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South Asian Journal of Management Research (SAJMR), is a scholarly journal that publishes scientific research on the theory and practice of management. All management, computer science, environmental science related issues relating to strategy, entrepreneurship, innovation, technology, and organizations are covered by the journal, along with all business-related functional areas like accounting, finance, information systems, marketing, and operations. The research presented in these articles contributes to our understanding of critical issues and offers valuable insights for policymakers, practitioners, and researchers. Authors are invited to publish novel, original, empirical, and high quality research work pertaining to the recent developments & practices in all areas and disciplines.

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Editor

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Consumer Satisfaction Towards Organic Produce: A Study in Western Tamil Nadu

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Abstract

This study examines the level of consumer satisfaction with organic products in Western Tamil Nadu, India, and how important variables like product features, consumer awareness, marketing strategies, environmental awareness, and health perception affect this satisfaction. The results of a mixed-method approach that included a pilot study and quantitative analysis using Structural Equation Modelling (SEM) show that, with a standardised regression coefficient of, product attributes have the biggest influence on customer satisfaction. Additionally, two notable positive factors that emerged were consumer awareness and environmental consciousness. The impact of health perception was favourable, but it was not as strong as that of marketing tactics and customer perception. These findings emphasise how crucial it is to provide premium organic products, enhance pricing and accessibility strategies, and take advantage of eco-friendly initiatives in order to raise customer satisfaction. The study also highlights how important ethical marketing techniques and focused awareness campaigns are building customer loyalty and trust. This study provides useful insights for stakeholders seeking to match their strategies with the changing demands of ethically conscious consumers and the more general requirements of corporate social responsibility by placing the analysis within the framework of Western Tamil Nadu.

Keywords: Consumer Satisfaction, Organic Products, Consumer Awareness, Environmental Awareness, Product Features.

Introduction

Consumer awareness of health benefits, eco-sustainability, and ethical farming practices have elevated organic products to a global market frontier (Seufert, et. Al., 2023). This growing awareness has changed consumer preference but also stimulated researchers and organizations to further investigate consumer satisfaction in this area. One of the most important indicators of consumer response in markets is consumer satisfaction, as it reflects the overall effectiveness of the offer of organic products (Hemmerling et al., 2015). In an Indian context, consumer awareness and satisfaction factor significantly — especially in Western Tamil Nadu, where the legacy of agriculture and changing consumption habits provide the right environment for organic product market expansion (Naspetti & Zanolli, 2021).

Demand for organic products largely depends on the willingness of consumers who are well-informed in the characteristics and the significance of biological farming system, eco-system, and health effects (Aertsens et al., 2011). The core of awareness is trust and confidence in the organic offerings which leads a consumer to seek everything regarded to organic. For example, Hemmerling et al. (2015) found that the lack of harmful substances leads consumers to have greater satisfaction and higher purchase intent towards organic products when they have more knowledge about this. This dynamic between conscious consumption and satisfaction emphasises the need to communicate the value proposition of organic products.

In addition to the awareness, satisfaction of the consumers getting organic products depend on the intrinsic properties of the organic products like quality, availability and price of the organic products. Organic products of high quality that fulfil the expectations of consumers help forge positive impressions and the loyalty of shoppers. Despite the promise shown by these products, limited availability and premium prices remain major limitations to broader diffusion especially in less informed markets (Naspetti & Zanolli, 2021; Willer & Lernoud, 2023). This identifies a key area for exploration in removing restrictions on accessibility and affordability, without compromising the principles of organic.

Another determinant of consumer satisfaction is health perception. Organic goods are believed to be healthier choice due to being free of harmful pesticides, artificial additives, and other harmful substances. Due to this, consumers are paying higher attention to organics, especially in terms of nutrition, safety and customer satisfaction and loyalty for organics (Hughner et al., 2007). In other research, health-promoting individuals are mentioned as more prone to choose organic foods because they believe they will contribute to a more positive wellness and a prophylactic attitude towards diseases (Saba & Messina, 2003).

