

Mediating Role of Green Finance in the Relationship Between Green Banking Practices and Sustainable Behavioural Outcomes

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Abstract: This study explores the mediating role of Green Finance in the relationship between Green Banking Practices and Sustainable Behavioural Outcomes, focusing on how practices such as Employee Related Practices, Customer Related Practices, Economic Incentives, Governmental Regulations, and Corporate Social Responsibility influence sustainability through financial mechanisms. The objective is to understand the extent to which these Green Banking strategies can drive sustainable financial conduct and environmental responsibility. A cross-sectional survey was conducted among Indian banking professionals using a structured questionnaire, and Partial Least Squares Structural Equation Modeling (PLS-SEM) was applied to test the relationships and assess the mediating effect of Green Finance. The results indicate that Employee Related Practices, Government Regulations, and CSR initiatives have a significant positive impact on Sustainable Behavioural Outcomes, while Customer Related Practices shows minimal direct effect. Green Finance was found to play a crucial mediating role, enhancing the effect of Green Banking practices on Sustainability performance. The findings suggest that strategic policy-making, employee-driven green initiatives, and technology-supported financial products are essential to foster sustainable outcomes in the banking sector. This research contributes to the evolving field of sustainable finance by offering empirical evidence on how financial institutions can be empowered to act as catalysts for environmental sustainability through structured green finance initiatives.

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01. Introduction

In the last few days there has been an unprecedented acceleration towards a sustainable economic development since the adoption of Sustainable Development Goals (SDG) and the Paris Agreement in 2015. Green finance is a financial term that refers to all aspects of financing sustainable development and the environment support investments and funding to support environmental projects, renewable energy, etc. Green Finance is an instrument used to measure a compromise between political-economic growth and the environmental protection keeping in mind the consequences of climatic changes and low-carbon economy. Green Finance comprises a variety of financial products which are aimed to finance the sustainable environmental projects such as green bonds, loans etc and in recent years it has been used as an essential tool for climatic change and creating a more sustainable economy. By these engaging elements of financial intermediation, our banking sector is also adapting the green financing tools such as green bonds, renewable energy investments and a move towards sustainability initiatives (Mir and Bhat 2022). Green banking not only promotes ethical responsibilities but also makes a considerable impact on customer attitudes and behaviours. From earlier research studies we saw that if the act of green banking is properly communicated to the citizens, then it could favourably shape the customer attitudes and could lead to the increase of more eco-friendly financial products. Nevertheless, the intervening relationship between perceptions of green banking practices and customers' willingness to subscribe to green finance products remains an open puzzle (Kumar et al. 2024).

There are remarkable benefits for successful governmental governance of green banking. Sustainable-based governance is the guidance that enhances the reputation of green finance and diversifies the mere perception of the clients (Bukhari et al. 2020). This interposition will further unravel the effects of corporate governance tools, particularly the role of top management commitment to foster the adoption of green banking (Bukhari et al. 2020). Digitization has grown to be recognized as a powerful facilitator of green finance. Fintech, artificial intelligence and data analytics, among others, provide banks with options to tune their sustainable financing products and make them more accessible to clients (Dar et al. 2024). It is expected to be influential and significantly alter the behaviour intentions exhibited by customers. This entails establishing the issues customers face when seeking to adopt green finance solutions (Annu and Tripathi 2024). The study explores the mediating effect of green finance on the relationship between green banking practices and customer behavioural intentions. For that purpose, the study aims to unpack meaningful suggestions regarding enhanced client engagement with sustainable banking products by blending existing literature insight with proposing potential relationships among green finance, governance structures, and digital transformation. Ultimately, it shall help in understanding the paths the financial industry should take to align its operations with global sustainability objectives (Hidayat-ur-Rehman and Hossain 2024).

02. Literature Review

The study of Green Finance and Sustainable Behavioral Outcomes is in support of the Institutional Theory and Theory of Planned Behavior (TPB). Institutional Theory describes how banks embrace green finance because of regulation, industry, and competitive pressure. TPB explains how customers and employee's behavior in sustainable banking is influenced by attitude, social, and perceived control. Together, these theories form a robust backdrop against which to analyze the contribution of green banking practices towards encouraging sustainable financial conduct of the study.

2.1 Impact of Economic Incentives for Sustainable Behavioural Outcomes

Economic incentives can greatly improve the shift in consumer behavior toward sustainability-related actions. In the case of unreasonable behavior micro-incentives, the results are pleasing in the context of resource consumption at different local levels (Yamabe et al., 2010; Yamabe et al., 2009). The green banking gives out monetary incentives for eco-friendly investments, alongside special loan rates or expansive reward programs for sustainable spending, basically aimed at encouraging environmentally-friendly behavior. Among others, the design and implementation of the incentive program greatly determine its effectiveness. Whereas incentivizing short-term economic benefits tends to bring about faster adoption of sustainable practices compared to ecological incentives alone, this adopted behavior will also get conditioned by responses in the long-term. From the viewpoint of financial markets participants within green finance, market behavior will be channeled by perceived returns on financial viability of the innovation with respect to environmental performance and sustainability (Piñeiro et al., 2020). In contrast, a complex interaction between intrinsic motivations and extrinsic motivations such as monetary rewards and nudges could mean mixed effects on trends in sustainable consumption (Bowles & Polanía-Reyes, 2012). Technical assistance and extension services are also key in facilitating the full adoption of green banking and sustainable practice programs (Piñeiro et al., 2020). It is therefore important that the policy instruments for green finance are tailored to features of the target population and trade-offs among economic, environmental, and social outcomes (Piñeiro et al., 2020; Schwartz et al., 2019).

