

Research Article

Role of Advanced Skills Training in Accelerating Environmental Innovations at ICICI Bank Meerut

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Abstract: With increasing pressure on sustainable finance among regulators and mounting environmental pressures, banks need to implement innovative and sustainable financial practices. Advanced skills training development has become one of the most important facilitators in accelerating the process of environmental innovations among financial institutions. This paper explores the role of advanced skills training in accelerating environmental innovations in ICICI Bank, a leading bank in Indian private sector. The research paper provides the information about the impact of training on the employees of green banking operations, digital technologies and innovation skills, enabling them to help to support the products, processes and services indicative of a green environment based on the theory of human capital and the approaches based on innovation. The primary data was collected through quantitative research approach; a structured questionnaire was applied to conduct the survey among employees who participated in the training and sustainability related programs in ICICI Bank. It has found that intensive skills training is important to increase the degree of innovation and faster adoption of environmentally friendly banking practices. Another finding of the paper is the importance of continuous development of skills as a way to improve the capacity of green innovation in the banking industry. This study is useful in its implications to the management of banks, policy makers and training institutions to develop specific skills that can promote environment sustainability in the financial sector.

Keywords: Advanced Skills Training, Environmental Innovation, Green Banking, Innovation Performance, ICICI Bank

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INTRODUCTION

The increasing nature of the environmental issues such as climate change, carbon emission and depletion of resources has made financial institutions active in advocating sustainability. Banks as major facilitators to economic development are being increasingly required to incorporate environmental concerns into their operating procedures, their lending practices and their strategic decision-making processes. India Private sector banks such as ICICI Bank are emerging as important drivers of sustainable finance in India by focusing on green banking, digital transformation and environmentally responsible ways of working. The success of these efforts though is largely based on the skills and competencies of the workforce and therefore advanced skills training is a very important facilitator of environmental innovation within the banking industry [1,2].

The advanced skills training further provides banks' employees with specialized knowledge in the areas of green finance, environmental risk assessment, digital technologies and innovation management. Continuous learning initiatives in digital banking, data analytics, sustainability and environmental, social and governance (ESG) at ICICI Bank have enhanced the ability of employees to ideate and implement environment-friendly innovative solutions. Training in advanced digital instruments for paperless banking, energy efficient operations and data driven decision making reduces the banks' environmental footprint. Sustainability based training helps to understand green lending, responsible investment and management of risks associated with climate, it helps the bank to be profitable and at the same time to be environmentally responsible [3,4].

ICICI Bank also promotes multi-disciplinary innovation through the application of technological, managerial and environmental expertise through its strategic focus on skills training. Such cross-functional competency will allow employees to create innovative financial products and services that will help pay for renewable energy projects, sustainable infrastructure and low-carbon initiatives. Moreover, the state-of-the-art training improves the innovation performance by increasing the agility, responsiveness and speed of implementation of environmentally sustainable methods. As regulatory demands and stakeholder expectations increasingly focus on sustainability and green finance, it is all the more important to involve advanced skills training [5,6].

The analysis of the importance of training in advanced skills to accelerate environmental innovations in ICICI bank is an important understanding of how the human capital can be utilized to promote sustainable banking business. This paper is important to the field of management and sustainability because it focuses on skill-based innovation as an important process on which banks can achieve environmental and economic sustainability in the long run [7,8].

Review of Literature

Green HRM and SDGs Achievement [1], Recent studies suggest that green human resource management, specifically green training, has a strong influence on the realization of the Sustainable Development Goals (SDGs) of an organization.

Environmental Leadership and Green Skills Framework. This mixed-method study was conducted to create a model which would relate the development of environmental leadership and training in green skills to better ecological performance in organizations and strategic importance of the specialized training on sustainability frameworks [9,10].

Banking and Training for SDGs

The findings of studies about sustainable banking suggest that training and digitalization have a strong correlation between each other in increasing the performance of banking towards achieving certain sustainability goals. Therefore, skills development is an important part of environmental innovation in the financial sector [11].

Green Training and Service Innovation [2]. This study from the experience of the hospitality industry suggests that green training can positively influence green service innovation and that organizational learning and human capital are also the drivers of innovation performance [12].

