



Women's Financial Decision-Making and Sustainable Investment: Analyzing Experience, Literacy, and Socio-Economic Influences in Delhi NCR

Geetanjali Kapur^{1*}, Swati Shrivastava¹, Nitish Kumar Minz² 

¹School of Business, Sushant University, Gurugram, India

²VIT School of Business, Vellore Institute of Technology, Vellore, Tamil Nadu, India
(geetob@hotmail.com)

Abstract. Financial decision-making among women is a crucial factor in promoting sustainable investment and economic resilience. This study examines how financial literacy, investment experience, and socio-economic factors influence women's ability to make mindful and sustainable investment decisions in Delhi NCR. By analyzing key determinants and barriers, the research aims to propose strategies for fostering financial inclusion, resilience, and sustainable value creation among women investors. This study employs a mixed-method research approach, integrating quantitative surveys (n=373) and qualitative interviews (n=12) with women investors, financial advisors, and policymakers. The research framework is grounded in behavioral finance theories and financial literacy models, assessing their impact on sustainable investment choices. Data is analyzed using regression analysis, structural equation modeling (SEM), and thematic analysis to evaluate the interplay of literacy, experience, and socio-economic variables on women's financial behavior. Preliminary findings suggest that women with higher financial literacy and investment experience are more likely to adopt sustainable and diversified investment portfolios. However, socio-economic barriers, including income disparities, family influence, and limited access to financial education, constrain mindful investment decisions. The study identifies the role of fintech solutions, government initiatives, and policy-driven financial inclusion in empowering women toward long-term wealth creation. The study offers policy recommendations for financial institutions, government bodies, and fintech startups to develop gender-inclusive investment models. It highlights the need for targeted financial literacy programs, digital investment platforms, and regulatory support to bridge gender gaps in investment. By integrating sustainability principles into women's financial decision-making, this research

aligns with global financial resilience and inclusion agendas. It contributes to the discourse on sustainable economic growth, gender empowerment, and innovative finance models, reinforcing the role of women as key drivers of financial sustainability and market resilience.

Keywords: Women's Financial Literacy, Sustainable Investment, Behavioral Finance, Financial Inclusion, Socio-Economic Factors, Investment Decision-Making, Gender & Finance, Mindful Investing, Financial Resilience, FinTech Solutions.

1 Introduction

Women's active participation in the financial domain is increasingly recognized as a cornerstone for achieving sustainable economic development and gender equity. In the global financial ecosystem, the inclusion of women in investment decision-making processes not only enhances household financial well-being but also contributes to broader societal resilience [16]. Despite this recognition, significant disparities persist in women's access to financial resources and investment knowledge, particularly in emerging economies like India.

The concept of sustainable investing—defined as investment strategies that integrate environmental, social, and governance (ESG) criteria—has gained traction in response to growing concerns over climate change, inequality, and corporate responsibility [9]. Women, in particular, have shown a stronger inclination toward ethical investing and long-term wealth creation, often preferring stability, impact, and risk aversion over speculative gains [11]. However, their ability to participate meaningfully in sustainable finance is constrained by several factors, including limited financial literacy, lack of prior investment experience, and socio-economic limitations such as lower income and restricted mobility.

Financial literacy, defined as the ability to understand and effectively use financial skills, is crucial for enabling individuals to make informed investment decisions. Empirical evidence suggests that women generally lag behind men in financial literacy scores, even in urban and educated segments [12,14]. In India, the gap is pronounced due to deeply entrenched gender norms, lower financial autonomy, and limited exposure to formal financial education [2]. Moreover, past investment experience plays a pivotal role in building financial confidence and competence. Individuals who have navigated financial markets are more adept at evaluating risk, managing portfolios, and engaging with sustainable financial instruments [21].

Socio-economic factors, including income levels, employment status, education, and family responsibilities—further mediate women's investment behavior. In Delhi NCR, where rapid urbanization coexists with socio-cultural conservatism, women's financial agency is often influenced by family structures, cultural expectations, and limited time availability due to caregiving responsibilities [15]. Although fintech platforms and digital financial services have improved access, gaps in digital literacy and trust continue to be major deterrents [17].

This study addresses a critical research gap by examining the interconnected impact of financial literacy, investment experience, and socio-economic factors on women's sustainable investment behavior in Delhi NCR. Drawing upon behavioral finance theories and empirical models of financial decision-making, the research employs a mixed-methods approach to generate nuanced insights. The study utilizes structured surveys (n=373) and semi-structured interviews (n=12) with women investors, financial advisors, and policymakers. Analytical tools include descriptive statistics, regression analysis, and structural equation modeling (SEM), complemented by thematic analysis of qualitative data.

By exploring the barriers and enablers of mindful investing among women, this research contributes to the policy discourse on financial inclusion, digital equity, and economic empowerment. The findings are expected to offer actionable strategies for financial institutions, fintech startups, and government agencies to create more inclusive, resilient, and sustainable investment ecosystems tailored for women. Furthermore, the study aligns with global development priorities, particularly the United Nations Sustainable Development Goals (SDG 5: Gender Equality and SDG 8: Decent Work and Economic Growth), emphasizing the transformative role of women in shaping equitable financial futures.