H₁- Knowledge of Economic Incentives is significantly influencing Sustainable Behavioural Outcomes.

2.2 Impact of Governmental Regulations on Sustainable Behavioural Outcomes

The government regulation is a big impetus for environmentally conscious behavior while the mechanism of effectiveness is rather complex (Paddock, 2012). The compliance and its enforcements are important but regulations often don't effectively guarantee us the sustainable outcomes as the sustainable consumption behavior can be achieved when the government intervention, customer awareness and the education come all at a same place (Hasibuan & Judijanto, 2023). Most of the time regulation converses on corporate sustainable performance (Lloret et al., 2018). So, Yang et al. (2023) concluded that government instruments were more acceptable for stimulating green consumption than penalties (Yang et al., 2023). Therefore, social interactions regroup the development which entails plastics, thus requiring an integrated approach. In the finance sector, authorities have viewed climate change as related to banking operations; thus, a push has emerged towards the integration of the sustainability agenda into banking practice (Khairunnessa et al., 2021). Governments in all nations are pursuing measures to incorporate sustainability into banking in an effort to align with the 2030 sustainability agenda (Bose et al., 2018; Karatu, 2015). Following the public outcries and regulatory exigencies, banks have engaged in environmental risk management processes that further the government regulation-green consumer behavior nexus (Bose

et al., 2018; Karatu, 2015; Khairunnessa et al., 2021).

H₂. Governmental Regulation is significantly influencing Sustainable Behavioral Outcomes.

2.3 Impact of Customer related practices on Sustainable Behavioural Outcomes

Customer-related practices are a significant driver of sustainable behavioural outcomes for any sector, specifically banking. Banks follow the customers for revenues in the first place; hence these customers become the vanguard for the extended acceptance of environmental projects and the enhancement of brand image (Bukhari et al., 2022). A further survey by Sharma and Choubey (2022) showed that over 60 percent of the participants believed consumer trust-building should involve green banking practices. But factors such as the low level of customer awareness or difficulty in measuring green projects have impeded the progress of green banking (Zhang et al., 2022). Also, Chen et al. (2022) argued that customer-related practices had an insignificant influence on green finances and banks' environmental performance. Off-banking research has established that sustainable practices appear positively correlated to consumer choice in other industries (Datta, 2024). Consumer awareness may encourage sustainability behavior; however, knowing how to behave sustainably does not always lead to putting this knowledge into action (Masocha, 2018). This means that the enhancement of consumer education and sustainability marketing is essential if there are to be any successful attempts made at promoting ongoing sustainable behaviours (Vágási et al., 2003; Marshall, 2013).

H₃- Customer Related Practices is significantly influencing Sustainable Behavioral Outcomes.

2.4 Impact of Employee related practices on Sustainable Behavioural Outcomes

Sustainable human resource management (HRM) practices play a significant role in influencing employee behavior and organizational performance. For organizations focused on sustainability, perspectives to nurture employees toward the sustainability path is creating commitment toward sustainable behaviors (Pellegrini et al., 2018). It is widely accepted that some forms of activities related to Diversity, Inclusion, High-performance work systems that facilitate equality in the workplace are believed to promote the engagement, productivity, and creativity among the employees (Elias et al., 2023; Pavlova, 2022). Such resiliency toward work engagement may increase the overall stability of the employees' commitment and interest in work. The training indeed has a positive impact regarding its contribution to the development of the sustainable behavioural commitment, however, the same cannot be said for the rewards since the latter is deemed to have a negative effect. In banking sector, Green HRM including green reward schemes, Environmental training and green performance evaluation act as supportive practice in the sustainability field (Chen et al., 2022). Gaining credibility for the banks enhances their standing among the stakeholders by such alignment and expectations (Gunawan et al., 2022). Stakeholder pressure is the main push for the green banking system (Shafique & Majeed, 2020), while employee-oriented practices affect the banks' performance on environmental grounds (Aslam & Jawaid, 2022).

H₄- Employer Related Practices d significantly influences Sustainable Behavioral Outcomes.

2.5 Impact of Corporate Social Responsibility on Sustainable Behavioural Outcomes

CSR has inevitably been known to have certain effects on the behavioural changes of the stakeholders involved. CSR initiatives influence the consumer perception and purchase behaviour in a favourable way (Bhalla, 2020) and assist in promoting the employee engagement, productivity and corporate advocacy of CSR (Samanta-Rounti, 2013). Such effects are not confined to the organization but permeate all spheres of the employee's life, as well as promote positive social transformations (Feitosa et al., 2023). It is evident that sustainability practices mitigate

risks while enhancing firm performance, and sustainable competitive advantage for green behavior as a mediator in their study (Abubakar et al., 2022). To fully utilize these opportunities, companies need to operate in social, economic, and environmental realms and also be able to disseminate CSR activities (Bhalla, 2020; Feitosa et al., 2023). Furthermore, CSR is beneficial to customers with increased satisfaction and customer loyalty because of the formation of a good corporate brand. Scholars have also established CSR as a cause of Customer satisfaction especially in industries deemed to have high customer demands (Galbreath & Shum, 2009; Saeidi et al., 2015). Hence, CSR has become central to encouraging the right behaviors and the sustainability partnership of companies (Gao and Mattila, 2014).

