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Factors Influencing Customer Satisfaction and Loyalty towards Green Insurance

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Abstract

The present study aims to examine the factors influencing customer satisfaction and loyalty towards green insurance services. The study adopts a descriptive research design with a quantitative approach. The study is conducted in Chennai City, Tamil Nadu, among green insurance policyholders. Primary data were collected from 424 respondents through a structured questionnaire using the non-probability convenience sampling method. Secondary data were collected from research articles, journals, books and other relevant publications. The collected data were analysed using percentage analysis, Pearson correlation and multiple regression analysis. The findings reveal a positive and significant relationship between customer satisfaction and customer loyalty and further indicate that customer satisfaction significantly influences customer loyalty. The study suggests that insurance companies should improve service quality, ensure transparent communication, facilitate efficient claim settlement and strengthen digital facilities to enhance customer satisfaction and loyalty. It concludes that customer satisfaction and environmentally sustainable business practices are essential for strengthening customer relationships and promoting the long-term growth of the green insurance sector.

Keywords: Green Insurance, Customer Satisfaction, Customer Loyalty, Insurance Policyholders.

1. Introduction

Environmental sustainability has become an important consideration in the modern business environment, influencing the strategies, policies and operational practices of organisations across various industries. Increasing environmental concerns, climate change, natural disasters, pollution and the depletion of natural resources have encouraged businesses to adopt environmentally responsible practices. The insurance sector, which plays a significant role in financial protection and risk management, is also undergoing a transformation towards sustainable business practices. Green insurance has emerged as an important approach that integrates environmental sustainability into insurance products, services, business operations, investment decisions and risk management activities.

According to the United Nations Environment Programme Finance Initiative (UNEP FI, 2012), sustainable insurance involves integrating environmental, social and governance (ESG) considerations throughout the insurance value chain. This approach encourages insurance companies to identify environmental risks, develop sustainable insurance solutions and contribute towards building resilient communities. Green insurance practices include paperless transactions, digital policy management, environmentally responsible investments, green insurance products, climate-risk protection and customer awareness initiatives. These practices not only contribute to environmental protection but also create opportunities for insurance companies to improve their corporate image and strengthen customer relationships.

Customer satisfaction is a significant factor determining the long-term success and competitiveness of insurance companies. Since insurance services are intangible and involve long-term financial commitments, customers generally evaluate their experiences based on service quality, transparency, reliability, claim settlement efficiency, accessibility and trust. Zeithaml, Berry and Parasuraman (1996) highlighted that service quality has a significant influence on customers' behavioural intentions, including their willingness to maintain relationships with service providers. From the perspective of green insurance, customer satisfaction may depend not only on conventional service delivery but also on customers' perceptions of environmental responsibility, sustainable products and eco-friendly operational practices.

Customer loyalty is equally important for the sustainable growth of insurance companies because retaining existing policyholders can support policy renewals, positive word-of-mouth recommendations and long-term business relationships. Oliver (1999) explained that customer satisfaction is an important foundation for developing customer loyalty, although satisfaction alone does not always guarantee continued loyalty. In the insurance sector, customer loyalty may be influenced by trust, service reliability, transparent policy conditions, efficient claim settlement, customer engagement and the perceived commitment of insurers towards environmental sustainability.

Despite the growing importance of sustainability in the insurance industry, understanding the factors that influence customer satisfaction and loyalty towards green insurance remains essential. Customers may differ in their environmental awareness, perceived values, attitudes, trust and willingness to adopt sustainable insurance services. In this context, the present study, entitled "Factors Influencing Customer Satisfaction and Loyalty Towards Green Insurance," aims to examine the major factors influencing customer satisfaction and loyalty towards green insurance services.

2. Literature Review

Abraham and Ota (2026), in their study entitled "Climate Change and Green Insurance: An Analysis of Purchase Intentions Among Generation Y in India," examined the factors influencing the purchase intentions of Generation Y towards green insurance. The study employed a quantitative research approach and applied exploratory factor analysis, confirmatory factor analysis and structural equation modelling. The findings revealed that green attitude, environmental concern, social value, emotional value and green marketing efforts significantly influenced customers' purchase intentions. However, high insurance premiums emerged as a major barrier to adoption. The study emphasised the importance of affordable and accessible green insurance products to encourage environmentally responsible purchasing behaviour.