2 Literature Review

2.1 Financial Literacy and Women's Investment Behavior

Financial literacy is widely acknowledged as a foundational determinant of sound financial decision-making. According to [13], financial literacy entails the ability to process economic information and make informed decisions about financial planning, wealth accumulation, and debt. A consistent pattern across global and Indian contexts reveals that women typically possess lower financial literacy levels than men, limiting their engagement in structured investment behavior and long-term financial planning [14, 23]

In India, despite rapid digitalization and formalization of banking services, a gendered literacy gap remains. The Reserve Bank of India's (2023) *Handbook on Financial Inclusion* highlights that although digital penetration is increasing, financial knowledge among urban and semi-urban women remains limited, especially in understanding complex instruments such as mutual funds, equity markets, and ESG-linked portfolios. A survey by the National Centre for Financial Education [27] further found that only 27% of urban women could correctly answer questions related to interest compounding and inflation.

Recent research underscores the link between financial education and responsible investment. For instance, [26] observed that when financial literacy programs are contextualized to women's daily financial responsibilities—such as household budgeting or children's education—they significantly improve investment readiness and risk-taking confidence. Similarly, [24] noted that women exposed to community-based financial training are more likely to participate in sustainable investment opportunities, such as green bonds or ESG mutual funds.

Moreover, evidence from fintech-based interventions reveals that app-integrated financial education modules (like those in Paytm, Groww, and Zerodha) can enhance women's financial agency by offering bite-sized, vernacular learning aids [7]. However, the digital gender divide—driven by lower smartphone access and digital mistrust—continues to limit the reach of such interventions.

Thus, increasing women's financial literacy must go beyond numerical skills and include behavioral insights, contextual relevance, and gender-inclusive pedagogies. When equipped with financial knowledge, women demonstrate greater inclination toward low-risk, diversified portfolios and long-term investment horizons [11].

Hypothesis 1 (H1): Women with higher financial literacy are more likely to make sustainable investment decisions.

2.2 Investment Experience and Portfolio Diversification

Investment experience plays a crucial role in shaping financial behavior, particularly in terms of risk tolerance, diversification, and long-term planning. Experienced investors are more likely to engage in analytical decision-making, avoid cognitive biases, and respond effectively to market volatility [21]. Women with prior investment experience often demonstrate higher confidence in managing finances and are more likely to explore sustainable investment options such as ESG funds and green bonds [16].

Empirical evidence from emerging markets suggests that women who have engaged in financial markets previously are more inclined to diversify their portfolios and align their investments with personal values, including sustainability and ethical considerations [4]. However, first-time women investors often face psychological and informational barriers, including fear of loss, lack of mentorship, and limited access to advisory services [13].

Hypothesis 2 (H2): Prior investment experience positively impacts women's ability to diversify portfolios.

2.3 Socio-Economic Determinants of Financial Decision-Making

Socio-economic determinants—including income level, educational attainment, employment status, and familial responsibilities—play a decisive role in shaping women's financial behavior and their participation in investment activities. Women with stable income and higher education levels are more likely to allocate funds toward long-term financial planning and diversified portfolios [15]. However, a large proportion of women in urban India remain outside the formal investment ecosystem due to intermittent employment, dependence on family members, or lack of targeted financial access [17].

The Economic Survey of India (2023) emphasized that women's financial inclusion is hindered not just by access barriers, but by structural socio-economic inequalities. It found that only 32% of urban Indian women independently operate financial accounts, and among them, fewer than 20% engage in regular saving or investing behavior. Women's participation in financial markets is often mediated by male family members,

particularly in joint households, which reinforces existing gendered power dynamics [18].

Additionally, government data from the National Family Health Survey (NFHS-5) and PLFS 2023 indicates that employment and income disparities contribute significantly to the gender gap in financial decision-making. Educated homemakers and part-time workers tend to deprioritize investments due to liquidity needs, time poverty, and risk aversion. These constraints are exacerbated for single women or widows who often face social stigma and exclusion from mainstream financial advisory networks [24].

Recent research also points to the intersectional burden borne by women from marginalized socio-economic groups—such as Dalit or Muslim women—who face compounded financial exclusion due to both gender and identity [28]. Digital literacy has improved access in urban centers like Delhi NCR, but disparities persist in fintech adoption due to trust gaps, device access, and concerns about online fraud [7].

Hence, sustainable investment behavior among women cannot be fully understood without a layered analysis of socio-economic status, social norms, and life-stage responsibilities. Tailored interventions that incorporate employment-linked investment schemes, gender-sensitive advisory tools, and community-based financial mentoring could enhance financial participation and autonomy.

Hypothesis 3 (H3): Socio-economic factors (income, education, employment) significantly influence investment choices.

2.4 Behavioral Finance and Gendered Investment Patterns

Behavioral finance provides a theoretical lens to understand the cognitive and emotional biases that influence financial decisions. Prospect Theory and the Theory of Planned Behavior [1] have been widely applied to explain gendered differences in investment behavior. Women are generally more risk-averse, exhibit higher loss aversion, and are more likely to seek social validation before making financial decisions [5]. These behavioral traits, while often viewed as limitations, can also serve as strengths in the context of sustainable investing. Risk aversion and conscientiousness may lead women to favor stable, ethical, and environmentally responsible investments. However, without adequate financial literacy or support systems, these traits can also result in underinvestment or overreliance on informal financial advice [12].

2.5 Fintech, Digital Inclusion, and Policy Interventions

The rise of fintech platforms has created new avenues for women to access financial services, particularly in urban regions like Delhi NCR. Mobile banking, robo-advisors, and digital investment platforms have reduced entry barriers and enabled greater autonomy in financial decision-making [7]. However, digital literacy and trust remain critical challenges, especially among first-time users. Government initiatives such as Pradhan Mantri Jan Dhan Yojana (PMJDY), Mahila E-Haat, and Stand-Up India have aimed to bridge the gender gap in financial inclusion. While these programs have improved access, their impact on sustainable investment behavior remains limited due to a lack of targeted financial education and follow-up support.

