The ups and downs of daily life during COVID-19:

Age differences in affect, stress, and positive events

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Abstract

Objective: Past research has linked older age with greater emotional well-being and decreased reactivity to stressors, but it is unknown whether age-related advantages in emotional well-being are maintained in the wake of COVID-19. We examined age differences in exposure and affective reactivity to daily stressors and positive events in the first several weeks of the COVID-19 outbreak.

Method: In March and April 2020, 776 adults from Canada and the U.S. ages 18-91 (mean age 45) reported COVID-19 threats at baseline, then completed nightly surveys for one week about their daily stressors, positive events, and affect.

Results: Younger age predicted more concerns about the threat of COVID-19 across multiple domains, in addition to lower positive affect, higher negative affect, and less frequent positive events. Younger adults had more non-COVID-19 daily stressors and higher perceived control over stressors, but lower perceived coping efficacy than older adults. There were no age differences in the frequency of COVID-19 daily stressors nor perceived stressor severity. Younger adults had greater reductions in negative affect on days when more positive events occurred and greater increases in negative affect on days when non-COVID-19 stressors occurred. Age moderation was attenuated for negative affective reactivity to COVID-19 stressors. Age did not moderate positive affective reactivity to daily events.

Discussion: In the early weeks of the pandemic, older adults showed better emotional well-being and less reactivity to stressors but did not differ from younger adults in their exposure to COVID-19 stressors. Additionally, younger adults benefited more from positive events.

Keywords: coronavirus, pandemic, daily stress, emotions, aging

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The novel coronavirus disease 2019 (COVID-19) pandemic has severely disrupted daily life around the world. The impacts of the pandemic vary based on social roles and risk factors that are present at different points in the adult lifespan. In particular, older age is associated with physical health risks (e.g., chronic conditions, compromised immune system) that contribute to higher rates of severe complications and mortality from COVID-19 (CDC, 2020; Zhou et al., 2020). Younger and middle-aged adults, on the other hand, are faced with family- and work-related challenges, such as working from home, homeschooling children, and unemployment. Indeed, initial research found that younger adults had more COVID-19 worries and implemented more behavioral changes than older men but not older women (Barber & Kim, 2020). Consistent with observed mortality risk, older adults perceived themselves to be at higher risk of dying if they were to contract COVID-19. Yet they reported better mental health and psychological functioning than their younger counterparts (Bruine de Bruin, 2020). Despite these age differences in risk perceptions and mental health, a cross-sectional survey reported that the association between the perceived impact of COVID-19 and psychological outcomes was age-invariant (Tull et al., 2020). In the current study, we used a micro-longitudinal approach to track both stressful and positive experiences as they unfolded in daily life, in order to examine age-related patterns in psychological adjustment during the outbreak.

Daily diary studies of U.S. adults have found that older age is associated with fewer daily stressors (Charles et al., 2010; Mroczek & Almeida, 2004) and more daily positive events (Sin & Almeida, 2018). Older adults also have higher positive affect (PA) and lower negative affect (NA) than younger adults (Charles & Carstensen, 2010), but evidence is mixed regarding age differences in affective reactivity to daily events. Some studies have

indicated that older adults show relatively smaller increases in NA (Charles et al., 2009; Uchino et al., 2006) and less-decreased PA (Scott et al., 2013) when daily stressors occur, whereas other studies have found the opposite effect (Mroczek & Almeida, 2004; Wrzus et al., 2013).

Theoretical perspectives on aging and emotions posit that older age is associated with motivation and skills that help shape social environments to promote emotional well-being (Charles, 2010). In particular, older adults are more likely to use attentional, appraisal, and behavioral strategies to minimize stressful situations and should therefore show more favorable stress responses, compared to younger adults (Charles, 2010). However, when faced with unavoidable stressors that elicit high levels of distress, these age-related strengths may disappear. Indeed, when stressors affect multiple life domains (Wrzus et al., 2013) or when global perceived stress is higher (Scott et al., 2013), older adults fare the same or worse than younger adults. The sustained challenges caused by the pandemic put into question whether age-related advantages in emotional well-being will persist during this crisis.

