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Financial Well-Being and Financial Capability among Low-Income Entrepreneurs

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Abstract: Financial well-being is a key component of quality of life and overall well-being and is likely to affect other aspects of quality of life, such as health and health care. The COVID-19 pandemic presents an immense crisis of financial well-being among low-income entrepreneurs and has left many small-scale entrepreneurs financially fragile. We argue that promoting the financial capability of low-income entrepreneurs is effective in protecting their financial well-being from a crisis. To examine the association between financial capability and the financial well-being of low-income entrepreneurs, we use the 2016 National Financial Well-Being Survey, which provides the latest and comprehensive measurement of financial capability, including financial knowledge, financial skills, and access to financial products and services. Our analyses show that, compared to their higher-income counterparts, low-income entrepreneurs have statistically lower levels of financial well-being, financial knowledge, financial skills, and access to mainstream financial products; they also have a statistically higher risk of using high-fee alternative financial products. In addition, low-income entrepreneurs have larger barriers to accessing mainstream financial products than low-income non-entrepreneurs. The results indicate that financial capability plays a significant role in promoting the financial well-being of low-income entrepreneurs.

Keywords: financial well-being; financial capability; quality of life; well-being; entrepreneurship; self-employment

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1. Introduction

Small-scale/micro-entrepreneurs, small business owners, and self-employed individuals throughout the United States face a significant crisis due to the COVID-19 pandemic. According to Fairlie (2020), the United States witnessed the largest decline on record in the number of active business owners during the first few months of the pandemic, with a decrease of 3.3 million. Humphries et al. (2020) reported that at least 60% of small businesses laid off employees during the April and May 2020 lockdown, while Lin et al. (2021) found that the surge in unemployment was greater among workers in small firms than those in large enterprises. More than half of the small businesses reported significant negative impacts during the lockdown, and around 30% experienced similar effects throughout the remaining months of 2020. Additionally, almost 75% of businesses reported a decline in sales or revenue due to the lockdown, with small businesses suffering an estimated average loss of 29% in sales (Bloom et al. 2021).

The pandemic has left small-scale/micro-entrepreneurs (especially those with low incomes) financially fragile. Three-quarters of business owners in a survey had only enough cash to cover two months of operation (Bartik et al. 2020; Fairlie 2020). The situation is especially precarious for those small businesses owned by low-income individuals and racial minorities. A lesson learned from the COVID-19 pandemic suggests that it is important to promote financial security and financial well-being among entrepreneurs, especially those who are financially vulnerable.

Proactive preparation for potential financial risks would help low-income entrepreneurs in the face of crises (such as the COVID-19 pandemic) and foster healthy and sustainable entrepreneurship in the long run. The COVID-19 pandemic provides an opportunity to reconsider effective strategies toward financial security and greater financial well-being for low-income entrepreneurs. For example, low-income entrepreneurs may need access to appropriate and beneficial financial services and policies (e.g., credit, loan, public subsidies, and financial guidance services) and improve their financial knowledge, skills, and management. Financial relief packages provided by the federal and state government for small businesses during the pandemic testifies to the notion of expanding access to beneficial financial services for low-income entrepreneurs. Extra resources and support from the government are especially effective in helping them pull through hard times.

As a key component of quality of life and overall well-being, financial well-being is defined as a condition "of being financially healthy, happy, and free from worry" (Joo 2008). The U.S. Consumer Financial Protection Bureau (CFPB) describes financial well-being as a four-part concept that encompasses the ability to manage day-to-day finances, the freedom to make financial choices, the capacity to withstand financial shocks, and progress towards long-term objectives (CFPB 2015). Individual and family financial well-being likely has considerable impacts on other aspects of quality of life, such as health and health care. For example, wealth and asset accumulation may contribute to health disparities due to varying factors in the residential environment, including access to critical health-promoting resources. Economic circumstances and financial hits in the aftermath of the COVID pandemic have had a critical impact on the physical and mental health of millions of people, including low-income entrepreneurs (Fang and Huang 2022a). In addition, financial incentives as health intervention have been widely tested to have positive impacts on multiple health behaviors and outcomes across different social and cultural contexts (Fang and Huang 2022b; Sun Sicong et al. 2021). Thus, financial well-being is not only one aspect of quality of life, but a social determent of health.