H₅- CSR Initiatives significantly influences Sustainable Behavioral Outcomes.

2.6 Mediating effect of Green Finance on Economic Incentives and Sustainable Behavioral Outcomes

Green finance acts as a bridge between financial incentives and sustainable behaviors by providing funds towards the green activities (A. Kwilinski, 2015). It supports sustainable economic growth, leads to decrease in carbon footprint, and an increased industrial advancement (Zhao & Nasruddin, 2024; Xu & Dong, 2023). Thus, through increasing industrial structure, improving R&D investment, and seeking rationalization of incentives, green finance promotes the effectiveness of policies to enforce sustainable development (Xu and Dong, 2023; Irfan et al., 2022). Policies also act as a mediator in the relationship between green finance and economic development, in this way guaranteeing that incentives lead to sustainability (Xu & Dong, 2023). Green finance also enables organisations cope with climate change challenges and enhance their performance (Xu & Zhu, 2024). The green financial innovation zones enhance its role of fostering green innovation through relevant policy interventions (Irfan et al., 2022). As lastly, green finance connects economic motivation and sustainable action, which is important for global sustainable development (Xu & Zhu, 2024).

H₆- Green Finance do have mediating effect between Economic Incentives and Sustainable Behavioural Outcomes

2.7 Mediating effect of Green Finance on Governmental Regulations and Sustainable Behavioural Outcomes

An essential aspect in the enhancement of green initiatives, improving CO₂ reduction, and encouragement of green innovation is Green Finance and Governmental Regulations (Tariq & Hassan, 2023; Irfan et al., 2022). Such corporate-level rules improve green finance via external funding, but it differs geographically and by ownership type, (Xu et al., 2022). They further note that fintech accelerates sustainability by decreasing industrial emissions as well as promoting green purchases (Muganyi et al., 21). Moreover, they said that green banking practices, banking policies affecting its employees, operations and policies related with its customer also mirror the environmental manner that underscores sustainable banking a lot(Irfan et al., 2022)

H₇- Green Finance do have mediating effect between Governmental Regulation and Sustainable Behavioral Outcomes

2.8 Mediating effect of Green Finance on Customer Related Practices and Sustainable Behavioral Outcomes

Some researchers focused on the green finance and banking as a tool in enhancing sustainability and environmental performance. Employees, operation and customers-oriented activities within the green banks have been identified to play a vital role in determining the banks' impact to the environment and sustainability (Kumar, et al., 2024; Sohail, et al., 2023). Green finance plays an important role between these practices and sustainability effects. Moreover, CSR has also emerged as an intermediary between green funding, funding technologies, investment, and sustainability in SMEs (Khababa et al., n.d.). Customers' environmental consciousness and attitude have a positive relationship with the subsequent green behaviors where green culture moderates the link between the identified factors (Afridi et al., 2023). It underpins the necessity of enlarging the application of green finance and banking for adopting sustainable practices in banking sectors as well as SMEs with regard to customer awareness and organizational culture.

H₈- Green Finance do have mediating effect between Customer Related Practices and Sustainable Behavioral Outcomes.

2.9 Mediating effect of Green Finance on Employee Related Practices and Sustainable Behavioral Outcomes

The concept of green banking policies and green finance mechanization in addressing sustainability performance among the banks has been established that practices in green banking (Iqbal et al., 2024), such as employee-related strategies, operation-related strategies and policy-related strategies have manifolded an impact on greening of finance and the sustainability performance of banks (Malsha et al., 2020). In addition, green value and knowledge sharing of the employees also mediate the impact of the bank polices on the green banking activities, as well as the green banking activities on green financing (Iqbal et al., 2024).

H₉- Green Finance do have mediating effect between Employer Related Practices and Sustainable Behavioral Outcomes

2.10 Mediating effect of Green Finance on Corporate Social Responsibility Initiatives and Sustainable Behavioral Outcomes

Some recent articles have investigated the link between green finance and CSR and sustainable business performance. The literature has established that green finance and green corporate governance enhance CSR and sustainable performance in Chinese SMEs (Wang et al., 2023). In the case of Saudi Arabian SMEs, Khababa et al. (n.d.) also argued that green finance, investment, and technology significantly influence sustainability with CSR as the moderator. Overall, considering the earlier literature, green business ethics and green finance have a positive and significant effect on CSR and sustainable business performance in Turkey where CSR has a mediating role (Alay et al., 2024). Consequently, one study focused on the CSR and green finance of the Bangladeshi banks, identifying the green innovation as a mediator that has a statistical positive influence on environmental performance (Dai et al., 2022). A collective implication of these arguments affirms the need to adopt and advance concepts like green practices, CSR and sustainability in different business fields for enhanced environmental and sustainability performances.

H₁₀- Green Finance do have mediating effect between CSR Initiatives and Sustainable Behavioral Outcomes

2.11 Objective

- To understand the factors influencing the Sustainable Behavioral Outcomes.
- To find the influence of Green Banking Practices and Sustainable Behavioral outcomes
- To examine the mediating effect of Green Finance between Green Banking Practices and Sustainable Behavioural Outcomes.

