Advancing the Study of Resilience to Daily Stressors

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Abstract
Historically, studies of childhood and adult resilience have typically focused on adaptation to chronic life adversities, such as poverty and maltreatment, or isolated and potentially traumatic events, such as bereavement and serious illness. Here, we present a complementary view and suggest that stressors experienced in daily life may also forecast individual health and well-being. We argue that daily process approaches that incorporate intensive sampling of individuals in natural settings can provide powerful insights into unfolding adaptational processes. In making this argument, we review studies that link intra-individual dynamics with diverse health-related phenomena. Findings from this research provide support for a multiple-levels-analysis perspective that embraces greater unity in pivotal resilience constructs invoked across childhood and adult literatures. Drawing on insights and principles derived from life-span theory, we conclude by outlining promising directions for future work and considering their broader implications for the field of resilience.

Keywords
daily stress, resilience, dampened reactivity, accelerated recovery, toughening, richness

Resilience has numerous meanings in prior research but generally refers to the capacity of a dynamic system to adaptively respond to environmental adversity. Inherent in the construct of resilience are two distinct dimensions: exposure to significant risks and evidence of positive adjustment (Luthar & Cicchetti, 2000; Luthar et al., 2000; Zautra et al., 2008). A key implication is that resilience is best understood as an active dynamic adaptation to stressors rather than as an inert trait or predisposition. Although indicators of adaptational processes vary across developmental and ecological contexts, predominant conceptualizations of resilience emphasize three key elements: sustainability, recovery, and steeling. Sustainability refers to the maintenance of health and well-being in the face of major life stressors (Bonanno, 2004; Masten et al., 1990). Recovery refers to how quickly and effectively people bounce back or regain equilibrium following challenge and adversity (Curtis & Cicchetti, 2003; Davidson, 2000). Steeling refers to the propensity for prior stressor exposure to increase coping capacity in the face of future stressors (Rutter, 2012; Seery, 2011). Evidence of these core elements of resilience in the context of toxic environmental circumstances (Luthar, 2006) and potentially traumatic events (Bonanno et al., 2011; Seery, 2011) have been well documented, but the capacity for resilience in the face of naturally occurring day-to-day stressors is not well understood.

In this article, we review current research that demonstrates the phenomenon of resilience is not limited to major life adversities but applies to relatively minor events encountered in daily life. This research illustrates how dynamic daily processes can be conceived as resilient factors that describe individuals’ inherent capacity for change (Kalisch et al., 2015; Ram & Gerstorf, 2009) and, in turn, are linked to physical health and psychological functioning. Drawing on principles from life-span theory (Baltes, 1987; Staudinger et al., 1993), we present a multiple-levels-analysis perspective that takes into account resilience processes that operate across different timescales (Fig. 1), including both short-term, intra-individual variability and long-term, intra-individual change.

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We highlight the benefits of measurement-burst designs (Nesselroade, 1991b; Sliwinski, 2008) and point to the unfulfilled potential of existing time-series tools (Brose et al., 2022; Hamaker et al., 2018) for investigating and modeling interindividual differences in intraindividual variability (Wang et al., 2012). We conclude with a discussion of remaining questions and future directions, including how daily process inquiries hold great promise for elucidating resilience processes that can inform new targets for intervention research and practice.

Resilience as Dynamic Daily Process

The idea that resilience reflects a dynamic process is not new. Developmental researchers and theorists have long noted that the temporal unfolding nature of resilience implies that it is not a trait or personality characteristic (Luthar, 2006; Luthar et al., 2000; Rutter, 2006). Commenting on this issue, Luthar and colleagues (2000) maintained that a core distinction between resilience and traits that purport to capture resilience is that only the former presupposes a dynamic process and exposure to adversity. Similar concerns have been raised about the use of single-administration trait questionnaires in studies of adult resilience (Bonanno et al., 2011; Kalisch et al., 2017). The overarching message that emanates from these influential programs of research is clear: To better understand the adaptational processes that underpin resilience, researchers need to examine them as they unfold.