The present study examined age differences in the perceived threat of COVID-19, as well as exposure and reactivity to daily stressors and positive events amid the outbreak. We report findings from a lifespan adult sample in Canada and the U.S., using daily diary data collected in the 25 days from March 18, 2020—just as local, provincial, and state governments began issuing stay-at-home orders—until April 11, 2020. We focused on these first several weeks of the COVID-19 response as it was likely to be the period of greatest disruption and uncertainty during the pandemic.

Method

Sample

Data were collected as part of the Coping with COVID-19 Outbreak Study from March 18 to April 11, 2020. Data analyses were started in mid-April 2020 to facilitate a

timely dissemination of research findings. Participants were recruited through popular print, television, and radio news outlets in North America; social media (e.g., university media channels); community organizations (e.g., YMCA); and institutions (e.g., local hospital). Participants from Canada and the U.S. ages 18-91 ($N = 913$) completed an online baseline questionnaire and subsequently enrolled in a 7-day diary study. Of these, 132 were excluded for completing fewer than 4 of the 7 evening surveys, and 5 were excluded due to missing values on key variables, resulting in an analytic sample of 776. Participants received email reminders every evening at 7 PM local time with a link to the daily survey. The study protocol was approved by the research ethics board at the authors' institution.

Measures

COVID-19 threat. In a baseline questionnaire, participants were asked to rate 8 items that tapped into primary stress appraisals regarding the threat of COVID-19 (Pow et al., 2016, 2017; adapted from Folkman et al., 1986). Specifically, the items asked about concerns of harm to their own and to a loved one's physical health/safety and emotional well-being, not achieving important work goals, not achieving something important to them, strain on financial resources, and losing another's approval or respect. Ratings were made using a 4-point scale (1 = *not at all*, 2 = *a little*, 3 = *a moderate amount*, 4 = *a great deal*).

Daily affect. Daily PA and NA items were adapted from the PANAS-X (Watson & Clark, 1999). Using a slider ranging from 0 (*Not at all*) to 100 (*Extremely*), participants indicated the extent that they had felt 9 emotions for PA (*calm*, *enthusiastic*, *happy*, *satisfied*, *confident*, *like you belong*, *close to others*, *proud*, *full of life*) and 7 emotions for NA (*anxious, sad, angry, frustrated, disgusted, lonely, ashamed*). Reliability was satisfactory at between- and within-person levels (PA: within-person = .85, between-person = .99; NA: within-person = .74, between-person = .98; Scott et al., 2018).

Daily stressors. Daily stressors were assessed using a modified version of the Daily Inventory of Stressful Events (Almeida et al., 2002). Specifically, participants indicated whether any stressful events had occurred in the following 7 domains: *'argument, conflict or disagreement', 'family/home-related', 'financial problems', 'traffic or transportation', 'health problem or accident', 'stressful event that happened to close friends or family'*, and *'other stressful event.'* Participants reported a daily average of 0.95 stressors ($SD = 1.03$). Thus, we used a dichotomous (*yes/no*) variable to indicate whether any stressor occurred on a given day.

If at least one stressor was reported, participants were asked follow-up questions about their most stressful event that day. First, they rated how much the stressful event was related to the COVID-19 pandemic, using a 0 (*not at all*) to 100 (*very much*) sliding scale. To examine stressors that were strongly related to the pandemic, **COVID-19 stressor days** were defined as days on which stressors were rated above the median of 75 in its relation to the pandemic. This dichotomization was chosen because the distribution of COVID-19 relevance was bimodal with peaks at opposite ends of the scale, such that 25% of ratings were 0-20 and 46% of ratings were 80-100 (Supplementary Figure S1). **Perceived stressor severity** was assessed by asking participants to rate how stressful the event was, from 0 (*not at all stressful*) to 100 (*extremely stressful*). **Perceived stressor control** was assessed by asking how much control the participant had over the situation (0 = *none at all*, 100 = *a great deal*). **Perceived coping efficacy** was assessed with the question, "*How well do you think you have handled the situation, given the circumstances?"* (0 = *not well at all*, 100 = *very well*; Aldwin & Revenson, 1987).