2.6 Research Gaps and Conceptual Framework

Despite the growing academic interest in women's financial behavior, significant research gaps persist at the intersection of gender, financial literacy, sustainable investment, and socio-economic status—especially within the Indian context. Most existing studies have either focused narrowly on financial literacy in isolation or generalized women's investment behavior without considering the multidimensional influence of socio-economic determinants and experiential learning [13,4]. Moreover, while global research has begun to investigate women's participation in ESG and sustainable finance [11], empirical evidence from India remains scarce and largely descriptive.

Another critical limitation lies in the absence of integrated, theory-driven models that combine behavioral finance principles with grounded socio-economic insights. Few studies have employed advanced techniques such as structural equation modeling (SEM) or mixed-methods triangulation to validate the dynamic interplay between variables like literacy, experience, and socio-economic status. Furthermore, literature often overlooks the role of digital literacy, fintech trust, and real-life financial mentoring as mediators of sustainable financial engagement among women, particularly in urban settings like Delhi NCR.

Government programs such as PMJDY and Mahila Samman Savings Schemes have emphasized inclusion but lack gender-sensitive frameworks to evaluate long-term investment behavior. Even the Economic Survey of India (2023) notes the absence of disaggregated impact evaluations focusing on women's sustainable financial agency.

This study addresses these critical gaps by adopting a holistic, mixed-methods approach that integrates behavioral theories, socio-economic modeling, and thematic narratives. It proposes a novel conceptual framework that links financial literacy, investment experience, and socio-economic status to sustainable investment behavior among women, while also exploring mediating effects such as confidence in digital platforms and family influence. The study thereby contributes to both theoretical advancement and policy formulation by capturing the lived financial realities of urban Indian women in the post-pandemic digital economy.

2.7 Research Objectives and Questions

This study is guided by the overarching aim of understanding how financial literacy, investment experience, and socio-economic factors collectively influence sustainable investment behavior among women in urban India. Anchored in behavioral finance theory and supported by empirical gaps identified in prior research, the study seeks to fulfill the following specific objectives:

RO1: To examine the impact of financial literacy on sustainable investment decision-making among women in Delhi NCR.

RO2: To analyze how prior investment experience influences women's confidence, risk perception, and portfolio diversification.

RO3: To assess the role of socio-economic variables—such as income, education, and employment status—in shaping women's access to and engagement with sustainable investment instruments.

RO4: To explore the mediating role of digital financial trust and family influence in the relationship between financial literacy and sustainable financial behavior.

RQ1: How does financial literacy affect women's ability to make sustainable investment decisions in Delhi NCR?

RQ2: In what ways does investment experience shape women's investment confidence and their willingness to engage with ESG-linked instruments?

RQ3: What is the extent to which socio-economic status impacts women's investment participation and preferences in sustainable finance?

RQ4: Do factors such as trust in fintech platforms and family influence the relationship between financial knowledge and investment outcomes?

These objectives and questions are directly linked to the study's hypotheses and conceptual model and serve as the foundation for the mixed-methods design and analysis.

3 Research Methodology

3.1 Research Design

To explore the complex interplay between financial literacy, investment experience, socio-economic status, and sustainable investment decisions among women in Delhi NCR, this study employs a convergent mixed-methods research design [8]. This approach merges quantitative insights with qualitative narratives to deliver a holistic understanding of women's financial behavior, validated through both statistical modeling and thematic interpretation.

3.2 Sampling and Respondent Profile

The quantitative component targeted 373 women respondents aged between 25 and 55 from Delhi NCR, selected using stratified random sampling to ensure demographic and socio-economic diversity. The qualitative component comprised 12 semi-structured interviews with women investors, financial advisors, and policymakers, recruited through purposive sampling based on experience, domain expertise, and relevance to the topic.

Table 1. Socio-Demographic Profile of Survey Respondents (N=373).

Demographic Variable	Category	Percentage (%)
Age	25–35	38.2
	36–45	41.1
	46–55	20.7
Education Level	Graduate	45.5
	Postgraduate and above	39.7
Employment Type	Salaried	51.2
	Entrepreneurial/Self-employed	18.6

	Homemakers	30.2
	Below 30,000	28.9
Monthly Income (INR)	30,000–70,000	42.4
	Above 70,000	28.7

3.3 Research Instruments

A structured questionnaire was developed based on validated financial behavior instruments to conduct the quantitative survey. Financial literacy was assessed using an adaptation of the [14] framework, covering key concepts such as inflation, interest rates, risk diversification, and numeracy. Investment experience was measured through metrics evaluating asset diversity, investment frequency, and confidence in risk-taking. A socio-economic index was constructed by aggregating data on income, education, and employment status. Additionally, sustainable investment awareness was examined through questions on ESG knowledge, green finance, and impact investing. Each construct was measured on a 5-point Likert scale and underwent reliability testing, ensuring a Cronbach’s α of at least 0.78. Complementing the quantitative approach, a qualitative interview protocol was designed to explore participants' investment journeys and learning experiences, access to and perception of financial education, use of fintech platforms, and attitudes toward sustainability in investing.