Financial well-being is critical for low-income entrepreneurs and the development of small businesses. On the one hand, small-scale/micro-entrepreneurs, small business owners, and self-employed individuals may not be able to access employment-based social benefit programs and therefore need an extra financial cushion for emergencies. For example, health care coverage in the U.S. is largely tied to wage and salary employment, and those self-employed are less likely to have employment-based health insurance (Gumus and Regan 2015). On the other hand, lack of credit and lack of access to a range of financial services (e.g., banking, tax and accounting services, insurance, and financial counseling) present a formidable financial barrier to small-scale/micro-entrepreneurship, particularly for low-income and financially vulnerable populations (Arping et al. 2010; Idris and Agbim 2015; Langely 2014). They may not even have the financial knowledge or skills necessary to explore financial services and resources, plan new businesses, or make the right financial decisions in their pursuits of financial security and well-being (Ondiek et al. 2013; Wong and Aspinwall 2004). Therefore, it is important to assess the financial well-being of low-income entrepreneurs, including their financial knowledge and skills (*ability to act*) and access to mainstream financial services (*opportunity to act*). This holistic approach that considers both the "ability to act" and "opportunity to act" is referred to as *financial capability* (see Figure 1 for the Financial Capability Framework) (Huang et al. 2022; Sherraden 2013).

In the wake of the 2007 financial crisis, there has been a growing interest in financial capability as a determinant of financial well-being across the world (Atkinson and Messy 2011; Xiao et al. 2022). We argue that building financial capability—improving both financial knowledge/skills and financial service access—is a practical way to create a supportive ecosystem for successful entrepreneurship among low-income individuals and for the betterment of their financial well-being. For low-income entrepreneurs, economic success and quality of life partly lie in access to effective financial capability services.

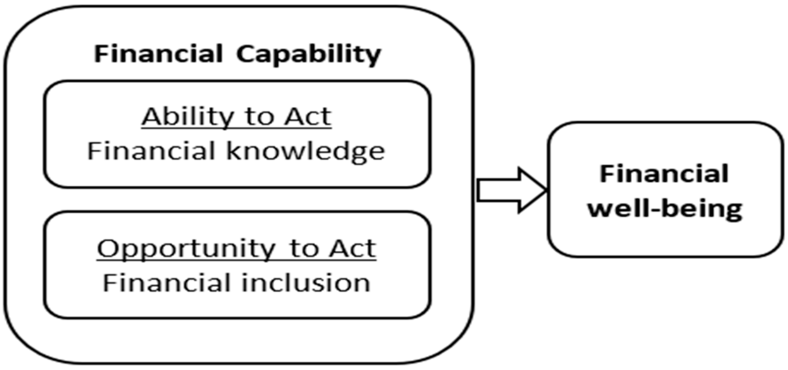

Figure 1. A conceptual framework of financial capability.

The notion of financial capability has received augmenting attention as it encompasses not only an individual's traits and ability (i.e., financial knowledge, skills, and attitudes) necessary for making financial decisions but also financial opportunities in the formal or informal infrastructure that provides a precondition for financial decisions. According to Sherraden and Huang (2019), the development of financial capability is established upon access to beneficial financial products, services, and policies (known as financial inclusion) that offer the possibility to take action, as well as financial knowledge and skills that provide the ability to act.

Financial capability differentiates itself from the conventional notion of financial literacy, which refers to "a set of individual qualities, including knowledge and skills, attitude, habit, motivation, confidence, self-efficacy and behavior" (Sherraden 2013). While financial literacy can be "improved by financial education, guidance, and advice" (Collins 2014), an individual's "ability to act" may be constrained by barriers in financial institutions that limit one's access to financial products and services. Therefore, to improve entrepreneurs' financial capability and financial well-being, it is not enough to improve financial literacy/knowledge; barriers in financial institutions must be removed for better financial access (Sherraden and Huang 2019; see Figure 1). The latter is particularly crucial for low-income entrepreneurs as they often lack access to loans, bank and investment accounts, insurance, and other beneficial products essential for business start-ups and entrepreneurial activities.

The framework of financial capability and its impacts on financial well-being has been empirically examined in terms of different outcomes for a variety of populations. For example, Huang et al. (2013) found that access to a specific financial service—Child Development Accounts for asset building—motivated parents to apply their financial knowledge to accumulate wealth designated for their children. Another study (Huang et al. 2015) showed that material hardship among older Asian immigrants was shaped by both their access to financial services and financial literacy. The link between financial capability and material hardship (as an indicator of financial well-being) is found to be evident in other populations as well (such as mothers with young children and low-income households) (Huang et al. 2022; Sun Sicong et al. 2021). However, few studies have applied the framework of financial capability to examine the financial well-being of low-income entrepreneurs. To fill the gap in knowledge on financial well-being and financial capability among low-income entrepreneurs, we analyze nationally representative cross-sectional data from the 2016 National Financial Well-Being Survey (NFWS) collected by the CFPB. Focusing on a unique population of low-income entrepreneurs, our results illustrate the theoretical discussion of financial well-being and financial capability. The study also compares low-income entrepreneurs with low-income non-entrepreneurs and higher-income entrepreneurs.