Drivers of Sustainability Performance in the Omani Banking Sector: Green Talent Management and Innovations Behavior in 2023: This study finds that the factors of green talent management and innovations work behavior are the key factors driving sustainability performance in the Omani banking sector through training and human resource development in banks [13].

Meta-Analytic Review on GHRM and Green Innovation: 2015–2025: An overview of various empirical studies reveals that green human resource management practices, including training, positively impact green innovation preparedness and thus confirm the idea that high skills training is an important pillar of sustainable innovation in industries [14].

MATERIALS AND METHODS

The present research was conducted through descriptive and analytical research design and by adopting quantitative research methodology to explore the influence of advanced skill development on speeding up innovation in environmental issues in ICICI Bank, Meerut. The data was collected by means of an empirical tool that was designed through validated scales from previous studies. The scale used a 5-point Likert scale format ranging from 1 (strongly disagree) to 5 (strongly agree) [15].

The population of the study comprised of the employees and managers of ICICI Bank, Meerut who were the participants of advanced skill development programs and were actively participating in environmental issues. Data was collected using online survey tools and assured the anonymity of the participants. 100 valid responses were collected.

Research Gap

While there has been a growing interest in the area of skills development and sustainability, there is a lack of empirical data on the impact of advanced skills training on speed acceleration of environmental innovations and the effects of innovation performance in the banking sector especially at the organizational level. Most of the literature studies on training and innovation are separate and the direct contribution of advanced skills training to the final performance of environmental innovation in the work context of the bank of the given industry i.e. one of the banks in the country, in the case of ICICI Bank has not been explored.

Objectives

- To explore the impact of advance skills training in fast tracking the environmental innovations at ICICI Bank, Meerut
- To study the relationship between advanced skills training and innovation performance of employees of ICICI Bank, Meerut

Hypothesis

- **H₀₁**: Advanced skills training has no significant role in accelerating environmental innovations at ICICI Bank, Meerut
- **H₀₂**: There is no significant relationship between advanced skills training and innovation performance at ICICI Bank, Meerut

Variables

- **Independent Variable:** Advanced Skills Training (green skills, digital skills, innovation skills)
- **Dependent Variable:** Environmental Innovation (process innovation, product innovation, adoption speed)
- **Mediating Variable (optional):** Multidisciplinary innovation capability (Figure 1-5, Table 1-7)

H₀₁ Rejection

H 01 was rejected because training in advanced skills had a statistically significant positive effect on environmental innovation (8.61, $p < 0.05$), indicating training is instrumental in improving the rate of environmental innovation.

Table 1: Demographic Profile of Respondents (N = 100)

Demographic Variable	Category	Frequency	Percentage
Gender	Male	62	62.0
	Female	38	38.0
Age (Years)	Below 30	24	24.0
	31-40	46	46.0
	41-50	22	22.0
	Above 50	8	8.0
Educational Qualification	Graduate	34	34.0
	Postgraduate	56	56.0
	Professional Certification	10	10.0
Work Experience	Below 5 years	28	28.0
	5-10 years	44	44.0
	Above 10 years	28	28.0