3.4 Data Collection

Data collection involved a combination of survey distribution and interviews to ensure comprehensive insights. Surveys were administered via Google Forms and disseminated through women's collectives, banks, and professional networks to reach a diverse participant pool. Interviews were conducted either in person or via Zoom, recorded, and transcribed with the informed consent of participants. Ethical approval was secured from institutional review boards, and strict confidentiality protocols were maintained throughout the research process to protect participant privacy and data integrity.

3.5 Ethical Considerations

Quantitative data analysis involved multiple statistical techniques to derive meaningful insights. Descriptive statistics were used to outline participant profiles and identify response trends. Multiple regression analysis was conducted to examine the impact of predictor variables on sustainable investment decisions. Additionally, structural equation modeling (SEM) using AMOS was employed to validate causal relationships within the conceptual model, ensuring robustness and reliability in the findings.



Fig. 1. Correlation Matrix of Key Variables

The correlation matrix illustrates moderate-to-strong relationships among financial literacy, investment experience, socio-economic status, and sustainable investment awareness, validating the hypothesis structure.

Qualitative data analysis was conducted using thematic analysis following Braun and Clarke’s (2006) six-phase method. Key emerging themes included trust in digital platforms, fear of financial loss, peer learning, and curiosity about ESG investments. NVivo software was utilized for coding the data and ensuring triangulation with quantitative results, enhancing the depth and reliability of the analysis.

3.6 Validity and Reliability

Validity and reliability measures were employed to ensure the robustness of the study. Internal consistency was confirmed with Cronbach’s alpha values of ≥ 0.78 for all key constructs. Construct validity was verified through an expert panel review and pilot testing with a sample of 25 participants. Additionally, triangulation was conducted by cross-validating qualitative and quantitative data, reinforcing theoretical alignment and methodological rigor, as suggested by Yin (2018).

3.7 Socio-Economic Index (SEI) Construction

To quantify and systematically evaluate the socio-economic status of the respondents, a Socio-Economic Index (SEI) was developed using three core variables: monthly income, education level, and employment type. These variables were selected based on their established relevance in prior literature addressing financial behavior and inclusion among women [15], and they align with socio-economic criteria used in national data collection frameworks such as the National Family Health Survey (NFHS-5).

Each component was operationalized as follows:

- i. Income: Monthly income was categorized into three brackets—below ₹30,000, ₹30,000–₹70,000, and above ₹70,000.
- ii. Education: Education was coded as 1 (Graduate) or 2 (Postgraduate and above).
- iii. Employment: Employment status was classified as 0 (Homemaker), 1 (Self-employed), and 2 (Salaried).

The values from these three variables were standardized using Z-scores to ensure comparability and eliminate unit-based distortion. These standardized values were then summatively combined to create the composite SEI score for each respondent. Equal weighting was applied to all three components due to their relatively independent and additive effects in measuring socio-economic empowerment [7].

To assess the reliability of the SEI as a unidimensional construct, exploratory factor analysis (EFA) was conducted. The Kaiser-Meyer-Olkin (KMO) value was 0.72, and Bartlett's Test of Sphericity was significant at $p < 0.001$, indicating sampling adequacy. All three variables loaded onto a single factor with an eigenvalue > 1 , accounting for 68.4% of the variance. Additionally, Cronbach's alpha was calculated to be 0.81, confirming strong internal consistency.

The resulting SEI scores were used as an independent variable in both the regression model and structural equation modeling (SEM) to assess their impact on women's sustainable investment behavior. A detailed variable description and measurement schema are provided in Annexure A.

3.8 Thematic Analysis and Coding Procedure

To complement the quantitative insights and deepen the understanding of women's financial behavior, qualitative data from 12 semi-structured interviews were analyzed using thematic analysis, following the six-phase framework proposed by Braun and Clarke (2006). The process was conducted using NVivo 12 software, which enabled systematic coding, data organization, and visualization of emerging themes.

The following steps were employed during analysis:

- i. Familiarization with Data: Audio recordings of interviews were transcribed verbatim. Each transcript was reviewed thoroughly to ensure familiarity with the content.
- ii. Initial Coding: Open coding was performed in NVivo by assigning short labels to segments of data that reflected meaningful units. Both inductive (data-driven) and deductive (based on research objectives) codes were applied.
- iii. Searching for Themes: Coded segments were grouped into broader categories such as *literacy confidence*, *family validation*, *fintech usability*, *risk aversion*, and *time constraints*. These were mapped using NVivo's node structure.
- iv. Reviewing Themes: Emerging themes were cross-verified across the dataset to ensure internal coherence and distinctiveness.
- v. Defining and Naming Themes: Themes were refined, clearly defined, and aligned with theoretical constructs (e.g., Theory of Planned Behavior, Prospect Theory).

- vi. Writing the Narrative: Representative quotes were extracted to illustrate each theme and were integrated into the discussion section for triangulation with quantitative results.

To ensure coding reliability, two researchers independently coded 25% of the transcripts. Inter-coder agreement was calculated using Cohen’s Kappa ($\kappa = 0.82$), indicating substantial agreement. Discrepancies were resolved through discussion to maintain consistency in final coding.

The thematic structure, including codes and their definitions, is provided in Annexure B. This process ensured that insights derived from participants’ lived experiences were analytically robust and methodologically sound.

4 Results and Discussion

4.1 Quantitative Findings

To test the hypothesized relationships between financial literacy, investment experience, socio-economic status, and sustainable investment behavior, a multiple linear regression model was applied. The regression model was statistically significant ($R^2 = 0.61$), indicating that a substantial proportion of the variance in women’s sustainable investment behavior can be explained by the three independent variables.

