# **Building Financial Resilience in Emerging Adults: The Role of Financial Capability and Financial Self-Efficacy**

Hitesh Kumar<sup>1\*</sup>, Supreet Sandhu<sup>2</sup>

<sup>1\*</sup>Research Scholar, University Business School, Guru Nanak Dev University, Amritsar, Punjab. E-mail: hiteshubs.rsh@gndu.ac.in
<sup>2</sup>Assistant Professor, University Business School, Guru Nanak Dev University, Amritsar, Punjab. E-mail: supreet05@yahoo.co.in

#### **Abstract**

To examine the role of financial capabilities in building financial resilience and how perceived financial self-efficacy affect this relationship, we conducted a cross-sectional study with 201 emerging adults aged between 18-34 years (n=187, 93%) in India who were experienced users of digital financial services. We used PROCESS macro to test the hypotheses. Results revealed full mediation of financial self-efficacy in the relationship between financial capability and financial resilience, highlighting the importance of emerging adults' perceived confidence on their ability to undertake financial decisions and take control of their finances. While previous research on financial resilience was mostly associated with financial knowledge, which is a subset of financial capability. This study examined financial capability (a measure which includes financial knowledge and financial inclusion as its determinants) among emerging adults. Additionally, we employed multiple resilience-building behaviors to measure financial resilience including savings, money management, and risk management strategies.

Keywords: financial capability, financial inclusion, financial literacy, financial resilience, financial self-efficacy

## 1. Introduction

Building resilience in the face of adverse financial events is an emerging area of research which has re-gained prominence in the recent years. *Financial resilience* has emerged as a critical aspect of an individual's financial well-being (Demirgüç-Kunt et al., 2022; Kulshreshtha et al., 2023). At the core of financial resilience lies the ability to withstand immediate financial shocks and to thrive in the face of ongoing financial downturns (Tahir et al., 2022). Salignac et al. (2019) defined financial resilience as "an individual's ability to access and draw on internal capabilities and appropriate, acceptable and accessible external resources and supports in times of financial adversity". A financially resilient individual is more likely to save up for emergencies (Despard et al., 2020), feel confident about its financial matters (Lone & Bhat, 2024), perform healthy money management practices (Sundarasen et al., 2016), and adopt risk mitigation strategies (Kass-Hanna et al., 2022). The lack of resilience does not just affect the individuals by increasing the probability of financial vulnerability, but it also has a bearing on the economy at large (Fernández-López et al., 2023; Hamid et al., 2023). As pioneered by Greene et al. (2004), individual's attitude can play an important role in becoming resilient and they become more resilient as they develop financial knowledge and gain access to financial resources. Building financial resilience also requires individuals to perform such financial behaviors and practices that lead to financial security, and eventually, financial resilience (Salignac et al., 2019).

Financial capability is assumed to be an important factor in building behaviors that make up financial resilience (Friedline & West, 2016; Pandey & Utkarsh, 2023). Financial capability has been defined by researchers in different ways (Atkinson et al., 2007; Johnson & Sherraden, 2007; Xiao et al., 2022). In this study, to emphasize the importance of both financial knowledge and financial inclusion, financial capability is defined as one's ability to act and opportunity to act in their financial self-interest (Johnson & Sherraden, 2007). The ability to act includes the innate characteristics such as level of financial knowledge, whereas opportunity to act is represented through financial resources such as owning a savings account, having access to financial services and credit (Johson & Sherraden, 2007; Sherraden, 2013). Prior research has found associations between the components of financial capability separately; mostly focused on financial knowledge and financial behaviors (Das & Maji, 2023; Robb & Woodyard, 2011). However, financial capability is a wider concept, as such, we consider both financial knowledge and financial inclusion to provide a broader context.

While majority of the studies highlight the importance of building financial capability for resilient behaviors, there are other factors as well which can influence financial resilience. Existing literature also finds the importance of psychological factors in shaping individuals' financial behaviors. One such crucial psychological element is perceived *financial self-efficacy* – one's ability to feel confident about the financial decisions he/she makes derived from a sense of control over one's financial affairs (Bandura, 1977). Financial literacy has a positive impact on financial self-efficacy (Herawati et al.,2020), and financial knowledge and financial confidence are the major antecedents of desirable financial behaviors (Das & Maji, 2023). Thus, financial self-efficacy can act as a link between knowledge and action (Bandura, 1982; Lone & Bhat, 2024).

The lack of financial exposure at a young age significantly influences financial choices in later life, which can hinder the propagation of financial decision-making skills (Mitra & Arnett, 2021; Ullah and Yusheng, 2020). *Emerging adulthood* is a unique phase of life in which an individual is most likely to gain financial and emotional independence, therefore, it becomes essential to resolve the challenges that inhibit emerging adults' financial well-being (Arnett, 2004; Mitra & Arnett, 2021; Lanz et al., 2020). Financial resilience is a crucial component of financial well-being (Demirgüç-Kunt et al., 2022). Understanding the mechanisms that promote financial resilience during emerging adulthood period is also important for policymakers and practitioners to frame their policies more prudently.

