








# “Relationship between financial stress and financial well-being of micro and small business owners: Evidence from India”

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<b>ARTICLE INFO</b>	Thangaraj Ravikumar, Mali Sriram, Nagalingam Kannan, Issac Elias and Vinita Seshadri (2022). Relationship between financial stress and financial well-being of micro and small business owners: Evidence from India. <i>Problems and Perspectives in Management</i> , 20(4), 306-319. doi: <a href="https://doi.org/10.21511/ppm.20(4).2022.23">10.21511/ppm.20(4).2022.23</a>
<b>DOI</b>	<a href="http://dx.doi.org/10.21511/ppm.20(4).2022.23">http://dx.doi.org/10.21511/ppm.20(4).2022.23</a>
<b>RELEASED ON</b>	Friday, 02 December 2022
<b>RECEIVED ON</b>	Thursday, 19 May 2022
<b>ACCEPTED ON</b>	Monday, 14 November 2022
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<b>JOURNAL</b>	"Problems and Perspectives in Management"
<b>ISSN PRINT</b>	1727-7051
<b>ISSN ONLINE</b>	1810-5467
<b>PUBLISHER</b>	LLC “Consulting Publishing Company “Business Perspectives”
<b>FOUNDER</b>	LLC “Consulting Publishing Company “Business Perspectives”



NUMBER OF REFERENCES

**57**



NUMBER OF FIGURES

**1**



NUMBER OF TABLES

**12**

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## BUSINESS PERSPECTIVES



LLC "CPC "Business Perspectives"  
Hryhorii Skovoroda lane, 10,  
Sumy, 40022, Ukraine  
[www.businessperspectives.org](http://www.businessperspectives.org)

**Received on:** 19<sup>th</sup> of May, 2022

**Accepted on:** 14<sup>th</sup> of November, 2022

**Published on:** 2<sup>nd</sup> of December, 2022

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Seshadri, 2022

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### **Conflict of interest statement:**

Author(s) reported no conflict of interest

Thangaraj Ravikumar (India), Mali Sriram (India), Nagalingam Kannan (India),  
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# RELATIONSHIP BETWEEN FINANCIAL STRESS AND FINANCIAL WELL-BEING OF MICRO AND SMALL BUSINESS OWNERS: EVIDENCE FROM INDIA

## Abstract

Micro and small businesses financially suffered due to COVID-19 in India. This financial suffering created financial stress among them and deteriorated their financial well-being. However, micro and small business owners exhibit financial resilience by bouncing back to regular business activities through their hope, optimism, and self-efficacy, which are the components of positive psychological capital. This study analyzes the relationship between financial stress and financial well-being of micro and small firm owners keeping financial resilience as a mediator and positive psychological capital as a moderator in the mediation. This descriptive analysis employed a survey method to collect primary data using the interview method. The interview method was used as most micro and small business owners are comfortable with interaction rather than filling out the questionnaires due to the language barrier. The sample size is 384 respondents, as per Krejcie and Morgan's formula. The mean scores indicate a moderate degree of financial stress (2.354), financial resilience (2.623), and financial well-being (2.637). The level of financial stress differs based on the respondents' gender. Financial stress is more among female business owners (2.504) than their male counterparts (2.265).

Further, business owners who earn more have a higher level of financial resilience (2.985), psychological capital (2.951), and financial well-being (2.711). Financial stress significantly impacts financial well-being (28.4%). Financial resilience has a partial mediation effect (65%) on financial stress and financial well-being. Finally, psychological capital moderates indirect relationships among financial stress, financial resilience, and financial well-being.

## Keywords

personal finance, psychological factors, financial welfare,  
personal well-being, behavioral finance

## JEL Classification

D14, D91, I39, G40

## INTRODUCTION

The COVID-19 pandemic severely hit the Indian public health system and troubled the growth of the Indian economy. In this regard, the Indian economy lost its growth track, and its real Gross Domestic Product was down by 8.5% in the fiscal year 2020–2021 (Reserve Bank of India, 2020). This economic stiffness was due to the lockdown, travel restrictions, restrictions on the movement of goods and services, social distancing measures, and reduced consumption. The pandemic has caused unprecedented unemployment, business closures, revenue loss, and financial instability in India (Vyas, 2020). In addition, it has also affected micro and small businesses both financially and mentally due to revenue loss, lower demand, rising price levels, and high healthcare expenditures.

Furthermore, the pandemic induced financial stress among individuals, businesspersons, and households. Financial stress (FS) oc-

curs when individuals cannot afford necessities (Friedline et al., 2021). FS leads to psychological issues such as anxiety, fear, lack of confidence, poor quality of life, and low life satisfaction (Heo et al., 2020). Therefore, FS influences the financial health of a person. Financial well-being (FWB) is the measure of financial health. FWB is the perception of a person toward his/her financial situation.