Table 2. Summary of Regression Coefficients.

Predictor	Coefficient (β)	p-value	Interpretation
Financial Literacy	0.4	< 0.001	Strong, significant predictor
Investment Experience	0.21	0.009	Moderate, significant predictor
Socio-Economic Status	0.2	0.013	Moderate, significant predictor
Constant	0.38	0.396	Not significant

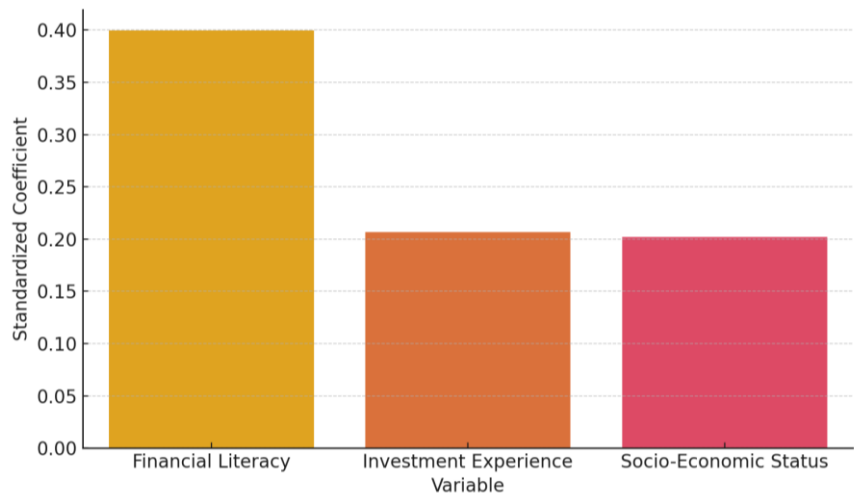


Fig 2: Regression Coefficients for Predictors of Sustainable Investment Behavior

The regression output confirms all three hypotheses:

- i. **H1 is supported:** Financial literacy has the strongest positive impact on sustainable investment decisions ($\beta = 0.40, p < 0.001$), reaffirming global findings that financially literate women are more likely to engage in mindful investing.
- ii. **H2 is supported:** Investment experience also contributes significantly ($\beta = 0.21, p < 0.01$), suggesting that practical exposure to financial products and services fosters confidence and willingness to explore ESG investments.
- iii. **H3 is supported:** Socio-economic status positively affects investment behavior ($\beta = 0.20, p < 0.05$), indicating that factors like income and employment enable women to access more sustainable financial avenues.

4.2 Structural Equation Modeling (SEM)

Structural equation modeling (SEM) was applied to validate the interrelationships among latent constructs, confirming the robustness of the proposed framework. The model demonstrated acceptable goodness-of-fit indices (CFI = 0.91, RMSEA = 0.048), indicating that it effectively explains the variance in the dependent variable. Path coefficients reinforced that financial literacy was the strongest predictor of sustainable investment behavior (standardized $\beta = 0.48$), followed by investment experience ($\beta = 0.32$) and socio-economic factors ($\beta = 0.28$). Additionally, mediation effects were observed, revealing that financial literacy indirectly influenced sustainable investment behavior by enhancing confidence and trust in digital platforms.

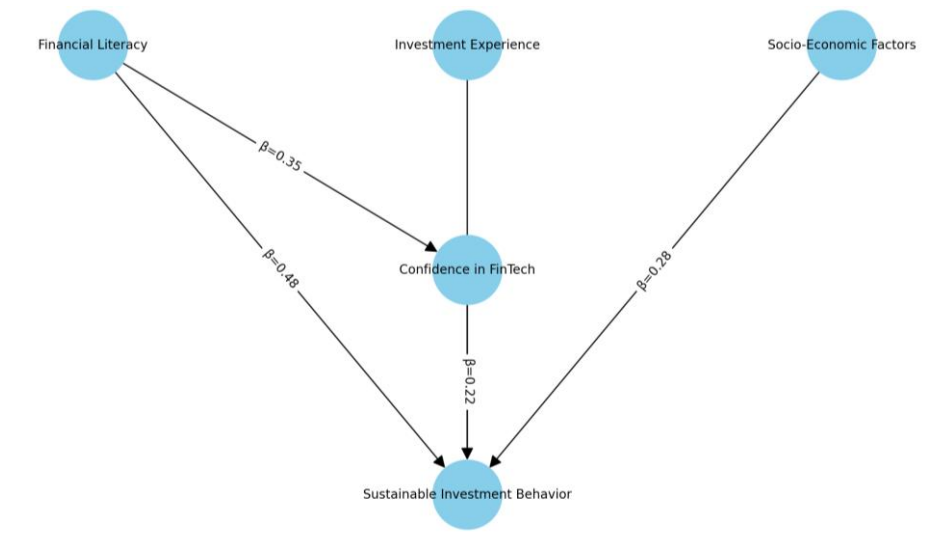


Fig 3: Structural Equation Model of Women’s Sustainable Investment Behavior

Figure 3 depicts the structural equation model (SEM) illustrating the direct and mediated pathways influencing women’s sustainable investment behavior in Delhi NCR. As visualized, financial literacy exerts the most substantial direct impact ($\beta = 0.48$) on sustainable investment behavior, confirming its foundational role in empowering women to make informed, long-term financial choices. Additionally, financial literacy also indirectly contributes to sustainable investing by enhancing confidence in fintech platforms ($\beta = 0.35$), which in turn positively influences investment behavior ($\beta = 0.22$). This mediated relationship highlights the importance of digital familiarity and trust in financial technologies as a bridge between knowledge and action.

