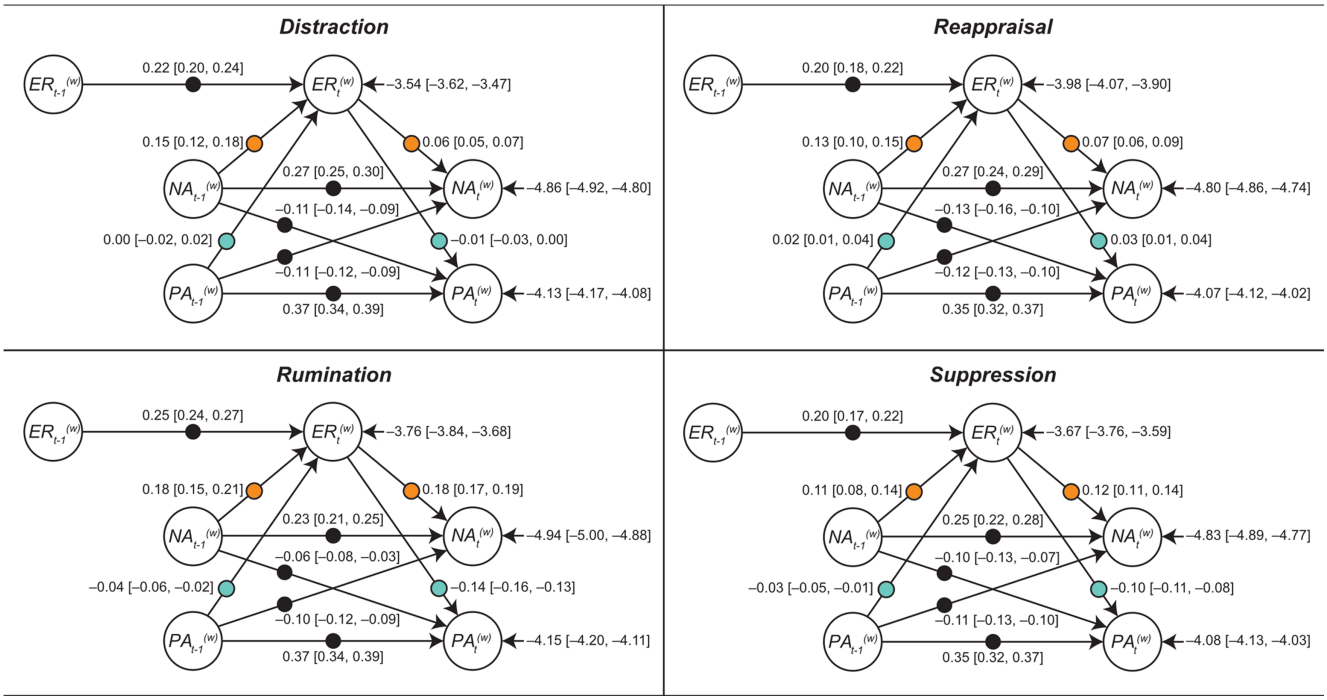
To test our key research question, we first examined cross-lagged effects from affect to ER (a paths) and from ER to affect (b paths), which are combined to obtain estimates of indirect effects of ER strategies as mediators of PA and NA inertia. Figure 3 shows the unstandardized posterior means (and 95% credible intervals) for these a and b paths (see Supplemental Figure S1, for standardized estimates of these paths).

For NA, we found positive a and b paths across all four ER strategies. In other words, NA at $t-1$ predicted greater use of distraction ($a_{NA} = 0.148$, 95% CI [0.118, 0.177]), reappraisal ($a_{NA} = 0.126$, 95% CI [0.101, 0.150]), rumination ($a_{NA} = 0.176$, 95% CI [0.145, 0.205]), and suppression ($a_{NA} = 0.111$, 95% CI [0.080, 0.142]) between $t-1$ and t. In turn, using distraction ($b_{NA} = 0.060$, 95% CI [0.049, 0.071]), reappraisal ($b_{NA} = 0.073$, 95% CI [0.060, 0.086]), rumination ($b_{NA} = 0.183$, 95% CI [0.173, 0.193]), and suppression ($b_{NA} = 0.124$, 95% CI [0.113, 0.135]) between $t-1$ and t predicted higher NA at time t.

In contrast, a and b path estimates for PA were smaller and less consistent than for NA. For distraction, we found nonsignificant a ($a_{PA} = 0.000$, 95% CI [−0.018, 0.019]) and b ($b_{PA} = -0.012$, 95% CI [−0.025, 0.001]) paths. In contrast, cross-lagged effects among reappraisal and PA were positive in both directions: PA at

Figure 2

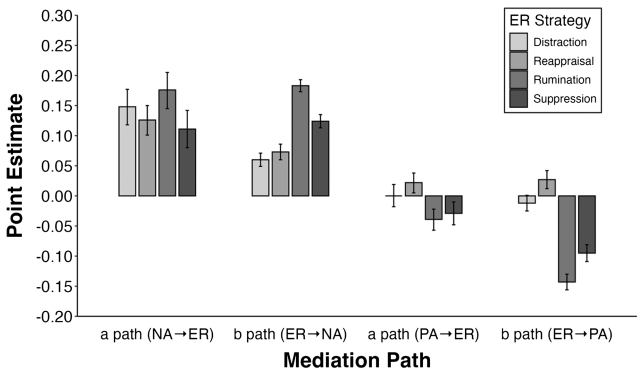
Point Estimates and 95% Credible Intervals of Fixed Parameters From Models With Each ER Strategy as a Mediator of PA and NA Inertia



Note. Parameter estimates are unstandardized. NA = negative affect; PA = positive affect; ER = emotion-regulation strategy. See the online article for the color version of this figure.

Figure 3

Point Estimates for Fixed Effects of a and b Paths for ER Strategies With Negative Affect and Positive Affect



Note. *a* paths are affect predicting ER strategy use; *b* paths are ER strategy use predicting affect. Error bars are 95% credible intervals for fixed effects. NA = negative affect; PA = positive affect; ER = emotion regulation.

$t - 1$ predicted greater use of reappraisal between $t - 1$ and t (a_{PA} = 0.022, 95% CI [0.005, 0.038]), and reappraisal then predicted greater PA at t (b_{PA} = 0.027, 95% CI [0.012, 0.042]). Finally, for rumination and suppression, we observed significant negative *a* and *b* paths. That is, PA at $t - 1$ predicted lower use of rumination (a_{PA} = −0.039, 95% CI [−0.057, −0.022]) and suppression (a_{PA} = −0.029, 95% CI [−0.048, −0.010]). In turn, rumination and suppression predicted lower PA (rumination: b_{PA} = −0.143, 95% CI [−0.156, −0.130]; suppression: b_{PA} = −0.095, 95% CI [−0.109, −0.081]) over the subsequent time interval.

Indirect Effects and Mediation Ratios

In line with our preregistered hypotheses, we found a significant indirect effect (IndEff) of NA at $t - 1$ predicting NA at t (i.e., NA inertia) via rumination ($IndEff_{NA}$ = 0.035, 95% CI [0.029, 0.041]) and suppression ($IndEff_{NA}$ = 0.017, 95% CI [0.012, 0.021]). Similarly, the indirect effects of lagged NA via distraction ($IndEff_{NA}$ = 0.014, 95% CI [0.011, 0.018]) and reappraisal ($IndEff_{NA}$ = 0.011, 95% CI [0.008, 0.015]) on current NA were also significant. These findings suggest that at times when NA is high, it is likely to persist over time partly via the use of these four ER strategies. Mediation ratio (P_M) estimates[2] indicated a reduction of the NA inertia slope of between 4.1% and 13.2% when accounting for spontaneous use of the ER strategies, with rumination leading to the greatest reduction (P_M = 0.132, 95% CI [0.108, 0.157]), followed by suppression (P_M = 0.062, 95% CI [0.046, 0.081]), distraction (P_M = 0.049, 95% CI [0.037, 0.062]), and reappraisal (P_M = 0.041, 95% CI [0.030, 0.054]).