2. Methods

2.1. Data and Sample

We examine the financial well-being of low-income entrepreneurs and its relationship with financial capability using the data from the 2016 NFWS (CFPB 2017). The NFWS aims to understand individual financial well-being in the United States, and its survey instrument includes a variety of validated measures of finance-related concepts and offers a unique opportunity for testing our research questions. The NFWS sample, which was taken from the GfK Knowledge Panel—the most significant probability-based non-volunteer online panel in the United States—is a reflection of the non-institutionalized adult population of the United States in 2016. Furthermore, survey weights were used to adjust for discrepancies in sampling and non-response. Self-employment status (Yes/No) is used to define entrepreneurship. Setting the low-income cut-off line at the 200% federal poverty line, we compare the status of financial well-being and financial capability of low-income entrepreneurs (n = 134) with those of low-income non-entrepreneurs (n = 1342) and higher-income entrepreneurs (n = 402). The total size of three sample groups is 1878 (see Table 1).

Table 1. Three groups in the analytic sample (N = 1878).

Group	Sample Size
Low-income entrepreneurs (household income < the 200% federal poverty line)	134
Low-income non-entrepreneurs (household income < the 200% federal poverty line)	1342
Higher-income entrepreneurs (household income $\geq$ the 200% federal poverty line)	402

2.2. Measures

The Financial Well-Being Scale. The standardized 10-item financial well-being scale, created by the CFPB, is designed to assess individuals' perception of their financial status, with statements such as "I am behind with my finances," "I am just getting by financially," and "I am securing my financial future." The scale uses a five-level Likert response system, ranging from "completely" to "not at all," and has a value from 0 to 100, with higher scores indicating better financial well-being. The four elements of financial well-being that the scale aims to capture are control over one's finances, capability to absorb a financial shock, being on track to meet financial goals, and freedom to enjoy life, including having resources for vacations or pursuing further education.

The Financial Knowledge and Financial Skill Scales. The financial knowledge and financial skill scales are utilized as two primary independent variables for assessing the ability to act, which is a critical aspect of financial capability. Proposed by Knoll and Houts (2012), the 10-item financial knowledge scale includes items regarding one's understanding of long-term investment returns, benefits of diversification, life insurance, and so on. The range of the financial knowledge scale is (−2.05, 1.27). A larger scale value means better financial knowledge.

The financial skills scale, consisting of 10 items, assesses an individual's capacity to act on knowledge and information to manage their household finances, according to the CFPB (2017). Examples of the items include "I can make complex decisions" and "I know when to seek advice about my money." Respondents rate their level of agreement on a Likert scale ranging from "completely" to "not at all" or from "always" to "never." The resulting scale score ranges from 0 to 100, with higher scores indicating higher levels of financial skill.

Financial Access. The number of financial services and products possessed by a survey participant (ranging from 0 to 5), such as bank savings or checking accounts, health insurance, nonretirement investments, pensions, and retirement accounts, is used as a substitute to measure access to and utilization of financial services (opportunities to act). In addition, we count the number of risky and high-fee alternative financial products (0–5), including payday loans, pawn loans, reloadable cards, nonbank money transfers, and nonbank cashing or purchasing used by respondents as a negative indicator of financial access.

2.3. Analyses

We first report descriptive statistics of financial well-being, financial capability, and demographic and socioeconomic characteristics of the three groups in the sample. Next, we present estimates from a linear regression model which uses the four focal independent variables (i.e., financial knowledge, financial skills, financial access, and risky financial products) to predict the financial well-being for each of the three groups; demographic characteristics (all variables in Table 2) are controlled for in these regression analyses. Finally, we apply Chow tests to statistically compare the differences in regression coefficients of four independent variables across the three groups. We hypothesize that financial knowledge, financial skills, and financial access are positively, and risky financial products are negatively, associated with financial well-being. Given the relatively small sample size of low-income entrepreneurs (n = 134), we set the statistical significance at the 0.10 level. All analyses are adjusted by the NFWS survey weight.

