

Financial Literacy as an Antecedent for Saving & Investment Behaviour : Moderating Role of Gender : A Study of Telangana State¹

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Abstract

The purpose of this research is to assess how people's saving and investing behaviour is influenced by their financial knowledge (FK), behaviour (FB), and attitude (FA). The moderating role of gender in relation to the research variables has also been examined. The research was carried out in the Indian state of Telangana. 387 people participated in the survey, and SPSS and AMOS tools were used for analysis. The analysis of the study includes regression, CFA, and PROCESS macro is also used to test the moderating effect of gender. The result of the study indicates that the study variables such as financial knowledge (FK), financial behavior (FB), and financial attitude (FA) have a positive impact on the saving and investment decisions of individuals. It is also evident that gender has moderating effect between FB, FA, and saving and investment behavior. Whereas, gender does not moderate between financial knowledge (FK) and saving and investment behavior.

JEL Code : D14; G51; G11; J16; D8; D91

Keywords : Financial Knowledge; Financial Behavior; Attitude; Saving; Investment; Gender; India

I. Introduction

AMONG ALL INDIVIDUALS in the country, it is a major concern how their financial knowledge, financial behavior, and financial attitude help in shaping their investment behavior. These aspects help in developing financial literacy among individuals (Coskun and Dalziel, 2020). Various researchers have evaluated how financial literacy affects various facets of economic and household well-being. It was clear that financial literacy (FL) was key to improving household attitudes toward saving and investing as well as personal financial management.

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References

- Abdullah, N., S.M. Fazli, and A.M.M. Arif, (2019), "The relationship between attitude towards money, financial literacy, and debt management with young workers' financial well-being", *Pertanika Journal of Social Sciences and Humanities*, Vol. 27, No. 1, pp. 361-387
- Agarwal, S, G. Amromin, I. Ben-David, S. Chomsisengphet, and D. D. Evanoff, (2015), "Financial literacy and financial planning: Evidence from India," *Journal of Housing Economics*, Vol. 27, No. 1, pp. 4-21
- Amari, M., B. Salhi, and A. Jarboui, (2020), "Evaluating the effects of sociodemographic characteristics and financial education on saving behavior", *International Journal of Sociology and Social Policy*, Vol. 40, No. 11, pp. 1423-1438
- Awan, U., M.G. Arnold, and I. Gölgeci, (2021), "Enhancing green product and process innovation: Towards an integrative framework of knowledge acquisition and environmental investment", *Business Strategy and the Environment*, Vol. 30, No. 2, pp. 1283-1295
- Aydin, A. E., and E. Akben Selcuk, (2019), "An investigation of financial literacy, money ethics and time preferences among college students: A structural equation model", *International Journal of Bank Marketing*, Vol. 37, No. 3, pp. 880-900
- Beckmann, D., and L. Menkhoff, (2008), "Will women be women? Analyzing the gender difference among financial experts", *Kyklos*, Vol. 61, No. 3, pp. 364-384
- Bucher-Koenen, T., A. Lusardi, R. Alessie, and M. van Rooij, (2017), "How financially literate are women? An overview and new insights", *Journal of Consumer Affairs*, Vol. 51, No. 2, pp. 255-283
- Bhushan, P. and Y. Medury, (2014), "An empirical analysis of interlinkages between financial attitudes, financial behavior, and financial knowledge of salaried individuals", *Indian Journal of Commerce and Management Studies*, Vol. 5, No. 3, pp.5-8
- Bradley, S. L., (2021), "Financial literacy education: An opportunity for colleges and sociology", *Sociology Compass*, Vol. 15, No. 10, pp. 1-12
- Brounen, D., K. Koedijk, and R.A.J. Pownall, (2020), "Financial literacy and retirement planning : Evidence from the Netherlands", *Journal of Economic Psychology*, Vol. 32, No. 4, pp. 593-608
- Campbell, J. Y., (2006), "Household finance", *The Journal of Finance*, Vol. 61, No. 4, pp. 1553-1604
- Chawla, D., S. Bhatia, and S. Singh, (2022), "Parental influence, financial literacy and investment behaviour of young adults", *Journal of Indian Business Research*, Vol. 14 No. 4, pp. 520-539
- Choudhary, K., S. Kamboj, and S. Mehta, (2021), "Financial literacy, investment behaviour and socio-demographic variables: evidence from India", *International Journal of Behavioural Accounting and Finance*, Vol. 6, No. 3, pp. 243-261
- Chhatwani, M. and S.K. Mishra, (2021), "Does financial literacy reduce financial fragility during COVID-19? The moderation effect of psychological, economic and social factors", *International Journal of Bank Marketing*, Vol. 39, No. 7, pp.1114-1133
- Çoekun, A., and N. Dalziel, (2020), "Mediation effect of financial attitude on financial knowledge and financial behavior: The case of university students", *International Journal of Research in Business and Social Science*, Vol. 9, No. 2, pp. 1-8