Daily positive events. Participants reported whether any of the following 7 positive events occurred each day: *'positive social interaction, in person', 'positive social interaction, remote', 'positive event at work, school, or volunteer position', 'positive event at home',*

'positive event that happened to a close friend or family member', 'spent time enjoying or viewing nature', and '*other positive event'* (Sin & Almeida, 2018). Because participants tended to report multiple positive events each day, we used the number of daily positive events (rather than whether any had occurred) as an outcome.

Questions reflecting on the past week. On the final survey day, participants were asked "*How stressed did you feel this past week, compared to your usual level of stress?"* and "*How often did you have positive experiences this past week, compared to your usual level of positive experiences?*" Ratings were made on a scale ranging from 1 (*A lot more than usual*) to 7 (*A lot less than usual*), such that smaller values referred to more stress or more frequent positive experiences.

Analysis

Data were analyzed in R. For descriptive purposes, we first grouped participants into younger (18-39 years old), middle-aged (40-59 years old), and older (60+ years old) age groups, and we ran one-way ANOVAs and Tukey-HSD tests to examine group differences. Next, our primary analyses regarding daily events were conducted using multilevel models provided by the lmerTest package (Kuznetsova et al., 2017). Days (level 1) were nested within participants (level 2). Level 1 predictors were person-mean centered and level 2 predictors grand-mean centered. To examine age differences in the frequency of daily positive events, age was entered as a continuous predictor of the number of daily positive events in a multilevel model. Age differences in the occurrence of daily COVID-19 stressors and of non-COVID-19 stressors (0 = stressor did not occur, 1 = stressor occurred) were examined in two separate multilevel logistic regression models. To evaluate age differences in affective reactivity to daily events, we entered 2-way interaction terms for Age by COVID-19 Stressors, by Non-COVID-19 Stressors, and by Positive Events as predictors of PA and NA. Models controlled for study day (centered on the first diary day), gender (men, women,

other), education (less than college graduate vs. college graduate), and race (White vs. non-White). Random effects were included for study day and positive events, but not for stressor days because inclusion led to convergence problems.

Results

Daily experiences in the wake of COVID-19

Descriptive statistics by age group are provided in Table 1, and between-person correlations are provided in Supplementary Table S1. Compared to older adults, younger and middle-aged adults were more concerned with harm to their emotional well-being, work goals, and finances. Younger adults also reported greater concerns about losing the respect of other's and not achieving important goals, whereas middle-aged adults were more concerned than older adults about others' physical health and safety. There were no age differences in concerns about harm to one's own physical health and safety or to a loved one's emotional well-being due to the COVID-19 pandemic.

Daily diaries showed that middle-aged and older adults had higher PA and more daily positive events, compared to younger adults. Older adults had lower NA than both middle-aged and younger adults. Age was not related to the overall frequency of stressor days. However, the frequency of different types of events varied by age (Supplementary Table S2), such that older age was associated with fewer interpersonal conflicts, family, and work/school stressors but more "other" stressors. Middle-aged adults had more in-person positive social interactions, whereas older adults had fewer work/school/volunteer positive events but more remote positive social interactions, positive events in their social networks, nature events, and "other" types of positive events. The ICCs indicated that much of the variance in affect and daily events were attributable to within-person variation (Table 1).

With regard to daily stress appraisals, stressful events were largely rated above the midpoint of the scale in their relation to the COVID-19 outbreak (grand mean = 60.92, SD =

38.70, median = 75) among all age groups. Using a median split to conservatively define COVID-19 stressors, we found that middle-aged and older adults had COVID-19 stressors on nearly one-third of diary days, and younger adults had COVID-19 stressors on over a quarter of days ($p > 0.05$). Older adults rated themselves as having less control over their stressors but reported higher levels of coping efficacy, compared to younger adults. Although age groups differed in the types of stressors reported (Supplementary Table S2), age was not associated with differences in perceived stressor severity (Table 1). Among all age groups, people rated the study week as more stressful than usual and reported having less-frequent positive experiences than usual (Table 1).