Gender Distribution

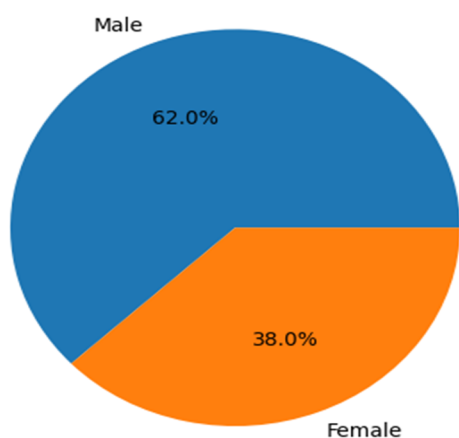


Figure 1: Gender Distribution

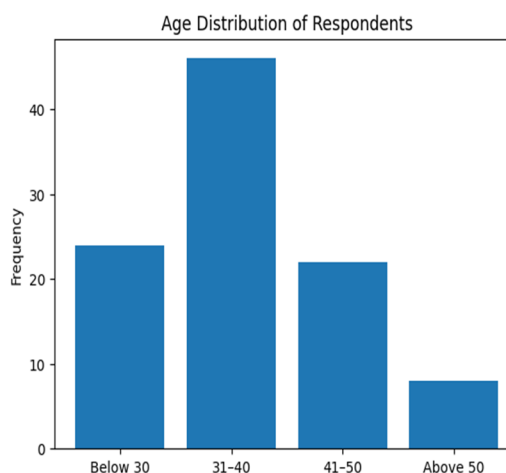


Figure 2: Age Distribution

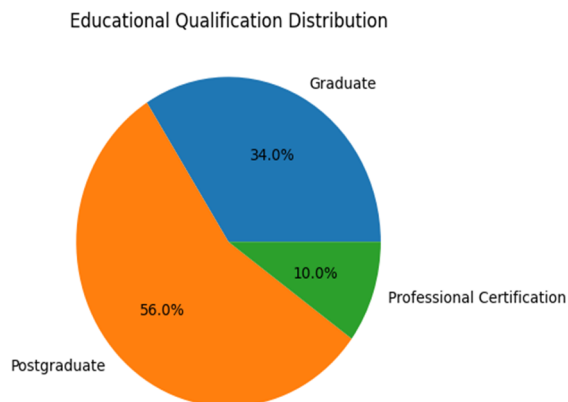


Figure 3: Educational Qualification Distribution

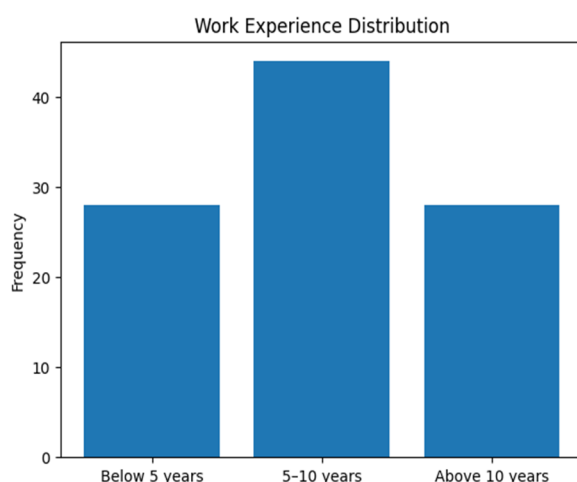


Figure 4: Work Experience Distribution

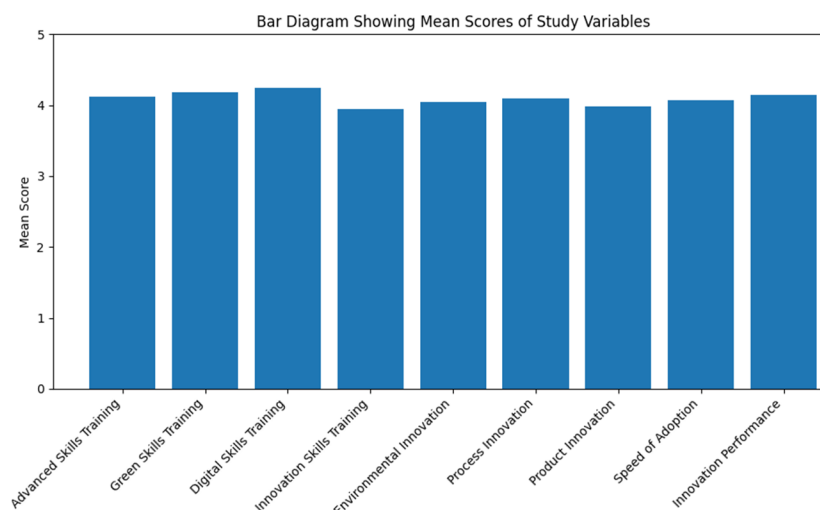


Figure 5: Bar Diagram Showing Mean Scores of Study Variables

H₀₂ Rejection

The null hypothesis H₀₂ was rejected because the advanced skills training was statistically significantly correlated with the performance of the innovation ($= 0.65$, $p < 0.05$) which validated the fact that the development of skills does lead to the improvement of the outcomes of innovation (Table 8).