Table 2. Weighted sample characteristics (N = 1878).

Variable	Percentage or Mean (SD)		
	Low-Income Entrepreneurs (n = 134)	**Low-Income Non-entrepreneurs (n = 1342)**	**Higher-Income Entrepreneurs (n = 402)**
Age category [a]			
18–24	8.86	10.43	4.70
25–34	25.95	23.82	18.48
35–44	23.39	14.19	13.98
45–54	24.28	14.16	28.07
55–61	6.64	10.28	15.15
62 and above	10.87	27.11	19.62
Female [a]	47.34	52.56	40.89
Race and ethnicity [a]			
Non-Hispanic white	34.41	48.54	69.62
Non-Hispanic black	19.96	17.22	7.05
Non-Hispanic other	3.20	7.24	6.63
Hispanic	42.42	26.99	16.71
Education [a]			
High school and below	48.42	50.71	17.95
Some college	29.33	33.52	21.11
College degree and above	22.25	15.78	60.94
Married status [a]			
Married	37.22	38.84	61.09
Living with partner	50.69	52.59	30.52
Others	12.09	8.58	8.40
Household size [a]	2.96 (1.55)	2.85 (1.43)	2.43 (1.15)
Household income [a]			
Less than $20,000	55.62	45.68	0.00
$20,000–$29,999	17.27	27.88	3.04
$30,000–$39,999	14.71	16.56	6.53
$40,000–$49,999	6.96	6.21	7.71
Above $50,000	5.44	3.67	82.73
Metropolitan resident [a]	91.79	81.99	88.18

Source: Authors' tabulations with data from the 2016 National Financial Well-Being Survey. SD = standard deviation. [a] The differences among the three groups are statistically significant at the 0.10 level.

3. Results

3.1. Sample Characteristics

Table 2 summarizes the weighted demographic characteristics of low-income entrepreneurs (n = 134), low-income non-entrepreneurs (n = 1342), and higher-income entrepreneurs (n = 402). Of the low-income entrepreneurs surveyed, over a third were under 34 years old, while half were aged 35-61, and about 10% were 62 or older. Approximately 47% of the sample identified as female. Non-Hispanic white individuals comprised approximately one-third of respondents (34%), with a significant percentage identifying as non-Hispanic black (20%) or Hispanic (42%). Just over half of respondents had completed education beyond high school (29% with some college and 22% with a bachelor's degree or higher), and 37% were married. On average, households consisted of nearly three people, with over half of respondents reporting household income below $20,000. Over 91% of respondents lived in metropolitan areas.

There are statistical differences in these demographic characteristics between low-income entrepreneurs and the other two groups. Compared to low-income non-entrepreneurs, low-income entrepreneurs are younger, less likely to be female, more likely to be Hispanic, with higher educational attainment, living in a larger household, and more likely to be in the lowest income category (<$20,000) and live in metropolitan areas. Compared to higher-income entrepreneurs, low-income entrepreneurs are also younger but more likely to be female and Hispanic, less likely to be married, with lower educational attainments, and more likely to be in the lowest income category (<$20,000) and live in metropolitan areas.

3.2. Financial Well-Being and Financial Capability

The means of the five financial measures are presented in Table 3. The results show that higher-income entrepreneurs have significantly higher mean scores for financial well-being, knowledge, and skills compared to low-income entrepreneurs and non-entrepreneurs. However, there is no statistically significant difference in these three financial measures between low-income entrepreneurs and non-entrepreneurs. In terms of financial products, low-income entrepreneurs own fewer mainstream financial products and use more alternative financial products compared to low-income non-entrepreneurs and higher-income entrepreneurs. Additionally, low-income entrepreneurs face more obstacles when accessing financial services.

Table 3. Financial well-being and financial capability (N = 1878).

Financial Well-Being and Financial Capability	Low-Income Entrepreneurs (n = 134)	Low-Income Non-entrepreneurs (n = 1342)	Higher-Income Entrepreneurs (n = 402)
Financial well-being score	47.76	47.05	56.65 [a]
Financial knowledge score	−0.68	−0.64	0.10 [a]
Financial skill score	47.97	46.56	52.99 [a]
Mainstream financial products	1.32 [b]	1.73 [c]	2.74
Use of risky financial products	0.64 [b]	0.49 [c]	0.24

[a] The mean differences between higher-income entrepreneurs and low-income entrepreneurs and non-entrepreneurs are statistically significant at the 0.10 level. [b] The mean differences between low-income entrepreneurs and higher-income entrepreneurs and low-income non-entrepreneurs are statistically significant at the 0.10 level. [c] The mean differences between low-income non-entrepreneurs and higher-income entrepreneurs are statistically significant at the 0.10 level.