The conception of resilience as an unfolding dynamic process necessitates research designs that combine idiographic (patterns of variability and change within individuals) and nomothetic (patterns of differences across individuals) methods. This hybrid approach is exemplified in the daily process paradigm (Bolger & Zuckerman, 1995; Tennen & Affleck, 2002), which uses intensive longitudinal methods (e.g., experience sampling, daily diary assessments) to examine individual differences in the patterning of temporal events and behavior. These methods enhance ecological validity, strengthen causal inference, and minimize recall error. Note that process-oriented designs permit the assessment of resilience processes closer to their real-time moments of change.
Applications of Daily Process Formulations of Resilience to Health

Although the theoretical significance of daily process designs for resilience research has been recognized (Almeida, 2005; Ong et al., 2009), empirical studies to date have primarily explored how individual differences in personal vulnerabilities and resources predict exposure and responses to daily stressful events (Bolger & Zuckerman, 1995; Zautra et al., 2005). More recently, researchers have turned to daily process designs to probe the dynamic processes that give rise to interindividual differences (Charles et al., 2013; Leger et al., 2018; Smyth et al., 2018). In this section, we review research that demonstrated the value of conceptualizing specific daily resilience processes as interindividual difference characteristics (Ram & Gerstorf, 2009). Working at the interface between substantive theory and methodological implementation, we delineate four dynamic processes that underlie individual differences in resilience to everyday stressors: dampened reactivity, accelerated recovery, toughness/inoculation, and richness/balance. Each resilience process is described along with illustrative examples of how it is operationalized and measured in daily life. Studies that explore how these dynamic processes are associated with psychological functioning and physical health are then reviewed (for details of each study, see Table 2), followed by recommendations for future research. Findings from this work demonstrate how the use of intraindividual, process-oriented methods can serve as powerful tools to illuminate context-specific protective processes (Luthar et al., 2000) and thereby help to identify individuals who are most at risk for maladaptive adjustment and poor health.
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Table 2. (continued)

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Note: For studies that used indices of reactivity and recovery, results are summarized on a continuum, ranging from resilience to vulnerability. NA = negative affect; PA = positive affect; HRV = heart rate variability; PWB = psychological well-being; II-6 = Interleukin-6; CRP = C-reactive protein; SDRR = standard deviation of R-R intervals; HF-HRV = high frequency HRV; RMSSD = root mean square of successive differences.

Dampened reactivity

Leading models of stress and health posit that heightened stress reactivity plays a prominent role in the development of psychiatric disorders and disease risk (Epel et al., 2018). Although individual differences in physiological responses to standardized laboratory stressors have been widely reported, growing research suggests that individuals may also differ in their reactivity and recovery from naturally occurring stressors. Here we focus on studies of affective responses to daily stressors, which constitute the bulk of existing intensive longitudinal studies of stress. Operationally, affective reactivity has been conceptualized as interindividual differences in the degree of intraindividual coupling of daily stress and affect (Sin et al., 2015). From a resilience perspective, these intraindividual parameters measure a continuum of interindividual differences in affective reactivity to daily stressors, which range from resilience (i.e., dampened reactivity) on one end to vulnerability on the other (i.e., heightened reactivity).

Measurement. Affective reactivity is typically estimated as the regression coefficient ($\beta_j$) in a within-persons regression model,

$$\text{Affect}_j = \beta_{0j} + \beta_{1j} (\text{stressor}_j) + r_j,$$

where the stressor$_j$ variable is a binary indicator that distinguishes event and nonevent occasions. The regression coefficient $\beta_{1j}$ captures the expected change in affect for person $j$ in response to a same-day stressor event (Ong et al., 2013; Sin et al., 2015).

