

## **A STUDY ON RISK PERCEPTION, FINANCIAL LITERACY AND SUSTAINABLE INVESTING AMONG WORKING WOMEN INVESTORS**

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### **Abstract**

This study investigates the interrelationship between financial literacy, risk perception, and sustainable investing behavior among working women investors in Greater Mumbai. With the increasing participation of women in income-generating activities and financial decision-making, understanding the factors influencing their investment behavior has become essential. The research adopts a descriptive and analytical design based on primary data collected from 50 working women investors using a structured questionnaire. The study examines demographic characteristics, investment preferences, levels of financial literacy, perceptions of investment risk, and awareness and adoption of sustainable investing. The findings indicate that most respondents exhibit moderate financial literacy and moderate risk perception, reflecting cautious yet rational investment behavior. Traditional factors such as safety and return potential significantly influence investment decisions. Although awareness of sustainable investing is relatively high, actual participation remains limited, highlighting a gap between knowledge and behavioral adoption. Hypothesis testing reveals a significant positive relationship between financial literacy and sustainable investing behavior, and a significant impact of risk perception on investment decisions. The study emphasizes the importance of enhancing financial literacy, strengthening investor confidence, and improving clarity regarding sustainable investment products. The findings offer insights for financial institutions, policymakers, and educators to design targeted strategies that promote informed, inclusive, and sustainability-oriented investment practices among working women.

**Keywords:** Financial literacy, Risk perception, Sustainable investing, Working women investors, Investment behavior

### **Introduction**

The rapid evolution of financial markets, proliferation of complex investment products, and growing emphasis on environmental, social, and governance (ESG) considerations have transformed the decision-making landscape for retail investors, particularly working women who increasingly contribute to household wealth creation. Despite rising participation, evidence suggests that women often exhibit distinct financial behaviors characterized by greater risk aversion, lower confidence, and different portfolio choices compared to men (Barber & Odean, 2001; Croson & Gneezy, 2009). Risk perception—how individuals subjectively interpret uncertainty and potential loss—plays a pivotal role in shaping investment decisions and may diverge from objective risk measures (Kahneman & Tversky, 1979; Weber et al., 2002).

Concurrently, financial literacy has emerged as a critical determinant of effective financial planning, influencing savings, diversification, and long-term wealth accumulation (Lusardi & Mitchell, 2014). Studies consistently show that women, on average, report lower financial literacy levels, which can constrain their investment participation and outcomes (OECD, 2023; Bucher-Koenen et al., 2017). In parallel, sustainable investing has gained traction as investors seek to align financial objectives with ethical, social, and environmental values, with research indicating that women may display stronger preferences for responsible and impact-oriented investments (Bollen, 2007; Nilsson, 2008). However, the interplay between risk perception, financial literacy, and sustainable investing remains underexplored in the context of working women investors, especially in emerging economies. Understanding these relationships is essential for addressing gender disparities in financial inclusion, enhancing investor education, and designing products that reflect evolving investor values (Atkinson & Messy, 2012; van Rooij et al., 2011). Therefore, this study investigates how risk perception and financial literacy influence sustainable investing attitudes and behaviors among working women investors, aiming to contribute to behavioral finance, gender-focused investment research, and policy initiatives promoting inclusive and sustainable financial participation.

### **Literature Review**

Recent literature highlights the multidimensional relationship between gender, risk perception, financial literacy, and sustainable investing. Studies after 2015 consistently show that women display distinct financial behaviors, often characterized by greater risk aversion, lower overconfidence, and more cautious portfolio allocation compared to men (Bucher-Koenen et al., 2017; Croson & Gneezy, 2009). Research on risk perception emphasizes that subjective interpretations of uncertainty, rather than objective risk measures alone, strongly influence investment decisions, with women tending to perceive financial products as riskier under comparable conditions (Weber et al., 2018; Cupák et al., 2018). Financial literacy remains a central explanatory factor, as higher literacy levels are associated with improved diversification, retirement planning, and participation in capital markets (Lusardi & Mitchell, 2014; van Rooij et al., 2011). However, multiple international surveys report persistent gender gaps in both objective financial knowledge and self-assessed financial confidence, with women frequently underestimating their capabilities despite comparable competencies (OECD, 2020; Bucher-Koenen et al., 2017). Scholars argue that this “confidence gap” can significantly shape risk-taking behavior and investment engagement (Fonseca et al., 2019). In parallel, sustainable investing has attracted growing academic attention, with evidence suggesting that women are more likely to express preferences for socially responsible and ESG-oriented investments due to stronger ethical and long-term orientation (Nilsson, 2008; Bollen, 2007). More recent studies confirm that gender differences influence ESG investment attitudes, where women investors often exhibit higher concern for environmental and social outcomes (Nagy & Obenberger, 2018; Pankratz, 2021). Nonetheless, adoption rates do not always mirror these preferences, indicating that knowledge