Indirect effect estimates for PA were significant and positive for distraction ($IndEff_{PA}$ = 0.003, 95% CI [0.001, 0.005]), reappraisal ($IndEff_{PA}$ = 0.003, 95% CI [0.001, 0.004]), rumination ($IndEff_{PA}$ = 0.009, 95% CI [0.005, 0.012]), and suppression ($IndEff_{PA}$ = 0.004, 95% CI [0.002, 0.007]). All indirect effects were positive but for different reasons across strategies. For reappraisal, the indirect effect was the product of positive *a* and *b* paths, implying PA is likely to persist over time partly because it predicts greater reappraisal use, which is associated with increased PA. In contrast, the indirect effects of rumination and suppression result from the products of negative *a* and *b* paths and thus reflect that PA persists over time partly due to PA predicting *decreased* use of these strategies, which are themselves negatively associated with PA over time. The indirect effect for distraction is difficult to interpret given that the *a* and *b* paths are not significant. Relative to NA inertia, the PA inertia slope reduced by a much smaller amount (i.e., between 0.7% and 2.3%) when accounting for strategy use (distraction: P_M = 0.008, 95% CI [0.003, 0.013]; reappraisal: P_M = 0.007, 95% CI [0.003, 0.013]; rumination: P_M = 0.023, 95% CI [0.015, 0.032]; suppression: P_M = 0.012, 95% CI [0.005, 0.019]). Further, 95% CIs for the PA indirect effects only just excluded zero, suggesting that these results should be interpreted with caution (Götz et al., 2021).

Supplemental Analyses

To check the robustness of our findings, we conducted several additional analyses. First, Study 5 comprised three waves of ESM data each separated by approximately 6 months. For our main analyses, we included only Wave 1 ESM data in line with previous publications (e.g., Koval, Brose, et al., 2015). However, we repeated all analyses substituting Wave 2 or 3 instead of Wave 1 as a robustness check (see Supplemental Table S8). Parameter estimates were similar in direction and magnitude, with one change: the *b* path for distraction predicting PA became significant when including the Wave 3 ESM data (b_{PA} = −0.013, 95% CI [−0.026, −0.001]).

Second, our main analyses were *bivariate affect models*, in which NA and PA were modeled as simultaneous outcomes. This allowed us to estimate PA and NA inertia from a single model while also controlling for their cross-lagged effects (see Hamaker et al., 2018). However, most research on inertia has used a univariate approach, in which NA and PA inertia are estimated in separate models without controlling for their cross-lagged effects. Thus, we repeated our analyses using *univariate affect models* (i.e., with NA and PA as separate outcomes) resulting in eight additional models, with one for each ER strategy as a mediator of either NA or PA inertia (see Supplemental Tables S9 and S11, for results). For NA inertia, none of the *a* and *b* paths differed meaningfully when comparing the univariate versus bivariate affect models. Similarly, for PA inertia, the *a* and *b* paths for rumination and suppression and the *b* path for reappraisal were similar across univariate and bivariate models. However, the *a* paths for distraction and reappraisal and the *b* path for distraction became negative and significant in the univariate affect models.

Finally, in our main analyses, we modeled each ER strategy separately as a mediator of PA and NA inertia. However, previous findings indicate that ER strategies tend to correlate positively within individuals (e.g., Grommisch et al., 2020), consistent with the concept of polyregulation (Ford et al., 2019; Hartmann et al., 2024; Ladis et al., 2023). To account for this, we ran an additional *combined ER strategy model* (i.e., repeating our main analyses but with all ER strategies included in one model). This model quantified the unique indirect effects of each ER strategy on PA and NA inertia (modelled simultaneously). Results of this combined ER strategy

[2] Although Preacher and Kelley (2011) list several reasons why the mediation ratio is widely used, they also pointed out some limitations to the measure and so these results should be interpreted with caution.

model (shown in Supplemental Tables S10 and S11) qualify our main findings. When modeling all ER strategies as simultaneous mediators, the *b* path from reappraisal to NA became nonsignificant, suggesting that reappraisal is not predictive of future NA over and above its shared variance with other ER strategies. Further, rumination and suppression accounted for a larger proportion of total NA inertia than in our main (separate ER strategy) analyses. However, the indirect effect of reappraisal was no longer significant when including all ER strategies in the same model, suggesting that reappraisal may not account for persistence in NA over and above its shared variance with other strategies. We also observed changes in mediation paths and indirect effects for PA inertia when modeling all ER strategies simultaneously. PA was no longer predictive of future rumination and suppression, and distraction became predictive of future PA. Indirect effects of rumination and suppression for PA inertia became smaller, and the indirect effect of reappraisal became nonsignificant. By summing the P_M estimates, we can also gauge the total amount by which the NA and PA inertia slopes reduced when accounting for all ER strategies which was 26.9% for NA and 3.9% for PA. In other words, the total autoregressive effect of NA at $t - 1$ predicting NA at t was reduced by 26.9% overall by these four ER strategies. In contrast, the total autoregressive effect of PA at $t - 1$ predicting PA at t was reduced by 3.9% overall by these four ER strategies. Together, these findings suggest that ER strategy use may be more consequential for the process underlying NA inertia than for the process underlying PA inertia in daily life.

Discussion

The present study contributes to a modest empirical literature exploring the psychological mechanisms underpinning emotional inertia. And this is the first study—to our knowledge—to specifically test the claim that inertia is driven, at least in part, by ER processes within individuals (Kuppens et al., 2010). Previously, the role of ER processes in emotional inertia has been investigated almost exclusively at the between-person level (e.g., Brose et al., 2015). Considering the challenges in generalizing from between-person associations to within-person processes (Schuurman, 2023), a direct test of the theorized role of ER at the within-person level substantially advances understanding of the mechanisms underpinning emotional inertia.

Our results suggest that ER is one mechanism underpinning NA inertia and, to a lesser degree, PA inertia. This suggestion is broadly consistent with Folkman and Lazarus (1988) pioneering work investigating coping strategies as mediators of changes in emotion under stress. Although Folkman and Lazarus used a retrospective recall design, which did not allow them to directly model how coping mediated the persistence of affect over time, their findings align with the hypothesized mediating role of coping efforts in emotional change during a stressful encounter.

