Optimism, Financial Trust, Resilience, and Life Satisfaction during COVID-19 Pandemic

Timothy S. Griesdorn, University of the Incarnate Word¹ Sharon A. DeVaney, Purdue University² Soo Hyun Cho, California State University Long Beach³ Sae Rom Chung, University of Georgia⁴

Abstract

This study examines the links among financial and psychological variables and overall life satisfaction during the COVID-19 pandemic. Our unique data consist of 3,570 responses from predominately low- to moderate income families and people of color. The survey data was collected online via Qualtrics during November 17 – December 15, 2021. Hierarchical linear least squares regression was used to analyze the impact of socio-economic factors, trust, optimism, and resilience on life satisfaction. The results suggest that optimism, resilience, and trust in financial institutions contribute to life satisfaction have a stronger influence than demographic and socioeconomic indicators. To enhance clients' life satisfaction, financial counselors and practitioners may want to focus on building their level of trust and resilience.

Key words: Life satisfaction, resilience, trust, optimism, COVID-19 pandemic

Objectives

The purpose of our research was to understand the importance of psychological variables (trust, resilience, and optimism) in life satisfaction among low- to moderate-income households and people of color during the COVID-19 pandemic.

Significance

As reported in the New York Federal Reserve Consumer Credit Panel 2022, total household debt increased in the second quarter of 2022, increasing by \$312 billion (2%) to \$16.15 trillion. Balances now stand \$2 trillion higher than at the end of 2019, before the COVID-19 pandemic. The pandemic has created long-term negative results for household finances. To recover from the financial effects of the pandemic households need financial advice to make more optimal financial decisions. For households to benefit from specialized advice like that of a Certified Public Accountant, a financial planner, or educator they must be willing to follow the advice offered.

A key component of the willingness to follow through is the level of trust between the client and the financial services professional. However, the Chicago Booth/Kellogg School Financial Trust Index from 2008-2020 indicates public trust in financial institutions has ranged from 20% in 2008 to 31% in 2019 (<u>http://www.financialtrustindex.org/</u>). Clearly US households are hesitant to trust financial advice, especially unsolicited financial advice (Burke & Poschke, 2021; Hilgert et al., 2003). Willingness to trust in financial institutions predicts stock market participation (Agnew et al., 2012; El-Attar & Poschke, 2011; Guiso et al., 2008). Stock market participation is a key factor in predicting overall household net worth (Calcagno & Monticone, 2015; Favilulkis, 2013; Melcangi & Sterk, 2020). Trust has been shown to be a factor in wealth accumulation which then influences other aspects of one's life.

Numerous studies have shown a link between financial indicators and overall life satisfaction (Joo & Grable, 2004; Rath & Harter, 2010; Seligman, 2011). The field of behavioral economics has established many links between psychology and financial behavior (Kahneman, 2011) This study uses a unique

¹ Timothy S. Griesdorn (<u>griesdor@uiwtx.edu</u>), Associate Professor, Finance

² Sharon A. DeVaney (<u>devaneysa5761@gmail.com</u>), Professor Emeritus, Department of Consumer Sciences

³ Soo Hyun Cho (<u>soohyun.cho@csulb.edu</u>), Associate Professor, Department of Family and Consumer Finances

⁴ Sae Rom Chung (<u>saeddong@uga.edu</u>) Postdoctoral Research Associate, University of Georgia

dataset collected during the COVID-19 pandemic to test the relationship of trust and psychological variables of resilience with overall life satisfaction.

Conceptual Background

Financial wellness or wellbeing describes the level of a person's financial health. It is conceptualized as multidimensional – incorporating financial satisfaction, objective financial status, and attitudes and behaviors related to finances. Joo and Grable (2004) proposed a model of financial wellness that included both objective behaviors and subjective perceptions as determinants of financial satisfaction. Financial satisfaction is an important part of overall life satisfaction (Rath & Harter, 2010); therefore, we propose to test the following hypotheses.

Hypotheses

H1. Trust in financial institutions will be positively associated with higher life satisfaction.

H2. Optimism will be positively associated with life satisfaction.