While prior studies on the topic have considered adults from different nations such as Finland (Ranta et al., 2020), Italy (Lanz et al., 2020), and Lithuania (Vosylis & Klimstra, 2022), research focusing on financial behavior of emerging adults in India, providing an emerging country's perspective still remains scant and underexplored. Thus, the present study attempts to examine the association between financial capability and financially resilient behaviors of emerging adults in India. Despite the growing recognition of the intertwined nature of financial capability and resilience in the existing literature (Anvari-Clark & Ansong, 2022; Potocki & Cierpiał-Wolan, 2019), there still exists a noticeable research gap in understanding how psychological factors, particularly perceived financial self-efficacy, mediate this relationship. Therefore, this study contributes to the existing literature by examining the indirect effect of financial capability on financial resilience through financial self-efficacy as a mediator, and in doing so, we aim to provide a more comprehensive framework to enhance financial resilience.

#### 2. Literature Review

# Financial capability and financial resilience

Financial capability comprises two components - financial knowledge and financial inclusion (Johnson & Sherraden, 2007; Sherraden, 2013). Financial knowledge plays a significant role in money management and personal financial management behavior of young adults (Sundarasen et al., 2016). Robb and Woodyard (2011) indicate that financial knowledge positively influence best practices behavior - setting aside emergency funds and risk management. As per West and Friedline (2016), financial knowledge and financial inclusion both significantly contribute to the likelihood of having emergency savings. Financial inclusion is another yet an integral component of financial capability (Nam et al., 2022). Singh and Kumar (2018) studied financial inclusion using dimensions such as banking penetration, availability of banking services, and usage of banking system. Prior research shows that individuals having access to financial services are more resilient than those who have low financial knowledge or are financially excluded (Hussain et al., 2019; Potocki & Cierpiał-Wolan, 2019). Financial literacy and financial inclusivity are key factors in resilience-building financial behaviors in South Asia and Sub-Saharan Africa (Kass-Hanna et al., 2022). Greater financial knowledge and financial inclusion in terms of owning a bank account and holding financial products is associated with greater financial resilience (Hamid et al., 2023). Emerging adults who display lower levels of financial capability are more likely to have lower life satisfaction and higher depressive symptoms, leading to a lower overall well-being (Ranta et al., 2020). On the other end, individuals with high financial capability can afford unexpected expenses, save for emergencies, and are less likely to carry burdensome debt, thereby leading to positive impact on well-being (Despard et al., 2020; Friedline & West, 2016). Thus, this study hypothesizes that:

H1: There is a positive relationship between financial capability and financial resilience.

# The mediating role of perceived financial Self-efficacy

Some studies suggest that higher financial knowledge or capability may not necessarily lead to financially resilient behaviors or outcomes (Rothwell et al., 2016; Pandey & Utkarsh, 2023). As such, there are some intervening factors such as one's attitude towards money, financial confidence, and financial self-efficacy through which financial capability may exert a more pronounced effect on financial resilience (Lone & Bhat, 2024). Individuals who are more confident in their ability to control financial matters are more likely to engage in desirable financial behaviors, and have higher level of financial satisfaction than their counterparts (Pearson & Korankye, 2023; Robb & Woodyard, 2011). Higher financial knowledge and skills in managing financial matters builds financial confidence and leads to positive financial behavior (Herawati et al., 2020). Also, individuals exhibiting high financial knowledge and financial self-efficacy are more likely to save for unexpected expenses (Ameer & Khan, 2020). Reyers (2019) found that financial self-efficacy is more important than objectively assessed financial ability, in the context of individuals making responsible financial choices. Financial literacy and financial self-efficacy were found to have significant roles in accelerating the savings behavior of the Indian farmers (Das & Maji, 2023).

According to the resilience theory (Greene et al., 2004), peoples' personal attitude is important to becoming resilient and they can become more resilient as they develop and have access to resources. Therefore, it is reasonable to assert that possessing objective knowledge of finances and having access to the financial services develops a sense of control over financial matters and boosts financial confidence, developing a positive financial attitude which in turn impacts financial outcomes. Based on the literature reviewed above, this study proposes the following hypotheses:

H2: There is a positive relationship between financial capability and perceived financial self-efficacy.

H3: There is a positive relationship between perceived financial self-efficacy and financial resilience.

H4: Perceived financial self-efficacy mediates the relationship between financial capability and financial resilience. Figure 1 shows the proposed mediation model and hypothesized relationships. This model explains the relationship between financial capability and financial resilience. The model proposes that perceived financial self-efficacy (M) functions as a mediator in the relationship between financial capability (X) and financial resilience (Y). In model estimation, we control for demographic variables including income, number of dependents, and number of earning members in the family.

[Insert Figure 1 here]

# 3. Methodology

# Participants and Procedure

We conducted a cross-sectional survey using non-probability judgment sampling method (Hew et al., 2018). The population of the study comprises emerging adults who are experienced users of digital financial services, residing in Punjab, a state in India, aged 15 years or older. Data were collected through an online survey via social media platforms (WhatsApp and Facebook), email, and personal contacts. We made participation in the survey voluntary and anonymous. From the initial 286 responses obtained, after omitting incomplete and unengaged responses, 201 responses were used in the analysis. The sample size exceeds the suggested minimum sample size (55) computed using G\* Power with an effect size of 0.15, and an alpha level of 0.05 to achieve a statistical power of 80 per-cent (Kumar et al., 2022). It is advisable to have a sample three times this number, thus, satisfying the minimum sample size's requirements (Hair et al., 2013). The structured questionnaire consisted of four sections: 1) Questions on demographic profile of respondents, and 2) The second to fourth sections measured financial capability, financial self-efficacy and financial resilience. The details of construct/items, their source, and measurement scales are available in Annexure-I.