To highlight the most reliable findings across modeling approaches, we summarize our key results in Table 1. Across all modeling approaches, we found consistent evidence of indirect

Table 1
Comparison of Findings for Mediation Paths and Indirect Effects Across Alternate Model Specifications

ER strategy	Combined ER strategies (bivariate affect) model	Separate ER strategies (bivariate affect) model	Separate ER strategies (univariate affect) model
a paths for NA (NA → ER)			
Distraction	+	+	+
Reappraisal	+	+	+
Rumination	+	+	+
Suppression	+	+	+
b paths for NA (ER → NA)			
Distraction	+	+	+
Reappraisal	n.s.	+	+
Rumination	+	+	+
Suppression	+	+	+
Indirect effects for NA			
Distraction	+	+	+
Reappraisal	n.s.	+	+
Rumination	+	+	+
Suppression	+	+	+
a paths for PA (PA → ER)			
Distraction	n.s.	n.s.	−
Reappraisal	+	+	−
Rumination	n.s.	−	−
Suppression	n.s.	−	−
b paths for PA (ER → PA)			
Distraction	+	n.s.	−
Reappraisal	+	+	+
Rumination	−	−	−
Suppression	−	−	−
Indirect effects for PA			
Distraction	+	+	+
Reappraisal	n.s.	+	+
Rumination	+	+	+
Suppression	+	+	+

Note. Parameter estimates are unstandardized. ER = emotion regulation; NA = negative affect; PA = positive affect; + = positive and significant; − = negative and significant; n.s. = not significant.

effects of NA via rumination, suppression, and distraction on subsequent NA. In contrast, the NA indirect effect via reappraisal became nonsignificant in the model including all ER strategies. For PA, we also observed consistent indirect effects of rumination, suppression, and distraction, but not reappraisal, across modeling approaches. Based on our main analyses, mediation ratios—representing the proportion of total affect inertia from $t-1$ to t mediated by each ER strategy—tended to be higher for NA inertia (P_Ms from 4.1% to 13.2%) than for PA inertia (P_Ms from 0.7% to 2.3%), and for rumination and suppression (P_Ms from 1.2% to 13.2%) than for reappraisal and distraction (P_Ms from 0.7% to 4.9%), although the magnitude of these mediation ratios may not differ significantly. Estimates for the *a* and *b* paths also varied by model specification, particularly for PA. Below, we first consider the robust relationships between all ER strategies and NA inertia and then reflect on the less conclusive evidence for their role in PA inertia.

Vicious Cycles Among Negative Affect and Emotion-Regulation Strategies

In line with our hypotheses, NA persisted over time partly to the extent that it predicted increases in rumination and suppression, which themselves predicted subsequent increases in NA. This finding is consistent with previous research reporting positive associations between NA inertia and self-reported habitual use of rumination (Brose et al., 2015; Koval et al., 2012; Rónai & Polner, 2021) and suppression (Koval, Butler, et al., 2015) at the between-person level. While previous findings suggest that individuals who tend to use more rumination and suppression also show higher NA inertia, the present study suggests that using rumination and suppression at a particular occasion may account, at least in part, for greater NA persistence over time within individuals. This finding aligns with research showing that rumination prolongs emotional states (Résibois et al., 2018; Verduyn & Lavrijsen, 2015).

Surprisingly, our main analyses indicated that NA inertia was also mediated (to a lesser degree) by distraction and reappraisal, both of which were bidirectionally positively associated with NA. This finding suggests that not only is NA inertia partly driven by use of strategies considered to increase NA (i.e., rumination and suppression; Aldao & Nolen-Hoeksema, 2010; John & Gross, 2004), but also by strategies typically considered to be effective in decreasing NA (i.e., distraction and reappraisal; Denson et al., 2012; Gross & John, 2003). However, the indirect effects of reappraisal and distraction were smaller (and no longer significant for reappraisal) when including all ER strategies in the same model, suggesting that these strategies (particularly reappraisal) may not account for NA inertia over and above their shared variance with other strategies.

Broadly, our findings demonstrate that NA has a self-reinforcing quality and operates in a vicious cycle with regulation attempts in daily life (Pavani et al., 2017). Psychological flexibility theory states that an adaptive emotion system is one that changes flexibly in response to changing environmental inputs and regulation attempts (Klein et al., 2023). Our work affirms that strategies typically categorized as maladaptive (i.e., rumination and suppression) reinforce NA, leading to emotional vicious cycles. Distraction has previously been shown to have hedonic benefits in the short term (Webb et al., 2012). However, our current findings (i.e., a small but significant indirect effect of distraction in NA inertia) suggest that distraction also contributes to emotional vicious cycles in daily life. One possible explanation for this finding is that the distraction items (e.g., "In the last hour, I engaged in activities to distract myself") conflated occasions when distraction was combined with emotional acceptance (a combination previously found to be adaptive) with times when distraction co-occurred with emotional avoidance (a combination found to be maladaptive; Wolgast & Lundh, 2017).

Overall, the tendency for NA to predict greater use of all four regulation strategies suggests that experiencing increases in unpleasant feelings tends to activate a goal to intervene using a variety of regulation strategies (Brans et al., 2013; Koole, 2009). However, given people tend to hold pro-hedonic motives in daily life (Riediger et al., 2009), using certain regulation strategies may be counterproductive. That is, using rumination and suppression, and to a lesser extent distraction, predicted subsequent increases in NA and partly accounted for the tendency for NA to persist over time, suggesting that these strategies may not be useful in achieving pro-hedonic regulation goals.

Emotion-Regulation Strategies May Not Underpin Positive Affect Inertia

Based on our main analyses, we might conclude that PA persists into the future partly to the extent that it predicts (a) decreased use of rumination and suppression, which themselves predicted decreases in PA; and (b) increased use of reappraisal, which predicts increases in PA. However, we note that ER strategies reduced the PA inertia slope by a much smaller amount than the NA slope, and our findings for PA inertia varied considerably across model specifications. For example, the negative effects of PA on subsequent use of rumination and suppression were strongest in the univariate modeling approach (i.e., without controlling for NA or other ER strategies), became smaller in the bivariate affect model (i.e., controlling for lagged NA), and became nonsignificant when modeling all ER strategies simultaneously. This example reflects the broader ambiguity that arose from our analyses, and the possibility that the use of these ER strategies may not be an important mechanism underpinning PA inertia. However, below we tentatively discuss the more consistent findings for reappraisal.

In contrast to the positive (but damaging) reciprocal relations that we observed among NA and ER strategies, we found that higher-than-usual PA at one occasion predicted greater use of reappraisal, which, in turn, predicted greater PA at the next occasion, and that these effects were robust across model specifications.[3] This finding is consistent with the broaden-and-build theory of positive emotions, according to which positive emotions broaden an individual's behavioral repertoire and bolster their resources, thus further reinforcing positive emotion (Fredrickson, 2013). This finding is also consistent with Pavani et al.'s (2017) observation that PA predicts greater use of regulation strategies that, in turn, are associated with increases in PA, as well as research showing that pleasant activities tend to be preceded by higher-than-typical levels of PA (Aurora et al., 2022; Nylocks et al., 2019). However, other studies have reported the opposite, namely that engaging in hedonically beneficial regulation strategies (e.g., Colombo et al., 2021) and daily

[3] However, it is worth noting that the indirect effect of reappraisal on PA inertia became non-significant in the model including all ER strategies, despite the *a* and *b* paths remaining significant.

activities (e.g., Taquet et al., 2016) tends to be preceded by lower-than-typical levels of pleasant affect.

One possible reason for the discrepancy between the current and previous studies' findings is that previous research has often modeled the dynamics of PA or NA separately without considering their reciprocal relations (see Koval et al., 2021). In contrast, our models included both autoregressive effects (i.e., inertia) and cross-lagged effects among PA and NA. Thus, we modeled effects of ER strategies on PA or NA while controlling for the cross-lagged effect of opposite-valence affect, which showed reliable blunting effects (see Hamaker et al., 2018; Pe & Kuppens, 2012). Given that PA and NA tend to be moderately inversely related within individuals (e.g., Eisele et al., 2021), it seems essential to model their dynamics simultaneously rather than assume their independence, as has been typical in previous research. Furthermore, conclusions appear to be substantively different contingent on modeling choices. Nevertheless, future research is needed to identify when people are likely to engage in PA-enhancing activities with the goal of capitalizing on their already elevated PA, versus with the goal of recovering from a dip in pleasant feelings.