H3. Financial resilience will be positively associated with life satisfaction.

Methodology

Instrument

The survey was developed by a team of researchers in the personal finance field. The data were collected online via Qualtrics during November 17, 2021 – December 15, 2021, with an oversample of low- to moderate-income respondents and also black, indigenous, and people of color. The instrument was approved for human subject research at the principal investigator's institution's IRB committee. A total of 62 questions were asked about respondent's economic, demographic, health, and psychological attributes both before and during the COVID-19 pandemic. The study was funded by a grant from Wells Fargo bank.

Dependent Variable

The dependent variable was satisfaction with life from Kobau et al. (2010). The original scale had five questions with agree or disagree using a 1 - 7 scale, including: "In most ways my life is close to my ideal," "The conditions of my life are excellent," "I am satisfied with my life," "So far I have gotten the important things I want in life," "If I could live my life over, I would change almost nothing." In our survey, the response was recorded with 5-point Likert scale, thus ranging from 5 to 25.

Independent Variables

Independent variables included a set of financial variables along with access and bank experiences. Experiences with bank/financial services were measured with frequency such as "For the most part, financial institutions are trustworthy." Optimism was measured with the degree they agreed or strongly agreed with statement "When I think about my financial situation, I am optimistic about the future." Resilience was measured with six items which were adapted from the Australian Resilience Study by Muir et al. (2016). The questions focused on budgeting, goals, credit, problem solving, financial management, and preparation for retirement.

For personality type, we asked one question where respondents selected one of the three descriptors – resilient, overcontrolled, and undercontrolled. Resilient personalities have high associations with all Big 5 Personality Traits (OCEAN) including high scores in Openness, Conscientiousness, Extroversion, Agreeableness, and low Neuroticism score). Undercontrolled has a positive association with Extroversion and Neuroticism and negative on all others. Undercontrolled personalities tend to be overconfident when investing and are more likely to take risks. Overcontrolled has high Agreeableness and Conscientiousness with low Extroversion, Neuroticism, and Openness. They also tend to be risk averse when investing.

Control Variables

Based on previous literature, socio-demographic variables and economic variables were used as control variables. Socio-demographic variables included age of the respondent, education, gender, marital status, and race. Economic variables included household income, employment status and homeownership. These socio-economic status variables were asked with categories to choose from: household income (under \$35k, \$35-\$75k, and over \$75k); age (18-24, 25-34, 35-44, 45-54, and over

Consumer Interests Annual

55); education (high or less, some college, Bachelor's degree or higher); gender (male, female, and other), employment status (employed full-time, self-employed or part-time, student, and unemployed); marital status (married/cohabitating, single/widowed, divorced/separated); homeownership (yes or no), and race/ethnicity (Non-Hispanic White, Non-Hispanic Black, Asian including Pacific Islanders, Hispanic, and all other which included Native American, Alaskan Native, muti-racial, etc.). See Table 1 for the characteristics of the sample responses for socio-economic, demographic, and other factors.

Table 1

Sample Participant Characteristics (N=3,570) Characteristic	N	%
Household income		70
Low income (\$35k or less)	1,714	49
Moderate income (\$35k - \$75k)	1,047	30
High income (over \$75k)	712	21
Age		
18 – 24	646	18
25 – 34	1,093	31
35 – 44	864	24
45 – 54	441	12
55 and over	525	15
Education		
HS or less	1,213	34
AA or some college	1,410	40
BA or higher	945	26
Gender		
Female	1,756	49
Male	1,737	49
All other	76	2
Employment		
Full-time	1,409	40
Part-time or self-employed	696	20
Student or other	560	16
Unemployed	874	25
Marital status		
Single/widowed	1,675	47
Married/cohabitating	1,502	42
Divorced/separated	391	11
Homeownership		
Own home	1,384	39
Rent	2,182	61
Race/Ethnicity		
White (non-Hispanic)	1,432	40
Black (non-Hispanic)	709	20
Asian	383	11
Hispanic	713	20
All other	329	9

Sample Participant Characteristics (N=3,570)