Consumer satisfaction is also influenced by environmental awareness. Organic products are often viewed as environmentally friendly options that fit the ideals of sustainable living. This belief has a strong appeal among environmentally conscious consumers, who feel that their purchase decisions represent a form of payment to avert environmental disasters (Paul & Rana, 2012). According to Willer and Lernoud (2023), consumers who are highly environmentally conscious not only prefer organic products but actually enjoy their purchases even further because those choices reaffirm their professed commitment to sustainability.

Besides product characteristics and environmentally friendly practices, marketing strategies also play a vital role in creating consumer trust and turning satisfaction into a positive review for a product. Consumers appreciate when products are transparently labeled, backed by credible certifications, and when targeted ad campaigns effectively inform them of product offerings. Accurate labeling is key to endorsing consumers' trust about product authenticity and increasing consumer confidence in the organic market (Gracia & Magistris, 2008). Indeed, as highlighted by Naspetti and Zanolini (2021), transparency and consistency in marketing and promotional activities significantly influence the establishment and maintenance of consumer satisfaction.

The interplay between these factors, namely consumer awareness, product attributes, health perception, environmental sustainability, and their role/ impact on marketing plans, in line with these are relevant in western Tamil Nadu Saleena, T. A. (2019). The combination of the region's longstanding agricultural traditions and fast-changing consumer preferences make it an ideal place to research the determinants of satisfaction with organic products. This is intended to fill the voids in knowledge and provide recommendations to the participants in the organic market by studying the dynamics. It aims to inform the evolution of consumer-oriented strategies that control interest in organic better products as well as boost sustainable growth in the natural item industry (Willer & Lernoud, 2023).

In this study, it further emphasizes the significance of offering products that meet consumer expectations for these targets through this investigation. By doing so, it offers practical suggestions which provide for either enhancing product quality, increasing accessibility, or fine-tuning marketing approaches to address the specific requirements and preferences of consumers in Western Tamil Nadu. The research would therefore serve to contribute to the continuing development of the organic market, its ability to serve the needs of a well-informed and environmentally sensitive consumer group.

Objectives

To assess how consumer knowledge in Western Tamil Nadu affects consumers' satisfaction with organic products.

To evaluate how customer satisfaction is impacted by product qualities (quality, price, availability, and variety).

To investigate how perceptions of the environment and health influence consumers' satisfaction with organic products.

To examine how marketing tactics affect the development of customer satisfaction and trust.

To ascertain how total satisfaction is impacted by customer views of brand and value.

Hypothesis Development and Relevant Reviews

Consumer Awareness and Consumer Satisfaction

Consumer satisfaction in the organic food sector heavily relies on awareness and information. Data shows a good relationship between awareness of organic benefits such as health protection, environmental conservation, and ethics of organic farming practices, which lead to satisfaction (Saputra et al., 2024; Zhilla et al., 2024). Knowledgeable customers have a better understanding of products and develop more confidence and loyalty towards organic products instead of conventional ones. Saputra et al. (2024) note that informed consumers can better gauge product value, enhancing the fit between consumer expectation and satisfaction.

Educational initiatives and awareness campaigns are showing solid efforts in breaking information barriers. By highlighting the benefits and showcasing the potential dangers of conventional produce, organic product advertisements seem to encourage consumers to invest in organic food — promoting its superior nutritional value and sustainability as some of its most appealing attributes. Zhilla et al. (2024) which emphasize the importance of targeted education campaigns to increase satisfaction by teaching consumers the benefits of products that align with their values. These initiatives also educate consumers on the environmental and social benefits of choosing organic, which helps to build brand loyalty.

Awareness also helps improve perceived reliability and trustworthiness of products. That illusion is further exacerbated through transparent labeling, certifications, and communication of benefits, resulting in a much more fulfilling feeling for the consumer (which is essentially what they are after when they are looking to buy these products). Due to the crucial influence of awareness on consumer purchasing behavior and subsequently on the

organic product market, awareness in the broader sense and the studied elements have received increasing attention (Wellens & Erbrink, 2013).

H1: Higher levels of consumer consciousness have a positive impact on consumer satisfaction with organic products.