Limitations and Future Directions

The present study constitutes an important advance in our understanding of the mechanisms underlying emotional inertia by exploring the potential within-person mediating role of four widely studied ER strategies. However, we also note some important limitations. First, while our findings suggest that emotional inertia is, to some extent, underpinned by the use of certain ER strategies, inertia is likely multiply determined by various endogenous and exogenous processes (Koval, Brose, et al., 2015; Kuppens et al., 2010). Consistent with this view, a large proportion of the total inertia of NA and PA was not accounted for by ER strategies in our models, suggesting the degree to which affect persists over time within individuals may be largely driven by other factors. For instance, emotional inertia may depend on the use of other ER strategies not included in the present study (e.g., decentering; Naragon-Gainey et al., 2023) or other components of ER besides strategy use, such as the timing or context-appropriateness of regulation attempts (e.g., Sheppes & Gross, 2011). Furthermore, other processes unrelated to regulation may also play a role, such as exposure and reactivity to events (Koval, Brose, et al., 2015; Wenzel et al., 2022) and internal physiological changes (De Longis et al., 2020). Thus, an important goal for future research is to investigate the (unique) roles of these many candidate processes in emotional inertia.

Second, our analyses relied on self-report measures of affect and ER strategy use which remain the only means of directly assessing feelings and many (covert) ER strategies (Kuppens et al., 2022). Nevertheless, relying on self-report may be problematic for at least two reasons. First, the validity and reliability of self-reports rest on the assumptions that respondents (a) intuitively understand which internal experiences the items seek to measure and (b) accurately introspect on these mental experiences, both of which have been questioned (Hurlburt et al., 2022). The reliability and validity of self-reports can be difficult to assess, especially when constructs are measured using single items (Dejonckheere et al., 2022), as was the case for most ER strategies in the current investigation. Thus, future studies should, where possible, assess ER strategies with validated (multi-item) scales (e.g., Medland et al., 2020). A second limitation of how ER strategy use was assessed here (as in many daily life studies) concerns the use of retrospective timeframes (e.g., "since the previous survey"). Consequently, we cannot pinpoint when exactly each use of a regulation strategy occurred, how it was related to other contextual factors, or how ER strategies dynamically varied within an emotional episode (see Kalokerinos et al., 2017). While we can be certain that momentary affect at time $t - 1$ temporally preceded ER strategy use reported at time t (as occurring between $t - 1$ and t), we cannot be certain about the temporal ordering of affect and ER strategy use reported at the same ESM survey (e.g., at time t). Thus, our assumption that (retrospectively reported) ER strategy use at t temporally preceded affect at t may not hold. This limitation could be mitigated in future research by adopting momentary measurement of ER strategies (see, e.g., Moberly & Watkins, 2008).

Third, although we tested a within-person or "1–1–1" (Fang et al., 2024) mediation model, it is important to note that our model parameters varied only between persons but were assumed to be stable within individuals. That is, we modeled relations among within-person variables (i.e., how affect at $t - 1$ indirectly predicted affect at t, via ER strategy use occurring between $t - 1$ and t) while allowing for between-person differences in these relations. However, McNeish and MacKinnon (2025) proposed a method for estimating time-varying or "dynamic" mediation models, in which model parameters (e.g., a, b, and c' paths) can vary not only over individuals but also over time. Given evidence that emotional inertia has been suggested to vary across time (e.g., Albers & Bringmann, 2020) and contexts (e.g., Koval & Kuppens, 2012), future studies should aim to combine within-person mediation and time-varying autoregressive models to understand the processes underlying within-person variation in inertia.

Finally, given the relatively sizeable literature on emotional inertia combined with a dearth of studies exploring the possible mechanisms underlying inertia, we focused our study on investigating the mediating role of ER strategies in the temporal persistence of affect in daily life. However, as researchers begin to explore the temporal dynamics of ER strategies themselves (e.g., Bean et al., 2020, 2021; Wenzel et al., 2022), it may be fruitful for future studies to explore the extent to which affective experience may play a mediating role in the process underlying the persistence (or inertia) of ER strategy use.

Constraints on Generality

Our study was also limited in ways that put constraints on the generality of our findings. First, we analyzed data from predominantly highly educated, nonclinical young adults (median age of 21) of European/Caucasian ethnicity (45.2%), and Australian or Belgian nationality (68.4%). Our findings may not apply to samples with different demographic compositions and may differ in more distressed samples where affective intensity (particularly of NA) in daily life is higher (see Chen et al., 2023). Second, while theory and empirical research suggest that ER strategies may be directed at a range of diverse goals (Tamir et al., 2019), we did not account for ER goals in the present study. Individuals tend to endorse mostly pro-hedonic regulation goals in daily life (Riediger et al., 2009), but there are circumstances in which ER strategies may be used to achieve contra-hedonic effects (e.g., maintaining or increasing NA

to elicit care from others; Tamir, 2016). Under such circumstances emotional inertia may be the intended outcome, as individuals may use ER strategies to maintain their affective state. Future research should aim to measure ER goals and ER strategy use to differentiate between intended and unintended emotional inertia.

Conclusion

Overly inert emotions have been associated with psychological maladjustment (Houben et al., 2015). Despite the great interest in emotional inertia as a possible marker of emotional inflexibility and maladjustment, little is known about the mechanisms responsible for the persistence of affect in everyday life. In the present study, we explored the possibility that the use of ER strategies may be among the basic building blocks underlying inertia in a pooled analysis of eight experience sampling studies. Our findings suggest that the spontaneous use of ER strategies (especially rumination and suppression) in daily life partly accounts for the persistence of negative feelings over time, within individuals. Thus, although other factors clearly also play a role in determining how our daily feelings fluctuate and/or persist, the present study provides preliminary support for the hypothesized role of ER strategies in emotional inertia at the within-person level.

References

Albers, C. J., & Bringmann, L. F. (2020). Inspecting gradual and abrupt changes in emotion dynamics with the time-varying change point autoregressive model. *European Journal of Psychological Assessment*, *36*(3), 492–499. https://doi.org/10.1027/1015-5759/a000589

Aldao, A., & Nolen-Hoeksema, S. (2010). Specificity of cognitive emotion regulation strategies: A transdiagnostic examination. *Behaviour Research and Therapy*, *48*(10), 974–983. https://doi.org/10.1016/j.brat.2010.06.002

Aldao, A., Nolen-Hoeksema, S., & Schweizer, S. (2010). Emotion-regulation strategies across psychopathology: A meta-analytic review. *Clinical Psychology Review*, *30*(2), 217–237. https://doi.org/10.1016/j.cpr.2009.11.004

Aurora, P., Disabato, D. J., & Coifman, K. G. (2022). Positive affect predicts engagement in healthy behaviors within a day, but not across days. *Motivation and Emotion*, *46*(2), 211–225. https://doi.org/10.1007/s11031-021-09924-z

Bean, C. A. L., Heggeness, L. F., & Ciesla, J. A. (2021). Ruminative inertia, emotion regulation, and depression: A daily-diary study. *Behavior Therapy*, *52*(6), 1477–1488. https://doi.org/10.1016/j.beth.2021.04.004