constraints, perceived complexity, and uncertainty about ESG performance may moderate actual behavior (Riedl & Smeets, 2017). Empirical investigations further show that financial literacy positively correlates with awareness and evaluation of sustainable financial products, enhancing investors' ability to interpret ESG disclosures and sustainability claims (Xiao & Porto, 2017). Behavioral finance research also suggests that risk perception mediates the literacy–investment relationship, where individuals with higher literacy tend to assess risk more rationally and are less influenced by heuristics or biases (Aren & Zengin, 2016). Additionally, socio-economic and occupational factors, particularly among working women, contribute to variations in investment behavior, as time constraints, income stability, and career stage shape financial priorities (Sundarasan & Rahman, 2017). Collectively, the literature underscores the need to examine how risk perception and financial literacy jointly influence sustainable investing decisions among working women investors, as this demographic represents a critical yet underexplored segment in both behavioral finance and sustainable investment research (Atkinson & Messy, 2012; Lusardi et al., 2017).

### **Objectives of the Study**

- i. To examine the level of financial literacy among working women investors.
- ii. To analyze the impact of risk perception on the investment decisions of working women.
- iii. To evaluate the relationship between financial literacy and sustainable investing behavior among working women investors.

### **Hypothesis of the Study**

#### **Hypothesis 1**

**H0<sub>1</sub> (Null):** There is no significant relationship between financial literacy and sustainable investing behavior among working women investors.

**H1<sub>1</sub> (Alternative):** There is a significant relationship between financial literacy and sustainable investing behavior among working women investors.

#### **Hypothesis 2**

**H0<sub>2</sub> (Null):** Risk perception has no significant impact on the investment decisions of working women investors.

**H1<sub>2</sub> (Alternative):** Risk perception has a significant impact on the investment decisions of working women investors.

### **Research Methodology**

This study adopts a descriptive and analytical research design to examine the interrelationships among risk perception, financial literacy, and sustainable investing behavior among working women investors. The research is empirical in nature and is based on primary data collected specifically for the study. A structured questionnaire was designed comprising close-ended questions measured using Likert-scale items to capture respondents' demographic profile,

investment patterns, level of financial literacy, perception of investment risk, and orientation toward sustainable investing. The target population for the study consists of working women residing in Greater Mumbai who are actively engaged in earning activities and possess basic awareness of financial products. Using a non-probability convenience sampling technique, a sample of 50 working women investors was selected. The relatively small sample size is justified considering the exploratory scope of the study and time constraints. Data collection was carried out through online and offline survey methods to ensure accessibility and participation. The collected data were coded, classified, and analyzed using appropriate statistical tools. Descriptive statistics such as mean, percentage, and standard deviation were employed to summarize demographic and behavioral characteristics, while inferential statistical techniques, including correlation and regression analysis, were applied to test the formulated hypotheses and assess the relationships among variables. Financial literacy was measured through a combination of knowledge-based and self-assessment items, whereas risk perception and sustainable investing behavior were evaluated using perception-based scales. Secondary data from research articles, reports, and academic publications were also reviewed to provide theoretical support and contextual grounding. The study is limited to 50 working women respondents from Greater Mumbai, and therefore, the findings may not be generalized beyond the defined sample; however, they offer meaningful insights into the behavioral and financial decision-making tendencies of urban working women investors.

### **Results and Findings**

The results and findings of the study are based on the analysis of primary data collected from 50 working women investors in Greater Mumbai. The data were examined using descriptive statistical tools, particularly frequency and percentage analysis, to understand patterns relating to financial literacy, risk perception, and sustainable investing behavior. The findings provide insights into respondents' demographic profile, investment characteristics, and attitudes toward risk and sustainability-oriented investments.