Consumer Interests Annual

Trust financial institutions		
Feel financial institutions are trustworthy	1,697	48
Do not trust financial institutions	1,868	52
Big 5 personality traits (OCEAN)		
Undercontrolled (extroverted, high neuroticism, low in all other personality traits like conscientiousness)	835	24
Overcontrolled (introverted, low neuroticism, high conscientiousness, and agreeableness)	1,172	33
Resilient (high in all areas except neuroticism)	1,552	35
Future financial situation outlook		
Optimistic about future	2,318	65
Pessimistic about future	1,247	35

Analysis

To examine the characteristics of the sample, descriptive and frequency analyses were conducted. For multivariate analyses, we used hierarchical ordinary least squares regression. The first model included the dependent variable and eight socio-economic variables, the second model included the dependent variable, socio-economic variables, and the trust of financial institutions, and the final model included everything included in the second model plus the Australian Resilience Scale, personality traits, and optimism.

Results of the regression analysis

Prior to running the full regression model, some preliminary data analyses were conducted. Chisquare testing was conducted on the trust in financial institution data. The variable of trust in a financial institution was significant based upon both race and household income at p<.001 significance level. Those with higher income levels were more likely to trust financial institutions, and non-Hispanic Whites were more likely to agree or strongly agree that financial institutions are trustworthy. Table 2 shows the descriptive statistics of the two scales used in the analysis, the satisfaction with life scale and the six question resilience scale adapted from the Australian Resilience Study.

Table 2

Sample Properties of Independent Variables and Scales

Scale/Measure	М	SD	Range	N
Satisfaction with life (life is close to	15.1	4.73	5-25	3,552
ideal, conditions of life, life satisfaction,				
needs met, happiness)				
Resilience scale (goals, financial	13.8	4.2	6-24	3,553
management, confidence, budgeting,				
retirement)				

Table 3 shows the results of the hierarchical regression. In Step 1, all of the socio-economic variables were significant in predicting satisfaction with life scale with the exception of gender. In Step 2, trust of financial institutions was significantly associated with satisfaction with life. The higher levels of trust in financial institutions were positively associated with higher levels in life satisfaction scores. Adding these variables from Model 1 significantly increased the R² by .06. In Step 3 the final model was tested with the inclusion of personality traits and the resilience scale. The final model significantly increased the R² by about .15 from that of Step 2. The final model had an adjusted R² of .33 with p<.001. No multicollinearity among independent variables was detected based on the VIF statistics which ranged from 1.05 - 2.77.

Table 3

Hierarchical Regression Results for Satisfaction with Life (N=3,570)

iable Step 1		Step 2	Step 3	
	β	β	β	
Income (reference over \$75k)		-		
Low income (\$35k or less)	-0.20***	-0.17***	-0.10***	
Moderate income (\$35k - \$75k)	-0.13***	-0.11***	-0.06***	
Age (reference over 55)				
Age (18-24)	0.03	0.05*	0.06**	
Age (25-34)	0.04	0.05*	0.08***	
Age (35-44)	-0.06*	-0.05*	-0.01	
Age (45-55)	-0.07**	-0.06**	-0.03	
Education (reference BA or higher)				
HS or less	-0.05*	-0.04	-0.03	
AA or some college	-0.09***	-0.08***	-0.06***	
Gender (reference female)				
Male	0.02	0.02	-0.01	
Employment (reference full-time)			· · · · **	
Unemployed	-0.07***	-0.06**	-0.05**	
Part-time or self-employed	-0.02	-0.01	-0.01	
Student	0.01	0.01	-0.00	
Marital status (reference married)				
Single	-0.11***	-0.10***	-0.10***	
Divorced	-0.09	-0.09***	-0.08***	
Homeowner	0.13***	0.10***	0.09***	
Race/Ethnicity (reference non- Hispanic White)				
Non-Hispanic Black	0.07***	0.07***	0.01	
Asian	0.01	0.01	-0.01	
Hispanic	0.05*	0.05**	0.03	
Race all other	-0.04*	-0.03	-0.05**	
Trust banks		0.25***	0.18***	
Personality type (reference overcontrolled)				
Undercontrolled personality			0.06***	
Resilient personality			0.08***	
Optimistic			0.30***	
Resilience scale			0.18***	
R ²	0.12	0.18	0.33	
ΔR ²	0.12		0.15***	
		0.06***	0.10	

Note. *p<.05. **p<.01. ***p<.001.