Age as a moderator of exposure and reactivity to daily events

In multilevel models (Table 2), age was associated with more positive events, lower NA, higher PA, and lower odds of experiencing non-COVID-19 stressors, but not the odds of experiencing COVID-19 stressors. In the models for affective reactivity to daily events, the within-person main effect for daily positive events indicated that on days when more positive events occurred than usual, PA increased and NA decreased. Likewise, on days when COVID-19 or non-COVID-19 stressors occurred compared to days without these stressors, NA increased and PA decreased. Age moderated the within-person associations of positive events and non-COVID-19 stressors with NA, such that younger adults showed the greatest decreases in NA when positive events occurred (Age x Positive Events: $b = 0.03$, $SE = 0.01$, $p = .035$; Figure 1A) and more pronounced increases in NA on non-COVID-19 stressor days (Age x Non-COVID-19 Stressor Day: $b = -0.09$, $SE = 0.03$, $p = .002$; Figure 1B). Age did not predict NA reactivity to COVID-19 stressors (Age x COVID-19 Stressor Day: $b = -0.05$, $SE = 0.03$, $p = .125$; Figure 1C) nor PA reactivity to positive events or to any stressors.

Sensitivity Analyses

We ran two sensitivity analyses using alternative approaches for examining the COVID-19 relevance of stressors. First, we restricted our analyses to only days on which stressors were either highly related to COVID-19 (i.e., rated 80-100 in COVID-19 relevance) or very low in its relevance to COVID-19 (i.e., rated 0-20), as well as days without any stressors. The previously-observed findings persisted, such that older age predicted fewer non-COVID-19 stressors (b = -0.01, SE = 0.004, p = .03) but was not associated with the frequency of COVID-19 stressors (b = 0.004, SE = 0.004, p = .33). Age continued to moderate the relationship between non-COVID-19 stressors and NA (b = -0.11, SE = 0.03, p = .002). The interaction term for age moderation in the link between COVID-19 stressors and NA was not statistically significant (b = -0.06, SE = 0.03, p = .07). For our second sensitivity analysis, we tested age as a moderator of the association between the COVID-19 relevance of stressors and NA; this analysis was conducted for stressor days only because COVID-19 relevance was not assessed on nonstressor days. As shown in Supplementary Table S3, age did not moderate the association between COVID-19 stressor relevance and NA on stressor days. Taken together, older age predicted smaller increases in NA on days with non-COVID-19 stressors compared to their NA on nonstressor days, but this effect was attenuated and nonsignificant for NA reactivity to COVID-19 stressors.

Discussion

The purpose of this study was to examine age differences in the perceived threat of COVID-19, in addition to exposure and affective reactivity to daily stressors and positive events amid the outbreak in North America. Compared to older adults, younger and middle-aged adults were more concerned about the threat of COVID-19 for multiple life domains, especially regarding their own emotional well-being, finances, and work goals. Daily diary data revealed that younger age predicted greater reductions in NA when positive events

occurred. Younger age was also associated with greater increases in NA in response to stressors that were less-related to COVID-19, but this age moderation effect was attenuated and did not reach statistical significance for stressors that were highly related to COVID-19.

Consistent with past findings of better emotional well-being with age (Charles et al., 2010), older age was associated with higher PA, lower NA, and more frequent daily positive events. Also, in line with some previous research (Charles et al., 2009; Uchino et al., 2006), younger age predicted greater NA reactivity to stressors that were less related to COVID-19. This age difference in daily stress reactivity may have been due, at least in part, to younger and middle-aged adults experiencing different types of ongoing non-pandemic stressors than older adults, such as interpersonal conflicts. The broader stress context plays a central role in emotional responses to stress (Scott et al., 2013), such that age-related advantages in stressor reactivity were attenuated for stressors that were highly related to COVID-19. Older adults were perhaps less able to use their strengths to avoid, disengage from, or de-escalate events that were part of the broader COVID-19 stress context (Charles, 2010).