India has gradually emerged from the glitches of the most disastrous pandemic. The government of India eased out the restrictions imposed. As a result, the Indian economy has also started showing positive recovery signs (MoSPI, 2021). However, the recovery process will be the toughest, especially for daily wage workers and micro and small businesses, because they first need to overcome the financial stress they are facing now. Then, they need to focus on normalizing the present financial well-being and achieving future financial security. The questions in this context are a) How to overcome financial stress to achieve financial well-being? and b) Is overcoming financial stress a matter of money or psychological factors, or both?

Financial stress can effectively be tackled when a person can meet basic needs and liabilities – here, earning money matters. However, earning during tough times requires a positive psychological approach, grit, untired efforts, and strong mental health. Thus, money and positive psychology together effectively mitigate financial stress. Financial resilience (FR) and positive psychological capital (PPC) are the constructs that are considered for appraising the nexus between FS and FWB. Financial resilience implies the ability to quickly bounce back from financial hardship and financial stress (Mcknight & Rucci, 2020). PPC is a part of positive psychology (Piqueras Gómez et al., 2018). PPC insists on possessing positive concepts, such as self-efficacy, hope, resilience, and optimism in the workplace (Piqueras Gómez et al., 2018). This study analyzes the nexus between financial stress, financial resilience, positive psychological capital, and financial well-being of micro and small firm owners.

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## 1. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Onset of COVID-19 attracted the attention of academicians and researchers to measure and analyze its impact on various realms of public life. Further, numerous research works have been carried out to understand how the pandemic has transformed the lives of various kinds of people. Many research studies have been undertaken to evaluate the COVID-19 pandemic's repercussions on the personal finance of individuals and businesspersons. The pandemic, in general, brought adverse effects on economic activities (Brodeur et al., 2021). It has a direct effect on the economy of the nation (Mirica et al., 2020). The pandemic has disturbed households, individuals, and businesses' everyday life and financial condition (Carroll et al., 2020). The economic collapse caused by this pandemic is the worst one (Barrafrem et al., 2020). The COVID-19 pandemic's effect is distinct for each individual (Robillard et al., 2020). Financial stress is widespread, but it is acute for the low and

moderate-income groups (Roll et al., 2016). The economic stress of individuals is linked to health risks and psychological problems (Sampson et al., 2021). Financial stress is a condition wherein the participants in economic activities face severe uncertainties (Senapati & Kavediya, 2020). Financial stress leads to anxiety and fear among the affected people (Sampson et al., 2021). It also makes a person less focused and unproductive (Ozyuksel, 2022). Individuals' financial stress affects their families (Rodrigues et al., 2021). Financial well-being indicates financial stability and liberty (Consumer Financial Protection Bureau, 2015). When an individual can pay all his financial obligations, he feels financially stable and has the liberty to select the desired products or services; this is financial well-being (Consumer Financial Protection Bureau, 2017).

Positive psychology enables a person to revisit himself (Luthans et al., 2007). It insists on focusing strengths of an individual rather than own weaknesses (Ghosh & Deb, 2016). Positive psychology was advocated and popularized by Martin Seligman in 1994 (Dabas et al., 2018).

There are two perspectives on positive psychology: the western perspective and the eastern perspective. Positive psychology has been emphasized in Indian scriptures. There are similarities in western and Indian approaches toward positive psychology. The ideas of mindful meditation mentioned in Indian scriptures and Seligman's model of happiness are similar (Dabas et al., 2018). However, even though there are similarities in western and eastern approaches, the philosophy on which the positive psychology approach is built is contradictory. The Indian approach is based on "not me, truth, and renunciation," whereas the western approach is "me and the accumulation of wealth." Western psychology focuses on biopsychosocial processes, while Indian psychology emphasizes linking spirituality with biopsychosocial processes. Thus, Indian psychology has a broader framework and more scope (Rao & Paranjpe, 2016). Self-exploration and experience are essential to the concepts of eastern teaching (Lopez et al., 2018).

PPC is "an individual's positive psychological state of development" (Luthans et al., 2007). This state of mind possesses high hope, efficacy, resilience, and optimism (Ohlin, 2021). Individuals with more PPC manage the worst situations well (Luthans et al., 2007). Therefore, PPC is required to survive in the worst situations of life. PPC positively contributes to employees' commitment and well-being and the impact of stress on PWB (Mensah & Amponsah-Tawiah, 2016). Financial resilience is known as the capacity to get back quickly from financial hardship (Mcknight & Rucci, 2020). Financial resilience is critical to inclusive growth and welfare (Arellano et al., 2019). Financial fragility and financial resilience are two sides of a coin (Lyons et al., 2020). Reactions to economic shocks and other crises by individuals, businesses, and households vary (Sarkar & Clegg, 2021). The future is highly uncertain, and it is less predictable. Therefore, businesses must be resilient (Nauck et al., 2021). FWB is the ability of a person to meet his financial obligations and financial desires (Consumer Financial Protection Bureau, 2015). Although it is complex, understanding it is crucial (Consumer Financial Protection Bureau, 2015). Financial well-being and mental health are related (Hassan et al., 2021). Financial stress negatively affects financial well-being (Sun et al., 2022).