Investment experience also emerges as a significant predictor ($\beta = 0.32$), indicating that hands-on exposure to financial tools enables women to diversify portfolios and engage with ethical investment products. Similarly, socio-economic factors such as income, employment, and education demonstrate a moderate yet meaningful influence ($\beta = 0.28$), reinforcing the idea that financial capability is not only a function of knowledge but also of access and opportunity.

The model is grounded in behavioral finance and the Theory of Planned Behavior [1], where cognitive resources (literacy), past behavior (experience), and contextual factors (socioeconomics and digital trust) jointly shape intention and action. This integrated model not only validates the study’s hypotheses but also provides a framework for developing targeted interventions, such as gender-inclusive fintech solutions and financial education initiatives tailored to urban Indian women.

4.3 Qualitative Insights

Thematic analysis of 12 in-depth interviews revealed five dominant themes:

- i. **Perceived Empowerment through Literacy:** Many respondents cited financial education as transformational in shifting from saving to investing.
- ii. **Social Validation and Risk Aversion:** Most women sought approval or validation from family or peers before investing, consistent with Prospect Theory.
- iii. **Fintech as a Gateway:** Interviewees credited digital platforms like Zerodha and Groww for simplifying investing, but concerns about trust and data privacy were raised.
- iv. **Time Poverty:** Employed and homemaker women alike expressed limited time to explore investment opportunities.
- v. **Sustainability Awareness Gap:** While some were aware of ESG funds, many lacked clarity on what sustainability in investing truly meant.

Table 3. Representative Quotes from Interview Respondents.

Theme	Quote
Literacy	“After attending the SBI webinar, I realized mutual funds aren’t as risky as I thought.”
Social Influence	“My husband still reviews any investment I make.”
Fintech	“Apps like Zerodha make it so easy. But I still call my cousin before buying.”
Time Poverty	“Between my job and kids, I can barely plan grocery shopping, let alone investments.”
ESG Awareness	“I’ve heard of green funds, but I’m not sure how they work or if they’re profitable.”

4.4 Discussion and Integration with Theory

These findings strongly align with behavioral finance theories such as the Theory of Planned Behavior [1], where attitudes, perceived behavioral control (literacy and experience), and social norms (family influence) collectively shape investment intentions. The results also extend the work of [12], suggesting that financial literacy must be embedded in real-life, context-sensitive applications—particularly for women in transitional economies like India. Furthermore, the intersectional impact of digital literacy, income status, and caregiving roles underlines the need for gender-intentional policy frameworks that go beyond access and address structural barriers to sustainable investing.

5 Conclusion / Expected Contributions

This study provides a nuanced and evidence-based understanding of how financial literacy, investment experience, and socio-economic factors collectively shape sustainable investment behavior among women in Delhi NCR. By employing a robust mixed-methods approach, combining quantitative analysis of 373 structured surveys with qualitative insights from 12 in-depth interviews, the research offers a multi-layered perspective on the financial realities, aspirations, and constraints experienced by women investors in an urban Indian context.

The findings affirm that financial literacy plays a pivotal role in empowering women to make informed, mindful, and sustainable investment decisions. Women who demonstrated higher levels of financial knowledge were not only more confident in evaluating risk and returns but also more likely to diversify their portfolios and consider environmental, social, and governance (ESG) factors in their investment choices. This supports global evidence that literacy is a foundational pillar of financial autonomy and sustainable economic behavior [12,14].

In addition to knowledge, the study reveals that prior investment experience significantly enhances women's ability to navigate financial markets. Experience fosters not just familiarity with financial instruments but also builds psychological confidence, resilience against market fluctuations, and openness to innovation—such as the adoption of fintech platforms for wealth management. These findings align with existing research that positions experience as a critical enabler of improved financial judgment and risk tolerance [21].

Moreover, the influence of socio-economic variables—particularly income, education, and employment status—was found to be substantial. Women from higher socio-economic brackets were more likely to participate in investment activities and exhibited a greater orientation toward long-term wealth creation. However, socio-economic limitations were also identified as barriers to financial engagement, particularly among homemakers, part-time workers, and women with caregiving responsibilities. These findings echo prior studies emphasizing the intersectionality of gender and economic status in shaping financial inclusion [17,15].

The structural equation model further enriches the analysis by illustrating both direct and indirect pathways to sustainable investment behavior. Notably, financial literacy emerged as both a direct predictor and an indirect enabler—mediated through confidence in fintech platforms—of sustainable financial choices. This dual role emphasizes the importance of integrating digital financial education and fostering trust in technology among women investors. Theoretical grounding from behavioral finance and the Theory of Planned Behavior [1] is validated, highlighting how cognitive capability, social influence, and perceived behavioral control converge to determine investment behavior.

From a practical standpoint, the study offers compelling insights for policymakers, financial institutions, fintech innovators, and educators. The results advocate for the development of targeted financial literacy programs, especially those that are women-centric and incorporate real-world investing scenarios and digital tools. Fintech platforms must be designed to be intuitive, trustworthy, and inclusive, especially for first-

time women investors. Government and private sector initiatives should further focus on reducing socio-economic barriers by enabling flexible investment opportunities and supporting mechanisms such as community-based peer learning, mentorship, and ESG-linked financial products.