From Good Product Features to Good Consumer Satisfaction

With respect to the organic food industry, aspects like availability, price, quality, and variety of the product greatly affect consumer satisfaction. A major part of satisfaction and loyalty is fulfilling basic consumer needs, such as providing quality products at affordable prices (Relawati et al., 2024). This accessibility is crucial, because products that are more readily available to consumers and are in convenient locations decrease the barriers to purchase and, in turn, increase consumer satisfaction (Relawati et al., 2024). Having organic goods available all year round will keep the hassle out of question of availability and make the shopping experience rewarding.

A major aspect that directly influences the satisfaction is the quality of organic products. Organic products that are high-quality fulfill the desire expressed by consumers for taste, freshness, and safety, reinforcing how consumers perceive the value of organic products. According to Poudel (2024), the reliability and authenticity of organic products, along with competitive pricing is the leading factors that influence consumer satisfaction. When consumers feel like the price represents the quality and value of the product, their trust in the brand improves, leading to greater levels of satisfaction Delgado-Ballester, (2001).

Moreover, it is the variety that is key when it comes to different preferences among consumers. With a greater diversity of organic options, catering to individual needs can be accomplished, creating a much richer experience. All these factors together namely, accessibility, pricing, quality and assortment provide a complete value proposition for people who buy organic products every so often or people who buy organic products.

H2: The quality, price, availability, and variety of products influence consumer satisfaction with organic products.

Consumer Satisfaction and Health Perception

Health perception is a powerful driver for the organic food market, consumers increasingly perceive organic as better substitutes for conventional products. In this case, it is based on beliefs that organic foods are safer, healthier, and without harmful pesticides or synthetic additives (Kabir & Ko, 2025). Especially health-conscious consumers highly rate the nutritional benefits and safety attributes of organic foods that are related to significantly higher satisfaction levels. According to Kabir and Ko (2025), consumers that are more health-oriented often have higher loyalty and trust in organic brands since these products link to their health objectives.

Relawati et al. (2024) also add that Organic products' higher quality and more nutritional properties lead to higher satisfaction among consumers. These associations not only resonate with individual values and lifestyles but also promote the notion that organic food is a preventive decision for overall health. Organic products fulfil the requirements of health-conscious consumers and thus, build a strong value proposition which enhances loyalty and repeat purchase.

In addition, through health perception, a strong emotional bond forms between consumers and organic goods, and buying and consuming such products means investing in the welfare of oneself and the family. This link highlights the need to communicate clearly the health benefits of organic products through transparent labeling, certifications, and awareness campaigns.

H3: Awareness of health benefit positively influences consumer satisfaction with organic products.

Environmental Awareness and Consumer Satisfaction

Consumers are getting increasingly conscious, making environmental awareness a key influencer of satisfaction in the market for organic products. Because organic products fit better with environmentally friendly individuals' values of sustainable living and environmental protection, they gain extra satisfaction from consuming organic products (Indrawaty et al., 2024). Furthermore, they consider organic products as ethical purchases, which contribute to ecological practices, thus improving their overall satisfaction or providing a sense of fulfillment. Indrawaty et al. (2024) highlight the role of these choices in strengthening the congruence between consumer values and product characteristics, promoting trust and loyalty towards organic brands.

Furthermore, Kavya et al. (2024, p. 5) emphasize that the act of buying organic products can generate a deep sense of purpose and emotional bonding for environmentally conscious consumers. Organic eating habits buy more than products out in a physical space but compounds bigger issues such as farming practices and environmental sustainability. This personal relationship deepens customer loyalty and increases satisfaction with organic products.

The significance of marketing and awareness campaigns emphasizing the environmental segments of organic elements can also be drawn from the fact that environmental awareness and consumer satisfaction significantly vary positively. Clear communication regarding the positive environmental impacts of organic farmers — not limited to carbon footprint reduction, biodiversity conservation, and soil health — may resonate with environmentally-minded consumers as well.

Not only do organic products protect the environment and public health, but businesses can attract a growing consumer segment that prioritises sustainability as they create value by promoting organic products and services. Such initiatives not only foster personal satisfaction, but they also contribute to environmental stewardship and sustainable consumption at large.

H4: Higher environmental awareness positively affects consumer satisfaction with organic products.