The conservation of resources (COR) theory is a motivational theory developed by Hobfoll (1989) to explain stress. COR theory supposes that each person attempts to obtain, retain, protect, and build the resources and any loss to the valued resources harms them mentally (Hobfoll, 1989). Stress occurs when vital assets are vulnerable, when vital assets are lost, or when efforts fail to gain vital resources (Hobfoll et al., 2018). The vital assets include health, well-being, family, self-esteem, meaning in life, and other resources that vary from culture to culture (Hobfoll et al., 2018). This paper focuses on the financial stress of micro and small business owners caused by the pandemic.

Moreover, it measures the effect of financial stress on the FWB of micro and small businesses in India. The pandemic caused healthcare concerns, job loss, revenue loss, closure of business, and threats to the resources such as savings and assets through healthcare expenditures. As per COR theory, loss of resources leads to stress. The pandemic devastated the revenue of micro and small firms and created financial stress. Further, stress and well-being are negatively related (Johnson et al., 2005). Resilience denotes the ability to get back from complications. Financial resilience is the ability to withstand financial hardships and stress (Mcknight & Rucci, 2020). Thus, financial resilience helps in withstanding financial hardship and financial stress.

A positive approach toward life facilitates overcoming life difficulties. Positive psychology focuses on the strengths of a person rather than worrying about weaknesses (Ghosh & Deb, 2016). PPC comprises virtues such as self-efficacy, optimism, hope, and resilience. These virtues help people "weather the storm" (Luthans et al., 2007). This paper is interested in assessing the effect of positive psychological factors on stress and well-being. Therefore, positive psychological capital has been considered a moderator between FS and FWB. Further, the moderating role of PPC in financial stress and financial resilience relationship is considered.

Differences exist in financial stress based on gender, age, annual income, and other demographics-related factors (Arellano et al., 2019; Barbera et al., 2017; University of South Florida, 2021; KPMG

International, 2020). Stress is more predominant among women than men (Gonzalez & Vives, 2019). Women, young adults, and the elderly are financially fragile and have financial stress (Arellano et al., 2019). Financial stress leads to anxiety among individuals that impacts well-being (Tran et al., 2018). Further, financial resilience differs from person to person (Arellano et al., 2019; Barbera et al., 2017; University of South Florida, 2021; Hassan et al., 2018; Jacobsen et al., 2009; de Koning, 2016; Lusardi et al., 2021; Lyons et al., 2020; Mcknight & Rucci, 2020; OECD, 2020). Women take advantage of the formal financial system rather than men to enhance their financial resilience (Arellano et al., 2019). Persons aged 25 years to 65 years use various financial tools to promote financial resilience than other age groups (Arellano et al., 2019). Higher-income households are more financially secure than low-income households (Mcknight &

Rucci, 2020). Women have better self-control, optimism, and self-encouragement (Mellao & Monico, 2013). PPC is positively related to life satisfaction, a part of well-being (Pramanik & Biswal, 2020). Individual, work-related, and social factors are related to well-being (Hsu, 2019). Thus, the existing research found that financial stress, financial resilience, optimism (antecedent of psychological capital), and well-being differ from person to person. Thus, this study is interested in identifying whether financial stress, financial resilience, PPC, and FWB differ from person to person. Moreover, it measures the impact of demographic characteristics on financial stress, financial resilience, positive psychological capital, and financial well-being.

A literature survey has been carried out on the impact of the pandemic on personal finance, repercussions of financial stress, role of financial stress on

