Economic and Emotional Perceptions During and After COVID19

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Abstract

Faced with the SARS-CoV-2 pandemic, we decided to investigate if recovery from this large exogenous global shock depended on both emotional and economic recovery. We piloted a survey from May 2020 – August 2020 to examine how exposure to this global pandemic shaped economic outlook, and we documented the innate emotional styles of respondents. We then sought to answer two questions. Do the emotional style dimensions have anything to do with economic recovery? And are wages and emotional dimensions associated with economic outlook? With these questions in mind, we estimated two structural equation models. We jointly estimated all six emotional dimensions for the first question and assessed their impact on economic outlook. We estimated a structural model with a Mincer-wage equation and emotional outlook, resilience, and attention equations for the second question. We found that emotional outlook was positively and significantly correlated with economic outlook. We also found that wages, emotional- outlook, resilience, and attention were correlated with returning to behavior-normal, meaning once the public health crisis abates, fear will cease to restrict mobility in all sectors. We found pessimism over returning to business-normal, patronizing businesses that are significantly affected by the pandemic could have a dampening effect on economic recovery. However, this could be offset by the positive correlations between emotional outlook on economic outlook and returning to behavior-normal, both of which could boost economic recovery. From a public policy standpoint fostering a positive emotional outlook and encouraging emotional resilience could be the *mojo* needed for faster economic recovery.

Keywords: Emotional and economic wellbeing, resilience, outlook, attention, inequality

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Background

The SARS-CoV-2 pandemic is a global exogenous shock, unlike anything we have experienced. As of December 4th, it has infected 24.8 million Americans with a death toll in the U.S. 400+ thousand. The numbers continue to climb globally, even as vaccinations enter the market. SARS-CoV-2 is a public health crisis first, the dominant governmental response globally has been to contain, treat, and vaccinate. The economic and mental health fallouts will be grim until the pandemic is controlled. The U.S. GDP contracted 32% in the second quarter, the worst hit in U.S. history. Put in perspective, the 1958 recession had a GDP contraction of 10%, and the great-depression had a GDP contraction of 8%. During the third quarter, as the economy re-opened, economists anticipated a “V” shaped recovery—where the economy was expected to rapidly return to a pre-SARS-CoV-2 GDP level (Barro et al. 2020). Now, we must dispense with the notion of a “V” shaped recovery. Businesses have shut down, causing permanent unemployment for some. More find themselves homeless as eviction rates increase, and those who can avail unemployment insurance or payment protection fall deeper into debt (HPS 2020). All of this worsens the underlined income inequality in the U.S. and instead of a “V” shaped economic recovery to pre-SARS-CoV-2 levels climbing out of economic distress appears to be a long unequal road with a “K” shaped divergent recovery.

The climb towards economic recovery has several interesting components. Job security and business outlook because post-pandemic it would be optimal for the economy to return to its normal steady state. Workers face job insecurity, are going into debt, and perhaps need retraining for new jobs in a post-pandemic world. Firms, in some sectors, may not resume activity, may experience productivity losses and capital constraints. Resilience requires high motivation from workers and firms to either return to peak productivity-performance levels or transition effectively to other profitable sectors. Resilience from a worker perspective means returning to work energized to a changed environment without the scarring associated with temporary unemployment, job retraining, or adverse effects from remote working and parenting. It requires a psychological version of a “V” shaped recovery—where an adverse negative event generates a natural upheaval but extinguishes rapidly, allowing a person to return to productive

tasks and goals (Jones E., 2020). Here on out, this is what we mean by worker resilience—the ability to quickly recover from negative stimuli, sustain a positive outlook, and attend to the tasks at hand. We can see this is important in several ways, workers have to be at peak performance despite the uncertainty of the timing of vaccines, their remote work arrangements, their continued unemployment, and the political climate. Firm resilience would require navigating through capital constraints and implementing post-pandemic work arrangements that increase production and worker productivity. Absent worker-firm resilience, there would be productivity losses due to presenteeism or absenteeism (Bubonya and Cobb-Clark, 2017).

We also need to address fear to prepare people for the post-pandemic world. If fear, anxiety, and worry prevent people from returning to normal activities, then consumption and labor productivity in key sectors will go down, thus slowing economic recovery (Goolsbee, 2020). With these ideas of facing a post-pandemic world, we piloted a small economic and emotional outlook survey from May 1st, 2020 – August 31st, 2020, asking questions centered on economic and emotional well-being. The purpose of the survey was to capture the effects of the safer-at-home-order on emotional style and business and worker outlook.