Impact of Marketing and Satisfaction of Customers

The effectiveness of marketing strategies on consumer satisfaction with organic products. Establishing trust and ensuring satisfaction requires transparency and credibility, as well as efficient communication through advertising, promotions and labeling (Ponnusamy et al., 2024). Certification-backed accurate and transparent labeling provides consumers with peace of mind regarding the authenticity and quality of organic products. This trust develops more emotional bonds with brands and improves the customer experience.

These strategies are further enhanced by digital marketing campaigns. Ponnusamy et al. (2024) state that digital channels are critical to ensure that consumers are informed on the health, environmental and ethical benefits provided by organic products. These initiatives help educate consumers about the special characteristics of organic products, allowing them to shop with confidence Seyfang, G. (2006).

The importance also lies in advertisements and promotions in consumer satisfaction. According to Akter & Islam (2024), well-planned promotional activities convey the unique value of organic products. Such strategies are not just about improving awareness of a product, but also about creating an anticipation that promotes the satisfaction of the user, making them feel like part of an exclusive and reliable group. Brands build this relationship with their customers using discounts, loyalty programs and targeted advertising based on consumer preferences.

The benefits of marketing extend beyond the moment of purchase, creating long-term brand loyalty and even contributing to market growth. For example, utilizing such innovative and transparent marketing methods helps the business to reach consumer expectations and maximize trust capital, which in turn, leads to increased satisfaction among organic product consumers.

H5: The effectiveness of marketing strategies has a direct positive impact on the consumer satisfaction towards organic products.

Consumer Understanding and Consumer Satisfaction

The perception of consumers is an important factor that leads to satisfaction in the organic product market. Since customers positively view the price, brand, and product they bought, it translates positively towards how satisfied and fulfilled they feel before and after purchase. Transparent and dynamic pricing strategies can generate trust and confidence from consumers and increase their satisfaction (Narcı ve Tembelo, 2024). Pricing perceived as fair and indicative of quality boosts consumer engagement and long-term loyalty.

Similarly, Ahmadi et al. (2025) emphasize the role of brand equity in determining consumer satisfaction. The strong brand equity, established by consistent quality, being able to trust, and effective communication, is in accordance with the rise of consumers' expectations and improve their loyalty toward organic products. By providing a better and complete understanding of product attributes and benefits, consumer experiences are enriched, leading to satisfaction and in turn repeat purchases.

These results emphasize the importance of consumer perception in directing marketing efforts for long-lasting involvement and satisfaction. Transparent communication, detailed labeling, and addressing consumer concerns can all be key marketing initiatives for promoting the positive perception of genetically modified organisms (GMOs) Ngo, T. T. et. al., (2024). In addition, companies that connect their value propositions with consumer expectations are more likely to sustain satisfaction and loyalty with consumers.

By maintaining and highlighting good messaging and value, it can make consumers feel good about purchasing an organic product[3]. To sustain a competitive edge in the organic products arena, it is essential that perception aligns with satisfaction.

H6: A positive consumer perceptions increases the consumer sunction the content outcome positively.

Conceptual Framework

The following framework was developed according to the literature review. Consumer Knowledge, Product Characteristics, Health Awareness, Environmental Awareness, Marketing Impact, and Consumer Perception are the six independent variables that impact consumer satisfaction to create the conceptual framework. Drawing from the literature review in the above sections, these variables are considered as the key determinants of satisfaction with the organic products. Consumer Satisfaction (the dependent variable), represents the overall level of satisfaction deriving from product use. The model suggests that positive interaction with these independent variables provides satisfaction where awareness, perceptions, and marketing strategies are vital in making positive consumer experiences. The relationship provided a basis for analysis of the factors influencing satisfaction within the organic product market.