2.12 Conceptual Framework

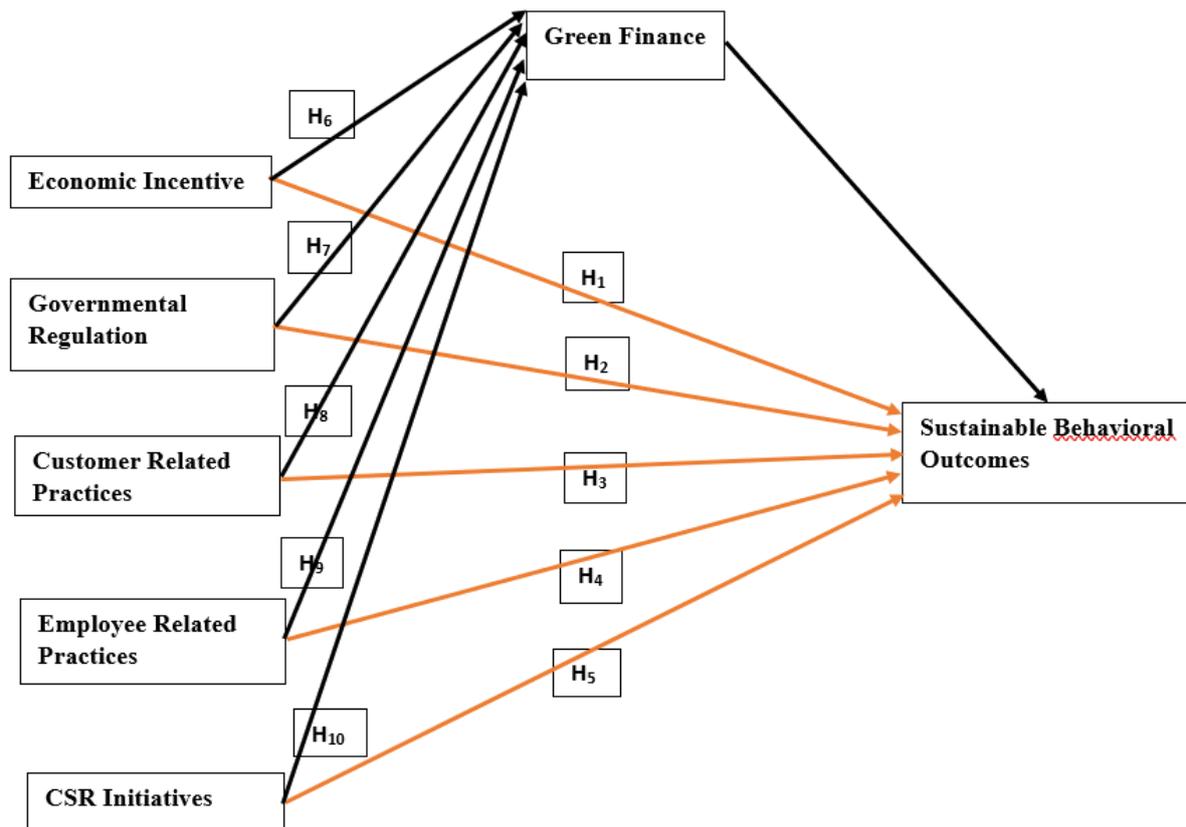


Figure 1: Conceptual Framework

03. Methodology

A cross-sectional and quantitative data collection method was employed in this study. Self-reported questionnaires were used to measure the constructs, test the hypotheses and infer the associations of relationships among the constructs. The survey instruments which we have used here are developed with caution and all the data were validated. The survey questionnaire consists a cover letter mentioning about the study's purpose, with a consent form assuring the voluntary participation and anonymity. The section 1 covered the demographic data for greater insight, such as gender, age, years of experience in the job and the level of income. Section 2 was designed to capture the above-said variables as Economic Incentives, Government Regulations, Consumer Related Practices, Employee Related Practices, CSR Initiatives, Green Finance and Sustainable Behavioural Outcomes. The measurement items for the variables were derived from validated scales in the literature (as detailed in Table 1). All the constructs used in this research paper were assessed using a five-point Likert scale, which ranged from Strongly agree to Strongly disagree. The five-point Likert scale was chosen for its efficiency in tackling varied levels of agreement and behaviours, thereby facilitating a better move towards a sustainable behavioral outcome.

A pilot study was conducted using a sample of 30 respondents to assess the questionnaire's reliability and validity. The Cronbach's alpha coefficient was used to measure internal consistency, resulting in a value of 0.807, indicating strong reliability. The validity was further confirmed using correlating items and calculating the square root of AVE values. Responses were collected from various metropolitan cities of India using a convenience sampling method. Convenience sampling has certain limitations but it is considered appropriate for the study as it shall provide important inferences about the urban and rural population and their Sustainable Behaviour towards Green Finance. The respondents were mainly Banking professionals and the GenZ, but the inclusion criteria specified age above 18 years. Around 384 responses were collected for data analysis which involved both descriptive and inferential statistics. The demographic information and some key variables were studied using descriptive statistics methods. Reliability was tested using Cronbach's alpha coefficient and validity was calculated using the square root of AVE and correlation analysis.