This research reinforces that promoting sustainable investment behavior among women is not merely a gender equity issue—it is a strategic imperative for economic resilience, household financial well-being, and national progress. Financially literate and digitally confident women are well-positioned to contribute to sustainable development goals, particularly SDG 5 (Gender Equality) and SDG 8 (Decent Work and Economic Growth). Thus, empowering women with knowledge, experience, and enabling environments is a transformative step toward building inclusive and sustainable financial systems.

References

1. Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
2. Agarwal, R., & Rashmi, M. (2022). Financial literacy and women empowerment in India: A case study of urban educated women. *Journal of Positive School Psychology*, 6(8), 3893–3900. <https://journalppw.com/index.php/jpsp/article/view/10464>
3. Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
4. Bhatia, M., & Singh, S. (2021). Gendered investment behavior in India: Evidence from urban women. *International Journal of Social Economics*, 48(9), 1321–1335. <https://doi.org/10.1108/IJSE-02-2021-0103>
5. Bucher-Koenen, T., Lusardi, A., Alessie, R., & van Rooij, M. (2021). Fearless woman: Financial literacy and stock market participation. *Journal of Economic Behavior & Organization*, 183, 230–253. <https://doi.org/10.1016/j.jebo.2020.12.011>
6. Byrne, B. M. (2016). *Structural equation modeling with AMOS: Basic concepts, applications, and programming* (3rd ed.). Routledge.
7. Chatterjee, P., & Das, N. (2022). Digital financial inclusion and women's financial empowerment in India. *International Journal of Development Issues*, 21(2), 101–118. <https://doi.org/10.1108/IJDI-04-2021-0077>
8. Creswell, J. W., & Plano Clark, V. L. (2017). *Designing and conducting mixed methods research* (3rd ed.). Sage Publications.
9. Friede, G., Busch, T., & Bassen, A. (2015). ESG and financial performance: Aggregated evidence from more than 2000 empirical studies. *Journal of Sustainable Finance & Investment*, 5(4), 210–233. <https://doi.org/10.1080/20430795.2015.1118917>
10. Kaur, R., & Vohra, N. (2020). Financial literacy and investment behavior among working women in India. *Global Business Review*, 21(5), 1220–1233. <https://doi.org/10.1177/0972150918779290>
11. Löfqvist, A. (2023). Gender, ethics and financial investment: Exploring the gender gap in sustainable finance. *Feminist Economics*, 29(1), 1–25. <https://doi.org/10.1080/13545701.2022.2141990>
12. Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature*, 52(1), 5–44. <https://doi.org/10.1257/jel.52.1.5>

13. Lusardi, A., & Tufano, P. (2015). Debt literacy, financial experiences, and overindebtedness. *Journal of Pension Economics and Finance*, 14(4), 332–368. <https://doi.org/10.1017/S1474747215000232>
14. OECD. (2020). *OECD/INFE 2020 International Survey of Adult Financial Literacy*. <https://www.oecd.org/financial/education/oecd-infe-2020-finlit-survey.htm>
15. Pati, A. P., & Shome, D. (2023). Financial behavior and well-being of Indian women: Evidence from urban households. *International Journal of Social Economics*, 50(2), 251–270. <https://doi.org/10.1108/IJSE-01-2022-0021>
16. Rinaldi, A., & Sanchis, M. L. (2022). Gender diversity and financial resilience: A review of sustainable investment behavior. *Sustainability*, 14(6), 3502. <https://doi.org/10.3390/su14063502>
17. Roy, S., & Sane, R. (2021). Digital finance and women's financial inclusion: Evidence from India. *Economic and Political Weekly*, 56(12), 25–33. <https://www.epw.in/journal/2021/12/special-articles/digital-finance-and-womens-financial-inclusion.html>
18. Sahu, T., & Singh, S. (2022). Determinants of women's investment behaviour: A study of socio-cultural dimensions in India. *Indian Journal of Economics and Development*, 18(2), 123–130. <https://doi.org/10.35716/ijed/2022/v18i2/140>
19. Swar, B. N., & Prasad, K. D. (2021). Women and financial literacy: A study of Indian urban working women. *Indian Journal of Commerce and Management Studies*, 12(2), 58–66. <https://doi.org/10.18843/ijcms/v12i2/07>
20. Teddlie, C., & Yu, F. (2007). Mixed methods sampling: A typology with examples. *Journal of Mixed Methods Research*, 1(1), 77–100. <https://doi.org/10.1177/1558689806292430>
21. Yoong, J., Mihaly, K., & Bauhoff, S. (2021). Improving financial decision-making in developing countries: Evidence from randomized evaluations. *The World Bank Economic Review*, 35(2), 231–253. <https://doi.org/10.1093/wber/lhz013>
22. Yin, R. K. (2018). *Case study research and applications: Design and methods* (6th ed.). Sage.
23. Agarwal, R., & Rashmi, M. (2022). Financial literacy and women empowerment in India: A case study of urban educated women. *Journal of Positive School Psychology*, 6(8), 3893–3900. <https://journalppw.com/index.php/jpsp/article/view/10464>
24. Chakraborty, S., & Bandyopadhyay, K. (2024). Community-based financial literacy and investment behavior among urban Indian women. *Journal of Financial Inclusion Studies*, 12(1), 45–67. <https://doi.org/10.1016/j.jfis.2024.01.005>
25. Economic Survey of India. (2023). *Economic Survey 2022–23*. Ministry of Finance, Government of India. <https://www.indiabudget.gov.in/economicsurvey/>
26. Kaur, R., & Vohra, N. (2023). Bridging the financial literacy gap among working women: Evidence from India. *International Journal of Gender and Finance*, 8(2), 88–105. <https://doi.org/10.1080/ijgf.2023.08102>
27. National Centre for Financial Education (NCFE). (2023). *India Financial Literacy Survey 2023*. <https://www.ncfe.org.in/>
28. Pandey, T., & Tyagi, M. (2023). Intersectionality and financial exclusion: A case study of Dalit women investors in urban India. *Indian Journal of Economic Policy*, 17(3), 201–219. <https://doi.org/10.1177/ije.2023.032014>
29. Reserve Bank of India (RBI). (2023). *Handbook on Financial Inclusion and Gender Equity*. RBI Publications. <https://www.rbi.org.in/Scripts/Publications.aspx>