#### Measures

#### Financial Capability

Our conceptualization of financial capability is based on the work of Johnson and Sherraden (2007) and Sherraden (2013). As such, we included two dimensions, financial literacy and financial inclusion to measure financial capability. Financial literacy was measured using 5 quiz questions from Pahlevan Sharif et al. (2020). These five questions were about simple interest, inflation, time value of money, risk & return, and diversification (Xiao & Porto, 2017). All five questions were recoded into binary variables in which 1=correct answer, 0=otherwise, and then the new variables were summed to form the financial literacy score ranged from 0 to 5. Financial inclusion was assessed through three variables viz. financial access, awareness, and usage (Nam et al., 2022). These variables were also considered significant predictors of financially inclusion as per National Centre for Financial Education (NCFE) financial literacy and inclusion survey report (NCFE, 2019). Financial access was estimated by summing up 3 binary variables like having a bank account, access to digital financial services, and having access to credit. Awareness included items such as "I know the digital payments methods like Paytm/Google pay/Online Banking/Debit Credit Card etc." and "I know the application of these apps such as checking bank balance/investing/financing/money transfer/settlement of transactions". Usage included statements focusing on operating various financial products such as "I frequently use debit card/credit card, as it is a better option against cash" and "I frequently use digital banking, as it is a better option against cash". Awareness ( $\alpha$ =0.85) and usage ( $\alpha$ =0.90) were both measured on a 5-point scale. We use sum of Z-score of objective financial knowledge and financial inclusion to compute a standardized value of financial capability.

## Perceived Financial Self-efficacy

Financial self-efficacy ( $\alpha$ =0.82) is a unidimensional construct and the 5 items measuring it have been derived from Lone and Bhat (2024) and Rothwell et al. (2016) using 5-point scale ranging from 1 (strongly disagree) to 5 (Strongly agree). Financial self-efficacy scale reflects one's perceived financial knowledge, financial confidence and a sense of control over finances while dealing with day-to-day financial matters with items such as: "I feel confident about the financial decisions I make", "I feel comfortable dealing with banks and other financial institutions", and "I feel that I can control my financial resources".

### Financial Resilience

The conceptualization of financial resilience is based on the model framework given by Salignac et al. (2019) and items that measure financially resilient behaviors were derived from Salignac's conceptual framework and Kass-Hanna et al. (2022). We defined these resilient behaviors as emerging adults' savings behavior, money management practices, and risk management strategies. In terms of savings behavior, we focus on whether the respondent have "sufficient savings to meet living expenses" and "are they good at planning financial affairs so as to contribute to future savings". The variables related to money management included items such as "I am very organized when it comes to managing my money daily" and "I do a good job of balancing my spending and savings". Similarly, risk management strategies considered if the respondent keeps funds saved up for emergency/ unexpected expenses, can they easily arrange funds worth ₹15000\* in case of any emergency, within one week, and do they make sure they understand the commitments while entering into

any financial contracts. These items were rated on a scale from 1 (strongly disagree) to 5 (strongly agree). The Cronbach's alpha ( $\alpha$ ) for savings behavior, money management, and risk management was found to be 0.60, 0.79, and 0.58, respectively (Nunnally, 1994). The sum variable was constructed for financial resilience ( $\alpha$ = 0.85).

#### Data Analysis

The present study uses Hayes's (2018) PROCESS macro to examine the proposed mediation model. PROCESS is freely available and it can be added as an extension in the SPSS Version 24 or above. The model specifies financial capability as the independent variable, financial resilience as the dependent variable, financial self-efficacy as the mediator, and income, number of dependents, and number of earning members as the control variables in Model-4 of PROCESS macro (Hayes, 2018). The bootstrap procedure with 5,000 sample replications at a 95% confidence level produces robust standard errors for the parameter estimates. The PROCESS macro is convenient to overcome constraints associated with sample size and degrees of freedom (Hair et al., 2010). PROCESS utilizes Ordinary Least Square (OLS) regression-based algorithm to independently estimate the parameters for each equation (Hayes et al., 2017). Moreover, while inferential tests for path coefficients in a Structural Equation Modelling (SEM) program may exhibit slight errors in case of smaller samples, the *t*-distribution through OLS-regression procedure is more suitable for obtaining p-values for regression coefficients (Hayes, 2018). The proposed mediation model is estimated with the following equations:

$$M = i_M + \alpha_l X + \alpha_M C + \varepsilon_M \tag{1}$$

Y is the dependent variable (financial resilience), which is specified by:

$$Y = i_Y + \dot{c}X + \beta M + \alpha_Y C + \varepsilon_Y \tag{2}$$

Where, X is the independent variable (financial capability); M is the mediator (financial self-efficacy); C represents all the control variables;  $i_M$  and  $i_Y$  denotes regression constants of M and Y, respectively;  $\alpha$ ,  $\beta$ , and  $\dot{c}$  represents the regression coefficients and;  $\varepsilon_M$  and  $\varepsilon_Y$  are the errors in the estimation of M and Y, respectively.