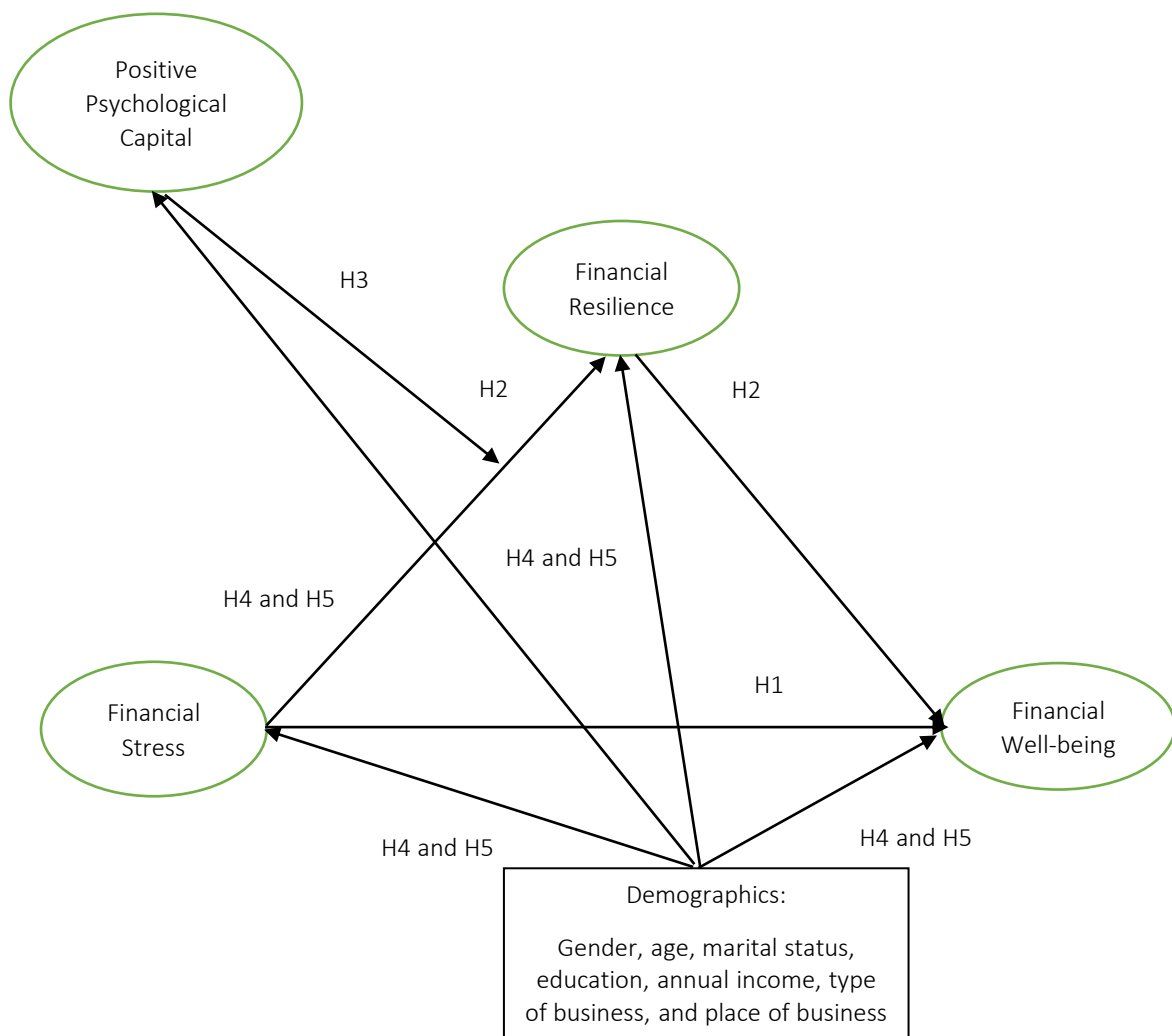


Figure 1. Research model



financial well-being, relationship between financial resilience, financial well-being, and mental health. This survey reveals that there are limited studies on how small businesses respond to the COVID-19 crisis. Therefore, this paper analyzes the nexus between financial stress, financial resilience, and financial well-being. Furthermore, this study aims to measure and analyze the moderating role of positive psychological capital in the nexus between financial stress, financial resilience, and financial well-being. The research model is shown in Figure 1. The following hypotheses are developed:

- H1: *Financial stress significantly affects the financial well-being of micro and small businesses.*
- H2: *Financial resilience significantly mediates the relationship between financial stress and financial well-being.*
- H3: *Psychological capital significantly mediates the indirect relationship between financial stress and financial well-being.*
- H4: *Financial stress, financial resilience, positive psychological capital, and financial well-being do not significantly differ based on the personal characteristics of micro and small business owners.*
- H5: *Demographic characteristics of micro and small business owners significantly impact financial stress, financial resilience, positive psychological capital, financial well-being, and their sub-dimensions.*

## 2. METHODOLOGY

This paper is a descriptive study. It aims to determine and analyze the financial stress, financial resilience, and financial well-being of micro and small business owners. Further, this study measures the effect of financial resilience in the said relation. A moderated mediation role of positive psychological capital has been identified and analyzed. A causal investigation is carried out. A survey method was used to collect primary data from micro and small companies in Bangalore, India. This study is a natural field study. The analysis was conducted from November 2021 to March 2022;

thus, the study was conducted simultaneously. The sample population has representatives of different gender and age groups because financial stress, financial well-being, positive psychological capital, and financial resilience vary based on gender and age.