There were no significant age differences in the frequency of COVID-19 stressors or in perceived stressor severity, but some challenges were particularly evident at different periods in the adult lifespan (e.g., work and family stressors for younger and middle-aged adults). Although older adults felt less control over their stressful situations, they had higher ratings of perceived coping efficacy compared to younger adults. This is in line with past research showing that perceived control is lower in late adulthood, yet sense of mastery is maintained (Lachman, 2006). Our findings are also aligned with theoretical propositions that older adults may rely less on primary control strategies (i.e., efforts to directly change the situation) and focus on employing secondary control strategies (e.g., positive reappraisal) that can contribute to feelings of coping efficacy (Wrosch et al., 2000). However, this explanation

is merely speculative, as we did not have direct evidence of emotion regulation and coping strategies during the stressful encounters.

In contrast to the literature on daily stress, less is known about age differences in daily positive events and their implications for health and well-being across the adult lifespan (Sin & Almeida, 2018). Notably, positive experiences were prevalent in the midst of the COVID-19 pandemic, with an average of more than 2 positive events each day. A previous study of older women found that older age predicted fewer daily positive events (Charles et al., 2010), whereas we found that older adults reported more positive events. In particular, older adults were more likely than their younger counterparts to report physically-distanced positive events, including remote social interactions, time spent in nature, and positive events that happened to others in their social networks. Although there were no age differences in increases in PA on days with more positive events, younger adults derived more benefit from positive events in terms of reducing their NA. Thus, noticing or creating more opportunities for positive events may be a potential strategy for enhancing well-being and mitigating distress during the outbreak.

The limitations of this study should be considered when interpreting the findings. First, although our conclusions were based on age differences, people of similar chronological ages nevertheless can vary widely in their risks, life circumstances, and ability to cope with the outbreak (Fingerman & Trevino, 2020). It is possible that the results were driven less by age-related patterns in emotional well-being and more by differences in social roles across the lifespan. Second, we were conservative in classifying stressors as related versus not related to COVID-19, but we recognize that the pandemic had pervasive impacts across virtually all aspects of life. Thus, the "non-COVID-19 stressors" were nevertheless somewhat related to COVID-19. Third, our data were collected during the initial weeks of the pandemic response in North America, when the rates of COVID-19 cases and deaths were

accelerating. Age differences in concerns about COVID-19 and in daily experiences may change as the outbreak evolves and as communities reopen. Finally, as our sample was primarily well-educated, White, and all participated via an online study, the findings may not generalize to other populations.

The COVID-19 pandemic has led to an outbreak of ageism, in which public discourse has portrayed older adults as a homogeneous, vulnerable group (Ayalon et al., 2020). Our investigation of the daily life amid the outbreak suggests the opposite: Older age was associated with less concern about the threat of COVID-19, better affective well-being, more daily positive events, better perceived ability to cope with stressors, and less affective reactivity to non-COVID-19 stressors. Younger and middle-aged adults, on the other hand, faced more interpersonal conflicts and work- and family-related daily stressors. Although our findings revealed that older adults, on average, were more psychologically resilient in the face of COVID-19, their physical health should continue to be a major public health priority. Efforts to bolster mental health during COVID-19 could focus on modifying stress appraisals, promoting physically-distanced daily positive events, and should consider the COVID-19 stressors faced by individuals at different points of the adult lifespan.

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Table 1

Descriptive statistics for the sample of 776 adults

Variable	% or Mean (*SD*)			
	Younger (ages 18-39) n = 330	**Middle-Aged (ages 40-59) n = 253**	**Older (ages 60-91) n = 193**	**ICC**
Gender				
% Women	88.8%	85.8%	82.9%	
% Other	2.1%	0.1%	0%	
College graduate	73.0%	67.8%	58.0%	
White Race	82.7%	91.3%	93.9%	
Concerns about the threat of COVID-19 (1-4 scale)				
Own physical health/safety	2.54 (1.00)	2.68 (0.99)	2.69 (0.95)	
Own emotional well-being	2.86 (0.99) [ab]	2.61 (1.02) [bc]	2.38 (0.99) [ac]	
Others' physical health/safety	3.30 (0.88)	3.39 (0.79) [c]	3.18 (0.88) [c]	
Others' emotional well-being	2.99 (0.90)	3.09 (0.88)	2.98 (0.93)	
Work goals	2.34 (1.16) [ab]	1.87 (1.08) [bc]	1.34 (0.73) [ac]	
Finances	2.46 (1.06) [a]	2.51 (1.08) [c]	2.18 (1.04) [ac]	
Losing others' respect	1.41 (0.82) [ab]	1.19 (0.56) [b]	1.14 (0.49) [a]	
Not achieving important goal	2.19 (1.15) [ab]	1.67 (0.89) [b]	1.52 (0.83) [a]	
Daily affect and events				
Positive affect (0-100 scale)	43.69 (17.29) [ab]	48.60 (17.83) [b]	51.59 (19.44) [a]	.66
Negative affect (0-100 scale)	27.81 (14.48) [a]	25.39 (15.61) [c]	22.41 (15.62) [ac]	.58
No. of positive events (0-7 scale)	2.24 (1.12) [ab]	2.60 (1.06) [b]	2.68 (1.18) [a]	.50
% of days with any stressor	61% (26%)	61% (28%)	57% (29%)	.18