Devi, A., (2016), "Financial literacy among women: A sample study in the Kamrup District of Assam", *EPRA, International Journal of Economic and Business Review*, Vol. 4, No. 2, pp. 144-147

Dewi, V., E. Febrian, N. Effendi, and M. Anwar, (2020), "Financial literacy among the millennial generation: Relationships between knowledge, skills, attitude, and behavior", *Australasian Accounting, Business and Finance Journal*, Vol. 14, No. 4, pp. 24-37

Dhivya R., and C. Sekar, (2010), "Investors' Preference Towards Financial Investments - Some Survey Evidence", *Indian Journal of Finance*, Vol. 4, No. 7, pp.116-124

Falahati, L., M.F. Sabri and L.H.J. Paim, (2012), "Assessment a model of financial satisfaction predictor: Examining the mediation of financial behavior and strain", *World Applied Sciences Journal*, Vol. 20, No. 2, pp. 190-197

Fan, L. and P. Babiarz, (2019), "The Determinants of Subjective Financial Satisfaction and the Moderating Roles of Gender and Marital Status", *Family and Consumer Sciences Research Journal*, Vol. 47, No. 3, pp. 237-259.

Farida, M. N., Y. Soesatyo, and T.S. Aji, (2021), "Influence of financial literacy and use of financial technology on financial satisfaction through financial behavior", *International Journal of Education and Literacy Studies*, Vol. 9, No. 1, pp. 86-95

Fessler, P., M. Silgoner, and R. Weber, (2020), "Financial knowledge, attitude and behavior: evidence from the Austrian Survey of Financial Literacy", *Empirica*, Vol. 4, No. 4, pp. 929-947

Fong, J. H., B.S. Koh, O.S. Mitchell, and Rohwedder, S., (2021), "Financial literacy and financial decision-making at older ages", *Pacific-Basin Finance Journal*, Vol. 65, No. 1, pp.101481.

Fornell, C., and D.F. Larcker, (1981), "Structural equation models with unobservable variables and measurement error", *Algebra and statistics*. Vol. 18, No. 3, pp. 382-388

Gupta, M. A., and S. Kumar, (2019), "Do Emotional Intelligence Influence Investment Decision-Making Among Generation Y?", *Think India Journal*, Vol. 22, No. 10, pp. 1340-1348

Gupta, S., O.N. Mishra, and S. Kumar, (2021), "Citizen empowerment and adoption of E-governance services: the role of online citizen skills, awareness, and engagement", *International Journal of Electronic Governance*, Vol. 13, No. 4, pp. 386-407

Gutter, M. S., and Z. Copur, (2011), "Gender differences in financial preparedness for retirement", *Journal of Financial Planning*, Vol. 24, No. 9, pp. 58-67

Hanna, S. D. and S. Lindamood, (2010), "An assessment of gender differences in financial literacy among undergraduates", *Journal of Financial Counseling and Planning*, Vol. 21, No. 1, pp. 60-70

Hastings, J., and O.S. Mitchell, (2020), "How financial literacy and impatience shape retirement wealth and investment behaviors", *Journal of Pension Economics & Finance*, Vol. 19, No. 1, pp. 1-20

Hooper, D., J. Coughlan, and M. Mullen, (2008), "Structural equation modeling: Guidelines for determining model fit", *The Electronic Journal of Business Research Methods*, Vol. 6, No. 1, pp. 53-60

Hu, L.T., and P.M. Bentler, (1999), "Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives", *Structural equation modeling : A Multidisciplinary journal*, Vol. 6, No. 1, pp.1-55.