### 2.1. Sample design and study procedure

The interview method of data collection has been applied. Well-designed interview questions were prepared and validated. A judgmental sampling technique has been applied. Personal interviews were conducted. The interviews were conducted in vernacular language to collect precise information from the respondents. The sample size was defined based on Krejcie and Morgan's formula; the sample is 384 respondents. More than 462 business owners were approached for the data collection. However, only 389 responses were retrieved. The first 384 responses were considered for data analysis. There were several challenges while collecting the data. The respondents were very sensitive while answering the finance-related questions. All necessary efforts were made to receive unbiased responses from the respondents by conveying that the collected data would be considered for academic purposes only. The collected data were cleaned and coded in an Excel sheet, and the data analysis was done.

### 2.2. Measures

The constructs (such as financial stress, financial well-being, positive psychological capital, and financial resilience) have been measured by the scales identified. The scales were found from the existing literature and customized to the study context. For example, financial stress has been measured using the financial stress scale of Heo et al. (2020). This comprehensive scale has three dimensions: affective reactions, psychological responses, and relational behavior. Financial stress has been measured through twenty-four statements on a five-point Likert scale. Statements like "I avoid social events due to financial situation," "I find it difficult to talk about money with my spouse/significant others," and "I feel frustrated because of my financial situation" represent the FS scale in the study.

Luthans et al.'s (2007) scale having twenty-four statements is used to measure PPC. The PPC scale has four dimensions: self-efficacy, optimism, hope, and resilience. Statements like "All the problems of the work have a bright side," "I focus on my work goals always," and "Although my work is failed, I will try to make it a success again" are a few items used in measuring PPC.

Financial resilience has been quantified by the scale developed by Salignac et al. (2019). FR scale has 18 statements covering five components: economic resources, financial resources, financial knowledge and behavior, social capital, and psychological resilience. Examples of FR statements include "I have adequate savings and liquid financial assets to meet the income shock caused by the pandemic" and "I feel that the debts burden me a lot." In addition, financial well-being is quantified by the Consumer Financial Protection Bureau (2017) scale. The FWB scale has ten items that measure four components: control, capacity to absorb a shock, being on track to meet goals, and freedom of choice. Finally, the FWB scale includes the statements like "I have a secured financial future" and "I am just getting by financially."

Further, demographic and business-related attributes such as gender, age group, education, annual income, spousal status, nature of the business, type of business, and place of the business are studied. Cronbach's  $\alpha$  for FS, FR, PPC, and FWB scales were calculated based on a preliminary study, and  $\alpha$  scores were 0.945, 0.953, 0.967, and 0.921, respectively. As  $\alpha$  scores computed were good, the main study was carried out.

### 3. RESULTS

P-values of the Kolmogorov-Smirnov test and Shapiro-Wilk test are less than 0.05. So, FS, FR,

PPC, and FWB data are not normally distributed. 63% of the sample units are male business owners. Most of the sample population are millennials (25 years to 40 years) (58.9%), followed by generation X (29.2%). There are more married respondents (81.5%) in the sample having bachelor's degrees (46.4%) and an annual income of up to INR 2,00,000 (66.1%). Most respondents (55.2%) undertake their businesses in rural areas, and more than 50% of the sample units are in the trading business. The study then analyzed the differences in the constructs caused by personal attributes. Table 1 reflects the results of the differences.

Table 1 reveals significant differences between gender and financial stress, annual income and financial resilience, annual income and positive psychological capital, annual income and financial well-being, nature of business and FS, and nature of business and FR of the respondents. All other differences between personal and business-related characteristics and the constructs are insignificant.

This study is also interested in determining the impact of the demographic characteristics of the respondents on financial stress, financial resilience, positive psychological capital, and financial well-being and their dimensions. Tables 2-5 exhibit the outcomes of simple linear regression analysis. Results presented in Table 2 reveal that the personal attributes of the sample – gender, age group, spousal status, level of education, and annual income – do not significantly affect the financial stress of the respondents. However, gender and marital status significantly affect affective reaction and relational behavior dimensions of financial stress. In addition, annual income significantly explains variance in the dimension of the psychological response.

**Table 1.** Differences in personal and business-related characteristics

Source: Analysis of survey data.

Variables	Gender	Age	Marital status	Education	Annual Income	Type of business	Place of business	Nature of business
Financial stress	R*	A	A	A	A	A	A	R*
Financial resilience	A	A	A	A	R*	A	A	R*
Positive psychological capital	A	A	A	A	R*	A	A	A
Financial well-being	A	A	A	A	R*	A	A	A

Note: R\* denotes rejection of  $H_0$  ( $H_0$ : Existence of no significant difference) and A denotes Acceptance of  $H_0$  ( $H_0$ : Existence of no significant difference).