# 4. Results and Discussion

# 4.1. Respondent profile and descriptives

Table 1 provides the socio-demographic characteristics of respondents. The majority of the respondents were male (n=113, 56.2%), less than 35 years of age (n=187, 93.03%), and having at least three years of experience in the use of digital financial services (n=145, 72.13%). The most distinctive attribute of the sample is that they are highly educated, with at least a Master's degree (n=134, 66.67%). In almost half of the cases, there were at least three dependent members in the respondent's family (n=107, 53.2%), however, there were only one-third cases where number of earning members were three or more (n=66, 32.8%). The largest income group was earning INR192000 or less per year (n=84, 41.8%), while nearly two-third of the respondents were earning up to INR384000 annually (n=137, 68.15%). According the Reserve Bank of India (2023), annual per capita net domestic product in Punjab was INR181716 for 2022-23. [Insert Table 1 here]

The preliminary data analysis reveals that outcome variables (i.e., financial self-efficacy and financial resilience) differ significantly in terms of some demographic factors. Financial self-efficacy differs significantly in terms of number of dependents (f=5.076, p<0.05) and income (f=6.222, p<0.05). Financial resilience showed significant differences in terms of number of earning members (f=7.628, p<0.05), dependent members in the family (f=11.479, p<0.05), and level of income (f=5.268, p<0.05). Nevertheless, to address the issue of potential biases, we controlled for demographic factors including number of dependents, number of earning members, and the level of income in the statistical test of hypotheses.

# 4.2. Hypotheses Testing

Table 2 exhibits the PROCESS output showing results of the mediation model, and a summary of the indirect, direct, and total effects in presented in Table 3. As depicted in the Table 2,  $\alpha = 0.244$ ,  $\beta = 0.760$ , and  $\dot{c} = 0.048$ . In the form of OLS-regression models,

$$\dot{M} = -0.135 + 0.244X$$
  
 $\dot{Y} = -0.142 + 0.048X + 0.760M$ 

Table 3 depicts the direct effect of financial capability ( $\dot{c}=0.048$ ), which is the estimated difference in financial resilience of two respondents having the same level of financial self-efficacy but who differ by one unit in their reported level of financial capability. The coefficient is positive, implying that the respondent having a higher level of financial capability but same financial self-efficacy is estimated to have 0.048 units greater financial resilience. However, as can be seen in Table 3, this direct effect is statistically insignificant (t=1.769, p=0.078), with a 95% confidence interval ranging from -0.0056 to 0.1031. Thus, HI is not supported. It suggests that building financial capability alone does not lead to financial resilience. A possible explanation for the failure to support HI lies the attitudinal factors that influence financial behavior. These results are consistent with prior research on this relationship (Robb & Woodyard, 2011; Rothwell et al., 2016), although there is contrary evidence as well (Friedline & West, 2016). Rothwell et al. (2016) asserted that an understanding

of variation in saving behavior requires a significant consideration to individuals' attitudes and perceptions towards finances. Robb and Woodyard (2011) also suggested that subjective financial knowledge, measured as the self-assessed level of financial confidence had a more pronounced impact on the financial behavior than actual financial knowledge. To put it another way, financial knowledge and gaining access to financial services are not sufficient conditions to achieve financial resilience.

[Insert Table 2 here]

[Insert Table 3 here]

Results show that financial capability is positively associated to financial self-efficacy, and effect is statistically different from zero (t = 6.024, p < 0.001), implying that H2 is supported. It implies that objective financial knowledge with access to formal financial services can develop a sense of control over one's financial affairs whereby a person feels secure while dealing with day-to-day financial matters. These findings are in line with the previous research which showed that financial skills lead to higher financial confidence (Ameer & Khan, 2020). Further, we find a positive and statistically significant association between financial self-efficacy and financial resilience (t = 17.044, p < 0.001), indicating that H3 is supported. These findings are consistent with prior research indicating a strong positive effect of perceived financial knowledge on financial behavior (Allgood & Walstad, 2016; Pandey & Utkarsh, 2023). A recent study by Despard et al. (2020) also demonstrates that possessing financial knowledge, financial confidence, and being financially included are consistent and significant indicators of having an emergency fund, which is a component of financial resilience. Therefore, it can be asserted that financial capability and financial self-efficacy together can provide better grounds for resilient financial behaviors than financial capability alone.

Table 3 also shows the indirect effect, the effect of financial capability on financial resilience through the mediator financial self-efficacy. Multiplying  $\alpha$  and  $\beta$  yields the indirect effect,  $\alpha\beta = 0.244(0.760) = 0.186$ . So, two respondents who differ by one unit in their level of financial capability are estimated to differ by 0.186 in their reported level of financial resilience as a result of the tendency for those having relatively higher financial capability are more likely to have higher financial self-efficacy (because  $\alpha$  is positive), which in turn translates into greater financial resilience (because  $\beta$  is positive). Also, the 95% percentile bootstrap confidence interval shows the statistical significance of the indirect effect, as there is no zero in between the upper limit and lower limit (BootLLCI = 0.1177, BootULCI = 0.2593; See Table 3). Thus, H4, indicating mediation effect of financial self-efficacy in the relationship between financial capability and resilience is supported. Financial capability builds the perceived ability to confidently navigate the financial domain, which in turn is associated to prudent and financially resilient behaviors (Lone & Bhat, 2024). One probable explanation for the above findings can be that individuals typically tend to overestimate their level of financial knowledge compared to what they actually possess. Nevertheless, having the ability to feel confident and secure while dealing in financial matters significantly influence financial choices in life, even when such decisions lack a solid foundation in actual financial knowledge. Pearson and Korankye (2023) observed that individuals exhibiting overconfidence in their selfreported financial knowledge performed lower on an objective evaluation of their financial knowledge and yet these individuals had a greater sense of financial satisfaction than their counterparts. Therefore, we suggest that efforts to promote resilient financial behavior need to focus on more than just the financial capability by considering psychological characteristics such as the financial self-efficacy.