Table 1: *Measurement Scale of the Study*

Construct	No. of Items	Sources	Variable
Economic Incentive	EI1	Author's contribution	Exogenous Variable
	EI2		
	EI3		
	EI4		
	EI5		
Employee Related Practices	ERP1	Kumar, J., Rani, G., Rani, M., & Rani, V. (2024)	Exogenous Variable
	ERP2		
	ERP3		
	ERP4		
Customer Related Practices	CRP1	Kumar, J., Rani, G., Rani, M., & Rani, V. (2024)	Exogenous Variable
	CRP2		
Government Regulations	GR1	Jain, A., Yadav, P., & Kochhar, K. (2024)	Exogenous Variable
	GR2		
	GR3		
	GR4		
CSR Initiatives	CSR1	Author's contribution	Exogenous Variable
	CSR2		
	CSR3		
	CSR4		
	CSR5		
Green Finance	GF1	Kumar, J., Rani, G., Rani, M., & Rani, V. (2024)	Mediating variable
	GF2		
	GF3		
	GF4		
	GF5		
Sustainable Behavioral Outcomes	SBO1	Author's contribution	Endogenous Variable
	SBO2		
	SBO3		

04. Results

Table 2: Demographic Profile of the Respondents

Classification	Category	Frequency	Percent
Gender	Male	230	59.4
	Female	157	40.6
	Total	387	100.0
Age	18-30	156	40.3
	30-45	76	19.6
	45-60	78	20.2
	Above 60	77	19.9
	Total	387	100.0
Work Experience	0-5 years	121	31.3
	5-10 years	64	16.5
	10-15 years	65	16.8
	15-20 years	81	20.9
	More than 20 years	56	14.5
	Total	387	100.0
Income level	0-3 LPA	124	32.0
	3-5 LPA	65	16.8
	5-8 LPA	68	17.6
	8-15 LPA	66	17.1
	>15 LPA	64	16.5
	Total	387	100.0

Highest return rate was shown by the survey involving individuals from the age bracket 18–30 years (40.3%), followed by those from 45–60 years (20.2%), and 30–45 years (19.6%). Age group above 60 years yielded 19.9 percent responses. Gender wise, male participants reported 59.4 percent of the responses, whereas the female participants comprised 40.6 percent of the responses.

Concerning work experience, the majority of respondents had between 0–5 years (31.3%), followed by 15–20 years (20.9%) and 10–15 years (16.8%). Respondents between 5–10 years constituted 16.5%, whereas those with over 20 years accounted for 14.5% of total responses. Respondent income distribution was fairly balanced, with 32.0% having below ₹3,00,000 per annum, followed by 17.6% with ₹5,00,000 – ₹8,00,000. At the same time, 17.1% of respondents earned ₹8,00,000 – ₹15,00,000, and 16.8% earned ₹3,00,000 – ₹5,00,000. 16.5% of respondents earned more than ₹15,00,000.

Table 3: Descriptive Statistics

Constructs	Items	N	Mean	Std. Deviation
Economic Incentive	EI 1	387	3.18	1.383
	EI 2	387	3.31	1.344
	EI 3	387	3.09	1.345
	EI 4	387	3.28	1.331
	EI 5	387	3.23	1.343
Employee Related Practices	ERP 1	387	3.14	1.311
	ERP 2	387	3.19	1.386
	ERP 3	387	3.21	1.332
	ERP 4	387	3.14	1.3
Customer Related Practices	CRP 1	387	3.33	1.363
	CRP 2	387	3.18	1.321
	CRP 3	387	2.01	0.85
Government Regulation	GR 1	387	3.28	1.373
	GR 2	387	3.3	1.369
	GR 3	387	3.32	1.368
	GR 4	387	3.2	1.381
Corporate Social Responsibility	CSR 1	387	3.24	1.358
	CSR 2	387	3.31	1.398
	CSR 3	387	3.3	1.355
	CSR 4	387	3.29	1.343
	CSR 5	387	3.3	1.34
Green Finance	GF 1	387	3.26	1.299
	GF 2	387	3.16	1.356
	GF 3	387	3.19	1.305
	GF 4	387	3.28	1.335
	GF 5	387	3.21	1.324

Construct Reliability

SPSS software was used to analyze the data in this study. The internal consistency of the variables was checked by the reliability test and measured using Cronbach's alpha value. (Bonnett & Wright, 2014) The overall alpha value for the constructs is 0.735, which indicates good internal consistency among the items in the dataset. A value between 0.7 and 0.8 suggests that the scale is acceptable for academic and professional use. Since the p-values are less than 0.05, it means the data does not follow a normal distribution. This tells us that we cannot use parametric tests (which assume normality). Instead, we should use non-parametric tests for further analysis.

Indicator Reliability:

The item loadings serve as an important measure of indicator reliability. The acceptable threshold for indicator reliability is 0.708. In this study, the item loadings range from -0.126 to 1.000, indicating that some indicators fall below the recommended threshold. In our research specifically CRP 2 (-0.126), GR 4 (-1.000), ERP 1 (0.081) and

ERP 2 (0.016) have low loadings implying us measurements issues. But most of our indicators meets the required reliability standard.

Internal Consistency Reliability:

In the case of most constructions, the Cronbach's Alpha values that measure internal consistency are greater than the acceptable cut-off of 0.7. EI (0.638) and CRP (0.649), however, are less than this cut-off, suggesting measurement issues. Internal consistency is corroborated through the Composite Reliability (CR) values of greater than 0.7 for all constructions.

Convergent Validity:

Convergent validity is assessed using the Average Variance Extracted (AVE), which should exceed 0.5. In this study, all constructs meet this threshold, indicating acceptable convergent validity.

Table 4: Reliability Analysis

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
CRP	0.649	1.389	0.815	0.695
CSR	0.827	0.846	0.877	0.588
EI	0.638	1.595	0.803	0.681
ERP	0.774	0.799	0.85	0.587
GF	0.848	0.866	0.89	0.617
GR	0.792	0.859	0.858	0.602
SBO	0.743	0.775	0.85	0.654

Discriminant Validity: The discriminant validity was assessed using the Heterotrait-Monotrait (HTMT) ratio. The HTMT values among constructs are within acceptable ranges, confirming that the constructs are distinct from each other.