**Table 2.** Financial stress and its dimensions

Source: Analysis of survey data.

Predictor	Financial stress	Affective reaction	Relational behavior	Psychological responses
Gender	IS	S*	S*	IS
Age	IS	IS	IS	IS
Marital status	IS	S*	S*	IS
Education	IS	IS	IS	IS
Annual income	IS	IS	IS	S*

Note: S\* represents significant impact at a 5% significance level, and IS denotes insignificant impact at 5%.

**Table 3.** Financial resilience and its dimensions

Source: Analysis of survey data.

Predictor	Financial resilience	Economic resources	Financial resources	Financial knowledge	Psychological resilience	Social capital
Gender	IS	IS	IS	IS	IS	IS
Age	IS	IS	IS	IS	IS	IS
Marital status	IS	IS	IS	IS	IS	IS
Education	IS	IS	IS	IS	IS	IS
Annual income	S*	S*	S*	S*	IS	S*

Note: S\* denotes significant impact at a 5% significance level, and IS denotes insignificant impact at 5%.

Table 3 exhibits that the personal attributes of the sample – gender, age group, spousal status, level of education, and annual income – do not significantly affect financial resilience and its dimensions. However, annual income significantly influences financial resilience and its dimensions, except for psychological resilience.

As per Table 4, the personal attributes of the sample – gender, age group, spousal status, level of education, and annual income – do not significantly affect psy-

chological capital and its dimensions. However, marital status significantly explains variance in the resilience dimension of PPC. On the other hand, annual income significantly influences psychological capital and its dimensions, except for self-efficacy.

Personal attributes of the sample – gender, age group, spousal status, level of education, and annual income – do not significantly affect financial well-being and its dimensions. However, marital status significantly affects the freedom of choice

**Table 4.** Psychological capital and its dimensions

Source: Analysis of survey data.

Predictor	Psychological capital	Self-efficacy	Optimism	Hope	Resilience
Gender	IS	IS	IS	IS	IS
Age	IS	IS	IS	IS	IS
Marital status	IS	IS	IS	IS	S*
Education	IS	IS	IS	IS	IS
Annual income	S*	IS	S*	S*	S*

Note: S\* denotes significant impact at a 5% significance level, and IS denotes insignificant impact at 5%.

**Table 5.** Financial well-being and its dimensions

Source: Analysis of survey data.

Predictor	Financial well-being	Control	Ability to absorb the shock	On the track to goal	Freedom of choice
Gender	IS	IS	IS	IS	IS
Age	IS	IS	IS	IS	IS
Marital status	IS	IS	IS	IS	S*
Education	IS	IS	IS	IS	IS
Annual income	S*	S*	S*	S*	S*

Note: S\* denotes significant impact at a 5% significance level, and IS denotes insignificant impact at 5%.



dimension of FWB. On the other hand, annual income significantly influences financial well-being and its dimensions (Table 5).

The mediating role of FR in FS and FWB relation has been analyzed and presented in Tables 6 and 7. Financial stress and financial well-being relation specified in Figure 1 is a prime relationship. Composite reliability (CR) and Cronbach's  $\alpha$  are good (more than 0.700). Further, Average Variance Extracted (AVE) scores for the constructs are also satisfactory.

**Table 6.** Statistical properties of the constructs

Source: Analysis of survey data.

Particulars	CR	AVE	Cronbach's $\alpha$
Financial stress	0.950	0.552	0.949
Financial resilience	0.956	0.548	0.953
Financial well-being	0.936	0.596	0.923

Since the reliability and validity of the constructs are statistically significant, mediation analysis has been carried out. Mediation analysis results are presented in Table 7. First, the nexus between FS and FWB is significant. Therefore, mediation analysis has been taken up as per variance accounted for (VAF). VAF is the ratio between IDE and total effect (TE). VAF establishes the mediation effect size (Hair et al., 2014).

Since the VAF score for the mediation of financial resilience is 65%, which lies between 21% and 80%, financial resilience partially mediates financial resilience and financial well-being.

The mediated moderation analysis is undertaken to measure the moderating impact of PPC in the indirect effect of prime relationships via financial resilience. Mediated moderation is essentially moderation (Muller et al., 2005). The mediated moderation effect exists when the moderator (positive

**Table 7.** Mediation effect of financial resilience

Source: Analysis of survey data.