3.3. Regression Results

Regression analyses in Table 4 suggest that, among low-income entrepreneurs, financial skills (b = 0.32, $p < 0.01$) are positively associated with their reported financial well-being. In addition, financial knowledge (b = −3.22, $p < 0.05$) and risky financial products (b = −3.31, $p < 0.05$) are negatively associated with financial well-being. A one-point increase in the financial skill score is correlated with an increase of 0.32 points in the financial well-being score, while a one-point increase in the financial knowledge score or one more use of risky financial products is correlated with a decrease of about 3.3 points in the financial well-being score. However, positive financial access is not statistically associated with individual financial well-being ($p = 0.18$) in this subsample, probably due to the weak statistical power of the small sample size.

For low-income non-entrepreneurs, both financial knowledge (b = −0.17) and risky financial products (b = −2.52, $p < 0.01$) are negatively related to self-reported financial well-being, but only the relationship between the use of risky financial products and financial well-being is statistically significant. Both financial skills (b = 0.28, $p < 0.01$) and financial access (b = 0.92, $p < 0.01$) have statistically significant and positive associations with individual financial well-being. For higher-income entrepreneurs, only financial skills (b = 0.33, $p < 0.01$) and financial access (b = 0.93, $p < 0.05$) have positive associations with individual financial well-being.

Table 4. Regression analyses to predict financial well-being (N = 1878).

Variables	Low-Income Entrepreneurs (n = 134)	Low-Income Non-entrepreneurs (n = 1342)	Higher-Income Entrepreneurs (n = 402)
Financial knowledge	−3.22 **	−0.17	1.82 *
Financial skills	0.32 ***	0.28 ***	0.33 ***
Financial access	1.19	0.92 ***	0.93 **
Use of risky financial products	−3.31 **	−2.52 ***	−0.80

* $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$.

The Chow tests suggest that regression coefficients of financial skills, financial access, and the use of risky financial products do not differ statistically across the three groups. However, the positive correlation between financial knowledge and financial well-being is stronger for low-income non-entrepreneurs and higher-income entrepreneurs than for low-income entrepreneurs.

While not reported in Table 4, the results of control variables indicate that several demographic characteristics are statistically associated with the financial well-being of low-income entrepreneurs. For example, older adults (>62), Hispanic respondents, and those with higher household incomes are more likely to report a higher financial well-being sore. Married respondents have a lower level of financial well-being compared to their non-married counterparts; marriage may indicate the need for extra financial resources for low-income entrepreneurs to meet the household's basic needs (e.g., childcare). Finally, respondents living in a large household are more likely to have a higher financial well-being score.

4. Discussion

Entrepreneurship brings great pecuniary and non-pecuniary benefits for individuals. It not only provides opportunities for economic development and gains (Berglann et al. 2011) but also offers greater freedom and job satisfaction (Bianchi 2012; Hamilton 2000; Larsson and Thulin 2019). It is also a viable path to upward mobility, especially for minorities and immigrants. For many poor individuals, entrepreneurship is appealing as an avenue towards economic self-sufficiency and the American Dream (Laney 2013). Yet pursuing entrepreneurship can be especially challenging for low-income individuals, in part due to a lack of education, skills, capital and social contacts (Acs 2008; Kugler et al. 2017) and in part due to the poor infrastructure, labor supply, labor skills, and financial services in low-income areas (Acs 2008; Choguill 1999; Leyshon and Thrift 1995). Despite all these disadvantages, it is still believed that more low-income people would participate in entrepreneurial activities if impediments and disincentives were removed. In addition, with appropriate policies and programs devised for aspiring low-income individuals, they can become successful entrepreneurs (Sherraden et al. 2004). In the wake of the COVID-19 pandemic and the aftermath it left on low-income entrepreneurs, we suggest that promoting financial capability among low-income entrepreneurs be an effective strategy to protect their financial well-being from future crises. This study contributes to the literature by empirically examining the association between financial capability and the financial well-being of low-income entrepreneurs.