Jahnert, Schmeiser and Zehnle (2025), in their research entitled "Consumer Perceptions and Purchasing Behavior of Sustainable Insurance Products," investigated consumer preferences towards sustainable insurance products. The researchers conducted three studies to examine the influence of sustainability attributes on insurance purchase decisions. The study considered trust, product quality, brand equity and perceived consumer effectiveness as important mediating factors. The findings demonstrated that consumers showed a strong preference for sustainable insurance products, even when they involved higher prices. The study further highlighted that sustainable insurance attributes improved customers' perceptions of brand equity and product quality.

Sood and Ozen (2024), in their study entitled "A Systematic Review of ESG in the Insurance Industry: Navigating the Path to Sustainability," examined the integration of Environmental, Social and Governance (ESG) principles into the insurance industry. The researchers adopted a systematic literature review approach using the PRISMA methodology. The study identified investment activities, risk management, product management and asset valuation as important areas influenced by ESG integration. The findings suggested that sustainability-oriented insurance practices could strengthen the industry's contribution towards environmental responsibility and long-term business development. The authors also identified the need for further empirical research on ESG implementation in insurance companies.

Muflih, Iswanto and Purbayati (2023), in their study entitled "Green Loyalty of Islamic Banking Customers: Combined Effect of Green Practices, Green Trust, Green Perceived Value and Green Satisfaction," examined the influence of green practices on customer loyalty in Islamic banking. The study analysed 341 customer responses using structural equation modelling based on the partial least squares approach. The findings revealed that green practices directly influenced customer loyalty. Green satisfaction also played an important mediating role in the relationship between green practices and green loyalty. The study established the importance of developing environmentally responsible business practices to improve customer satisfaction and strengthen customer loyalty.

3. Method Adopted For The Research

The present study adopts a descriptive research design with a quantitative research approach to examine the factors influencing customer satisfaction and loyalty towards green insurance. The study is conducted in Chennai City, Tamil Nadu, focusing on green insurance investors, with green insurance policyholders serving as the respondents. Both primary and secondary data are used for the study. Primary data are collected directly from the respondents through a structured questionnaire, while secondary data are gathered from published research articles, journals, books, reports and other relevant sources. The measurement scales used in the study are adapted from established previous studies, particularly Shaumya and Arulrajah (2016) for green insurance practices and Ryu et al. (2012) and Namkung and Jang (2008) for customer satisfaction, with appropriate modifications to suit the research content. A total of 424 respondents are selected using the non-probability convenience sampling method**.** The collected data are analysed using SPSS 29.0 Version software with appropriate statistical tools, namely percentage analysis, correlation analysis and multiple regression analysis, to examine the relationships among the research variables and identify the factors influencing customer satisfaction and loyalty towards green insurance.

4. Analysis And Interpretation

Table-4.1: Green Insurance characteristics

Green Insurance characteristics		**Frequency**	**Percent**
Green Insurance Policy Investment	Below 1 lakh	108	25.5
	1 lakh to 3 lakhs	227	53.5
	3 lakhs to 5 lakhs	57	13.4
	Above 5 lakhs	32	7.5
Green Life Insurance Policy Type	Term Insurance	43	10.1
	Term insurance with return premium	37	8.7
	Unit Linked Insurance plans	47	11.1
	Endowment plans	48	11.3
	Money back policy	41	9.7

	Whole life insurance	41	9.7
	Group life insurance	42	9.9
	Child Insurance Plans	57	13.4
	Retirement plans	43	10.1
	Others	25	5.9
Green Insurance Company	LIC of India	31	7.3
	ICICI Prudential Life Insurance	42	9.9
	Bajaj Allianze Life Insurance	30	7.1
	SBI Life Insurance	47	11.1
	Reliance Life Insurance	29	6.8
	HDFC Standard Life	30	7.1
	Birla Sun Life	39	9.2
	Max New York Life	20	4.7
	Kotak Mahindra Life	34	8.0
	Aviva Life Insurance	25	5.9
	TATA AIG Life	42	9.9
	Bharti AXA Life	13	3.1
	Others	42	9.9
Awareness of Green insurance	Reference	113	26.7
	Media Advertisements	176	41.5
	News	73	17.2
	Social Media	62	14.6
Accessibility of Green insurance	Mobile App	225	53.1
	Web site	199	46.9
Gadgets Access for purchasing Insurance Policy	Desktop	210	49.5
	Laptop	89	21.0
	Mobile	64	15.1
	Tab	43	10.1
	Smart watch	18	4.2

Insurance Mode	Online	264	62.3
	Offline	50	11.8
	Both	110	25.9

Source: Primary data, computed.