This study also substantiates Bandura's (1982) claim that self-efficacy mediates the relationship between knowledge and action. In line with Bandura's (1977) theory of self-efficacy, this study demonstrates that financial capability indirectly influences financial resilience through financial self-efficacy which indicates that by building financial capability, emerging adults are more likely to develop a feeling of confidence and security about their financial choices, which in turn lead them to adopt healthy saving behavior, perform healthy money management practices, and undertake risk management strategies such as keeping emergency funds and understanding all terms and conditions before entering into any financial contract. In essence, the significance of financial capability in shaping financial resilience through financial self-efficacy is the major contribution of the study.

Table 3 also reports the total effect of financial capability on financial resilience, which is derived by summing the direct and indirect effects, or alternatively, by regressing financial resilience on financial capability by itself:  $c = c + \alpha_I^* \beta = 0.048 + 0.186 = 0.234$ . Two respondents who differ by one unit of financial capability are estimated to differ by 0.234 units in their reported level of financial resilience. The positive sign implies the individual with greater financial capability exhibits more financially resilient behaviors. This effect is statistically significant, (t = 5.884, p < 0.001), with confidence intervals ranging from 0.1558 to 0.3129.

For control variables, we find that number of dependents in respondent's family (t = -2.582, p < 0.05) and earning members in the respondent's family (t = 2.735, p < 0.01) have a significantly negative and positive impact on the financial resilience of the respondent, respectively.

# 5. Conclusion and Limitations

With the aim to delve into the nuanced ways in which individuals' level of financial capability and perceptions of their subjective financial knowledge could influence their financial resilience, we conducted a cross-sectional survey of 201 emerging adults in Punjab and found that financial capability is indirectly associated with financial resilience through

perceived financial self-efficacy. The contribution of the study lies in highlighting the importance of emerging adults' perception of their ability to control financial matters in shaping financially resilient behaviors. Therefore, we suggest that efforts to promote resilient financial behavior need to focus on more than just the financial capability by considering psychological characteristics such as the financial self-efficacy. Building financial capability is not enough, emerging adults need financial self-efficacy to demonstrate desirable saving behavior, perform healthy money management practices, and undertake risk management strategies such as setting aside emergency funds to meet an unexpected expense. In essence, capability may develop potential to act but having a sense of control over financial affairs can leads to financial resilience, which is a critical component of well-being.

This study has certain shortcomings. First, due to cross-sectional nature of the study, any claim for causality could not be made. Further, there are many factors besides financial self-efficacy, such as attitude towards money, financial locus of control, risk tolerance etc. which were not covered in the present study. Also, financial socialization builds a foundation of financial capability, but the present study did not consider financial socialization perspective. Future research would benefit from re-examining this study's findings using a comprehensive set of these factors.

#### 6. References

- 1. Allgood, S., & Walstad, W. B. (2016). The Effects of Perceived and Actual Financial Literacy on Financial Behaviors. Economic Inquiry, 54(1), 675-697. https://doi.org/10.1111/ecin.12255
- 2. Ameer, R., & Khan, R. (2020). Financial Socialization, Financial Literacy, and Financial Behavior of Adults in New Zealand. Journal of Financial Counseling and Planning, 31(1), 1-17. http://dx.doi.org/10.1891/JFCP-18-00042
- 3. Anvari-Clark, J., & Ansong, D. (2022). Predicting Financial Well-Being Using the Financial Capability Perspective: The Roles of Financial Shocks, Income Volatility, Financial Products, and Savings Behaviors. Journal of Family and Economic Issues, 43(4), 730-743. https://doi.org/10.1007/s10834-022-09849-w
- 4. Arnett, J. J. (2004). Emerging adulthood: The winding road from the late teens through the twenties. Oxford University Press.
- 5. Atkinson, A., McKay, S., Collard, S. B., & Kempson, E. (2007). Levels of financial capability in the UK. Public Money & Management, 27(1), 29–36. https://doi.org/10.1111/j.1467-9302.2007.00552.x
- 6. Bandura, A. (1977). Self-efficacy: Toward a Unifying Theory of Behavioral Change. Psychological Review, 84(2), 191-215.
- 7. Bandura, A. (1982). Self-efficacy Mechanism in Human Agency. American Psychologist, 37(2), 122–147. https://doi.org/10.1037/0003-066x.37.2.122
- 8. Das, S., & Maji, S. K. (2023). Impact of financial literacy and financial confidence on the savings behaviour of the farmers: the Indian scene. Agricultural Finance Review, 83(4/5), 845-861. https://doi.org/10.1108/afr-05-2023-0056
- 9. Demirgüç-Kunt, A., Klapper, L., Singer, D., & Ansar, S. (2022). The Global Findex Database 2021: Financial Inclusion, Digital Payments, and Resilience in the Age of COVID-19. World Bank Group. https://doi.org/10.1596/978-1-4648-1897-4
- Despard, M. R., Friedline, T., & West, S. (2020). Why Do Households Lack Emergency Savings? The Role of Financial Capability. Journal of Family and Economic Issues, 41, 542-557. https://doi.org/10.1007/s10834-020-09679-8
- 11. Fernández-López, S., Álvarez-Espiño, M., Castro-González, S., & Rey-Ares, L. (2023). Financial capability and households' financial vulnerability: evidence for the Spanish case. Managerial Finance, 49(4), 679-702. https://doi.org/10.1108/mf-02-2022-0086
- 12. Friedline, T., & West, S. (2016). Financial Education is not Enough: Millennials May Need Financial Capability to Demonstrate Healthier Financial Behaviors. Journal of Family and Economic Issues, 37, 649-671. https://doi.org/10.1007/s10834-015-9475-y
- 13. Greene, R. R., Galambos, C., & Lee, Y. (2004). Resilience Theory: Theoretical and Professional Conceptualizations. Journal of Human Behavior in the Social Environment, 8(4), 75-91. https://doi.org/10.1300/J137v08n04 05
- 14. Hair, J. F., Ringle, C. M., & Sarstedt, M. (2013). Partial least squares structural equation modeling: rigorous applications, better results and higher acceptance. Long Range Planning, 46(1–2), 1–12. https://doi.org/10.1016/j.lrp.2013.01.001
- 15. Hamid, F. S., Loke, Y. J., & Chin, P. N. (2023). Determinants of financial resilience: insights from an emerging economy. Journal of Social and Economic Development, 25, 479–499. https://doi.org/10.1007/s40847-023-00239-y
- 16. Hayes, A. F. (2018). Introduction to mediation, moderation, and conditional process analysis: A regression-based approach (2<sup>nd</sup> Edition). Guilford Press. https://www.guilford.com/books/Introduction-to-Mediation-Moderation-and-Conditional-Process-Analysis/Andrew-Hayes/9781462549030
- 17. Hayes, A. F., Montoya, A. K., & Rockwood, N. (2017). The Analysis of Mechanisms and Their Contingencies: PROCESS versus Structural Equation Modeling. Australasian Marketing Journal, 25(1), 76–81. https://doi.org/10.1016/j.ausmj.2017.02.001