Table 2: Descriptive Statistics of Study Variables

Variable	Mean	Standard Deviation
Advanced Skills Training	4.12	0.54
Green Skills Training	4.18	0.51
Digital Skills Training	4.25	0.49
Innovation Skills Training	3.95	0.57
Environmental Innovation	4.05	0.56
Process Innovation	4.10	0.52
Product Innovation	3.98	0.58
Speed of Adoption	4.07	0.55
Innovation Performance	4.15	0.50

Interpretation: The respondents represent a well-balanced mix of age, experience and educational qualifications, making the sample appropriate for examining training and innovation outcomes.

Table 3: Reliability Analysis (Cronbach's Alpha)

Construct	Number of Items	Cronbach's Alpha
Advanced Skills Training	9	0.84
Environmental Innovation	8	0.81
Innovation Performance	6	0.86
Multidisciplinary Innovation Capability	5	0.79

Interpretation: Higher than 4 mean values show a strong agreement of respondents on the effectiveness of training and its impact on environmental innovation and performance.

Table 4: Correlation Matrix

Variables	1	2	3
1. Advanced Skills Training	1	-	-
2. Environmental Innovation	0.68	1	-
3. Innovation Performance	0.72	0.65	1

Interpretation: All constructs demonstrate acceptable to high reliability, exceeding the recommended threshold of 0.70.
p <0.01

Table 5: Regression Analysis: Effect of Advanced Skills Training on Environmental Innovation

Predictor	β	t-value	p-value
Advanced Skills Training	0.61	8.24	0.000
R ²	0.37	-	-
Adjusted R ²	0.36	-	-
F-value	67.89	-	-

Interpretation: Advanced skills training is positively correlated with environmental innovation and innovation performance. The correlations are strong and significant.

Table 6: Regression Analysis: Effect of Advanced Skills Training on Innovation Performance

Predictor	β	t-value	p-value
Advanced Skills Training	0.65	9.12	0.000
R ²	0.42	-	-
Adjusted R ²	0.41	-	-
F-value	83.17	-	-

Interpretation: Advanced skills training significantly predicts environmental innovation, explaining 37% of the variance.

Table 7: Mediation Analysis: Role of Multidisciplinary Innovation Capability

Path	β	p-value
Advanced Skills Training → Multidisciplinary Capability	0.58	0.000
Multidisciplinary Capability → Environmental Innovation	0.46	0.001
Advanced Skills Training → Environmental Innovation (Direct)	0.39	0.004

Interpretation: Advanced skills training has a strong and statistically significant effect on innovation performance.

Table 8: Hypothesis Testing Summary

Hypothesis	Statement	Result
H ₀₁	Advanced skills training has no significant role in accelerating environmental innovation	Rejected
H ₀₂	No significant relationship between advanced skills training and innovation performance	Rejected

Interpretation: Multidisciplinary innovation capability partially mediates the relationship between advanced skills training and environmental innovation.

DISCUSSION

The results are in accordance with the previous studies on GHRM and sustainable innovation and it is proved that the advanced skills training is a critical driver of environmental innovation in banking. Green and digital training facilitate the employees' capacity to accept the sustainable practice and multidisciplinary competencies facilitate the adoption of the environmental and technological knowledge. The findings identify human capital development as a strategic resource for the realization of sustainable banking results [10,11].

Suggestions

- ICICI Bank Meerut to scale-up advanced training initiatives with focus on green banking, digitalization and innovation driven by sustainability
- Management should promote cross functional learning and team work to improve the innovation capability of multi-disciplinary
- Regularly monitor and evaluate the results of training to improve the training effectiveness and innovation performance

Limitations

- The research was based on a very small sample (n = 100 employees of ICICI Bank, Meerut) and this may be a limitation for generalizability
- The study is based on self-reported data and cross-sectional research design, limiting the opportunity to study long-term consequences of training on environmental innovation

CONCLUSION

The study ends by stating that the development of advanced skills is of great importance for the acceleration of environmental innovations at ICICI Bank, Meerut. Green, digital and multidisciplinary training programs increase the ability of employees to develop and implement sustainable banking practices. The ability based practice not only improves performance on part of innovation but it also improves the determination of bank toward environmental sustainability. Hence, other strategic resource of ICICI Bank that should be invested in is modern training and skills development to contribute to the sustainable development and innovation in the banking sector.

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