Path	Path Value	Remarks
1. Financial stress → financial resilience	0.765	
2. Financial resilience → financial well-being	0.694	
3. Financial stress → financial well-being	0.285	
Direct effect (de)	0.285	
Indirect effect (ide)	0.531	= 1 * 2 = .765 * .694
Total effect	0.816	= DE + IDE = 0.285 + 0.531
Variance accounted for (VAF) computed	65%	= IDE/ TE = .531/.816 = 0.650 or 65%

psychological capital) effect is applied to the indirect path from the independent variable (financial stress) to the dependent variable (financial well-being) via the mediator (financial resilience). The indirect effect of the model depends on the strength of the moderator. The strength of the overall effect depends on the moderator (Muller et al., 2005). The model of Hayes's (1989) process macro has been used to measure the mediated moderated effect mentioned. The mediated moderation is said to be achieved once the indirect effect of FS on FWB through FR differs in levels of positive psychological capital. The results are presented in Tables 8-11.

Table 8 shows the impact of financial stress and positive psychological capital on the mediator (financial resilience) and the significance of the model. The model is significantly fit (p-value: 0.05). Financial stress significantly affects financial resilience (p-value: 0.004), and positive psychological capital also significantly explains variance in financial resilience (p-value: 0.000). Further, the interacted effect of financial stress and positive psychological capital on financial resilience is significant (p-value: 0.022).

Table 9 explains the impact of financial stress and financial resilience on the financial well-being of the respondents. Both financial stress and financial resilience significantly account for the changes in the financial well-being of the sample (p-value: 0.000). Therefore, indirect effects from financial stress to financial resilience and financial resilience to financial well-being are significant, which satisfy one of the conditions of the mediated moderation analysis (Hernandez et al., 2016).

The direct effect is significant, which is a vital condition for mediation (Baron & Kenny, 1986; Preacher & Hayes, 2004). The direct effect is significant as the p-value is 0.000, and its effect size is 0.359 (Table 9).

**Table 8.** Model fit

Particulars	Coefficients	SE	t	P
r	0.949			
r <sup>2</sup>	0.900			
Significance of the model	–			0.000
Constant	2.6281	0.0186	141.12	0.000
Financial stress	–.0742	0.0260	–2.85	0.004
Positive psychological capital	1.0067	0.0217	46.32	0.000
Interacted term	–.0096	0.0232	–0.41	0.022

Note: Output variable: Financial resilience.

**Table 9.** Model coefficients

Particulars	Coefficients	SE	t	P
Constant	0.8212	0.0789	10.4417	0.000
Financial stress	0.3599	0.0338	10.6602	0.000
Financial resilience	0.6921	0.0288	24.0255	0.000

Note: Output variable: Financial well-being.

**Table 10.** Conditional indirect effects

Positive psychological capital	Effect	BootSE	BootLLCI	BootULCI
–.9165	.0453	0.0357	.1155	.3128
0.000	.0513	0.0255	.0998	.1573
.9165	.0574	0.0203	.2869	.3297

Table 10 shows the conditional indirect effects of the model. As “zero” is not there between the bootstrap lower-level confidence interval score and the bootstrap upper-level confidence interval score for -1sd, mean, and 1sd levels, the conditional indirect effect of PPC on the model is significant.

The omnibus test presented in Table 11 indicates that the mediated moderation effect exists in the

**Table 11.** Index of mediated moderation

Particulars	Index	BootSE	BootLLCI	BootULCI
Positive psychological capital	.0066	0.0152	0.0851	1.02237

**Table 12.** Hypotheses testing

Hypothesis	Result
Financial stress significantly affects the financial well-being of MSB owners.	Accepted
Financial resilience significantly mediates the relationship between financial stress and financial well-being.	Accepted
PPC significantly mediates the indirect relationship between FS and FWB.	Accepted
Financial stress, financial resilience, positive psychological capital, and financial well-being do not significantly differ based on the personal characteristics of MSB owners.	Significant differences exist between gender and FS, annual income and FR, annual income and PPC, annual income and FWB, nature of business and FS, and nature of business and FR. All other differences are insignificant.
Demographic characteristics significantly affect financial stress, financial resilience, positive psychological capital, financial well-being, and their sub-dimensions.	Annual income significantly influences FR, PPC, and FWB. However, all other personal characteristics insignificantly influence FS, FR, PPC, and FWB.

model, as zero is not between the bootstrap lower-level confidence interval score and the bootstrap upper-level confidence interval score. Table 12 further shows the hypotheses testing result.

## 4. DISCUSSION

This study analyzed the impact of the financial stress of micro and small business owners on their

financial well-being. It has investigated the mediation effect of FR on the prime relation in the research model. Further, the paper measured and analyzed the mediated moderation and moderated mediation roles of PPC and financial resilience in the prime relationship. The results of variance analysis concerning financial stress, financial resilience, positive psychological capital, and financial well-being reveal significant differences between gender and financial stress, annual income and financial resilience, annual income and positive psychological capital, annual income and financial well-being, nature of the business and FS, and nature of the business and FR.