- 18. Herawati, N. T., Candiasa, I. M., Yadnyana, I. K., & Suharsono, N. (2020). Factors that influence financial self-efficacy among accounting students in Bali. Journal of International Education in Business, 13(1), 21-36. https://doi.org/10.1108/jieb-02-2019-0010
- 19. Hew, J., Leong, L., Tan, G. W., Lee, V., & Ooi, K. (2018). Mobile social tourism shopping: A dual-stage analysis of a multi-mediation model. Tourism Management, 66, 121–139. https://doi.org/10.1016/j.tourman.2017.10.005
- Hussain, A. B., Endut, N., Das, S., Chowdhury, M. T. A., Haque, N., Sultana, S., & Ahmed, K. J. (2019). Does financial inclusion increase financial resilience? Evidence from Bangladesh. Development in Practice, 29(6), 798-807. https://doi.org/10.1080/09614524.2019.1607256
- 21. Johnson, E., & Sherraden, M. S. (2007). From financial literacy to financial capability among youth. Journal of Sociology and Social Welfare, 34(3), 119-145. https://doi.org/10.15453/0191-5096.3276
- 22. Kass-Hanna, J., Lyons, A. C., & Liu, F. (2022). Building financial resilience through financial and digital literacy in South Asia and Sub-Saharan Africa. Emerging Markets Review, 51, 1-28. https://doi.org/10.1016/j.ememar.2021.100846
- 23. Kulshreshtha, A., Raju, S., Muktineni, S. M., & Chatterjee, D. (2023). Income shock and financial well-being in the COVID-19 pandemic: financial resilience and psychological resilience as mediators. International Journal of Bank Marketing, 41(5), 1037-1058. https://doi.org/10.1108/ijbm-08-2022-0342
- 24. Kumar, P., Pillai, R., Kumar, N., & Tabash, M. (2022). The interplay of skills, digital financial literacy, capability, and autonomy in financial decision making and well-being, Borsa Istanbul Review, 23(1), 169-183. https://doi.org/10.1016/j.bir.2022.09.012
- 25. Lanz, M., Sorgente, A., & Danes, S. M. (2020). Implicit Family Financial Socialization and Emerging Adults' Financial Well-Being: A Multi-Informant Approach. Emerging Adulthood, 8(6), 443-452. https://doi.org/10.1177/2167696819876752
- 26. Lone, U. M., & Bhat, S. A. (2024). Impact of financial literacy on financial well-being: a mediational role of financial self-efficacy. Journal of Financial Services Marketing, 29, 122-137. https://doi.org/10.1057/s41264-022-00183-8
- 27. Mitra, D., & Arnett, J. J. (2021). Life Choices of Emerging Adults in India. Emerging Adulthood, 9(3), 229-239. https://doi.org/10.1177/2167696819851891
- 28. Nam, Y., Sherraden, M. S., Lee, E. J., & Huang, J. (2022). Building financial capability among low-income older Asian immigrants: The roles of financial access and locus of control. The Journal of Consumer Affairs, 56, 1683-1704. https://doi.org/10.1111/joca.12486
- 29. National Centre for Financial Education. (2019). Financial Literacy and Inclusion in India (NCFE-FLIS 2019). https://old.ncfe.org.in/reports/nflis
- 30. Nunnally, J. C. (1994). Psychometric theory 3E. Tata McGraw-Hill education.
- 31. Pandey, A., &, & Utkarsh. (2023). Determinants of positive financial behavior: a parallel mediation model. International Journal of Emerging Markets. https://doi.org/10.1108/ijoem-01-2022-0124
- 32. Pearson, B., & Korankye, T. (2022). The association between financial literacy confidence and financial satisfaction. Review of Behavioral Finance, 15(6), 935-946. https://doi.org/10.1108/rbf-03-2022-0090
- 33. Potocki, T., & Cierpiał-Wolan, M. (2019). Factors shaping the financial capability of low-income consumers from rural regions of Poland. International Journal of Consumer Studies, 43, 187-198. https://doi.org/10.1111/ijcs.12498
- 34. Ranta, M., Punamäki, R. L., Chow, A., & Salmela-Aro, K. (2020). The Economic Stress Model in Emerging Adulthood: The Role of Social Relationships and Financial Capability. Emerging Adulthood, 8(6), 496-508. https://doi.org/10.1177/2167696819893574
- 35. Reserve Bank of India (2023). Handbook of Statistics on the Indian Economy 2022-23 (25th Edition). https://www.rbi.org.in/
- 36. Reyers, M. (2019). Financial capability and emergency savings among South Africans living above and below the poverty line. International Journal of Consumer Studies, 43, 335-347. https://doi.org/10.1111/ijcs.12520
- 37. Robb, C. A., & Woodyard, A. S. (2011). Financial Knowledge and Best Practice Behavior. Journal of Financial Counseling and Planning, 22(1), 60-70.
- 38. Rothwell, D. W., Khan, M. N., & Cherney, K. (2016). Building Financial Knowledge Is Not Enough: Financial Self-Efficacy as a Mediator in the Financial Capability of Low-Income Families. Journal of Community Practice, 24(4), 368-388. https://doi.org/10.1080/10705422.2016.1233162
- 39. Salignac, F., Marjolin, A., Reeve, R., & Muir, K. (2019). Conceptualizing and Measuring Financial Resilience: A Multidimensional Framework. Social Indicators Research, 145(1), 17-38. https://doi.org/10.1007/s11205-019-02100-4
- 40. Sherraden, M. S. (2013). Building Blocks of Financial Capability. In J. Birkenmaier, Curley, J., & Sherraden, M. S. (Eds.), Financial Capability and Asset Development: Research, Education, Policy, and Practice (pp. 3-43). Oxford Academic. https://doi.org/10.1093/acprof:oso/9780199755950.003.0012
- 41. Singh, C., & Kumar, R. (2018). Role of Banks in Promoting Financial Inclusion in India. AIMS Journal of Management, 3(2), 219-234.