While Hoff and Stiglitz (2016) allude to including brain biology in economic analysis to our best knowledge, this is the first survey that integrates the emotional style questionnaire (ESQ) with the economic perceptions in a SARS-CoV-2 pandemic world. We address two questions in our analysis. First, do ESQ dimensions predict economic outlook (Figure A). We jointly estimate the six ESQ dimensions with economic covariates to answer this. The second question asks if outlook, resilience, attention equations should be jointly estimated with a Mincer-Becker wage equation.

The results show that ESQ-outlook is the only dimension correlated with economic outlook of the six ESQ dimensions. The ESQ dimensions outlook, resilience, self-awareness, and sensitivity-to-context are significantly correlated with returning to behavior-normal. However, none of the ESQ dimensions significantly correlates with returning to business-normal. Next, in the joint estimation of the wage, ESQ-outlook and ESQ-resilience are correlated with economic outlook. And all four wages, ESQ-outlook,

ESQ-resilience, and ESQ-attention, are correlated with returning to normal behavior. While the pessimism over returning to business-normal could have a dampening effect on economic recovery, the optimism of ESQ-outlook on economic outlook and returning to behavior-normal could boost economic recovery. This means joint estimation shows the importance of emotional wellbeing on economic recovery.

Methods and Materials

The data used in this analysis comes from an online survey conducted in a mid-size college town in the U.S. over May 1st – August 31st. Out of the 310 respondents, we use only the 191 who completed all questions (or imputed missing values) for our analysis. The inclusion criteria for the survey were ages 18+ and state residency. There is variability in our data over ages and income with 20% in \$30,000-\$69,000, 40% in \$70,000 - \$119,000 and 40% in \$119,000+. The vast majority of the respondents, 48%, had education beyond a Master's and worked professional positions, and 43% were males, and 57% were females. The sample is 91% White (which is typical of the state demographics), despite actively recruiting from the Black population in the state, the political climate prevented their participation during the time frame of the survey.

The participants were not assessed for any pre-existing economic or mental distress. The participants were solicited via social media and email lists, and they were not asked to retake the survey at any other time period. The participants did not receive any compensation. The University's institutional review board approved the survey. This was a one-shot survey to assess the willingness to adhere to public health measures, perceptions of the economic future and see if they are correlated with emotional style. In this spirit, we construct a few variables.

Constructed variables

Our constructed variables are in two groups economic variables and ESQ variables. The economic variables measure four things: SARS-CoV-2 experience, economic-outlook, behavior-normal, and business-normal from SARS-CoV-2. Then, we calculate the arithmetic mean of the responses. The ESQ

has six validated dimensions: outlook, resilience, attention, self-awareness, social intuition, and sensitivity to context (Pelin et al., 2019).

SARS-CoV-2 Experience: Four questions that assess the direct consequences of economic fallout due to SarCoV-2 are difficulty paying bills, paying for housing, borrowing money to cover household expenses, and relying on credit cards to pay bills. SARS-CoV-2 Experience is calculated as a single factor using PCA.

Economic outlook is the economic perception of outlook along four dimensions: job-security, financial-security, unemployment state, and job promotion prospects. These questions have three possible answers—better, same, or worse—with pre-SARS-CoV-2 states. Economic outlook is then calculated using the arithmetic mean.

Return to Normalcy measures whether a person is willing to return to normal activities. The questions take on values 1(= least likely) to 10 (= most likely) for the following questions. For example, a person's willingness to return to work, patronize businesses, go to restaurants, and visit a dentist formed the variable "Business-Normal" and going to movies or play theatres, staying in hotels, and traveling by plane/train created the variable "Behavior-Normal."

Six Dimensions of Emotional Style (ESQ) take on the values 1 (= strongly disagree) to 7 (= strongly agree), and respondents lay on the positive or negative end of the spectrum (Davidson and Begley (2012) and Pelin et al. (2019)). The six ESQ dimensions are a person's psychological stock and measure the innate ability to respond to shocks.

Outlook measures the communication between the prefrontal cortex (PFC) and nucleus acumbens—healthy connectivity in these regions implies better appreciation and maintenance of the reward circuitry needed to sustain a positive outlook and goal orientation.

Resilience measures the rapidity of recovery from adverse effects and requires healthy functional connectivity between PFC and the amygdala. Lab experiments show that exposure to negative stimuli spikes activity in these brain regions and that resilient people extinguish the negative stimuli more rapidly than others.