	% or Mean (*SD*)			
Variable	**Younger (ages 18-39) n = 330**	**Middle-Aged (ages 40-59) n = 253**	**Older (ages 60-91) n = 193**	**ICC**
% of COVID-19 stressor days[d]	27% (24%)	32% (29%)	31% (29%)	.21
Daily stress appraisals (0-100 scale)				
Related to COVID-19 outbreak	56.43 (29.29)	60.58 (30.00)	60.04 (30.37)	.33
Perceived stressor severity	56.21 (18.17)	56.63 (19.34)	54.83 (21.11)	.36
Perceived control over stressor	30.87 (19.20) [a]	29.76 (18.25)	25.77 (18.16) [a]	.18
Perceived coping efficacy	56.45 (17.48) [ab]	60.07 (16.52) [b]	61.15 (18.12) [a]	.29
Comparison of past week experiences to usual experiences (1-7 scale)[e]				
Level of stress	2.47 (1.42)	2.50 (1.47)	2.60 (1.52)	
Level of positive experiences	4.61 (1.38)	4.52 (1.42)	4.53 (1.51)	

Note. Age was grouped into categories for descriptive purposes in this table but was entered

as a continuous variable in subsequent multilevel models. Tukey-HSD was used to test for

group differences. Significant group differences were denoted with superscripts:

[a]Significant difference between younger and older adults

[b]Significant difference between younger and middle-aged adults

[c]Significant difference between middle-aged and older adults

[d]COVID-19 stressors were defined as ratings above the median of 75 on the item "*How much*

was this stressful event related to the COVID-19 outbreak?"

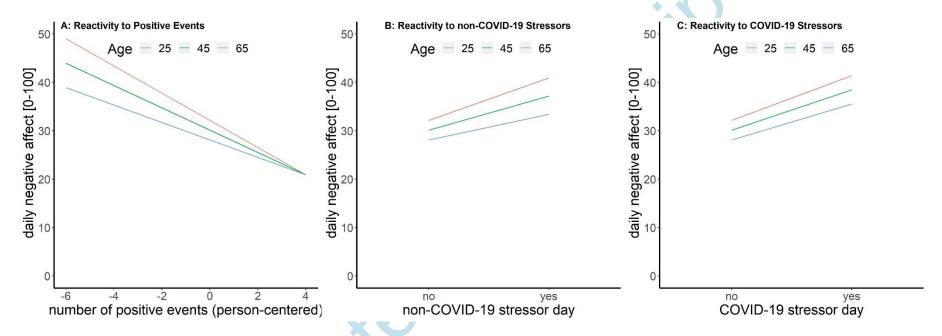[e]Asked on the final survey day; 1 = *A lot more than usual*, 7 = *A lot less than usual*

Table 2

Multilevel models of age as a predictor of daily stressors, daily positive events, and affective reactivity to positive events and stressors