Associations with mental and physical health. Growing evidence indicates that dampened negative affect (NA) reactivity to daily stressors may be protective against subsequent mental-health problems (Bai et al., 2020; Charles et al., 2013; Cohen et al., 2005), chronic health conditions (Piazza et al., 2013), marital risk (Ong et al., 2020), allostatic load (Piazza et al., 2019), and even mortality (Chiang et al., 2018; Stanton et al., 2019). Likewise, the maintenance of positive affect (PA) in the face of daily stressors is associated with more favorable profiles of sleep (Ong et al., 2013), health-related biomarkers (Sin et al., 2015), mental health (Ong & Burrow, 2018; Zhaoyang et al., 2020), and longevity (Mroczek et al., 2015).

Recommendations. Assessing dynamic resilience processes as stable individual differences requires measures that are reliable and sensitive to intraindividual change. A challenge in assessing the reliability of person-specific estimates (random slopes) that reflect daily stress reactivity is that it is unknown how many measurement occasions are needed for the individual slope estimates to be accurate and valid measures of interindividual differences. These problems can be addressed by applying a dynamic structural equation model approach in which the random effects are treated as latent variables in a general latent variable model framework (Asparouhov...
et al., 2018; Hamaker et al., 2018). Using simulated data on daily stress reactivity and change in affective distress, Brose et al. (2022) demonstrated that parameter estimates became closer to the true parameter estimates when a one-step multilevel structural equation model (MSEM) approach was used compared with a two-step approach.

In addition to linking dampened reactivity to changes in well-being, MSEM approaches that incorporate measurement-burst designs (Nesselroade, 1991b; Sliwinski, 2008) can be used to establish the temporal stability of interindividual differences in daily resilience processes. Life-span developmentalists have long recognized the importance of longitudinal designs for understanding temporal aspects of development, including intrapersonal variability and intrapersonal change (Baltes & Nesselroade, 1979; Nesselroade, 1991a; Wohlwill, 1973). Figure 1 illustrates a design that consists of intensive “bursts” of measurements obtained over micro timescales (e.g., hours, days, weeks) from a single individual and that are repeated over macro timescales (e.g., years, decades).

Employing two-wave measurement burst data from the National Study of Daily Experiences, Rush et al. (2019) reported a significant average intraindividual association in stress reactivity across bursts, albeit with considerable variability in the strength of the association within each burst. Using an MSEM approach, future work could benefit from assessing the timing of effects or temporal specificity of associations between dampened reactivity and well-being and the extent to which they exert reciprocal effects on each other (Brose et al., 2022; Rush et al., 2019).

**Accelerated recovery**

Beyond reactivity, recent theory and research suggest that interindividual differences in the rate of affective recovery from daily stressors may also have implications for long-term health. Whereas dampened reactivity reflects the magnitude of responses to stress, accelerated recovery reflects the speed with which stress responses return to baseline (Epel et al., 2018).

**Measurement.** Affective recovery can be estimated as the regression coefficient ($\beta_{ij}$) in a within-persons regression model,

$$\text{Affect}_{ij} = \beta_{0i} + \beta_{1j} \left( \text{stressor}_{ij-1} \right) + r_{ij},$$

where the stressor$_{ij}$ variable is a binary indicator that differentiates event and non-event occasions. The regression coefficient $\beta_{1j}$ captures the expected change in affect for person $j$ in response to a stressor event experienced on the previous day (Leger et al., 2018).