Green Insurance characteristics is displayed in table-4.1. Green Insurance Policy Investment, Green Life Insurance Policy Type, Green Insurer Name, Awareness of Green insurance, Accessibility of Green insurance, Gadgets Access for purchasing Insurance Policy and Insurance Mode are considered as a characteristic of Green Insurance.

Green Insurance Policy Investment of the Insurance holder is grouped as Below 1 lakh, 1 lakh to 3 lakhs, 3 lakhs to 5 lakhs and Above 5 lakhs. Majority (53.5 percent) of the Insurance holder invest 1 lakh to 3 lakhs in Green Insurance Policy followed by 25.5 percent of the Insurance holder invest Below 1 lakh, 13.4 percent of the Insurance holder invest 3 lakhs to 5 lakhs and 7.5 percent of the Insurance holder invest Above 5 lakhs in Green Insurance Policy. While gone through the table value most of the Insurance holder invest minimum investment in Green Insurance Policy.

Policy Type of Green Life Insurance may be classified as Term Insurance, Term insurance with return premium, Unit Linked Insurance plans, Endowment plans, Money back policy, Whole life insurance, Group life insurance, Child Insurance Plans, Retirement plans and other plan. While reading the table value majority (13.4 percent) of the Insurance holder invest in Child Insurance Plans followed by 11.3 percent of the Insurance holder invest in Endowment plans, 11.1 percent of the Insurance holder invest in Unit Linked Insurance plans, 10.1 percent of the Insurance holder invest in Term Insurance and Retirement plans, 9.9 percent of the Insurance holder invest in Group life insurance, 9.7 percent of the Insurance holder invest in Money back policy and Whole life insurance plans, 8.7 percent of the Insurance holder invest in Term insurance with return premium and 5.9 percent of the Insurance holder invest in other insurance plans. It is inferred that most of the Insurance holder invest in Child Insurance Plans for their kids' future benefits.

LIC of India, ICICI Prudential Life Insurance, Bajaj Allianze Life Insurance, SBI Life Insurance, Reliance Life Insurance, HDFC Standard Life, Birla Sun Life, Max New York Life, Kotak Mahindra Life, Aviva Life Insurance, TATA AIG Life, Bharti AXA Life and Other insurance companies are taken in to consideration as a Green Insurance Company for the present study. Majority (11.1 percent) of the insurance policy holder invest in the company SBI Life Insurance followed by 9.9 percent of the insurance policy holder invest in the company ICICI Prudential Life Insurance as well as TATA AIG Life and other insurance companies. 9.2 percent of the insurance policy holder invest in the Birla Sun Life company, 8.0 percent of the insurance policy holder invest in the Kotak Mahindra Life company, 7.3 percent of the insurance policy holder invest in the LIC of India, 7.1 percent of the insurance policy holder invest in the Bajaj Allianze Life Insurance and HDFC Standard Life, 6.8 percent of the insurance policy holder invest in the Reliance Life Insurance, 5.9 percent of the insurance policy holder invest in the Aviva Life Insurance, 4.7 percent of the insurance policy holder invest in the Max New York Life and 3.1 percent of the insurance policy holder invest in the Bharti AXA Life. It is to be noted that majority of the green insurance investors invest their green insurance policy in the company SBI Life Insurance.

Awareness of Green insurance is categorised through Reference, Media Advertisements, News and social media. In the above table value majority (41.5 percent) of the respondent may aware of green insurance through Media Advertisements followed by 26.7 percent of the respondent may aware of green insurance through somebody's Reference, 17.2 percent of the respondent may aware of green insurance through News and 14.6 percent of the respondent may aware of green insurance through social media. While gone through the table value most of the respondent may aware of green insurance through Media Advertisements.

Mobile App and Web site be the Accessibility of Green insurance. 53.1 percent of the insurance policy holder can access through Mobile App and 46.9 percent of the insurance policy holder can access through Web site. It is inferred that majority of the insurance policy holder can access through mobile app for easy access.

Gadgets Access for purchasing Insurance Policy by the policy holder are Desktop, Laptop, Mobile, Tab and Smart watch. In our research study most (49.5 percent) of the insurance policy holders may access and invest their policy through desktop followed by 21.0 percent of the insurance policy holders may access and invest their policy through laptop, 15.1 percent of the insurance policy holders may access and invest their policy through Mobile, 10.1 percent of the insurance policy holders may access and invest their policy through Tab and 4.2 percent of the insurance policy holders may access and invest their policy through Smart watch. It is to be noted that majority of the insurance policy holders may easily access and invest their policy through Desktop for comfortness.