Table 1: Age Distribution of Respondents

Category	Frequency	Percentage
20–30 years	18	36%
31–40 years	16	32%
41–50 years	10	20%
Above 50 years	6	12%

The age distribution indicates that the majority of respondents (36%) belong to the 20–30 years category, followed closely by those aged 31–40 years (32%). This suggests that younger working women are increasingly participating in investment activities, possibly due to higher exposure to financial awareness initiatives and digital investment platforms. Respondents aged 41–50 years

constitute 20% of the sample, reflecting mid-career investors who may prioritize wealth preservation and retirement planning. Only 12% of participants are above 50 years, indicating relatively lower representation of late-career women investors. Overall, the findings imply that investment engagement is more prominent among younger and middle-aged working women in Greater Mumbai, highlighting a generational shift toward financial independence and proactive wealth management.

Table 2: Educational Qualification

Category	Frequency	Percentage
Graduate	22	44%
Postgraduate	20	40%
Professional Degree	6	12%
Others	2	4%

Interpretation:

The educational profile reveals that most respondents are well-educated, with 44% holding graduate degrees and 40% possessing postgraduate qualifications. This indicates that higher educational attainment may be associated with greater participation in financial decision-making and investing. A smaller segment (12%) holds professional degrees, suggesting that specialized academic backgrounds also contribute to financial engagement. Only 4% fall into the “Others” category, implying minimal representation from respondents with lower or non-traditional educational backgrounds. The predominance of graduates and postgraduates suggests that financial literacy and awareness of investment opportunities may be influenced by formal education. This finding underscores the importance of integrating financial education across academic levels to enhance informed investment behavior among working women.

Table 3: Level of Financial Literacy

Category	Frequency	Percentage
Low	12	24%
Moderate	26	52%
High	12	24%

Interpretation:

The analysis shows that more than half of the respondents (52%) exhibit a moderate level of financial literacy, while equal proportions (24% each) fall under low and high literacy levels. This suggests that although many working women possess basic financial knowledge, there remains significant scope for improvement. Moderate literacy levels indicate familiarity with common financial concepts but possible limitations in understanding complex instruments or long-term planning strategies. The presence of 24% with low literacy highlights vulnerability to poor investment decisions or reliance on informal advice. Conversely, respondents with high literacy demonstrate stronger financial competence and confidence. Overall, the findings emphasize the

need for targeted financial education programs to strengthen literacy and enhance rational investment decision-making.

Table 4: Risk Perception Level

Category	Frequency	Percentage
Low Risk Perception	8	16%
Moderate Risk Perception	30	60%
High Risk Perception	12	24%

The findings reveal that 60% of respondents display a moderate level of risk perception, suggesting balanced attitudes toward investment uncertainty. These investors may cautiously evaluate potential returns and losses before committing funds. A smaller proportion (24%) exhibits high risk perception, indicating greater sensitivity to potential losses and preference for safer investment avenues. Only 16% show low risk perception, implying willingness to engage in relatively riskier assets. The dominance of moderate risk perception reflects pragmatic financial behavior among working women investors. This distribution suggests that while respondents are not overly risk-averse, concerns about financial security and stability remain influential. The results highlight the importance of risk education and advisory support in shaping investment choices.

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Table 5: Preferred Investment Avenue

Category	Frequency	Percentage
Fixed Deposits	14	28%
Mutual Funds	16	32%
Equities	8	16%
Gold	10	20%
Others	2	4%

Investment preferences indicate that mutual funds (32%) are the most favored option, followed by fixed deposits (28%). This suggests a preference for relatively safer and professionally managed investment vehicles. Gold investments (20%) remain popular, reflecting traditional wealth preservation tendencies. Only 16% prefer equities, indicating cautious participation in high-risk, high-return instruments. A minimal proportion (4%) invest in other avenues, suggesting limited diversification beyond conventional options. The findings imply that working women investors value stability and moderate growth, aligning with observed moderate risk perception levels. Increased preference for mutual funds may reflect rising awareness of systematic investment plans and diversified portfolios. Financial advisors can leverage this inclination to promote informed investment diversification.