- Sundarasen, S. D., Rahman, M. S., Othman, N. S., & Danaraj, J. (2016). Impact of Financial Literacy, Financial Socialization Agents, and Parental Norms on Money Management. Journal of Business Studies Quarterly, 8(1), 140-156.
- 43. Tahir, M. S., Shahid, A. U., & Richards, D. W. (2022). The role of impulsivity and financial satisfaction in a moderated mediation model of consumer financial resilience and life satisfaction. International Journal of Bank Marketing, 40(4), 773–790. https://doi.org/10.1108/ijbm-09-2021-0407
- 44. Ullah, S., & Yusheng, K. (2020). Financial Socialization, Childhood Experiences and Financial Well-Being: The Mediating Role of Locus of Control, Frontiers in Psychology, 11, 1-11. https://doi.org/10.3389/fpsyg.2020.02162
- 45. Vosylis, R., & Klimstra, T. (2022). How Does Financial Life Shape Emerging Adulthood? Short-Term Longitudinal Associations Between Perceived Features of Emerging Adulthood, Financial Behaviors, and Financial Well-Being. Emerging Adulthood, 10(1), 90-108. https://doi.org/10.1177/2167696820908970
- 46. West, S., & Friedline, T. (2016). Coming of Age on a Shoestring Budget: Financial Capability and Financial Behaviors of Lower-Income Millennials. Social Work, 61(4), 305-312. https://doi.org/10.1093/sw/sww057
- 47. Xiao, J. J., & Porto, N. (2017). Financial education and financial satisfaction. International Journal of Bank Marketing, 35(5), 805–817. https://doi.org/10.1108/ijbm-01-2016-0009
- 48. Xiao, J. J., Huang, J., Goyal, K., & Kumar, S. (2022). Financial capability: a systematic conceptual review, extension and synthesis. International Journal of Bank Marketing, 40(7), 1680–1717. https://doi.org/10.1108/ijbm-05-2022-0185

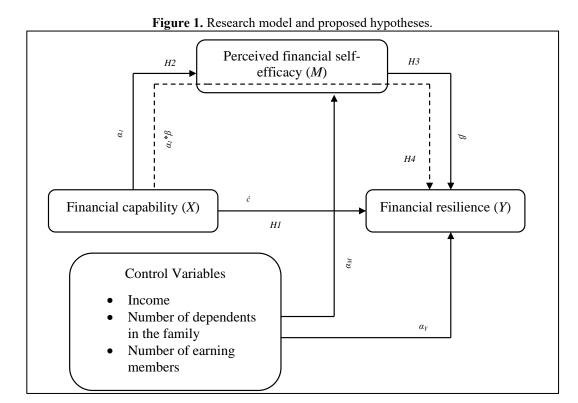


Table 1. Respondents' profile

Characteristics	Categories	n	%	Coding
Gender	Male	113	56.2	1
	Female	88	43.8	2
Age (in years)	15 or higher – less than 25	91	45.2	1
	25 or higher – less than 35	96	47.8	2
	35 or higher – less than 45	12	6.0	3
	45 or higher	2	1.0	4
Education	12 <sup>th</sup> class or below	10	5.0	1
	Graduation	57	28.3	2
	Post-Graduation or higher	134	66.7	3
Number of earning members in the family	One	58	28.9	1
	Two	77	38.3	2
	Three or more	66	32.8	3