	Estimate (*SE*)				
	Exposure to Daily Events			**Affective Reactivity to Daily Events**	
Fixed Effects	**Non-COVID-19 Stressor Day**	**COVID-19 Stressor Day**	**No. of Positive Events**	**Positive Affect**	**Negative Affect**
Intercept	-0.92 (0.11)***	-0.79 (0.12)***	2.41 (0.13)***	45.26 (0.95)***	30.11 (0.89)***
Study Day	-0.05 (0.02)*	-0.14 (0.02)***	-0.10 (0.01)***	1.18 (0.10)***	-1.04 (0.10)***
Age	-0.01 (0.003)***	0.01 (0.004)	0.01 (0.003)***	0.11 (0.03)***	-0.10 (0.03)***
Men (vs. Women)	0.08 (0.15)	-0.20 (0.18)	0.20 (0.12)	2.75 (1.50)	-1.88 (1.37)
Other Gender (vs. Women)	-0.16 (0.46)	0.52 (0.55)	-0.37 (0.39)	-0.14 (4.66)	-0.55 (4.25)
College graduate (vs. no college degree)	0.04 (0.10)	0.07 (0.13)	0.26 (0.09)**	0.57 (1.06)	-2.26 (0.97)*
Non-White (vs. White Race)	0.11 (0.15)	-0.04 (0.18)	-0.05 (0.13)	0.43 (1.55)	1.37 (1.42)
No. of Positive Events (BP)				9.01 (0.44)***	-4.29 (0.41)***
Non-COVID-19 Stressors (BP)				-18.08 (2.21)***	11.57 (2.02)***
COVID-19 Stressors (BP)				-20.02 (2.03)***	24.26 (1.85)***

No. of Positive Events (WP)				3.66 (0.20)***	-2.31 (0.20)***
Non-COVID-19 Stressor Day (WP)				-5.29 (0.48)***	7.05 (0.45)***
COVID-19 Stressor Day (WP)				-6.00 (0.50)***	8.33 (0.47)***
No. of Positive Events (WP) x Age				-0.02 (0.01)	0.03 (0.01)*
Non-COVID-19 Stressor Day (WP) x Age				0.05 (0.03)	-0.09 (0.03)**
COVID-19 Stressor Day (WP) x Age				0.01 (0.03)	-0.05 (0.03)
Random Effects	*SD* [*95% CI*]	*SD* [*95% CI*]	*SD* [*95% CI*]	*SD* [*95% CI*]	*SD* [*95% CI*]
Intercept	0.83 [0.54, 0.92]	1.12 [0.81, 1.22]	1.08 [1.00, 1.16]	12.65 [11.77, 13.72]	12.77 [11.83, 13.70]
Study Day	0.02 [0.02, 0.18]	0.11 [0.01, 0.15]	0.12 [0.09, 0.14]	1.53 [1.23, 1.80]	1.73 [1.48 1.95]
No. of Positive Events (WP)				2.01 [1.18, 2.58]	2.32 [1.73, 2.89]

Note. N = 776 persons and 4775 days, Estimates represent unstandardized regression coefficients, CIs for random effects were estimated using 500 bootstrap samples, BP = between-person variable (person-mean), WP = within-person variable (person-centered predictor).
Fixed effects: * p < .05, ** p < .01, *** p < .001

Figure 1

Affective reactivity to daily positive events, non-COVID-19 stressors, and COVID-19 stressors by age

Note. Figures depict the predicted values of negative affect. For illustrative purposes, simple slopes were estimated for younger, middle-aged, and older adults at ages 25, 45 (sample mean age), and 65, respectively. Panel A: Simple slope estimates for positive events were $b_{(Age = 25)} = -2.79$, $p < .01$; $b_{(Age = 45)} = -2.31$, $p < .01$; $b_{(Age = 65)} = -1.82$, $p < .01$. Panel B: Simple slope estimates for days with any non-COVID-19 stressors (vs. days without non-COVID-19 stressors) were $b_{(Age = 25)} = 8.90$, $p < .01$; $b_{(Age = 45)} = 7.09$, $p < .01$; $b_{(Age = 65)} = 5.28$, $p < .01$. Panel C: Simple slope estimates for days with COVID-19 stressors (vs. days without COVID-19 stressors) were $b_{(Age = 25)} = 9.27$, $p < .01$; $b_{(Age = 45)} = 8.37$, $p < .01$; $b_{(Age = 65)} = 7.46$, $p < .01$.