**Associations with mental and physical health.** Like differences in stressor reactivity, individuals differ in the rate or speed with which they recover from daily stressors. Using a daily burst design (i.e., 8-day diary study nested within a 10-year longitudinal study design), Leger et al. (2018) demonstrated that temporary or short-lived NA in response to daily stressors was associated with fewer numbers of chronic conditions and lower functional impairment 10 years later. Likewise, Bergeman and Deboeck (2014) found the interindividual differences in the rate of stress reduction or dissipation was inversely associated with depressive symptoms over a 5-year period. These findings demonstrate the unique contribution of daily process studies to elucidating dynamic resilience processes (e.g., dampened reactivity and accelerated recovery). Collectively, these studies show how daily study designs can be incorporated into longitudinal studies to make inferences about intrapersonal dynamics, which thereby generates more highly predictive models of stress and health (Epel et al., 2018). Critically, the scope of these investigations offers insights into daily processes that simply could not have been ascertained from traditional trait reports of resilience assessed at a single point in time (Kalisch et al., 2017).

**Recommendations.** Dynamic operationalizations of stress recovery depend crucially on the length of time between measurements. Linking retrospective reports of daily stress and affect over an entire day may thus obscure recovery processes that manifest across relatively faster timescales (e.g., minutes, hours). More frequent measurement bursts assessed at shorter intervals would therefore permit a better understanding of stress-recovery processes as they naturally occur in daily life (Hamaker et al., 2015). More generally, daily process studies of stress reactivity and recovery should be broadened to include measures of health that go beyond self-report (Gordon & Mendes, 2021; Leger et al., 2018). Experimental studies have assessed physiological recovery from laboratory-based stressors and their links to physical health (e.g., Panaite et al., 2015; Steptoe & Marmot, 2005). Future studies that combine experimental manipulations, intensive longitudinal designs, and objective indices of physical health may yield new insights into the dynamic mechanisms involved in accelerated recovery from daily stressors. Finally, from the perspective of psychological traits, consistency in idiographic structure (i.e., intrapersonal variability patterns defined across time and situations) is fundamental to understanding individual differences in personality (Beck & Jackson, 2020; Shoda et al., 1994). Yet evidence for
temporal stability and cross-situational consistency in stressor reactivity and recovery have not been established and therefore constitute an important future research direction. Furthermore, the potential contaminating influence of personality traits, such as neuroticism, on the relation between affective reactivity/recovery and health has received scant attention (but see Sin et al., 2015; Stanton et al., 2019). Hence, an important methodological issue for future studies of interindividual differences in resilience processes and health is whether associations are independent of neuroticism and allied personality traits.

**Toughening and inoculation.**

Although much work has focused on resilience as the capacity to absorb and recover from stressful events, there is growing evidence that stressful experiences themselves may also contribute to the capacity for resilience (Seery et al., 2010). This conceptualization of resilience holds that stressors that are challenging but manageable can play an adaptive role in preparing individuals for coping with later stressors, a protective phenomenon referred to as toughening or inoculation (Dienstbier, 1989; Meichenbaum, 1993). Note that toughening and inoculation effects are not limited to major life adversities but may also influence adaptation to minor daily stressors. DiCorcia and Tronick (2011) reviewed developmental research that showed successful regulation of everyday stressors scaffolded by caregiver reparatory sensitivity prepares infants for coping with subsequent stressors. Seery and Quinton (2016) reviewed social-psychological evidence demonstrating U-shaped relationships between daily stressor exposure and well-being. Although this research did not directly employ intensive longitudinal designs, it underscores the potential of daily process studies to advance understanding of the protective benefits or toughening qualities of daily stressor exposure that until now have been ascribed to cumulative lifetime adversities (Seery et al., 2010).

**Measurement.** One component of everyday stressor exposure that may be of particular importance for health is the effect of stressor pile-up in daily life (Schilling & Diehl, 2014; Smyth et al., 2018). Researchers interested in stressor pileup have used various indices to quantify patterns of stressor accumulation (e.g., frequency counts of daily stressors, number of stressor reactivity-recovery cycles). According to Schilling and Diehl (2014), stressor pileup can be expressed with the following equation:

$$A_{(k|i)} = \frac{\sum_{j=1}^{k} (k - j + 1)S_{(j|i)}}{\sum_{j=1}^{n} j},$$

where $A_{(k|i)}$ is an index of stressor pileup across $k$ days for individual $i$ and $k$ specifies the number of days that precede day $t$ (Schilling & Diehl, 2014).