Social Intuition measures a person's ability to tune into cues in relationships. Those on the puzzled end of the spectrum have low fusiform gyrus activation and higher amygdala activation. Conversely, socially intuitive people can read subtle social cues, have high fusiform gyrus activation and moderate amygdala activity. This is important to mitigate our behavior with confusing messages about SARS-CoV-2.

Sensitivity to context is critical during SARS-Cov-2 because it relies on activation of the Hippocampus, areas of the brain implicated for memory retention. Therefore, activity in this region is important for being tuned into the context of SARS-Cov-2, so people face the current threat appropriately and do not respond from a memory of a previous threat.

Self-awareness measures increased activity in the insula—which travels through our visceral organs. Higher insula activation indicates greater self-awareness, which helps us respond to SARS-CoV-2 public health messages appropriately—for example, masking, staying-at-home, and meeting the political climate's aggression with compassion.

Attention measures our ability to attend to situations appropriately. The brain basis for this includes activation of PFC and phase-locking with external cues. The SARS-CoV-2 pandemic has an extremely derailing effect on our daily work and home lives. We believe this dimension should affect the expectation to return to normal activities and willingness to follow public health orders.

Statistical Models

We offer a descriptive analysis of the key variables. Then based on insights from Manuelli and Seshadri (2014) and Manuelli (2015), we estimate the effects of emotional dimensions on economic dimensions to determine how emotional well-being correlates with post-SARS-CoV2 economic perception. Then we integrate the classical Becker (1975), or Mincer (1993) returns to schooling model with emotional dimensions to estimate a structural wage model with three emotional dimensions—outlook, resilience, and attention. Finally, we argue that the emotional dimensions are the innate ability purported in Manuelli and Seshadri (2014). We do this because economic and psychological recovery in a post-pandemic world

are interlinked and would create the needed advantage to restore total factor productivity—the key driver of economic growth.

Results

All scales measured by Cronbach's alpha are internally consistent. The alphas for the dimensions are 0.80 outlook, 0.83 resilience, 0.80 attention, 0.76 self-Awareness, 0.69 social intuition, 0.65 sensitivity to context, 0.78 economic outlook, 0.86 behavior outlook, 0.84 business outlook, and 0.70 SARS-CoV-2experience (Table A1 in annexed supplement). The emotional style scales show a statistically significant correlation, but our analysis is kept separate because they measure different concepts. The means and standard deviation for each dimension are reported in Table A1. The psychometric properties and factor loadings of the dimensions are available in Table A2.

In Table 1, we present the results of the joint estimation of ESQ dimensions on economic co-variates. We find that attention increases by 1.2% for a unit increase in age. Females are half as resilient as men but statistically and significantly more self-aware, socially intuitive, and sensitive to context than men. As compared to those with incomes \$150K+, those with incomes \$30K - \$70K are on the positive end, and those with incomes \$70.1K- \$120K are on the negative end of the spectrum for all six ESQ dimensions though these results are not statistically significant. Equated to high school graduates or less, ESQ dimensions show a positive relationship with education—though these results are not statistically significant. Emotional outlook positively and significantly is correlated with economic outlook. ESQ outlook, resilience, self-awareness, and sensitivity-to-context statistically and significantly show a positive view of returning to behavior-normal. Although not significant, the ESQ dimensions indicate a more pessimistic view of returning to business-normal.

Table 2 presents the structural estimation of wages and ESQ dimensions outlook, resilience, and attention (Table A3 for short regression). We had complete wage data for 164 respondents for the wage equation because those that lost employment due to SARS-CoV-2 did not accurately report their wages. Our wage results do not contradict Becker or Mincer's theories—higher schooling levels mean higher

wages, and women earn less. Relevant to SARS-CoV-2, wages are associated with a positive view of returning to business normal. Though the coefficients are positive, ESQ- outlook, resilience, and attention do not have significant returns to schooling like wages do—furthermore, they do not have significant income effects. Those with incomes of \$70.1K – \$120K had a more negative emotional outlook. Our results also show positive and significant correlations between ESQ outlook and resilience, economic outlook, and returning to behavior-normal. ESQ attention has a positive and significant age effect.