Number of dependent members in the family	2 or less	94	46.8	1
	3-4	78	38.8	2
	5 or more	29	14.4	3
Type of employment	Salaried Employee	73	36.3	1
	Self-employed	21	10.4	2
	Others (Students, Doctoral fellows etc.)	107	53.3	3
Average monthly income of the respondent*	Less than 16000	84	41.8	1
(in Rupees)	16000 or higher – less than 32000	53	26.4	2
	32000 or higher – less than 48000	39	19.3	3
	48000 or higher	25	12.5	4
Experience in the use of digital financial	2 or less	56	28	1
services	3-4	66	33	2
	5 or more	79	39	3

Note: n = Frequency; % = Percentage. \*The income is classified based on the Centre for Monitoring Indian Economy Pvt. Ltd. (CMIE) income classification approach

Table 2. Results of the mediation model

Table 2. Results of the mediation model								
Consequent								
		M (FSE)			_	Y (FR)		
Antecedent		Coeff.	SE	p		Coeff.	SE	p
X (FC)	$\alpha_I$	0.244	0.041	< 0.001	ć	0.048	0.027	0.078
M (FSE)					β	0.760	0.044	< 0.001
Constant	$i_M$	-0.135	0.271	0.617	$i_Y$	0.039	0.169	0.817
C (Control variables)	$\alpha_M$				$\alpha_Y$			
Income		0.054	0.063	0.394		-0.005	0.039	0.882
No. of Dependents		-0.141	0.090	0.120		-0.122	0.057	< 0.05
No. of Earning Members		0.129	0.083	0.122		0.126	0.052	< 0.01
	$R^2 = 0.205$				$R^2$	= 0.692		
	F(4, 196) = 12.682, p < .001			< .001	F(5)	195 = 3	87.604, <i>p</i>	0<.001

Note: FC - Financial Capability, FSE - Financial Self-efficacy, FR - Financial Resilience

Table 3. Summary of indirect, direct and total effects

	Effect	SE	t-statistic	95% Percentile Bootstrapping	
				LLCI	ULCI
Indirect effect	0.186	0.036		0.1177	0.2593
$FC \rightarrow FSE \rightarrow FR (\alpha_I * \beta)$					
Direct effect	0.048	0.027	1.769	-0.0056	0.1031
$FC \rightarrow FR (\acute{c})$					
Total effect (c)	0.234	0.039	$5.884^{*}$	0.1558	0.3129
FC $\rightarrow$ FR ( $c = \acute{c} + \alpha_1 * \beta$ )					

 $Note: LLCI-Lower\ Limit\ Confidence\ Interval,\ ULCI-Upper\ Limit\ Confidence\ Interval$ 

# Annexure-I

Variable	Attribution				
Financial Capability	[Sum of Z-score of objective financial knowledge and financial inclusion]				
Objective Financial	0-5, the quiz score of five financial literacy questions, in which 0 means no correct answer				
Knowledge	is obtained and 5 means all answers are correct. The five questions are about simple				
-	interest, inflation, time value of money, risk & return, and diversification. All five questions were recoded to binary variables in which 1=correct answer, 0=otherwise, and then the new variables were summed to form the score.				
Financial Inclusion	Three variables viz. financial access, awareness, and usage were used to compute financial				
	inclusion.				
	• Financial access: "having bank account, access to digital financial services, and having access to credit" 1=yes, 0=no				
	• Awareness: "I know the digital payments methods like Paytm/Google pay/Online Banking/Debit Credit Card etc." and "I know the application of these apps such				

<sup>\*</sup> denotes significance at p < 0.001

	as checking bank balance/investing/financing/money transfer/settlement of
	transactions etc." 1= strongly disagree, 5= strongly agree
	• Usage: "I have an experience in using Paytm/Google pay/Online Banking/Debit Credit Card etc. and other digital financial tools", "I frequently use debit card/credit card, as it is a better option against cash", "I frequently use digital banking, as it is a better option against cash", and "Overall, I frequently use digital banking services in my day-to-day financial matters" 1= strongly disagree, 5= strongly agree
	Financial inclusion was computed summing the Z-score of access, awareness, and usage.
Financial Resilience	[Sum of Z-score of saving behaviour, money management, and risk management
	strategies]
Savings Behavior	"I have sufficient savings to meet my living expenses", and "Due to good financial
	planning, I am able to contribute to my savings" 1= strongly disagree, 5= strongly agree
Money Management	"I am very organized when it comes to managing my money daily", "I keep a close personal
	watch on my financial affairs", and "I do a good job of balancing my spending and savings"
	1= strongly disagree, 5= strongly agree
Risk Management	"I always make sure I have money saved up for emergency/ unexpected expenses", "I can
Strategies	very easily arrange funds worth ₹15000* in case of any emergency, within one week", and
	"I make sure I understand the commitments I agree to in financial contracts" 1= strongly
	disagree, 5= strongly agree
Perceived Financial	"I have a good knowledge of various financial products and services offered by banks and
Self-Efficacy	other financial institutions", "I am good at dealing with day-to-day financial matters", "I feel confident about the financial decisions I make", "I feel comfortable dealing with banks
	and other financial institutions", and "I feel that I can control my financial resources" 1=
	strongly disagree, 5= strongly agree
Control variables	onongry divagrees, o onongry agree
Income	4 income groups were taken
Number of	1=2 or less, 2=3 to 4, 3=5 or more
Dependents	
*	1=One, 2=Two, 3=Three or more
Members	

<sup>\*</sup>The amount was set at approximately 12% of India's Gross National Income per capita: INR 128,829 in 2020-21, Source: National Statistical Office.