**Associations with mental and physical health.** Research suggests that stressor pileup is a common daily phenomenon (Almeida et al., 2002; Bolger et al., 1989) that can have adverse consequences for mental health and well-being, especially in the short term (Bolger & Schilling, 1991; Grzywacz & Almeida, 2008; Serido et al., 2004). Using data from a 30-day diary study, Schilling and Diehl (2014) found that stressor pileup over the course of a week had an independent effect on daily NA, above and beyond the effect of concurrent daily stress. In a coordinated analysis of data from two ecological-momentary-assessment (EMA) studies, Almeida and colleagues (2020) reported that greater stressor pileup was more strongly associated with physical activity compared with reactivity and recovery. Extending this research to a clinical sample, Smith et al. (2021) found that the cumulative buildup of stressors over recent hours predicted greater subsequent binge-eating symptoms among adults with binge-eating disorder.

**Recommendations.** Although exposure to mild everyday stressors has been theorized to foster resilience (Seery & Quinton, 2016), this has yet to be tested empirically using intensive longitudinal data. To the extent that exposure to daily stressors builds resilience through toughness and inoculation, individual differences in daily stressor accumulation and pileup should demonstrate U-shape relationships with well-being such that moderate levels of stressor pileup (relative to no or high levels) contribute to improved health over time. Charles et al. (2021) provided some evidence consistent with this premise; they found, in a sample of adults, that leading a stress-free life, although associated with higher emotion well-being, may be linked to lower cognitive functioning. A potential fruitful direction for future work would be to explicitly test curvilinear relationships between daily stressor pileup and subsequent health.

To date, almost all investigations of daily stress processes have created aggregate measures of individual differences and then drawn inferences about more dynamic processes that underlie psychological adjustment. In contrast, the study by Almeida et al. (2020) used an intraindividual approach to capture everyday stress processes and demonstrated substantial variation in the temporal patterning of stressor pileup both within and across days. This approach represents a significant advance in the assessment of stressor pileup because it allows researchers to begin to explicitly test resilience processes (e.g., toughening and inoculation) across different timescales as they unfold in real time.
and in individuals’ natural environments. Do low to moderate levels of stressor pileup reflect adaptive flexi-
bility such that exposure to some stress in daily life is
more likely to provide opportunities to develop tough-
ness than exposure to either no stress or high stress?
Do toughening mechanisms (e.g., mastery, perceived
control, and belief in the ability to cope) that have been
theorized to account for resilience in the face of major
life adversities (Seery et al., 2010) also explain how and
why exposure to minor daily hassles may be beneficial
to overall mental health and well-being? To date, no
studies have systematically examined these questions.

Richness and balance

Distinguished from cumulative stressor counts are indi-
ces that capture stressor diversity, or the richness and
balance of “hassles” (e.g., home chores, work deadlines,
interpersonal tensions) across multiple domains of daily
life. Consistent with a conservation model of stress
(Hobfoll, 1989), high stressor diversity theoretically
functions as a resource that confers differential well-
being (Koffer et al., 2016). Following techniques used
in the natural sciences to assess the biodiversity of
ecosystems (Magurran, 2004; Morin, 1999), researchers
have used measures of diversity to assess a variety of
social and psychological phenomena, including racial
and ethnic diversity (Budescu & Budescu, 2012), behav-
ioral flexibility (Ram et al., 2012), population genetics
(Sherwin, 2010), community social networks (Li et al.,
2015), emotional diversity (Ong et al., 2018; Quoidbach
et al., 2014; Urban-Wojcik et al., 2022), and activity
diversity (Lee et al., 2018, 2022).