Discussion

In Economic theory, Becker (1975) and Mincer (1993) argued that only education had significant effects on wages, and other dimensions such as resilience, outlook, or persistence would not have any effect on wages. However, many empirical studies have validated that estimating wages on education is a standard textbook undergraduate example (Woolridge, 2006). Recently, Manuelli (2015), Manuelli and Seshadri (2014), and Lucas (2015) have moved the literature to view investments in human capital as more than returns to schooling. However, it is hard to find data and good measures to show the effects of non-schooling investments in human capital on income, education, and economic outlook. Hair et al. (2016) offer important insights into child development, poverty, and educational attainment, but this finding gets swallowed up in lower wages attributable to lower educational attainment. Therefore, modeling ESQ structurally integrates a person's psychological stock into human capital directly and thus significantly advances the literature.

In this analysis, we present how emotional style affects economic outlook. We asked a series of economic perception questions that would help gauge how respondents perceived the economic climate post-SarCoV-2 pandemic. We found that a positive emotional outlook is associated significantly with a positive appraisal of economic outlook. Positive emotional outlook, resilience, self-awareness, sensitivity-to-context result in a positive and significant appraisal of returning to behavior-normal and, though not significant, a positive appraisal of returning to businesses-normal. We found those who reported wages had a positive economic outlook. We also found that wages should be jointly estimated with the ESQ

dimensions outlook, resilience, and attention. The likelihood test for joint estimation was statistically favored to estimating the equations separately. The variances on wage equations are lower than the ESQ dimensions validating both Becker and Mincer's theories of wages being a function of returns to schooling. Finally, we found that emotional dimensions outlook and resilience mattered most in having positive appraisals of economic recovery. This is a significant finding because the brain biology of sustaining a positive outlook and being resilient is the needed *mojo* in mental health, and any mind-training exercises that increase our capacity to sustain a positive outlook and resilience through public health messages would greatly help combat the negative effects of economic distress from the pandemic.

There are limitations to this analysis. First, our sample size is smaller than we anticipated. We disseminated the survey at a very turbulent time in American history, so eliciting participation was harder and thus limiting our capacity to dive deeply into the economic and emotional impact of SARS-CoV-2. Third, we can't push the boundaries of analysis because we would run into type I errors. Second, this is a one-shot survey, so we can't measure changes in emotional style or economic perceptions. Nevertheless, we feel this is a critical next step. Finally, there are meaningful policy implications from this analysis—most significantly, we can't divorce economic recovery from outlook, resilience, and attention.

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Table 1: Measuring the Relationship Between the Six Emotional Dimensions and Economic Dimensions

Covariates	Outlook	Resilience	Attention	Self Awareness	Social Intuition	Sensitivity to Context
Constant	4.352*** (0.483)	4.509*** (0.487)	4.081*** (0.489)	4.778*** (0.450)	5.126*** (0.419)	5.527*** (0.450)
Age	0.002 (0.006)	0.006 (0.006)	0.012** (0.006)	0.003 (0.005)	-0.004 (0.005)	-0.007 (0.005)
Female	0.007 (0.161)	-0.483*** (0.163)	-0.156 (0.163)	0.319** (0.150)	0.539*** (0.140)	0.699*** (0.150)
Income						
Income \$30K - \$70K	0.065 (0.226)	0.207 (0.228)	0.039 (0.228)	0.322 (0.210)	0.231 (0.196)	-0.263 (0.210)
Income \$70.1K- 120K	-0.256 (0.180)	-0.002 (0.181)	-0.199 (0.182)	-0.001 (0.167)	-0.047 (0.156)	-0.261 (0.167)
Education						
Bachelor's Degree	0.048 (0.249)	0.124 (0.251)	0.152 (0.252)	0.216 (0.232)	0.156 (0.216)	-0.068 (0.232)
Post-graduation	0.179 (0.249)	0.026 (0.251)	0.064 (0.252)	0.260 (0.232)	0.245 (0.216)	-0.124 (0.232)
Post-SarsCov2 Outlook						
Less Likely to PD in future	-0.038 (0.175)	-0.108 (0.176)	-0.127 (0.177)	-0.181 (0.162)	-0.163 (0.151)	-0.214 (0.163)
Economic Outlook	0.321** (0.135)	0.091 (0.136)	0.065 (0.137)	-0.192 (0.126)	-0.118 (0.117)	-0.073 (0.126)
Behavior Return to Normal	0.089* (0.051)	0.097* (0.052)	0.081 (0.052)	0.117** (0.048)	0.062 (0.045)	0.094** (0.048)
Business Return to Normal	0.026 (0.047)	-0.017 (0.048)	0.028 (0.048)	-0.015 (0.044)	-0.043 (0.041)	-0.014 (0.044)
Variance	1.067*** (0.111)	1.085*** (0.113)	1.093*** (0.114)	0.923*** (0.096)	0.803*** (0.083)	0.924*** (0.096)
Observations	185	185	185	185	185	185

Source: Data come from own economic perceptions and emotional style survey. The authors did all the analyses presented in this paper.