Financial stress differs based on gender. Mean scores indicate that female micro and small business owners have more financial stress (2.504) than their male counterparts (2.265). This result confirms the findings of Gonzalez and Vives (2019) and Tran et al. (2018). Financial resilience, positive psychological capital, and financial well-being differ based on the annual income of the sample. Mean scores convey that the higher the annual income, the higher the financial resilience, positive psychological capital, and financial well-being. Business owners who earn more than Rs 5,00,000 in a year have higher financial resilience (2.985), positive psychological capital (2.951), and financial well-being (2.932) than those who earn less than Rs 5,00,000 in a year. The respondents involved in the service business have more financial stress (2.525) than traders and manufacturers. At the same time, traders show more financial resilience (2.711) than owners who possess service (2.411) and manufacturing businesses (2.211).

The study also intended to determine the variance in the dimensions of each construct based on the demographic characteristics using MANOVA. As the data are not normally distributed, MANOVA could not be used. Instead, simple regression analysis was used to determine the impact of the demographic characteristics on the constructs and their dimensions. The regression results convey that the respondents' financial stress, financial resilience, positive psychological capital, and financial well-being are not impacted by gender, age, education,

and marital status. However, annual income significantly and positively affects the financial resilience, positive psychological capital, and financial well-being of the sample. On the other hand, annual income did not significantly explain financial stress. Therefore, financial stress is there even for those owners who earn higher annual income. The higher the annual income, the higher the positive impact on financial resilience, positive psychological capital, and financial well-being. Thus, financial resilience, positive character building, and financial well-being can be promoted by increasing the annual income.

The annual income of micro and small businesses is a prominent factor that positively impacts economic resources, financial resources, financial knowledge and behavior, and social capital dimensions of financial resilience. However, annual income does not help in developing the psychological and financial resilience dimension. Further, annual income is not a predictor of self-efficacy. On the other hand, annual income predicts hope, optimism, and resilience dimensions of positive psychological capital. In addition, annual income explains variances in all dimensions of financial well-being. Thus, simple regression results convey a message that annual income is a critical factor that enhances the financial resilience, hope, optimism, resilience, and financial well-being of micro and small business owners. The mediation analysis shows that financial resilience has a partial mediation effect on financial stress and financial well-being. Interestingly, financial stress significantly and positively affects the financial well-being of the respondents. Generally, financial stress weakens financial well-being and negatively affects well-being (Berrill et al., 2021).

In this study, financial stress did not affect financial well-being negatively. It may be because financial stress may have brought a conservative approach in the sample's minds to cut unnecessary expenses, not commit new financial obligations, and not dilute the savings and funds available to them during the hard times. This conservative approach has contributed to maintaining the financial well-being of businesses. Here, the financial stress of the sample is moderate and

not severe, as the mean score is 2.354. Further, when business owners exhibit financial resilience, it improves financial well-being. Financial resilience enhances financial well-being significantly by mediating financial resilience in financial stress and financial well-being relationships. Thus, financial resilience contributes positively to financial well-being. This result confirms the findings of Donaldson et al. (2021).

PPC has been considered a moderator in the mediated effect of financial resilience. The results of the mediated moderation reveal that psychological capital components self-efficacy, hope, optimism, and resilience significantly moderate

the mediation. Therefore, the indirect effect between financial stress and financial well-being through financial resilience differs in levels of PPC. The lesser the moderation of psychological capital, the lesser the effect on indirect relationships and vice versa. Thus, positive characteristics such as self-efficacy, hope, optimism, and resilience strengthen financial resilience and financial well-being. Furthermore, the nexus between FS and FWB can be either direct or indirect. The mediated moderation results emphasize that positive characters are required to tackle hard times and financial stress and improve businesses' financial resilience and financial well-being.

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## CONCLUSION

This study analyzed the mediating role of FR in FS and FWB relationship of micro and small business owners. Differential analysis results show significant differences between gender and FS, annual income and FR, annual income and PPC, annual income and FWB, nature of the business and FS, and nature of the business and FR. The study has found that annual income significantly affects FR, PPC, and FWB. All other personal characteristics insignificantly influence FS, FR, PPC, and FWB. The study results have revealed that FS significantly affects FWB. FR significantly and partially mediates FS and FWB relationships. Further, it is found that PPC significantly mediates the indirect relationship between FS and FWB. PPC components of self-efficacy, hope, optimism, and resilience significantly moderate the mediation effect of financial resilience.

Therefore, it is concluded that the mediation effect of FR on FS and FWB significantly depends on the level of PPC. The regulatory agencies and associations of micro and small businesses may consider the results of this study. These findings can enhance positive attitudes and positive psychology in the minds of micro and small business owners by conducting necessary training and development programs to increase their financial resilience. Similar studies may be conducted among medium and large-scale businesses in various parts of India.

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