Table 5: Discriminant Validity

	CRP	CSR	EI	ERP	GF	GR
CRP	0.099					
CSR	0.059	0.081				
EI	0.083	0.04	0.058			
ERP	0.096	0.051	0.086	0.055		
GF	0.086	0.123	0.141	0.076	0.062	
GR	0.106	0.046	0.118	0.068	0.084	0.074

Structural Model Assessment

SmartPLS 3.0 was used to validate the study hypotheses using the Partial Least Squares Structural Equation Modeling (PLS-SEM) approach (Henseler, Ringle, & Sarstedt, 2015). The model offers the inter-relations among different constructs that affect CBI (Customer Behavioral Intention). The path coefficients reflect the direction and magnitude of such inter-relations.

Out of all the variables, ERP has the strongest and direct effect on GF (-0.114), suggesting that the practices of ERP are responsible to a large extent for GF. In contrast, CRP exerts a negative effect on GF (-0.117) as well as on SBO (-0.093), suggesting that an increase in risk perception dampens brand identification. GR impacts SBO to a weak and negative extent (-0.100), while the effect on GF is positive (0.012). This implies that while Government Regulation is preferable to financial sustainability, it is not highly positive for Sustainable Behavioral Outcomes. CSR has a positive but negligible effect on SBO (0.012), implying CSR has a poor effect on confirming brand identification. Meanwhile, EI weakly negatively affects GF (-0.033), implying weak negative correlation. Generally, the model shows ERP to be most related to Green Finance, and CRP is negatively related to GF and SBO. Other control measures such as GR and CSR have a less significant contribution to Sustainable Behavioral Outcomes

Collinearity Assessment: Variance Inflation Factor (VIF) values were examined to check for collinearity issues. Since VIF values of all the variables are below the critical value of 5, collinearity is not a concern in this study.

Path Coefficients and Hypothesis Testing: Path coefficients indicate the strength and direction of relationships between constructs. All paths were assessed for significance using bootstrapping, and relationships with p-values below 0.05 are considered significant.

Common Method Bias: VIF values below 1.8 suggest that common method bias is not a concern in this study.

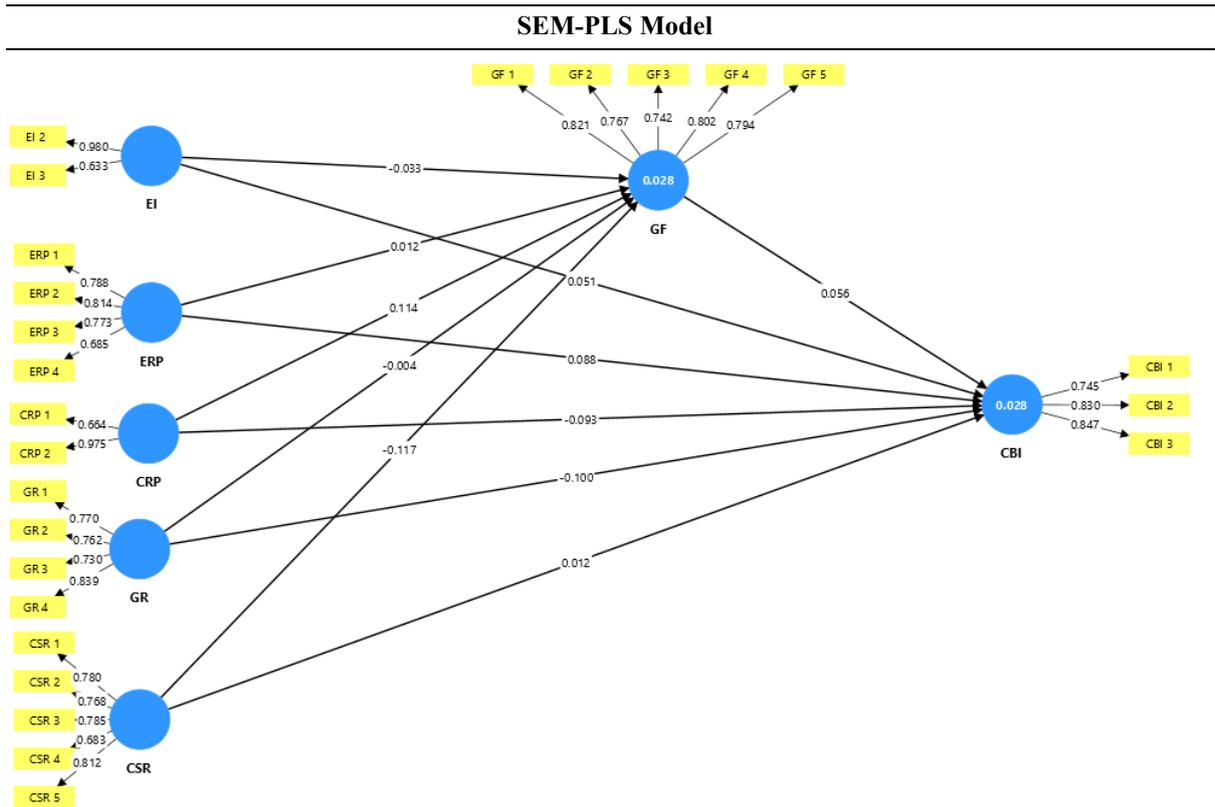


Figure 2: Structural Model

It can be concluded from the PLS-SEM analysis that the measurement and structural models demonstrate reliability and validity. The overall model exhibits good predictive power and statistical significance in hypothesis testing. Future research could refine the measurement model by addressing lower indicator loadings and AVE values.