Reference categories: Income > \$120, 000; Education High school and some college

Standard errors in parentheses

Statistical Significance *** p<0.01, ** p<0.05, * p<0.1

Table 2: Results for Mincerian Log Wages, Outlook, Resilience, and Attention on Economic Dimensions

Variables	Log Wages	Outlook	Resilience	Attention
Constant	7.720*** (0.364)	4.037*** (0.545)	3.836*** (0.525)	3.656*** (0.551)
Age	0.004 (0.005)	0.005 (0.006)	0.008 (0.006)	0.016** (0.006)
Female	-0.251* (0.134)	0.076 (0.177)	-0.251 (0.170)	-0.064 (0.179)
Education¹				
Bachelor's Degree	0.575*** (0.187)	0.298 (0.263)	0.176 (0.253)	0.066 (0.266)
Post-graduation	0.387** (0.194)	0.110 (0.266)	0.275 (0.257)	0.118 (0.269)
Income²				
Income \$30K - \$70K		0.224 (0.242)	0.305 (0.234)	0.174 (0.245)
Income \$70.1K- 120K		-0.032 (0.194)	0.155 (0.187)	0.021 (0.196)
Post-SARS-CoV-2Pandemic				
Behavior Normal	-0.023 (0.040)	0.101* (0.053)	0.128** (0.051)	0.071 (0.053)
Economic Outlook	0.155 (0.116)	0.309** (0.152)	0.248* (0.146)	-0.000 (0.154)
Business Return to Normal	0.018* (0.010)	0.004 (0.013)	-0.004 (0.012)	0.013 (0.013)
Variance	0.636*** (0.070)	1.101*** (0.122)	1.022*** (0.113)	1.126*** (0.124)
Observations	164	164	164	164

Source: Data come from own economic perceptions and emotional style survey. The authors did all the analyses presented in this paper.

Reference categories: Income > \$120, 000; Education High school and some college

Standard errors in parentheses

Statistical Significance *** p<0.01, ** p<0.05, * p<0.1

Appendix

Table A1: Psychometric properties of scales, factor loadings, inter-item correlations, and Cronbach's alpha. N = 191

Item No	Dimension	Factor Loading	Inter-Item Correlation	Cronbach Alpha
ESQ-Questions				
ESQ1r	Outlook	0.562	0.5886	0.811
ESQ7	Outlook	0.786	0.4738	0.7299
ESQ13	Outlook	0.735	0.498	0.7485
ESQ19r	Outlook	0.781	0.4785	0.7335
ESQ2r	Resilience	0.727	0.5591	0.7919
ESQ8	Resilience	0.805	0.5225	0.7665
ESQ14r	Resilience	0.726	0.5609	0.7931
ESQ20	Resilience	0.716	0.5666	0.7968
ESQ3	Self-Awareness	0.715	0.4162	0.6814
ESQ9r	Self-Awareness	0.581	0.4799	0.7346
ESQ15	Self-Awareness	0.707	0.4196	0.6845
ESQ21	Self-Awareness	0.655	0.4455	0.7067
ESQ4r	Social Intuition	0.611	0.3731	0.641
ESQ10	Social Intuition	0.559	0.3661	0.634
ESQ16r	Social Intuition	0.4877	0.4068	0.6729
ESQ22r	Social Intuition	0.7537	0.3102	0.5743
ESQ5r	Sensitivity to Context	0.7547	0.2392	0.4854
ESQ11r	Sensitivity to Context	0.5594	0.2952	0.5568
ESQ17r	Sensitivity to Context	0.6759	0.2619	0.5156
ESQ22r	Sensitivity to Context	0.2658	0.4381	0.7005
ESQ6	Attention	0.7067	0.4996	0.7497
ESQ12	Attention	0.7186	0.494	0.7455
ESQ18r	Attention	0.6969	0.5031	0.7523
ESQ24r	Attention	0.7041	0.5001	0.7501
Economic Scales				
Difficult Paying Bills	Covid-Experience	0.9012	0.319	0.5843
Difficulty Paying Rent/Mortgage	Covid-Experience	0.8701	0.3298	0.5961
Had to Borrow Money	Covid-Experience	0.4537	0.4998	0.7499
Credit Card Usage to Pay Bills	Covid-Experience	0.4082	0.5295	0.7715
Returning to Work	Business Normal	0.585	0.6176	0.8289
Patronize Business	Business Normal	0.9175	0.4663	0.7238
Patronize Restaurant	Business Normal	0.9097	0.4715	0.728
Dentist Check Up	Business Normal	0.5641	0.6313	0.8371
Go to Theatre	Behavior Normal	0.8744	0.6932	0.8188