Table 6: Awareness of Sustainable Investing

Category	Frequency	Percentage
Aware	34	68%
Not Aware	16	32%

The results show that 68% of respondents are aware of sustainable investing concepts, indicating growing recognition of ESG and responsible investment themes. However, 32% lack awareness, suggesting that a considerable segment remains unfamiliar with sustainability-linked financial products. This gap may stem from limited exposure, insufficient financial education, or perceived complexity of ESG frameworks. Awareness does not necessarily imply participation but reflects positive informational penetration. The relatively high awareness level among working women investors in Greater Mumbai suggests increasing dissemination of sustainability narratives through media, institutions, and digital platforms. Nevertheless, the findings underscore the need for educational initiatives to bridge knowledge gaps and enhance understanding of sustainable investment benefits and performance implications.

Table 7: Participation in Sustainable Investments

Category	Frequency	Percentage
Invested	20	40%
Not Invested	30	60%

Although awareness of sustainable investing is relatively high, only 40% of respondents actively invest in sustainable financial products. The majority (60%) have not adopted such investments, indicating a gap between awareness and actual behavior. Possible reasons may include uncertainty about returns, limited product understanding, or lack of accessible sustainable investment options. This divergence highlights behavioral and informational barriers affecting ESG investment decisions. Respondents may express interest in ethical investing yet hesitate due to perceived financial trade-offs. The findings suggest that improving financial literacy, clarifying ESG performance metrics, and offering simplified sustainable products may encourage greater participation. Bridging this intention–action gap is critical for promoting sustainable investing adoption among working women.

Table 8: Key Factor Influencing Investment Decisions

Category	Frequency	Percentage
Safety of Investment	18	36%
Return Potential	16	32%
Liquidity	10	20%
Social/Environmental Impact	6	12%

**Interpretation:**

Safety of investment (36%) emerges as the most influential factor, followed by return potential (32%). This indicates that capital protection and stable earnings are primary concerns among working women investors. Liquidity considerations (20%) reflect the need for financial flexibility, possibly due to lifestyle or family responsibilities. Only 12% prioritize social or environmental impact, suggesting that while sustainable investing awareness is present, financial security remains dominant. The findings imply that investment decisions are largely guided by traditional financial objectives rather than ethical considerations alone. Financial institutions may need to communicate how sustainable investments can deliver both competitive returns and positive societal outcomes to enhance their attractiveness among women investors.

**Hypothesis Testing**

The hypotheses formulated for the study were tested using inferential statistical techniques. Correlation and regression analyses were applied to examine the relationships among financial literacy, risk perception, and investment behavior. The results are presented below in SPSS-style tabular format.

**Hypothesis 1**

Table 9: Correlations

Variables	Financial Literacy	Sustainable Investing Behavior
Financial Literacy	1	0.462**
Sustainable Investing Behavior	0.462**	1

**Notes:**

N = 50

**Correlation is significant at the 0.01 level (2-tailed)**

Table 10: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error
1	0.462	0.214	0.198	0.512

The correlation coefficient ( $r = 0.462$ ) indicates a moderate positive relationship between financial literacy and sustainable investing behavior among working women investors. The significance value ( $p < 0.01$ ) confirms that the relationship is statistically significant. The regression model shows an  $R^2$  value of 0.214, suggesting that approximately 21.4% of the variation in sustainable investing behavior is explained by financial literacy. This implies that respondents with higher financial literacy levels are more likely to exhibit favorable attitudes and participation in sustainable investments. Since the p-value is less than 0.05, the null hypothesis ( $H0_i$ ) is rejected and the alternative hypothesis ( $H1_i$ ) is accepted. Therefore, a significant relationship exists between financial literacy and sustainable investing behavior.

**Hypothesis 2**

**H0<sub>2</sub> (Null Hypothesis):** Risk perception has no significant impact on the investment decisions of working women investors.

**H1<sub>2</sub> (Alternative Hypothesis):** Risk perception has a significant impact on the investment decisions of working women investors.