The perception that banks are trustworthy, being optimistic about one's financial future, and the resilience scale all showed positive associations with the satisfaction with life scale. The lower household income, unemployment, not having a bachelor's degree, and not being in a relationship all contributed to lower satisfaction with life. Race and ethnicity were not a significant predictor of life satisfaction with the exception of the "all other" racial category. Being a homeowner was associated with higher score for satisfaction with life compared to those who do not own homes.

Discussion and implications

Hypothesis 1, Trust in financial institutions will be positively associated with higher life satisfaction, was supported. The result of Step 2 in the hierarchical regression indicates the addition of the trust variable improved the model regression fit. The standardized beta of the variable was positive .25. This indicates every 1 standard deviation change in trust level increases .25 standard deviation in satisfaction with life score. The standardized beta coefficient of .25 is the highest predictor variable for life satisfaction in Step 2 of the regression. The variable remained a significant predictor of life satisfaction in the full model with a standardized beta coefficient of .18 at the p<.001 significance level.

Hypothesis 2, Optimism will be positively associated with life satisfaction, was supported. The results of Step 3 in the regression analysis indicate that the addition of optimism and the resilience scale both significantly predicted life satisfaction at the p<.001 significance level. The standardized beta of optimism of .30 was the highest of all the predictor variables. This indicates that how one views their financial future significantly predicts their self-reported life satisfaction. The result is consistent with previous research on optimism and overall satisfaction with life.

Hypothesis 3, Financial resilience will be positively associated with life satisfaction, was supported as well. In Step 3 of the regression analysis, the resilience scale had a standardized beta of .18 at the p<.001 significance level. While lower than optimism, the beta value is the second largest predictor variable in the overall model. This suggests that healthy financial habits included in the resilience scale like budgeting, goal setting, retirement planning, and financial management skills help increase one's ability to meet their needs. In addition to the resilience scale, the Big 5 personality trait termed Resilient (high extroversion, conscientiousness, agreeableness, openness, with low neuroticism) was positively associated with the satisfaction with life scale. The standardized beta for this variable was .08 and significant at the p<.001 level. Having an undercontrolled personality type (higher levels of neuroticism) was shown to have a negative impact on life satisfaction. This result is consistent with previous research that suggests neuroticism is associated with lower levels of wealth and income (Exley et al., 2022; Mosca & McCory, 2016).

This study confirms a well-documented finding that financial well-being is an important part of life satisfaction (Rath & Harter, 2010). This remains important to financial counsellors and educators as they strive to help households improve their financial literacy (Lusardi, 2008) and financial capability (Xiao, Chen, & Che, 2013). The more the American public understands this relationship, it could increase demand for and attendance at financial literacy education events.

The results also highlight the importance of psychological constructs such as optimism, resilience, and willingness to trust financial institutions as correlates with overall life satisfaction. Therefore, financial educators should strive to include support of psychological health when conducting financial education. The direct correlation between optimism and life satisfaction is similar to other findings (Seligman, 2011) and highlights the link between how we think and our overall satisfaction with life. In addition to financial education, this study demonstrates the importance of helping households to increase their psychological resilience.

Implications for financial services providers and educators include the importance of routine connections with their clients to build trust. Examples could include proactive communication strategies during periods of economic unrest, periodic reviews to ensure goals and financial circumstances have not changed, and the products and services provided are still appropriate for the client's circumstances. Transparency about fees and potential conflicts of interest is also recommended.

A limitation of the study was that it was collected online and thus the sample is not representative of the US population. The sample tended to be younger than the national population. The data from the survey was all self-reported and thus could be subject to a variety of cognitive biases.

