

Supplemental Materials

Results

Factor Analyses

We ran exploratory factor analyses for binary outcomes, applied to the dichotomous items used to measure preventative and risky health behaviors for each time point using the psych package in R (Revelle, 2016). The five risky behaviors were only assessed during the second and third questionnaires, whereas the ten preventative behaviors were assessed during all three questionnaires. The first several eigenvalues for the 10 preventative health behaviors in March were 6.33, .83, .72, and .57; thus, a one factor solution seemed the most appropriate. The first several eigenvalues for the 15 health behaviors were 4.85, 2.63, 1.44, .94, and .89 for early April and were 5.04, 2.45, 1.49, .96, and .91 for late April/early May. Two or three factors could have been appropriate. We opted for a two-factor solution because this grouping made the most sense conceptually. Factor loadings were all above .50 except for wearing a face mask and working from home for the last two waves of data only. Although the factor loadings were low for wearing a facemask, we decided to keep this item with the other preventative health behaviors given the importance of this particular item. The factor loadings are presented in Supplemental Table 1.

Within-person relationships

As we mentioned in the discussion section, we also wanted to examine the within-person associations between health behaviors and negative affect to understand how people felt as they engaged in various health-related behaviors. We entered health behaviors as the outcome variable and negative affect as the level 1 predictor, entered group-mean centered as follows:

$$\text{Level 1: } y_{ij} (\text{health behavior}) = \beta_{0j} + \beta_{1j} (\text{negative affect}) + r_{ij}$$

Level 2: $\beta_{0j} = \gamma_{00} + u_{0j}$

$$\beta_{1j} = \gamma_{10} + u_{1j}$$

We found that negative affect was positively related to preventative health behaviors, $b = .10$, $t = 17.94$, $p < .001$, and was negatively related to risky health behaviors, $b = -.01$, $t = 2.59$, $p = .010$. Preventative health behaviors were not significantly related to potentially risky health behaviors, $b = -.01$, $t = 1.20$, $p = .23$. This means that for the average participant, the more negative affect experienced at a particular point in time, the more they engaged in healthy preventative behaviors and the less they engaged in risky health behaviors. This is particularly noteworthy when considered in the context of the relationships involving the presence of meaning in life. Those who find their lives as highly meaningful are likely to engage in preventative health behaviors like social distancing even though these actions are linked to negative affect. Whereas some people may not be inclined to engage in social distancing because they may fear it will increase their stress and depression, those who find meaning and purpose in their lives are not afraid to partake in such activities even though it may dampen their mood.

Supplemental Table 1. Factor loadings of health-related items at each time point assessed during the Covid-19 pandemic.

Behavior	Time 1	Time 2		Time 3	
	Factor 1	Factor 1	Factor 2	Factor 1	Factor 2
Worn a mask or other face covering	.51	.27	-.11	.31	-.25
Washed your hands with soap or used hand sanitizer several times per day	.68	.52	-.13	.51	-.20
Canceled or postponed air travel for work	.76	.70	.08	.75	.06
Canceled or postponed air travel for pleasure	.80	.70	.08	.76	.03
Canceled or postponed work or school activities	.82	.74	.04	.77	.03
Canceled or postponed personal or social activities	.92	.82	-.05	.82	-.07
Avoided contact with people who could be high-risk	.82	.69	-.24	.60	-.33
Avoided public spaces, gatherings, or crowds	.87	.65	-.48	.61	-.52
Avoided eating at restaurants	.80	.55	-.29	.51	-.38
Worked or studied at home	.68	.45	-.02	.43	-.07
Gone to a friend, neighbor, or relative's residence (that is not your own)		-.03	.60	-.02	.60
Had visitors such as friends, neighbors or relatives at your residence		-.05	.58	.01	.57
Attended a gathering with more than 10 people, such as a reunion, wedding, funeral, birthday party, concert, or religious service		-.04	.75	-.08	.63
Gone out to a bar, club, or other place where people gather		-.05	.61	-.15	.58
Had close contact (within 6 feet) with people who do not live with you		-.14	.64	-.09	.63

Supplemental Table 2. Relationships between 1) presence of meaning in life, search for meaning in life, religiosity, and political orientation and 2) average scores of negative affect, preventative health behaviors, and risky health behaviors.

Level 2 Variables	Outcome Variables								
	Negative Affect			Preventative Health Behaviors			Risky Health Behaviors		
	<i>b</i>	<i>t</i>	<i>p</i>	<i>b</i>	<i>t</i>	<i>p</i>	<i>b</i>	<i>t</i>	<i>p</i>
<u>Presence of meaning in life</u>									
No controls	-.15	18.22	< .001	.02	7.78	< .001	-.01	2.86	.004
	[-.16, -.13]			[.01, .02]			[-.01, -.00]		
With demographic controls only	-.13	16.84	< .001	.01	5.93	< .001	-.00	1.72	.086
	[-.15, -.12]			[.01, .02]			[-.01, .00]		
With all controls	-.12	13.27	< .001	.01	4.13	< .001	-.01	2.52	.012
	[-.13, -.10]			[.01, .02]			[-.01, -.00]		
<u>Search for meaning in life</u>									
No controls	.16	19.62	< .001	.01	6.06	< .001	.01	2.65	.008
	[.14, .18]			[.01, .02]			[.00, .01]		
With demographic controls only	.12	14.99	< .001	.01	4.03	< .001	.00	1.10	.271
	[.11, .14]			[.01, .01]			[-.00, .01]		
With all controls	.11	12.53	< .001	.01	3.25	.001	.01	1.97	.049
	[.09, .13]			[.00, .01]			[.00, .01]		
<u>Religiosity</u>									
No controls	-.07	8.75	< .001	.01	5.18	< .001	.01	3.53	< .001
	[-.08, -.05]			[.01, .02]			[.00, .01]		
With demographic controls	-.06	7.53	< .001	.01	4.66	< .001	.01	4.78	< .001
	[-.07, -.04]			[.01, .02]			[.01, .02]		
<u>Political Conservatism</u>									
No controls	-.15	17.82	< .001	-.03	10.69	< .001	.02	7.65	< .001
	[-.17, -.14]			[-.03, -.02]			[.01, .02]		

With demographic controls	-0.13 [-0.14, -0.11]	14.82	< .001	-0.02 [-0.02, -0.01]	6.47	< .001	0.02 [0.02, 0.03]	8.72	< .001
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Note: Demographic controls included age, gender, race/ethnicity, household income, and education. Models with all controls additionally included religiosity and political orientation. Because religiosity and political orientation are presumed to be causes of presence and search for meaning in life, we did not control for them in the secondary analyses presented in the bottom portion of this table.