Insurance policy holders may invest their policies through Online mode, Offline mode and Both online as well as off line. While reading the table value majority (62.3 percent) of the respondent choose Online mode for their insurance policy investment followed by 25.9 percent of the respondent choose both online and off line mode for their insurance policy investment and 11.8 percent of the respondent choose Offline mode for their insurance policy investment. While reading the table value most of the insurance policy holders invest their policies through Online mode for quick process.

Table-4.2: Relationship between Satisfaction and Loyalty

Correlations			
		Loyalty	**Satisfaction**
Loyalty	Pearson Correlation	1	
	Sig. (2-tailed)		
	N	424	
Satisfaction	Pearson Correlation	0. 670*	1
	Sig. (2-tailed)	0.001	
	N	424	424

Source: Primary data, computed. *Significant at the 1% Level.

Table-4.2 shows the relationship between relationship between Satisfaction and loyalty. Here, Satisfaction considered as independent variables and loyalty considered as dependent variable. The correlation value of satisfaction (0.670) is positive significant relationship with loyalty.

H_1: There is a significant relationship between satisfaction and loyalty.

In order to examine the above stated hypotheses, Pearson correlation is executed. The P-values are significant at one percent level. Thus, the stated hypothesis (H_0) is accepted. It is identified that the satisfaction is having high level correlation and positive significant relationship with loyalty. Hence it is inferred that there is a significant relationship between satisfaction and loyalty.

Table-4.3: Factors Influence the satisfaction on loyalty

R	**R Square**	**Adjusted R Square**	**F**	**Significant Value**
0.670	0.450	0.446	114.344	0.001*

Coefficients					
Perceived Intention	**Unstandardized Coefficients**		**Standardized Coefficients**	**T**	**Significant Value**
	B	**Standard Error**	**Beta**		
(Constant)	34.600	1.657		20.884	0.001*
Satisfaction	4.347	0.476	0.530	9.132	0.001*

Source: Primary data, computed. *Significant at the 1% Level.

Table-4.3 explains the factors influencing satisfaction on loyalty. Here satisfaction is considered as independent variables and loyalty is considered as dependent variable.

H_1: Satisfaction influence on loyalty.

Further, stepwise multiple regression is applied to identify the most predictor satisfaction on loyalty. Regression analysis is applied to know the effect of exploratory variables on the dependent variable. The adjusted r-square value is found to be 0.446. It is inferred that the independent variables are influenced at 0.446 levels. It is found that the independent variables of satisfaction is influenced at 44.6 percent towards loyalty. The p-value is 0.001. So, the hypothesis is accepted.

The unstandardized co-efficient beta value indicates the strength of relationship between dependent and exploratory variables. It is expressed by the equation as follows;

Loyalty = 34.600 + 4.347 (satisfaction)

It is to be noted that the satisfaction is positively influencing the Loyalty. Hence, satisfaction influence on Loyalty.

5. Major Findings

The study reveals that customer satisfaction plays an important role in influencing customer loyalty towards green insurance. The positive and significant relationship between these two variables highlights the importance of improving customer satisfaction to strengthen customer loyalty. The findings also indicate the growing preference for online insurance transactions and digital platforms among the respondents.

6. Suggestions And Recommendations

Insurance companies should give priority to improving customer satisfaction through quality service delivery, transparent communication, efficient claim settlement and strengthened digital facilities. Since customer satisfaction has a positive and significant influence on customer loyalty, greater attention should be given to customer relationship management and service improvement initiatives. Furthermore, the growing preference for online insurance transactions highlights the need to develop secure, accessible and user-friendly digital platforms. These measures can help insurance companies strengthen customer loyalty and promote the sustainable growth of the green insurance sector.

7. Conclusion

The study concludes that customer satisfaction is a key factor in strengthening customer loyalty towards green insurance. The findings highlight that providing quality services, maintaining transparency, ensuring efficient claim settlement and improving digital service facilities are essential for enhancing customer satisfaction and building long-term customer relationships. The increasing preference for online insurance transactions also indicates the importance of adopting secure, convenient and user-friendly digital platforms. Therefore, insurance companies should focus on customer-oriented service practices and environmentally sustainable initiatives to

enhance customer loyalty, improve their competitive position and ensure the long-term growth and development of the green insurance sector.

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