References

- Agnew, J., Szykman, L., Utkus, S., & Young, J. (2012). Trust, plan knowledge and 401(k) savings behavior. *Journal of Pension Economics and Finance, 11*(1), 1-20. <u>https://doi.org/10.1017/S1474747211000230</u>
- Burke, J., & Poschke, A. A. (2021). Trust and financial advice. *Journal of Pension Economics & Finance,* 20(1), 9-29. <u>https://doi.org/10.1017/S147474721900026X</u>
- Calcagno, R., & Monticone, C. (2015). Financial literacy and the demand for financial advice. *Journal of Banking & Finance*, *50*, 363-380. <u>https://doi.org/10.1016/j.jbankfin.2014.03.013</u>
- El-Attar, M., & Poschke, M. (2011). Trust and the choice between housing and financial assets: Evidence from Spanish households. *Review of Finance*, *15*(4), 727–756, <u>https://doi.org/10.1093/rof/rfq030</u>
- Exley, J., Doyle, P. C., Grable, J., & Campbell, W. K. (2022). OCEAN wealth profiles: A latent profile analysis of personality traits and financial outcomes. *Personality and Individual Differences*, 185, 111300. https://doi.org/10.1016/j.paid.2021.111300
- Favilukis, J. (2013). Inequality, stock market participation, and the equity premium. *Journal of Financial Economics*, *107*(3), 740-759. <u>https://doi.org/10.1016/j.jfineco.2012.10.008</u>
- Guiso, L., Sapienza, P., & Zingales, L. (2008). Trusting the stock market. *The Journal of Finance*, 63(6), 2557-2600. <u>https://doi.org/10.1111/j.1540-6261.2008.01408.x</u>
- Hilgert, M. A., Hogarth, J. M., & Beverly, S. G. (2003). Household financial management: The connection between knowledge and behavior. *Federal Reserve Bulletin*, *89*, 309-322.
- Joo, S., & Grable, J. E. (2004). An Exploratory Framework of the Determinants of Financial Satisfaction. Journal of Family and Economic Issues, 25(1), 25-50. https://doi.org/10.1023/B;JEEI.0000016722.37994.9f
- Kahneman, D. (2011). Thinking, fast and slow. Farrar, Straus and Giroux.
- Kobau, R., Sniezek, J., Zack, M. M., Lucas, R. E., & Burns, A. (2010). Well-being assessment: An evaluation of well-being scales for public health and population estimates of well-being among US adults. *Applied Psychology: Health and Well-Being*, 2(3), 272–297. <u>https://doi.org/10.1111/j.1758-0854.2010.01035.x</u>
- Lusardi, A. (2008). *Household saving behavior: The role of financial literacy, information, and financial education programs* (No. w13824). National Bureau of Economic Research. Retrieved from: https://www.nber.org/system/files/working_papers/w13824/w13824.pdf
- Melcangi, D., & Sterk, V. (2020). *Stock market participation, inequality, and monetary policy.* Staff Report No. 932, Federal Reserve Bank of New York.
- Mosca, I., & McCrory, C. (2016). Personality and wealth accumulation among older couples: Do dispositional characteristics pay dividends? *Journal of Economic Psychology*, 56, 1-19. <u>https://doi.org/10.1016/i.joep.2016.04.006</u>
- Muir, K., Reeve, R., Connolly, C., Marjolin, A., Salignac, F., & Ho, K. (2016) Financial Resilience in Australia 2015, Centre for Social Impact (CSI) – University of New South Wales, for National Australia Bank. Retrieved from:

https://www.csi.edu.au/media/uploads/Financial_Resilience_in_Australia_-_Full_Report.pdf

- Rath, T., & Harter, J. (2010). Wellbeing: The five essential elements. Gallup Press.
- Seligman, M. (2011). Flourish: A visionary new understanding of happiness and well-being. Free Press.

Xiao, J. J., Chen, C., & Chen, F. (2013). Consumer Financial Capability and Financial Satisfaction, *Social Indicators Research 118*(1), 415-432 DOI: 10.1007/s11205-013-0414-8

Acknowledgement

This study was funded by Wells Fargo in 2021 to the principal investigator, Dr. Jinhee Kim at University of Maryland Extension, College Park to understand the health and financial impacts and recovery of the pandemic on low to moderate-income families and Black, Indigenous, and People of Color (BIPOC).