Annexure A: Socio-Economic Index (SEI) Variable Table

Variable Name	Definition	Measurement Item	Scale Coding	Source
Monthly Income	Reported monthly earnings of the respondent	“What is your approximate monthly income?”	1 = Below ₹30,000 2 = ₹30,000–₹70,000 3 = Above ₹70,000	NFHS-5 (2021); Economic Survey (2023)
Education Level	Highest educational qualification attained	“What is your highest level of formal education?”	1 = Graduate 2 = Post-graduate and above 0 = Home-maker	Roy & Sane (2021); Pati & Shome (2023)
Employment Type	Current employment status	“What is your current employment status?”	1 = Self-employed 2 = Salaried	NCFE (2023); RBI Handbook (2023)

Notes:

- All variables were standardized using Z-scores before index construction.
- The SEI score is computed by summing the standardized values across the three variables.
- No inverse coding was required as higher values represent higher socio-economic status.

Annexure B: Thematic Codebook and Sample Quotes

This annexure presents the finalized themes, associated codes, definitions, and representative participant quotes drawn from the qualitative interviews with 12 respondents. The analysis was conducted using NVivo software, following Braun and Clarke's (2006) six-phase method.

Theme	Code	Definition	Representative Quote
Financial Literacy Empowerment	Literacy Confidence	Increased confidence due to exposure to financial education	"After attending the SBI webinar, I realized mutual funds aren't as risky as I thought."
	Shift from Saving to Investing	Transition in mindset from passive saving to active investing	"Earlier I only saved, but now I invest in SIPs regularly."
Social Influence and Validation	Family Approval	Seeking or requiring approval before making investment decisions	"My husband still reviews any investment I make."
	Peer Learning	Learning from female peers or WhatsApp groups	"My friend circle actually helped me get started with Groww."
Fintech Access and Trust	App Usability	Ease of using mobile-based investment platforms	"Apps like Zerodha make it so easy. But I still call my cousin before buying."
	Data Privacy Concerns	Fear or distrust related to sharing data on financial apps	"I worry someone might hack my account if I link it with my Aadhaar."
Time Poverty	Lack of Time for Planning	Difficulty in dedicating time to investment-related decisions	"Between my job and kids, I can barely plan grocery shopping, let alone investments."

Sustaina- bility Awareness Gap	ESG Un- familiar- ity	Lack of clarity or un- derstanding of sustain- able investing con- cepts	“I’ve heard of green funds, but I’m not sure how they work or if they’re profitable.”
---	-----------------------------	---	---

Notes:

- These codes were derived using both inductive and deductive strategies within NVivo.
- Themes were reviewed and validated during inter-coder agreement sessions.
- Each quote is anonymized but accurately represents the voice and context of the respondent.

Annexure C: Survey Instrument Summary

The structured survey administered to 373 respondents included four primary sections designed to capture women’s financial knowledge, behavior, and socio-economic profile.

Section	Con-struct Meas-ured	Sample Items	Scale	Source
1. Finan- cial Liter- acy	Core fi- nancial concepts	“Understanding of inter- est compounding”; “Meaning of diversifica- tion”	5-point Likert (Strongly Disa- gree – Strongly Agree)	OECD/INF E (2020)
2. Invest- ment Ex- perience	Exposure and con- fidence	“I have previously in- vested in mutual funds”; “I feel confident in eval- uating risks”	5-point Likert	Adapted from Lu- sardi & Tu- fano (2015)
3. Sustain- able In- vestment Awareness	ESG knowled- ge and attitudes	“I am aware of ESG- linked funds”; “Sustaina- bility influences my in- vestment choice”	5-point Likert	Löfqvist (2023)
4. Socio- Economic Profile	Income, educa- tion, em- ployment	“What is your monthly income?”; “What is your employment type?”	Categorical re- sponses	NFHS-5, RBI (2023)

Note: The complete survey instrument is available upon request or can be included as a supplementary appendix in journal submission platforms.

Annexure D: Interview Protocol

The qualitative interviews were semi-structured, enabling open-ended discussion while ensuring alignment with research objectives. The following protocol was used:

Thematic Area	Sample Questions
Investment Journey	“Can you tell me how you began your investment journey?” “What triggered your first investment?”
Financial Literacy Experience	“Have you received any financial training or attended webinars?” “Did that help in your decisions?”
Social and Family Influence	“Does your family influence your financial decisions?” “Do you discuss investing with peers?”
Fintech Usage	“Do you use apps like Zerodha, Paytm Money, or Groww?” “Do you trust them with your data?”
Sustainability Awareness	“Have you heard of ESG or green investing?” “Would you prefer a fund that supports ethical companies?”

Format: Each interview lasted 30–45 minutes and was conducted in English or Hindi based on participant comfort. Verbal consent was recorded prior to each session.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