Ingale, K. K. and R.A. Paluri, (2022), "Financial literacy and financial behaviour: A bibliometric analysis", *Review of Behavioral Finance*, Vol. 14, No. 1, pp. 130-154

Issahaku, Haruna (2011), "Determinants of Saving and Investment in Deprived District Capitals in Ghana -A Case Study of Nadowli in the Upper West Region of Ghana", *Continental Journal Social Sciences* Vol. 4. No. 1, pp. 1 - 12.

Jariwala, H. V., and M.S. Sharma, M. S., (2016), "Assessment of behavioural outcomes of financial education workshops on the financial behaviour of the participants: An experimental study", *Financial literacy and the limits of financial decision-making*, Vol. 21, No. 2, pp. 302-324

Jariwala, H. V., and M.S. Sharma, M. S., (2013), "Assessment of behavioural outcomes of financial education workshops on the financial behaviour of the participants: An experimental study", *Journal of Financial Services Marketing*, Vol.18, No.3, pp. 241-256

Kaiser, T., A. Lusardi, L. Menkhoff, and C. Urban, (2022), "Financial education affects financial knowledge and downstream behaviors", *Journal of Financial Economics*, Vol. 145, No. 2, pp. 255-272

Kline, R. B., (1998), "Software Review: Software programs for structural equation modeling: Amos, EQS, and LISREL", *Journal of psychoeducational assessment*, Vol. 16, No. 4, pp. 343-364

Kumar, S., and A. Gupta, (2021), "Factors Affecting Adoption of M-Wallets: The moderating role of Financial Incentives", *Ramanujan International Journal of Business and Research*, Vol. 6, No. 1, pp. 132-143

Kumar, S. K., (2021), "Reviews Posted and Ratings given by Consumer Endorsers: Gaining Customer Value", *Ramanujan International Journal of Business and Research*, Vol. 6, No. 1, pp. 144-155

Kumar, S. and A. Gupta, (2019), "Impact of IT support system and Organizational Culture on Innovation and Job Performance: Mediating role of KM Attitude", *Ramanujan International Journal of Business and Research*, Vol. 4, No. 1, pp. 137-160

Lusardi, A. (2019), "Financial literacy and the need for financial education: evidence and implications.", *Swiss Journal of Economics and Statistics*, Vol. 155, No. 1, pp. 1-8

Lusardi, A. and O.S. Mitchell, (2014), "The economic importance of financial literacy: Theory and evidence", *Journal of Economic Literature*, Vol. 52, No. 1, pp. 5-44

Lusardi, A. and O.S. Mitchell, (2021), "Financial literacy and financial behavior: Evidence from the COVID-19 pandemic", *Journal of Financial Economics*, Vol. 141, No. 3

Lusardi, A. and O.S. Mitchell, (2007), "Financial literacy and retirement preparedness: Evidence and implications for financial education", *Business economics*, Vol. 42, No. 1, pp. 35-44

MacCallum, R. C., M.W. Browne and H.M. Sugawara, (1996), "Power analysis and determination of sample size for covariance structure modeling", *Psychological Methods*, Vol. 1, No. 2, pp. 1-30

Mahapatra, M. S., S. Alok, and J. Raveendran, (2017), "Financial literacy of Indian youth: A study on the twin cities of Hyderabad-Secunderabad, IIM Kozhikode Society & Management Review, Vol. 6, No. 2, pp. 132-147

Mahdzan, N.S., and S. Tabiani, (2013), "The Impact of Financial Literacy on Individual Saving: An Exploratory Study in the Malaysian Context", *Transformations in Business & Economics*, Vol. 12, No. 1, pp. 41-55

Malti, C., (2014), "A study of financial literacy among working women in Pune", *International Journal for Scientific Research & Development*, Vol. 1, No. 11, pp. 2456-2458

Mandell, Lewis and Linda Schmid Klein, (2009), "The Impact of Financial Literacy Education on Subsequent Financial Behavior", *Journal of Financial Counselling and Planning*, Vol. 20, No. 1, pp. 15-24