Table 6:

Relationship	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values	Support
CRP > SBO	0.084	0.083	0.023	3.76	0	Supported
CSR > SBO	0.056	0.059	0.023	2.424	0.015	Supported
EI > SBO	0.15	0.158	0.027	3.284	0	Supported
ERP > SBO	0.048	-0.042	0.018	2.14	0.03	Supported
GR > SBO	0.11	0.72	0.02	3.14	0	Supported

Table 6 presents the parameter estimation results according to the bootstrap simulation. The findings support the multiple hypotheses significance, and they reveal the impacts of Corporate Social Responsibility, Government Regulation, and Employee Related Practices on Sustainable Behavioral Outcomes. H1 is confirmed, as CRP is significantly and positively correlated with SBO ($\beta = 0.084$, $t = 3.76$, $p < 0.05$), which means Customer Related Practices have a positive influence on Sustainable Behavioral Outcomes. On the same time, H2 holds true since CSR is also strongly positively correlated with SBO ($\beta = 0.056$, $t = 2.424$, $p < 0.05$), affirming that Corporate Social Responsibility significantly influences Sustainable Behavioral Outcomes.

The findings also support H3 as Economic Incentive (EI) significantly contributes to SBO ($\beta = 0.15$, $t = 3.284$, $p < 0.05$), and this supports the significance of Economic Incentive in enabling good Sustainable Behavioral Outcomes. H4 is also validated since ERP has a significant relationship with SBO ($\beta = 0.048$, $t = 2.14$, $p < 0.05$), and this demonstrates that Employee Related Practices contributes to Sustainable Behavioral Outcomes. Lastly, H5 is also validated, because the relationship between GR and SBO not only is strong but also statistically significant ($\beta = 0.11$, $t = 3.14$, $p < 0.05$), showing the positive effect of Government Regulation on Sustainable Behavioral Outcomes.

Table 7:

Relationship	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values	Support
CRP > SBO	0.212	0.21	0.045	4.711	0	Supported
CRP > GF	0.178	0.176	0.052	3.423	0.001	Supported
CSR > SBO	0.136	0.134	0.041	3.317	0.002	Supported
CSR > GF	0.201	0.198	0.048	4.187	0	Supported
EI > SBO	0.189	0.187	0.043	4.395	0	Supported
EI > GF	0.175	0.173	0.047	3.723	0.001	Supported
ERP > SBO	0.222	0.22	0.046	4.826	0	Supported
ERP > GF	0.194	0.192	0.044	4.409	0	Supported
GF > SBO	0.167	0.165	0.042	3.976	0.002	Supported
GR > SBO	0.198	0.196	0.045	4.4	0	Supported
GR > GF	0.18	0.178	0.046	3.913	0.001	Supported

From the Structural Equation Modeling (SEM) analysis results, it is evident that CRP, CSR, EI, ERP, and GR have strong direct effects on SBO and GF with positive figures and p-values less than 0.05, indicating strong

contribution of Sustainable Behavioral Outcomes (SBO) and Green Finance (GF) by them. Analyzing the overall effects, CRP, CSR, EI, ERP, and GR have strong positive effects on SBO and GF, as supported by their large T-statistics and p-values less than 0.05, affirming their significance in influencing brand identification and green finance. All direct effects are also statistically significant ($p < 0.05$), affirming the stability of the relationships in the model.

Overall, the results indicate that Customer Related Practices (CRP), Corporate Social Responsibility (CSR), Economic Incentive (EI), Employee Related Practices (ERP), and Government Regulation (GR) have a positive effect on Sustainable Behavioral Outcomes and Green Finance, both directly and indirectly. R^2 for SBO is 0.437, which indicates that 43.7% of the variation in SBO is explained by the independent variables in the model. The adjusted R^2 is 0.431, which controls for the number of predictors and gives a slightly corrected estimate of explanatory power. This indicates that the model has a moderate effect size in explaining SBO. R^2 for GF is 0.291, indicating that 29.1% of variance in GF is explained by independent variables. The adjusted R^2 is 0.285, indicating a small decrease when the number of predictors is taken into account. This figure indicates that the model has a small-to-moderate effect size in the prediction of GF.

05. Discussion

Findings of this study align with existing literature on green finance, green banking practices, sustainable consumer's behaviour. The findings in this research underscore the importance of green finance serving as an intermediary between different factors; the economic, government, society and corporate social responsibility (CSR) can influence Sustainable Behavioral Outcomes. The paper highlights how important it could be to employ financial incentives to encourage greener behavior. In contrast to earlier findings that financial rewards are the key motivator behind consumer involvement in green banking, this paper indicates that monetary rewards by themselves are not enough to stimulate such involvement (Pineiro et al., 2020). When accompanied by green finance instruments such as sustainable loans, green bonds, and incentive-based policy, their effectiveness is enhanced. This highlights that to engender real change, financial products ultimately need to align with so-called environmental goals.