Bean, C. A. L., Heggeness, L. F., Kalmbach, D. A., & Ciesla, J. A. (2020). Ruminative inertia and its association with current severity and lifetime course of depression. *Clinical Psychological Science*, *8*(6), 1007–1016. https://doi.org/10.1177/2167702620949174

Bernstein, E. E., Curtiss, J. E., Wu, G. W. Y., Barreira, P. J., & McNally, R. J. (2019). Exercise and emotion dynamics: An experience sampling study. *Emotion*, *19*(4), 637–644. https://doi.org/10.1037/emo0000462

Blanke, E. S., Neubauer, A. B., Houben, M., Erbas, Y., & Brose, A. (2022). Why do my thoughts feel so bad? Getting at the reciprocal effects of rumination and negative affect using dynamic structural equation modeling. *Emotion*, *22*(8), 1773–1786. https://doi.org/10.1037/emo0000946

Boemo, T., Nieto, I., Vazquez, C., & Sanchez-Lopez, A. (2022). Relations between emotion regulation strategies and affect in daily life: A systematic review and meta-analysis of studies using ecological momentary assessments. *Neuroscience and Biobehavioral Reviews*, *139*, Article 104747. https://doi.org/10.1016/j.neubiorev.2022.104747

Brans, K., Koval, P., Verduyn, P., Lim, Y. L., & Kuppens, P. (2013). The regulation of negative and positive affect in daily life. *Emotion*, *13*(5), 926–939. https://doi.org/10.1037/a0032400

Braunstein, L. M., Gross, J. J., & Ochsner, K. N. (2017). Explicit and implicit emotion regulation: A multi-level framework. *Social Cognitive and Affective Neuroscience*, *12*(10), 1545–1557. https://doi.org/10.1093/scan/nsx096

Brose, A., Schmiedek, F., Koval, P., & Kuppens, P. (2015). Emotional inertia contributes to depressive symptoms beyond perseverative thinking. *Cognition and Emotion*, *29*(3), 527–538. https://doi.org/10.1080/02699931.2014.916252

Chen, T., Wang, P., Wang, Y., & Irish, M. (2023). Combining experience sampling with temporal network analysis to understand inertia of negative emotion in dysphoria. *Journal of Affective Disorders*, *338*, 246–253. https://doi.org/10.1016/j.jad.2023.06.006

Cole, P. M., Ashana Ramsook, K., & Ram, N. (2019). Emotion dysregulation as a dynamic process. *Development and Psychopathology*, *31*(3), 1191–1201. https://doi.org/10.1017/S0954579419000695

Colombo, D., Pavani, J.-B., Fernandez-Alvarez, J., Garcia-Palacios, A., & Botella, C. (2021). Savoring the present: The reciprocal influence between positive emotions and positive emotion regulation in everyday life. *PLOS ONE*, *16*(5), Article e0251561. https://doi.org/10.1371/journal.pone.0251561

Curran, P. J., & Hussong, A. M. (2009). Integrative data analysis: The simultaneous analysis of multiple data sets. *Psychological Methods*, *14*(2), 81–100. https://doi.org/10.1037/a0015914

De Longis, E., Alessandri, G., & Ottaviani, C. (2020). Inertia of emotions and inertia of the heart: Physiological processes underlying inertia of negative emotions at work. *International Journal of Psychophysiology*, *155*, 210–218. https://doi.org/10.1016/j.ijpsycho.2020.06.007

Dejonckheere, E., Demeyer, F., Geusens, B., Piot, M., Tuerlinckx, F., Verdonck, S., & Mestdagh, M. (2022). Assessing the reliability of single-item momentary affective measurements in experience sampling. *Psychological Assessment*, *34*(12), 1138–1154. https://doi.org/10.1037/pas0001178

Dejonckheere, E., Mestdagh, M., Houben, M., Rutten, I., Sels, L., Kuppens, P., & Tuerlinckx, F. (2019). Complex affect dynamics add limited information to the prediction of psychological well-being. *Nature Human Behaviour*, *3*(5), 478–491. https://doi.org/10.1038/s41562-019-0555-0

Denson, T. F., Moulds, M. L., & Grisham, J. R. (2012). The effects of analytical rumination, reappraisal, and distraction on anger experience. *Behavior Therapy*, *43*(2), 355–364. https://doi.org/10.1016/j.beth.2011.08.001

Dryman, M. T., & Heimberg, R. G. (2018). Emotion regulation in social anxiety and depression: A systematic review of expressive suppression and cognitive reappraisal. *Clinical Psychology Review*, *65*, 17–42. https://doi.org/10.1016/j.cpr.2018.07.004

Eisele, G., Lafit, G., Vachon, H., Kuppens, P., Houben, M., Myin-Germeys, I., & Viechtbauer, W. (2021). Affective structure, measurement invariance, and reliability across different experience sampling protocols. *Journal of Research in Personality*, *92*, Article 104094. https://doi.org/10.1016/j.jrp.2021.104094

Fang, J., Wen, Z., & Hau, K.-T. (2024). Mediation analyses of intensive longitudinal data with dynamic structural equation modeling. *Structural Equation Modeling*, *31*(4), 728–741. https://doi.org/10.1080/10705511.2023.2268293

Fisher, A. J., Medaglia, J. D., & Jeronimus, B. F. (2018). Lack of group-to-individual generalizability is a threat to human subjects research. *Proceedings of the National Academy of Sciences of the United States of America*, *115*(27), E6106–E6115. https://doi.org/10.1073/pnas.1711978115

Folkman, S., & Lazarus, R. S. (1988). Coping as a mediator of emotion. *Journal of Personality and Social Psychology*, *54*(3), 466–475. https://doi.org/10.1037/0022-3514.54.3.466

Ford, B. Q., Gross, J. J., & Gruber, J. (2019). Broadening our field of view: The role of emotion polyregulation. *Emotion Review*, *11*(3), 197–208. https://doi.org/10.1177/1754073919850314

Fredrickson, B. L. (2013). Positive emotions broaden and build. In P. Devine & A. Plant (Eds.), *Advances in experimental social psychology* (Vol. 47, pp. 1–53). Elsevier. https://doi.org/10.1016/B978-0-12-407236-7.00001-2

Frijda, N. H. (1988). The laws of emotion. *American Psychologist*, *43*(5), 349–358. https://doi.org/10.1037/0003-066X.43.5.349

Götz, M., O'Boyle, E. H., Gonzalez-Mulé, E., Banks, G. C., & Bollmann, S. S. (2021). The "Goldilocks Zone": (Too) many confidence intervals in tests of mediation just exclude zero. *Psychological Bulletin*, *147*(1), 95–114. https://doi.org/10.1037/bul0000315

Grommisch, G., Koval, P., Hinton, J. D. X., Gleeson, J., Hollenstein, T., Kuppens, P., & Lischetzke, T. (2020). Modeling individual differences in emotion regulation repertoire in daily life with multilevel latent profile analysis. *Emotion*, *20*(8), 1462–1474. https://doi.org/10.1037/emo0000669

Gross, J. J. (2015). Emotion regulation: Current status and future prospects. *Psychological Inquiry*, *26*(1), 1–26. https://doi.org/10.1080/1047840X.2014.940781

Gross, J. J., & John, O. P. (2003). Individual differences in two emotion regulation processes: Implications for affect, relationships, and well-being. *Journal of Personality and Social Psychology*, *85*(2), 348–362. https://doi.org/10.1037/0022-3514.85.2.348

Hamaker, E. L. (2012). Why researchers should think "within-person": A paradigmatic rationale. In M. R. Mehl & T. S. Conner (Eds.), *Handbook of research methods for studying daily life* (pp. 43–61). Guilford Press.