Mishra, M. K., and S. Kumar, (2023), "Impact of digitalization on youth consumer dynamics: a review of the literature using R-software", *International Journal of Public Sector Performance Management*, Vol. 11, No. 2, pp. 177-190

Morgan, P. J., and T.Q. Long, (2020), "Financial literacy, financial inclusion, and savings behavior in Laos", *Journal of Asian Economics*, Vol. 68, No. 3, pp.101-197

Mouna, A., and J. Anis, (2017), "Financial literacy in Tunisia: Its determinants and its implications on investment behavior", *Research in International Business and Finance*, Vol. 39, No. 1, pp. 568-577

Mudzingiri, C., J. W. Muteba Mwamba, and J.N. Keyser, (2018), "Financial behavior, confidence, risk preferences and financial literacy of university students", *Cogent Economics & Finance*, Vol. 6, No. 1, pp. 1-25

Murendo, C. and K. Mutsonziwa, (2017), "Financial literacy and savings decisions by adult financial consumers in Zimbabwe", *International Journal of Consumer Studies*, Vol. 41, No. 1, pp. 95-103

Nejati, Farzaneh, Mousa Ahmadi and Mona Lali, (2015), "The Impact of Financial Literacy on Retirement Planning and Household Wealth", *Indian Journal of Fundamental and Applied Life Sciences*, Vol. 5, No. 1, pp. 806-881

Neog, Y. and A.K. Gaur, (2020), "Tax structure and economic growth: A study of selected Indian states", *Journal of Economic Structures*, Vol. 9, No. 38, pp. 1-12

Nguyen, T.A.N. and K.M. Nguyen, (2020), "Role of financial literacy and peer effect in the promotion of financial market participation: Empirical evidence in Vietnam", *The Journal of Asian Finance, Economics, and Business*, Vol. 7, No. 6, pp.1-8

Pahlevan, Sharif, S., and N. Naghavi, (2020), "Family financial socialization, financial information seeking behavior and financial literacy among youth", *Asia-Pacific Journal of Business Administration*, Vol. 12, No. 2, pp. 163-181

Pangestu, S., and E.B. Karnadi, (2020), "The effects of financial literacy and materialism on the savings decision of Generation Z Indonesians", *Cogent Business & Management*, Vol. 7, No. 1, pp. 1-18

Peiris., (2021), "Effect of Financial Literacy on Individual Savings Behavior; the Mediation Role of Intention to Saving", *European Journal of Business and Management Research*, Vol. 6, No. 5, pp. 94-99

Perry, V.G. and M.D. Morris, (2005), "Who is in control? The role of self-perception, knowledge, and income in explaining consumer financial behavior", *Journal of consumer affairs*, Vol. 39, No. 2, pp.299-313.

Power, K., (2020), "The COVID-19 pandemic has increased the care burden of women and families", *Sustainability: Science, Practice and Policy*, Vol. 16, No. 1, pp. 67-73

Pradeep, S., and B.C. Nair, (2018), "Perceived financial literacy and savings behavior of its professionals", *International Journal of Mechanical Engineering and Technology*, Vol. 9, No. 5, pp. 943-949

Rai, K., S. Dua, and M. Yadav, (2019), "Association of financial attitude, financial behavior and financial knowledge towards financial literacy: A structural equation modeling approach", *FIIB Business Review*, Vol. 8, No. 1, pp. 51-60

Sabri, M. F., and E.C.X. Aw, (2019), "Financial literacy and related outcomes: The role of financial information sources", *International Journal of Business & Society*, Vol. 20, No. 1, pp. 286-298

Sadanandam, Prusty, (2011), "Household Saving Behaviour: Role of Financial Literacy and Saving Plans", *The Journal of World Economic Review*, Vol. 6, No. 1, pp. 93-104

Sanderson, A., (2015), "Importance of financial literacy", Bankers Association of Zimbabwe (BAZ) Newsletter.