Measurement. Stressor diversity can be estimated using
Shannon’s (1948) entropy:

\[
SD_i = -\left(\frac{1}{\ln(m)}\right) \sum_{j=1}^{m} p_{ij} \ln p_{ij},
\]

where \(SD_i\) is an index that quantifies the relative variety
or richness and evenness or balance in stressor experi-
ences \((j)\) across all study days for individual \(i\) (Koffer
et al., 2016).

Associations with mental and physical health.

Employing data from two independent diary studies,
Koffer and colleagues (Koffer et al., 2016, 2018) used an
entropy index to quantify the dispersion of daily stressors
across multiple domains (e.g., health, financial, work,
interpersonal) and found that higher daily stressor diver-
sity was associated with lower NA and weaker links
between daily stressor exposure and NA. Using EMA
\[\text{data, Koffer et al. (2020) reported that lower stressor}\
\text{diversity (i.e., higher number of stressors concentrated in}\
\text{one domain) coupled with higher stressor exposure was}\
\text{associated with higher diastolic blood pressure in a sam-
ple of middle-aged adults.}

Recommendations. The number of stressor events
sampled may affect the interpretation of stressor diversity
and its association with health and well-being. Coarse
assessments of individuals’ overall stressor ecosystems
could restrict the degree to which richness and balance
of stressful experiences are adequately captured (see
Brown & Coyne, 2017). Thus, future research should
examine whether the number of stressors assessed influ-
eses the rank order of stressor-diversity scores (see
Benson et al., 2018). Furthermore, whereas extant work
has focused on the immediate consequences of stressor
richness and balance, it is plausible that exposure to
many types of daily stressors that are appraised as man-
ageable rather than overwhelming may also contribute to
the propensity for resilience to future stressors, be they
major life adversities or minor daily hassles (Seery &
Quinton, 2016). Finally, methods used to operationalize
stressor diversity, such as Shannon's entropy, assume that
stressor events are independent and identically distrib-
uted across time (Ram & Gerstorf, 2009). This assumption
is untenable, however, when stressors are conceptualized
as continuous phenomena. One such class of stressors
are chronic strains that represent unresolved, recurrent
demands that people face in their daily lives (Pearlin &
Skaff, 1996). Here, alternative diversity indices that incor-
porate heterogeneity in time-series data, such as mea-
sures of turbulence (Koffer et al., 2016), may be used to
quantify the amount and distribution of individuals’ daily
stressor exposure.

Examples of turbulent variation abound in nature.
Unchecked by natural controls, invasive species, for
example, can spread quickly and displace native
plants, animals, and other organisms, which causes
dramatic biodiversity loss and ecosystem degradation.
In a similar vein, differential exposure to turbulent
(stochastic) daily stressors may disrupt the continuity
of everyday life and, over time, threaten the health and
functioning of the emotional ecosystem (Quoidbach
et al., 2014). By contrast, low turbulent stressor ecol-
ologies may be characterized by greater homogeneity
(predictability) in patterns of daily stressor exposure
(Ram et al., 2017).

Integrating Life-Span Principles
in the Study of Resilience

As the preceding discussions suggest, resilience is a
heterogeneous construct that encompasses an array of
dynamic processes, including dampened reactivity, rapid recovery, moderate stressor exposure, and high stressor diversity. We have argued that a daily process conceptualization of resilience may reveal the adaptive ways in which individuals respond to stressors in everyday life and thereby complement traditional formulations of resilience that primarily focus on major life adversities (Luthar et al., 2000; Zautra et al., 2008). In this final section, we summarize key principles and concepts from life-span theory and their implications for advancing the study of resilience in daily life. Although some of these concepts are inherent in previous models of resilience, a life-span perspective provides an interpretive framework for understanding variation in resilient functioning (Infurna, 2021; Staudinger et al., 1993).