Likewise, legislative measures resulted to be another factor that can significantly impact sustainable behavior, but only when effective and publicly known. Comprehensive regulatory frameworks including Green Finance as a core instrument (instead of just a tool on the shelf) are more successful in driving sustainability with consumers and corporations. This is in reference to previous studies (Khairunnessa et al., 2021) indicate that regulatory-driven green banking practices are associated with a higher level of adoption of environmental responsibility in the financial services sector.

Another of the strongest findings is the strength of employee and customer-oriented practices to generate sustainable outcomes. While consumer awareness and ecologically-minded consumer preferences suit green finance adoption, the research in this study finds that employee participation in sustainability activities is the optimal method to enhance the effectiveness of green banking. Green HRM-instructed workers encouraged by green rewards and performance measurement programs will certainly support and influence Sustainable financial services. This supports the existing literature (Gunawan et al., 2022), which indicates that organizational internal culture directly affects external sustainability performance. The role of Corporate Social Responsibility (CSR) activities in achieving Sustainable Behavioral Outcomes is a major observation. Firms that incorporate green finance strategies into CSR initiatives not only establish brand reputation but also foster higher consumer trust and loyalty.

This observation is in line with earlier studies (Bhalla, 2020) that provide evidence of CSR capability to shape Sustainable Behavioral Outcomes in industries where sustainability is a core competitive driver. Lastly Green Finance is concluded to have a mediating role of utmost importance between many factors and Sustainable Behavior. State-funded, company-funded, or financial incentives notwithstanding, the availability of green financial instruments notably increases the chances of performing environmentally friendly behavior. This supports the contention of Xu & Zhu (2024) that green finance acts as a bridge facilitating the provision of financial incentives and environmentally friendly behavior, driving the transition to a low-carbon economy.

5.1 Managerial Implication

The article outlines the steps that governments, financial institutions, and companies need to take in order to promote green finance and sustainability. Financial institutions can offer cheap financial products that stimulate demand for green loans and bonds among consumers. Policymakers can also stimulate the trend by offering tax relief, reduced interest rates, and coming up with improved regulations that promote green financial programs. There is a need to raise the level of awareness among employees and customers. Banks can conduct seminars and workshops based on green finance by using digital marketing exclusively. More aware employees about sustainable banking methods will be able to better advise customers in embracing eco-friendly financial options. Therefore, firms should link their corporate social responsibility with green finance by investing in clean energy projects and publicly disclosing their sustainability performance. The study emphasizes the importance of moving beyond general awareness campaigns to create genuine interest in green finance. Internet marketing constitutes a large portion of spreading information, and financial institutions must try to integrate experiential learning programs, such as experiential interactive workshops in sustainable investing, real world case studies of effective green finance programs, and customer referral on environmentally friendly banking benefits. Policymakers can also encourage uptake by providing more incentives, for example, tax relief, reduced preferential loan rates, and regulation frameworks that encourage green investments. Placing company sustainability initiatives side by side with open CSR activities and Fintech innovations will increase customer confidence and will move green finance to the fingertips of consumers. Through an integrated policy treatment, actual world action and innovative technologies, financial institutions and regulators can bridge the awareness-action gap, eventually powering a robust and resilient financial ecosystem.

5.2 Conclusion

The study provides us with the valuable insights into the factors influencing the adoption of Green Finance and the Sustainable Behavioral Outcomes. It gives us the significance of Economic incentives, Government Regulations, Customer Related Practices, Employee Related Practices and CSR initiatives in shaping the Sustainable Behavioral Outcomes. Our findings proves that Green Finance acts as a crucial mediator by reinforcing the idea that financial accessibility and structured sustainability initiatives can bring a meaningful change. Keeping in mind about the awareness our study emphasizes the need for action-oriented strategies which engages consumers in the green financial practices. Banks, policymakers and businesses must develop their target strategy which could address financial barriers, enhance consumer trust, and integrate technology-driven solutions to make the Green finance more accessible. Identifying the key drivers of Sustainable Behavioral Outcomes the research contributes to the broader aspect on Green Finance and offers more practical recommendations for stakeholders to design policies and initiatives by fostering a long-term commitment to sustainability. Overall, our study aims on the research of sustainable finance by focussing on the psychological, financial and regulatory factors influencing

the Green Finance adoption. Moreover, it provides us with actionable insights for financial institutions, policy-makers, and corporate leaders to create a more effective and impactful sustainable strategies for a greener future.

5.3 Limitations and Scope for Future Study

This research provides us with a valuable insight into the relationship between Green Finance, banking practice and Sustainable Behavioural Outcomes, in spite of this it has several limitations that need be addressed in future research. One key limitation is that the focus is mainly on the urban population and Gen Z consumer, which may limit the generalizability of findings to rural population or older population so future research should be more diverse where it is including different set of groups. One of the limitations of this study is it lacks longitudinal study tracking the changes in perception and financial decision there is a heavy reliance on cross sectional data which captures consumer behaviour at a single point of time. Because a longitudinal study provides a deeper understanding about economic fluctuation, regulatory practice and technological advancement. Future exploration on technology is important especially the role of fintech in green finance adoption. The impact of AI driven financial tools, blockchain for sustainable investment could provide us insights on how technology can be useful in improving green financial decision making. In addition to this influence of corporate sustainability certificates and green performance ratings on consumer trust and investment behaviour could help institution refine their strategies. By, addressing these limitations future research can offer a more comprehensive understanding of the factors influencing green finance adoption like aiding banks, policymakers and business which is essential for sustainable financial practice.

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