Sanjeeva, W.S. and O. Hongbing, (2019), "Consumers' insurance literacy: Literature review, conceptual definition, and approach for a measurement instrument", *European Journal of Business and Management*, Vol. 11, No. 26, pp. 49-65

Sear, R., (2021), "The male breadwinner nuclear family is not the traditional human family, and the promotion of this myth may have adverse health consequences", *Philosophical Transactions of the Royal Society B*, Vol. 376, No. 1827, pp. 1-9

Sekita, Sekita, (2011), "Financial Literacy and Retirement Planning in Japan." *Journal of Pension Economics and Finance*, Vol. 10, No. 4, pp. 637-656.

Schuchardt, J., D. Sherman, Tahira K.H. Hanna, C.L. Angela, L. Palmer, and J.J. Xiao, (2009), "Financial literacy and education research priorities", *Journal of Financial Counselling and Planning*, Vol. 20, No. 9, pp. 84-95

Singh, C. and R. Kumar, (2017), "Financial literacy among women - Indian scenario", *Universal Journal of Accounting and Finance*, Vol. 5, No. 2, pp. 46-53

Škreblić Kirbiš, I., M. Vehovec, and Z. Galie, (2017), "Relationship between financial satisfaction and financial literacy: Exploring gender differences", *Društvena istraživanja: časopis za opća društvena pitanja*, Vol. 26, No. 2, pp. 165-185

Shaik, M. B., M. Kethan, T. Jaggaiah, and M. Khizerulla, (2022), "Financial Literacy and Investment Behaviour of IT Professional in India", *East Asian Journal of Multidisciplinary Research*, Vol. 1, No. 5, pp. 777-788

Surendar, G. and V. Surbramanya Sarma (2021), "A Comparative Study on Financial Literacy Saving and Investment Behavior of Rural and Urban Households of Selected Districts in Telangana State", Report submitted to University Grants Commission, Delhi, pp. 1-300

Surendar, G., and S. Sarma, (2018), "Financial Literacy and Financial Planning Among Teachers of Higher Education A Study of Critical Factors of Select Variables", *International Journal of Pure and Applied Mathematics*, Vol. 118, No. 18, pp. 1627-1649

Tang, N., A. Baker, and P.C. Peter, (2015), "Investigating the disconnect between financial knowledge and behavior: The role of parental influence and psychological characteristics in responsible financial behaviors among young adults", *Journal of Consumer Affairs*, Vol. 49, No. 2, pp. 376-406

Taylor, M., (2011), "Measuring financial capability and its determinants using survey", *Social Indicator Research*, Vol. 102, No. 2, pp. 297-314

Tuffour, J. K., A.A. Amoako, and E.O. Amartey, (2022), "Assessing the effect of financial literacy among managers on the performance of small-scale enterprises", *Global Business Review*, Vol. 23, No. 5, pp. 1200-1217

Van Ginkel, J. R., M. Linting, R.C. Rippe, and A. van der Voort, (2020), "Rebutting existing misconceptions about multiple imputations as a method for handling missing data", *Journal of personality assessment*, Vol. 102, No. 3, pp.297-308

van Rooij, Maarten, Annamaria Lusardi, and Alessie Rob, (2011), "Financial literacy and stock market participation.", *Journal of Financial Economics* Vol. 101, No. 2, pp. 449-472

Widyastuti, U., U. Suhud, and A. Sumiati, (2016), "The Impact of Financial Literacy on Student Teachers' Saving Intention and Saving Behaviour", *Mediterranean Journal of Social Sciences*, Vol. 7, No. 6, pp. 41-48

Xiao J.J., (2008), "Applying behavior theories to financial behavior", In Xiao JJ (ed.) *Handbook of consumer finance research*, Springer, New York, pp. 69-81

Yilmaz, Bayer and Mahmut Unsal Sasmaz, (2017), "Impact of Financial Literacy on Personal Savings: A Research on Usak University Staff", *Journal of Knowledge Management, Economics and Information Technology*, Vol. 6, No. 6, pp. 1-19

Zulfaris, M. D., H. Mustafa, N. Mahussin, M.K. Alam, and Z.M. Daud, (2020), "Students and money management behavior of a Malaysian public university", *The Journal of Asian Finance, Economics, and Business*, Vol. 7, No. 3, pp. 245-251