**Multidirectionality and multidimensionality**

A key insight from life-span theory is that the development of adaptive capacities throughout life is characterized by the simultaneous unfolding of increases, decreases, and maintenance in functioning. Furthermore, development is a process that spans multiple domains such that decrements in one domain may coexist with stability or even increments in other domains. Taken together, these multidirectionality and multidimensionality perspectives may help to explain the heterogeneity in functioning across domains observed among people labeled as resilient (Luthar, 2006). Indeed, evidence of discordance between behavioral and physiological functioning has led some scholars to question whether resilience is a veridical construct or one that is only “skin deep” (Brody et al., 2013). Yet as developmentalists have pointed out, resilience is not an “across-the-board phenomenon” (Infurna & Luthar, 2017; Luthar, 2006), and adaptation across diverse spheres of functioning is never uniform but manifest in co-occurring profiles of successive gains and losses (Staudinger et al., 1993).

Translating multidirectional and multidimensional conceptions of adaptation to empirically tractable questions is critical for advancing the study of resilience in daily life. To what extent do daily manifestations of dampened reactivity, accelerated recovery, toughening, and stressor richness and balance change across the life span? How does the timing, direction, and rate of change in these resilience processes differ before and after adversity? Do affective and nonaffective domains of resilience in daily life constitute related, but distinct, processes (Nezlek, 2005)? Although there is growing recognition of the multidirectional and multidimensional nature of resilience to major life stressors (Infurna & Luthar, 2017), little is known about how resilience processes cohere across multiple domains (e.g., affective, cognitive, physiological) in daily life. Furthermore, to date, the resilience literature has largely focused on single outcomes, which prevents a comparison of trajectories of adaptation within and across different domains of functioning (Infurna & Luthar, 2017). How to relate resilience processes that manifest on micro timescales (e.g., hours, days) to “varieties” in resilient outcomes (Ryff et al., 2012) that unfold over macro timescales (e.g., years, decades)? The answers to these questions await further investigation.

**Plasticity and reserve capacity**

From a life-span perspective, whether individuals can sustain, recover, or benefit from adversity depends critically on the degree of adaptive potential, or plasticity (Staudinger et al., 1993). Furthermore, the extent to which such adaptive plasticity protects against future stressors is reflected in the level and accumulation of latent capabilities, or reserve capacity (Cullati et al., 2018). Although the concepts of plasticity and reserve capacity have been recognized in life-course models of resilience (Gallo et al., 2009; Ryff & Singer, 2008), their explicit connections to resilience in daily life have not been addressed.

Incorporating life-span principles more systematically into daily process research can enhance understanding of resilience to everyday stressors. Is plasticity or intra-individual variability in short-term resilience processes (e.g., dampened reactivity, toughening) modifiable through intervention (Baltes, 1987; Staudinger et al., 1993)? When one considers the timing of potential interventions, is midlife a critical, more malleable period in the life course for examining resilience in the face of challenge or the potential for change and plasticity (Infurna, 2021)? If so, what effect will preventative interventions in midlife have on catalyzing future benefits in the form of greater reserve capacity in later life? Pursuit of these questions may lead to important insights into how intensive longitudinal designs can be incorporated into randomized controlled studies of resilience to determine causal intraindividual mechanisms (Hamaker & Wichers, 2017).

**Conclusion**

The study of resilience in everyday life offers critically needed complements to existing research on potential trauma and extreme adversity. In this review, we have discussed the utility of four idiographic indices (i.e.,
dampened reactivity, accelerated recovery, toughness/inoculation, and richness/balance) and key principles of life-span development (i.e., multidirectionality, multidimensionality, plasticity, and reserve capacity) that warrant greater attention in daily process studies of resilience. Continued research in this area will deepen understanding of the mechanisms by which individuals’ inherent capacity for change, conceived as dynamic daily processes, exert their health-promoting effects. Beyond dynamic models that depict life as it is lived, daily process research holds great promise for unifying diverse formulations of resilience across the child and adult literatures (e.g., sustainability, recovery, steeling), thereby affording greater insight into what it means to be well in the face of adversity.

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