In this study, we analyze the 2016 NFWS data to investigate the financial well-being of low-income entrepreneurs and how it relates to financial capability, including financial knowledge, financial skills, and access to mainstream financial products and services. We focus on financial concepts because managing personal and business finances have become increasingly important and complex. To do so, individuals need to have access to a range of financial services and products, which often require the exercise of advanced financial skills. Many of these products and services are commonly used, such as online shopping, payment systems, consumer credit, home mortgages, educational loans, insurance, and retirement plans, and are subsidized by public policies. For example, in the United States, policies provide incentives for retirement savings by offering tax benefits for plan contributions and earnings. Entrepreneurs need these financial services and products for their business and financial well-being; nonetheless, they are often excluded from policy-subsidized employment-based benefits, which may otherwise become more accessible if operated through financial services and products (e.g., employment-based health insurance). At the same time, small-scale entrepreneurs need financial skills to take advantage of the policies and benefits, especially those targeting small businesses (e.g., government-subsidized small business loans). All of these have made financial capability critical for entrepreneurs.

The findings show that, compared to higher-income counterparts, low-income entrepreneurs have statistically lower levels of financial well-being, financial knowledge, financial skills, and access to mainstream financial products; they also have a statistically higher risk of using high-fee alternative financial products. Low-income entrepreneurs also have more barriers than low-income non-entrepreneurs to access mainstream financial products. As a result, they are more likely to use high-risk alternative financial services. The use of high-fee and risky financial products has a strong and negative association with the financial well-being of low-income entrepreneurs.

A surprising finding is that financial knowledge has a negative association with the financial well-being of low-income entrepreneurs, and this association is statistically different from that for the other two groups. It is probably because, among low-income entrepreneurs, those with more financial knowledge are also more aware of the financial barriers and more concerned about their financial well-being. These barriers may negatively affect their entrepreneurship and the use of appropriate and beneficial financial services. Once they are equipped with better access to mainstream financial services and products, then financial knowledge will play a positive role in promoting financial well-being, as is observed in higher-income entrepreneurs and low-income non-entrepreneurs. In other words, financial knowledge as a determinant of financial well-being depends on the external opportunities to access appropriate and beneficial financial services and policies. This finding further supports our argument that financial capability differentiates itself from financial literacy/financial knowledge, and the latter, by itself, is not adequate to support the financial well-being of low-income entrepreneurs.

Findings from this study point to the importance of financial capability, especially financial skills and financial inclusion, in the financial well-being of low-income entrepreneurs. In order to promote the financial well-being and financial capability of low-income individuals and prepare them for emergencies and crises, there is a need to create a comprehensive financial guidance and policy support system, especially on promoting financial inclusion or "opportunity to act". During the pandemic, emergency fund programs and public assistance at various levels have helped low-income entrepreneurs absorb negative economic shocks and achieve long-term success. The Paycheck Protection Program, established by the CARES Act in 2020, is a federal-level initiative that offers loan forgiveness to small business borrowers who meet certain conditions. The Small Business Administration and the U.S. Department of the Treasury support this program. The Economic Injury Disaster Loans program, also administered by the Small Business Administration, provides relief loans to small businesses and nonprofit organizations that suffered a temporary loss of revenue. State and local governments also provide aid and loan programs for small businesses. In 2020, about 75% of small businesses requested Paycheck Protection Program loans, nearly 30% requested Economic Injury Disaster Loans, and about 10% requested Small Business Administration loan forgiveness. These initiatives and programs aim to alleviate the impact of economic crises on small businesses and provide support for their recovery. These programs not only substantially increase small business entrepreneurs' access to financial services and resources not offered by the market but also improve their financial capability.

5. Conclusions

To summarize, financial well-being, as a unique aspect of quality of life, can have significant impacts on overall well-being and health. Few studies have examined the financial well-being of low-income entrepreneurs. Using the concept of financial capability, our study provides a unique approach to the financial well-being of low-income entrepreneurs. The study has several limitations. While the 2016 NFWS data provides a national representative sample and well-established measurement for financial capability and financial well-being, it was collected before the COVID-19 pandemic. Therefore, future research should further examine how the pandemic has affected the links between financial capability and financial well-being when such data is made available. In addition, given the small sample size of low-income entrepreneurs in the study and the cross-sectional correlation design, it is not possible to identify the causal impacts of financial capability on financial well-being. These limitations should be addressed in future research. Solid research on the financial capability framework for low-income entrepreneurs will provide a conceptual and empirical foundation for effective policies, programs, and interventions that benefit low-income entrepreneurs' financial security and financial well-being.

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