Hamaker, E. L., Asparouhov, T., Brose, A., Schmiedek, F., & Muthén, B. (2018). At the frontiers of modeling intensive longitudinal data: Dynamic structural equation models for the affective measurements from the COGITO study. *Multivariate Behavioral Research*, *53*(6), 820–841. https://doi.org/10.1080/00273171.2018.1446819

Hamaker, E. L., Asparouhov, T., & Muthén, B. (2023). Dynamic structural equation modeling as a combination of time series modeling, multilevel modeling, and structural equation modeling. In R. H. Hoyle (Ed.), *The handbook of structural equation modeling* (2nd ed., pp. 576–596). Guilford Press.

Hartmann, S., Pruessner, L., & Barnow, S. (2024). Contextual variations in emotion polyregulation: How do regulatory goals shape the use and success of emotion regulation strategies in everyday life? *Emotion*, *24*(3), 574–588. https://doi.org/10.1037/emo0001285

Hawes, M. T., & Klein, D. N. (2024). Emotion dynamics in current and remitted depression: An ecological momentary assessment study. *Psychological Medicine*, *54*(9), 2222–2229. https://doi.org/10.1017/S0033291724000369

Hemenover, S. H., Augustine, A. A., Shulman, T., Tran, T. Q., & Barlett, C. P. (2008). Individual differences in negative affect repair. *Emotion*, *8*(4), 468–478. https://doi.org/10.1037/1528-3542.8.4.468

Hjartarson, K. H., Snorrason, I., Bringmann, L. F., Ögmundsson, B. E., & Ólafsson, R. P. (2021). Do daily mood fluctuations activate ruminative thoughts as a mental habit? Results from an ecological momentary assessment study. *Behaviour Research and Therapy*, *140*, Article 103832. https://doi.org/10.1016/j.brat.2021.103832

Hollenstein, T. (2015). This time, it's real: Affective flexibility, time scales, feedback loops, and the regulation of emotion. *Emotion Review*, *7*(4), 308–315. https://doi.org/10.1177/1754073915590621

Hoorelbeke, K., Koster, E. H. W., Demeyer, I., Loeys, T., & Vanderhasselt, M.-A. (2016). Effects of cognitive control training on the dynamics of (mal)adaptive emotion regulation in daily life. *Emotion*, *16*(7), 945–956. https://doi.org/10.1037/emo0000169

Houben, M., Van Den Noortgate, W., & Kuppens, P. (2015). The relation between short-term emotion dynamics and psychological well-being: A meta-analysis. *Psychological Bulletin*, *141*(4), 901–930. https://doi.org/10.1037/a0038822

Hurlburt, R. T., Heavey, C. L., Lapping-Carr, L., Krumm, A. E., Moynihan, S. A., Kaneshiro, C., Brouwers, V. P., Turner, D. K., II, & Kelsey, J. M. (2022). Measuring the frequency of inner-experience characteristics. *Perspectives on Psychological Science*, *17*(2), 559–571. https://doi.org/10.1177/1745691621990379

John, O. P., & Gross, J. J. (2004). Healthy and unhealthy emotion regulation: Personality processes, individual differences, and life span development. *Journal of Personality*, *72*(6), 1301–1334. https://doi.org/10.1111/j.1467-6494.2004.00298.x

Jongerling, J., Laurenceau, J.-P., & Hamaker, E. L. (2015). A multilevel AR(1) model: Allowing for inter-individual differences in trait-scores, inertia, and innovation variance. *Multivariate Behavioral Research*, *50*(3), 334–349. https://doi.org/10.1080/00273171.2014.1003772

Kalokerinos, E. K., Résibois, M., Verduyn, P., & Kuppens, P. (2017). The temporal deployment of emotion regulation strategies during negative emotional episodes. *Emotion*, *17*(3), 450–458. https://doi.org/10.1037/emo0000248

Kalokerinos, E. K., Russo-Batterham, D., Koval, P., Moeck, E. K., Grewal, K. K., Greenaway, K. H., Shrestha, K. M., Garrett, P., Michalewicz, A., Garber, J., & Kuppens, P. (2023). *The EMOTE Database: An open, searchable database of experience sampling data mapping everyday life* [Manuscript in preparation]. Melbourne School of Psychological Sciences, The University of Melbourne.

Keller, M. M., Chang, M.-L., Becker, E. S., Goetz, T., & Frenzel, A. C. (2014). Teachers' emotional experiences and exhaustion as predictors of emotional labor in the classroom: An experience sampling study. *Frontiers in Psychology*, *5*, Article 1442. https://doi.org/10.3389/fpsyg.2014.01442

Kivity, Y., & Huppert, J. D. (2016). Does cognitive reappraisal reduce anxiety? A daily diary study of a micro-intervention with individuals with high social anxiety. *Journal of Consulting and Clinical Psychology*, *84*(3), 269–283. https://doi.org/10.1037/ccp0000075

Klein, R. J., Jacobson, N. C., & Robinson, M. D. (2023). A psychological flexibility perspective on well-being: Emotional reactivity, adaptive choices, and daily experiences. *Emotion*, *23*(4), 911–924. https://doi.org/10.1037/emo0001159

Koole, S. L. (2009). The psychology of emotion regulation: An integrative review. *Cognition and Emotion*, *23*(1), 4–41. https://doi.org/10.1080/02699930802619031

Koval, P., Brose, A., Pe, M. L., Houben, M., Erbas, Y., Champagne, D., & Kuppens, P. (2015). Emotional inertia and external events: The roles of exposure, reactivity, and recovery. *Emotion*, *15*(5), 625–636. https://doi.org/10.1037/emo0000059

Koval, P., Burnett, P. T., & Zheng, Y. (2021). Emotional inertia: On the conservation of emotional momentum. In C. E. Waugh & P. Kuppens (Eds.), *Affect dynamics* (pp. 63–94). Springer International Publishing. https://doi.org/10.1007/978-3-030-82965-0_4

Koval, P., Butler, E. A., Hollenstein, T., Lanteigne, D., & Kuppens, P. (2015). Emotion regulation and the temporal dynamics of emotions: Effects of cognitive reappraisal and expressive suppression on emotional inertia. *Cognition and Emotion*, *29*(5), 831–851. https://doi.org/10.1080/02699931.2014.948388

Koval, P., Kalokerinos, E. K., Greenaway, K. H., Medland, H., Kuppens, P., Nezlek, J. B., Hinton, J. D. X., & Gross, J. J. (2023). Emotion regulation in everyday life: Mapping global self-reports to daily processes. *Emotion*, *23*(2), 357–374. https://doi.org/10.1037/emo0001097

Koval, P., & Kuppens, P. (2012). Changing emotion dynamics: Individual differences in the effect of anticipatory social stress on emotional inertia. *Emotion*, *12*(2), 256–267. https://doi.org/10.1037/a0024756

Koval, P., & Kuppens, P. (2024). Changing feelings: Individual differences in emotional inertia. In A. C. Samson, D. Sander, & U. Kramer (Eds.), *Change in emotion and mental health* (pp. 3–21). Academic Press. https://doi.org/10.1016/B978-0-323-95604-8.00007-1