Stay At Hotel	Behavior Normal	0.9079	0.6094	0.7573
Take a Plane or Train Ride	Behavior Normal	0.8684	0.7061	0.8277
Job Security in 3 years	Economic Outlook	0.8402	0.3839	0.6515
Job Promotion in 3 years	Economic Outlook	0.7725	0.4005	0.6671
Financial Security in 3 years	Economic Outlook	0.4538	0.5466	0.7834
Unemployment rate in 3 years	Economic Outlook	0.648	0.4478	0.7087

Source: Data come from own economic perceptions and emotional style survey. The authors did all the analyses presented in this paper.

Reverse coded ESQ questions are denoted with an r.

Standard errors in parentheses

Statistical Significance *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table A2. Descriptive Statistics, Reliability, and Correlation Matrix

		Dimensions									
Dimension		1	2	3	4	5	6	7	8	9	10
1	Outlook	-									
2	Resilience	0.76**	-								
3	Attention	0.48**	0.43**	-							
4	Social Intuition	0.13	0.04	0.13	-						
5	Self-Awareness	0.40**	0.41**	0.35**	0.37**	-					
6	Sensitivity to Context	0.33**	0.36**	0.31**	0.42*	0.39**	-				
7	Economic Outlook	-0.188**	-0.16	-0.12	0.13	0.03	-0.08	-			
8	Behavior Outlook	0.25**	0.23*	0.24**	-0.06	0.18	0.11	-0.3**	-		
9	Business Outlook	0.24**	0.21*	0.26**	-0.09	0.14	0.09	-0.2	0.82**	-	
10	SarsCoV2 Experience	0.06	0.10	-0.00	-0.06	0.10	0.08	-0.1	0.14*	0.15*	-
α	Cronbach Alpha	0.80	0.83	0.80	0.76	0.69	0.65	0.78	0.86	0.84	0.70
	Range	1-7	1-7	1-7	1-7	1-7	1-7	1-3	1-10	1-10	0-2
μ	Mean	5.14	4.90	5.04	5.29	5.49	5.49	2.22	3.83	5.88	0.70
σ	Standard Deviation	1.09	1.11	1.10	0.94	0.99	1.04	0.62	2.66	2.76	0.18

Source: Data come from own economic perceptions and emotional style survey. The authors did all the analyses presented in this paper.

Statistical Significance **p<0.01, *p<0.05

Table A3: Short Estimation of Log Wages, Outlook, Resilience, Attention on Returns on Schooling and Economic Outlook

Variance	Log Wages	Outlook	Resilience	Attention
Constant	7.909*** (0.352)	4.106*** (0.472)	4.015*** (0.457)	3.775*** (0.475)
Age	0.004 (0.005)	0.004 (0.006)	0.007 (0.006)	0.015** (0.006)
Sex	-0.271** (0.133)	0.076 (0.177)	-0.256 (0.172)	-0.060 (0.178)
Education¹				
Graduate studies	0.555*** (0.188)	0.243 (0.248)	0.067 (0.240)	0.013 (0.249)
Bachelors	0.389** (0.196)	0.043 (0.258)	0.175 (0.250)	0.065 (0.259)
Post-SARS-CoV-2Perceptions				
Normal Activities	0.057** (0.027)	0.104*** (0.036)	0.098*** (0.035)	0.115*** (0.036)
Economic Outlook		0.309** (0.153)	0.247* (0.148)	-0.001 (0.154)
Variance	0.649*** (0.072)	1.117*** (0.123)	1.049*** (0.116)	1.130*** (0.125)
Observations	164	164	164	164

Source: Data come from own economic perceptions and emotional style survey. The authors did all the analyses presented in this paper.

Reference categories: Income > \$120, 000; Education High school and some college

Standard errors in parentheses

Statistical Significance *** p<0.01, ** p<0.05, * p<0.1

Figure A1: Economic Impact of SARS-CoV-2, Correlation between Emotional Style on Economic Outlook

Source: Own conceptualization

Path A: Psychological stock measured by emotional style shapes perceptions of economic recovery

Path B: The consequences of SarCoV-2 public policy, resulting economic fallout shaping perceptions of economic recovery