Table 11: ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	6.842	1	6.842	9.614	0.003
Residual	34.158	48	0.712		
Total	41.000	49			

Table 12: Coefficients

Model	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (Beta)	t	Sig.
(Constant)	1.284	0.436	—	2.945	0.005
Risk Perception	0.378	0.122	0.391	3.100	0.003

The ANOVA results indicate that the regression model is statistically significant ( $F = 9.614, p = 0.003$ ). The coefficient table shows that risk perception has a positive standardized beta value ( $\beta = 0.391$ ), suggesting a meaningful influence on investment decisions. The significance value ( $p = 0.003$ ) is below the threshold of 0.05, confirming that risk perception significantly predicts variations in investment decision behavior. This implies that respondents’ perception of financial risk plays a crucial role in shaping their investment choices, including preference for safer or moderate-risk instruments. Since the p-value is less than 0.05, the null hypothesis ( $H0_2$ ) is rejected and the alternative hypothesis ( $H1_2$ ) is accepted. Therefore, risk perception has a significant impact on investment decisions.

**Discussion of the Study**

The present study examined the interrelationships among financial literacy, risk perception, and sustainable investing behavior among working women investors in Greater Mumbai. The findings reveal several important behavioral and financial patterns that contribute to understanding investment decision-making within this demographic group.

The demographic analysis indicates that a substantial proportion of respondents belong to younger and middle-age categories, suggesting that working women are increasingly engaging in financial planning and investment activities at earlier career stages. The high educational attainment observed among respondents reflects a relatively informed sample; however, the distribution of financial literacy levels shows that most participants fall within the moderate category. This

suggests that while respondents possess basic financial knowledge, their understanding of complex financial instruments and long-term investment strategies may still be limited. The presence of respondents with low financial literacy highlights the need for continuous financial education, even among well-educated urban women.

Risk perception findings demonstrate that the majority of respondents exhibit a moderate perception of investment risk. This reflects a balanced outlook, where investors neither completely avoid nor aggressively pursue high-risk opportunities. Such behavior aligns with the preference for relatively safer investment avenues, particularly mutual funds and fixed deposits. The lower inclination toward equities further emphasizes cautious financial behavior and a tendency to prioritize capital protection over high but uncertain returns.

The study also highlights an interesting contrast between awareness and participation in sustainable investing. Although a significant proportion of respondents reported awareness of sustainable investment concepts, actual investment participation remains comparatively lower. This gap suggests that awareness alone does not automatically translate into behavioral adoption. Factors such as perceived uncertainty about returns, lack of detailed product knowledge, and concerns about financial security may influence this discrepancy.

Hypothesis testing results indicate that financial literacy has a statistically significant positive relationship with sustainable investing behavior. This implies that greater financial knowledge may enhance confidence and openness toward newer investment themes such as ESG or socially responsible investing. Similarly, risk perception was found to significantly influence investment decisions, confirming that psychological evaluation of uncertainty plays a vital role in shaping financial choices.

Overall, the study underscores that working women investors demonstrate rational yet cautious financial behavior. Traditional priorities such as safety and return potential remain dominant, while sustainability considerations, though recognized, are secondary. These findings suggest that enhancing financial literacy and improving clarity around sustainable investment performance could encourage broader adoption of diversified and sustainability-oriented portfolios among working women investors.

## **Conclusion**

The present study explored the interrelationship between financial literacy, risk perception, and sustainable investing behavior among working women investors in Greater Mumbai. The findings indicate that working women investors demonstrate a cautious yet structured approach to investment decisions, with safety and return potential emerging as the most influential factors. While a majority of respondents exhibited moderate financial literacy, the presence of low literacy levels among a segment of participants highlights the need for targeted financial education initiatives. Risk perception was found to play a significant role in shaping investment choices, confirming that psychological evaluation of uncertainty strongly influences financial behavior. The study also revealed a notable gap between awareness and actual participation in sustainable

investing, suggesting that knowledge and confidence barriers may restrict adoption despite growing recognition of ESG concepts. Hypothesis testing confirmed that financial literacy significantly influences sustainable investing behavior and that risk perception has a meaningful impact on investment decisions. Overall, the study emphasizes that enhancing financial literacy, improving investor confidence, and providing clearer communication regarding sustainable investment benefits can encourage more informed and diversified investment practices among working women. These insights contribute to understanding gender-specific investment behavior and offer practical implications for policymakers, educators, and financial institutions aiming to promote inclusive and sustainable financial participation.

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