Koval, P., Kuppens, P., Allen, N. B., & Sheeber, L. (2012). Getting stuck in depression: The roles of rumination and emotional inertia. *Cognition and Emotion*, *26*(8), 1412–1427. https://doi.org/10.1080/02699931.2012.667392

Koval, P., Pe, M. L., Meers, K., & Kuppens, P. (2013). Affect dynamics in relation to depressive symptoms: Variable, unstable or inert? *Emotion*, *13*(6), 1132–1141. https://doi.org/10.1037/a0033579

Koval, P., Sütterlin, S., & Kuppens, P. (2016). Emotional inertia is associated with lower well-being when controlling for differences in emotional context. *Frontiers in Psychology*, *6*, Article 1997. https://doi.org/10.3389/fpsyg.2015.01997

Krone, T., Albers, C. J., Kuppens, P., & Timmerman, M. E. (2018). A multivariate statistical model for emotion dynamics. *Emotion*, *18*(5), 739–754. https://doi.org/10.1037/emo0000384

Kuppens, P., Allen, N. B., & Sheeber, L. B. (2010). Emotional inertia and psychological maladjustment. *Psychological Science*, *21*(7), 984–991. https://doi.org/10.1177/0956797610372634

Kuppens, P., Dejonckheere, E., Kalokerinos, E. K., & Koval, P. (2022). Some recommendations on the use of daily life methods in affective science. *Affective Science*, *3*(2), 505–515. https://doi.org/10.1007/s42761-022-00101-0

Kuppens, P., & Verduyn, P. (2015). Looking at emotion regulation through the window of emotion dynamics. *Psychological Inquiry*, *26*(1), 72–79. https://doi.org/10.1080/1047840X.2015.960505

Ladis, I., Toner, E. R., Daros, A. R., Daniel, K. E., Boukhechba, M., Chow, P. I., Barnes, L. E., Teachman, B. A., & Ford, B. Q. (2023). Assessing emotion polyregulation in daily life: Who uses it, when is it used, and how effective is it? *Affective Science*, *4*(2), 248–259. https://doi.org/10.1007/s42761-022-00166-x

Levy, R., & McNeish, D. (2023). Perspectives on Bayesian inference and their implications for data analysis. *Psychological Methods*, *28*(3), 719–739. https://doi.org/10.1037/met0000443

Luo, X., & Hu, Y. (2024). Temporal misalignment in intensive longitudinal data: Consequences and solutions based on dynamic structural equation models. *Structural Equation Modeling*, *31*(1), 118–131. https://doi.org/10.1080/10705511.2023.2207749

McEvoy, P. M., Watson, H., Watkins, E. R., & Nathan, P. (2013). The relationship between worry, rumination, and comorbidity: Evidence for repetitive negative thinking as a transdiagnostic construct. *Journal of Affective Disorders*, *151*(1), 313–320. https://doi.org/10.1016/j.jad.2013.06.014

McNeish, D. (2018). Thanks coefficient alpha, we'll take it from here. *Psychological Methods*, *23*(3), 412–433. https://doi.org/10.1037/met0000144

McNeish, D., & Hamaker, E. L. (2020). A primer on two-level dynamic structural equation models for intensive longitudinal data in Mplus. *Psychological Methods*, *25*(5), 610–635. https://doi.org/10.1037/met0000250

McNeish, D., & MacKinnon, D. P. (2025). Intensive longitudinal mediation in Mplus. *Psychological Methods*, *30*(2), 393–415. https://doi.org/10.1037/met0000536

Medland, H., De France, K., Hollenstein, T., Mussoff, D., & Koval, P. (2020). Regulating emotion systems in everyday life: Reliability and validity of the RESS-EMA scale. *European Journal of Psychological Assessment*, *36*(3), 437–446. https://doi.org/10.1027/1015-5759/a000595

Moberly, N. J., & Watkins, E. R. (2008). Ruminative self-focus and negative affect: An experience sampling study. *Journal of Abnormal Psychology*, *117*(2), 314–323. https://doi.org/10.1037/0021-843X.117.2.314

Moeck, E. K., Mortlock, J., Onie, S., Most, S. B., & Koval, P. (2022). Blinded by and stuck in negative emotions: Is psychological inflexibility across different domains related? *Affective Science*, *3*(4), 836–848. https://doi.org/10.1007/s42761-022-00145-2

Moeller, J. (2015). A word on standardization in longitudinal studies: Don't. *Frontiers in Psychology*, *6*, Article 1389. https://doi.org/10.3389/fpsyg.2015.01389

Muthén, L. K., & Muthén, B. O. (2017). *Mplus user's guide* (8th ed.).

Myin-Germeys, I., Kasanova, Z., Vaessen, T., Vachon, H., Kirtley, O., Viechtbauer, W., & Reininghaus, U. (2018). Experience sampling methodology in mental health research: New insights and technical developments. *World Psychiatry*, *17*(2), 123–132. https://doi.org/10.1002/wps.20513

Naragon-Gainey, K., DeMarree, K. G., Kyron, M. J., McMahon, T. P., Park, J., & Biehler, K. M. (2023). Decentering from emotions in daily life: Dynamic associations with affect, symptoms, and well-being. *Clinical Psychological Science*, *11*(5), 841–862. https://doi.org/10.1177/21677026221147262

Naragon-Gainey, K., McMahon, T. P., & Chacko, T. P. (2017). The structure of common emotion regulation strategies: A meta-analytic examination. *Psychological Bulletin*, *143*(4), 384–427. https://doi.org/10.1037/bul0000093

Nylocks, K. M., Rafaeli, E., Bar-Kalifa, E., Flynn, J. J., & Coifman, K. G. (2019). Testing the influence of negative and positive emotion on future health-promoting behaviors in a community sample. *Motivation and Emotion*, *43*(2), 285–298. https://doi.org/10.1007/s11031-018-9729-8

Parkinson, B., & Totterdell, P. (1999). Classifying affect-regulation strategies. *Cognition and Emotion*, *13*(3), 277–303. https://doi.org/10.1080/026999399379285

Pavani, J., Le Vigouroux, S., Kop, J., Congard, A., Dauvier, B., & Denissen, J. (2017). A network approach to affect regulation dynamics and personality trait–induced variations: Extraversion and neuroticism moderate reciprocal influences between affect and affect regulation strategies. *European Journal of Personality*, *31*(4), 329–346. https://doi.org/10.1002/per.2109

Pe, M. L., & Kuppens, P. (2012). The dynamic interplay between emotions in daily life: Augmentation, blunting, and the role of appraisal overlap. *Emotion*, *12*(6), 1320–1328. https://doi.org/10.1037/a0028262

Preacher, K. J., & Kelley, K. (2011). Effect size measures for mediation models: Quantitative strategies for communicating indirect effects. *Psychological Methods*, *16*(2), 93–115. https://doi.org/10.1037/a0022658

Preacher, K. J., Zyphur, M. J., & Zhang, Z. (2010). A general multilevel SEM framework for assessing multilevel mediation. *Psychological Methods*, *15*(3), 209–233. https://doi.org/10.1037/a0020141

Résibois, M., Kalokerinos, E. K., Verleysen, G., Kuppens, P., Van Mechelen, I., Fossati, P., & Verduyn, P. (2018). The relation between rumination and temporal features of emotion intensity. *Cognition and Emotion*, *32*(2), 259–274. https://doi.org/10.1080/02699931.2017.1298993

Riediger, M., Schmiedek, F., Wagner, G. G., & Lindenberger, U. (2009). Seeking pleasure and seeking pain: Differences in prohedonic and contra-hedonic motivation from adolescence to old age. *Psychological Science*, *20*(12), 1529–1535. https://doi.org/10.1111/j.1467-9280.2009.02473.x

Rodriguez, M., & Kross, E. (2023). Sensory emotion regulation. *Trends in Cognitive Sciences*, *27*(4), 379–390. https://doi.org/10.1016/j.tics.2023.01.008

Rogers, M. L., Jeon, M. E., Duffy, M. E., & Joiner, T. E. (2022). Thinking too much: Rumination as a catalyst of the real-time associations between affective states and suicidal ideation. *Journal of Consulting and Clinical Psychology*, *90*(9), 670–681. https://doi.org/10.1037/ccp0000753

Rónai, L., & Polner, B. (2021). *Getting the blues: Negative affect dynamics mediate the within-person association of maladaptive emotion regulation and depression*. PsyArXiv. https://doi.org/10.31234/osf.io/he53c

Schoevers, R. A., van Borkulo, C. D., Lamers, F., Servaas, M. N., Bastiaansen, J. A., Beekman, A. T. F., van Hemert, A. M., Smit, J. H., Penninx, B. W. J. H., & Riese, H. (2021). Affect fluctuations examined with ecological momentary assessment in patients with current or remitted depression and anxiety disorders. *Psychological Medicine*, *51*(11), 1906–1915. https://doi.org/10.1017/S0033291720000689

Schuurman, N. K. (2023). *A "within/between problem" primer: About (not) separating within-person variance and between-person variance in psychology*. PsyArXiv. https://doi.org/10.31234/osf.io/7zgkx

Sheppes, G., & Gross, J. J. (2011). Is timing everything? Temporal considerations in emotion regulation. *Personality and Social Psychology Review*, *15*(4), 319–331. https://doi.org/10.1177/1088868310395778

Simons, J. S., Simons, R. M., Grimm, K. J., Keith, J. A., & Stoltenberg, S. F. (2021). Affective dynamics among veterans: Associations with distress tolerance and posttraumatic stress symptoms. *Emotion*, *21*(4), 757–771. https://doi.org/10.1037/emo0000745

Smith, M. R., Seldin, K., Galtieri, L. R., Alawadhi, Y. T., Lengua, L. J., & King, K. M. (2023). Specific emotion and momentary emotion regulation in adolescence and early adulthood. *Emotion*, *23*(4), 1011–1027. https://doi.org/10.1037/emo0001127

Spasojević, J., & Alloy, L. B. (2001). Rumination as a common mechanism relating depressive risk factors to depression. *Emotion*, *1*(1), 25–37. https://doi.org/10.1037/1528-3542.1.1.25

Sullivan, E. C., McCall, C., Brose, A., Henderson, L.-M., & Cairney, S. A. (2024). Emotional inertia is independently associated with cognitive emotion regulation strategies and sleep quality. *Cognition and Emotion*. Advance online publication. https://doi.org/10.1080/02699931.2024.2443562

Suls, J., Green, P., & Hillis, S. (1998). Emotional reactivity to everyday problems, affective inertia, and neuroticism. *Personality and Social Psychology Bulletin*, *24*(2), 127–136. https://doi.org/10.1177/0146167298242002

Suls, J., & Martin, R. (2005). The daily life of the garden-variety neurotic: Reactivity, stressor exposure, mood spillover, and maladaptive coping. *Journal of Personality*, *73*(6), 1485–1510. https://doi.org/10.1111/j.1467-6494.2005.00356.x

Tamir, M. (2016). Why do people regulate their emotions? A taxonomy of motives in emotion regulation. *Personality and Social Psychology Review*, *20*(3), 199–222. https://doi.org/10.1177/1088868315586325

Tamir, M., Halperin, E., Porat, R., Bigman, Y. E., & Hasson, Y. (2019). When there's a will, there's a way: Disentangling the effects of goals and means in emotion regulation. *Journal of Personality and Social Psychology*, *116*(5), 795–816. https://doi.org/10.1037/pspp0000232

Taquet, M., Quoidbach, J., de Montjoye, Y.-A., Desseilles, M., & Gross, J. J. (2016). Hedonism and the choice of everyday activities. *Proceedings of the National Academy of Sciences of the United States of America*, *113*(35), 9769–9773. https://doi.org/10.1073/pnas.1519998113

van de Schoot, R., Depaoli, S., King, R., Kramer, B., Märtens, K., Tadesse, M. G., Vannucci, M., Gelman, A., Veen, D., Willemsen, J., & Yau, C. (2021). Bayesian statistics and modelling. *Nature Reviews Methods Primers*, *1*(1), Article 1. https://doi.org/10.1038/s43586-020-00001-2

Verduyn, P., & Lavrijsen, S. (2015). Which emotions last longest and why: The role of event importance and rumination. *Motivation and Emotion*, *39*(1), 119–127. https://doi.org/10.1007/s11031-014-9445-y

Wang, X., Shao, S., Cai, Z., Ma, C., Jia, L., Blain, S. D., & Tan, Y. (2024). Reciprocal effects between negative affect and emotion regulation in daily life. *Behaviour Research and Therapy*, *176*, Article 104518. https://doi.org/10.1016/j.brat.2024.104518

Waugh, C. E., Shing, E. Z., Avery, B. M., Jung, Y., Whitlow, C. T., & Maldjian, J. A. (2017). Neural predictors of emotional inertia in daily life. *Social Cognitive and Affective Neuroscience*, *12*(9), 1448–1459. https://doi.org/10.1093/scan/nsx071

Webb, T. L., Miles, E., & Sheeran, P. (2012). Dealing with feeling: A meta-analysis of the effectiveness of strategies derived from the process model of emotion regulation. *Psychological Bulletin*, *138*(4), 775–808. https://doi.org/10.1037/a0027600

Wen, X., An, Y., Li, W., Du, J., & Xu, W. (2022). How could physical activities and sleep influence affect inertia and affect variability? Evidence based on ecological momentary assessment. *Current Psychology*, *41*(5), 3055–3061. https://doi.org/10.1007/s12144-020-00803-3

Wenzel, M., Rowland, Z., & Kubiak, T. (2022). How much variance can event intensity and emotion regulation strategies explain in momentary affect in daily life? *Emotion*, *22*(8), 1969–1979. https://doi.org/10.1037/emo0000816

Wolgast, M., & Lundh, L.-G. (2017). Is distraction an adaptive or maladaptive strategy for emotion regulation? A person-oriented approach. *Journal of Psychopathology and Behavioral Assessment*, *39*(1), 117–127. https://doi.org/10.1007/s10862-016-9570-x

Wrzus, C., & Neubauer, A. B. (2023). Ecological momentary assessment: A meta-analysis on designs, samples, and compliance across research fields. *Assessment*, *30*(3), 825–846. https://doi.org/10.1177/10731911211067538

Zhu, X., Yang, Y., Xiao, Z., Pooley, A., Ozdemir, E., Speyer, L. G., Leung, M., Thurston, C., Kwok, J., Li, X., Eisner, M., Ribeaud, D., & Murray, A. L. (2024). Daily life affective dynamics as transdiagnostic predictors of mental health symptoms: An ecological momentary assessment study. *Journal of Affective Disorders*, *351*, 808–817. https://doi.org/10.1016/j.jad.2024.01.269

Received May 14, 2024
Revision received April 3, 2025
Accepted April 10, 2025 ■