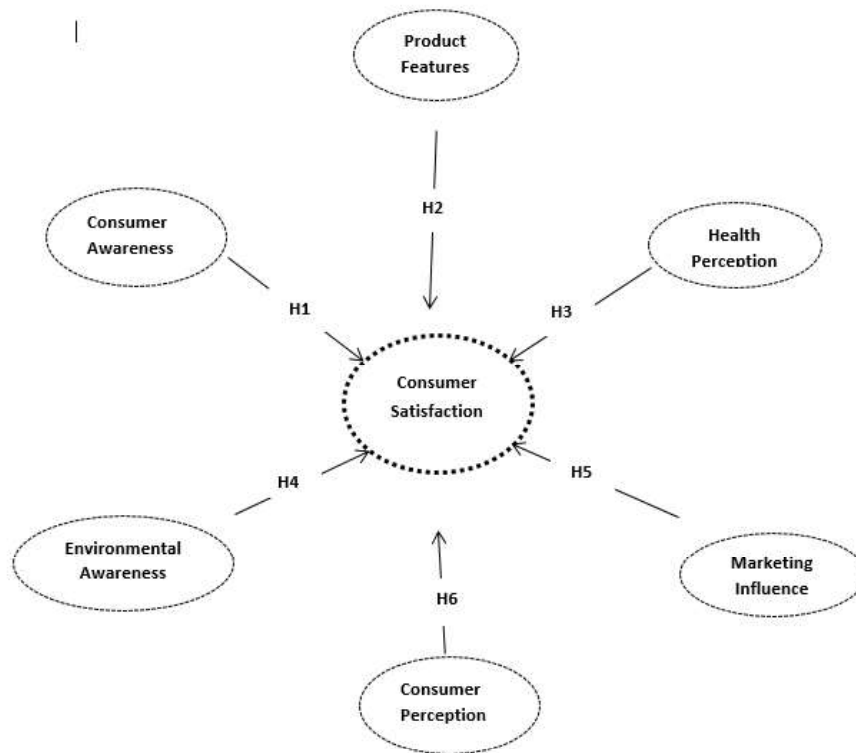


Figure 1: Conceptual Framework

Source: The Author's

Methods

Pre-test

A pilot study of 50 individuals was carried out, which provides early insights as to how the variables interact with each other in the population of interest. The purpose of this pre-test was to evaluate the reliability, clarity, and validity of the research tools, along with verifying any errors or changes that can be introduced before carrying out the complete research.

Exploratory Factor Analysis

The Exploratory Factor Analysis (EFA) demonstrates the appropriateness of this dataset since the KMO value = 0.906 indicating a high factorability of the correlations and the Bartlett's Test of Sphericity ($\chi^2 = 2088.626$, $df = 153$, $p < 0.001$) indicates that the variables taken together are not an identity matrix. The six extracted components accounted for 71.27% of the total variance, suggesting a strong underlying structure. Items load well on their respective product features (PF1-PF3), health perception (HP1-HP3), environmental awareness (EA1-EA3), marketing influence (MI1-MI3), customer satisfaction (CP1-CP3), and consumer awareness (CA1-CA3) as seen in the Rotated Component Matrix. These findings confirm the survey constructs, demonstrating they adequately reflect the variables of interest, facilitating subsequent analyses.

Table 1. KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.906
Bartlett's Test of Sphericity	Approx. Chi-Square	2088.626
	Df	153
	Sig.	.000
Total Variance Explained		71.274

Table 2. Rotated Component Matrix^a

	Component					
	1	2	3	4	5	6
PF1	.724					
PF2	.705					
PF3	.677					
HP1		.614				
HP2		.600				
HP3		.492				
EA1			.482			
EA2			.405			
EA3			.673			
MI1				.731		
MI2				.710		
MI3				.692		
CP1					.660	
CP2					.801	
CP3					.614	
CA1						.799
CA2						.773
CA3						.870

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.^a

a. Rotation converged in 11 iterations.

Results

Reliability

To assess the internal consistency of the measurement items, a reliability analysis was conducted using Cronbach's Alpha. The results demonstrated that all constructs had acceptable reliability, with alpha values exceeding the recommended threshold of 0.7 (Nunnally, 1978). Specifically, constructs such as Health Perception (0.756), Environmental Awareness (0.855), and Customer Satisfaction (0.751) displayed strong internal consistency. Consumer Awareness (0.831) and Product Features (0.792) also met the reliability criterion, though earlier exploratory values of 0.698 and 0.633, respectively, suggested that these constructs were slightly refined during the development of the model. Marketing Influence (0.889) and Consumer Perception (0.854) demonstrated very strong internal consistency, reinforcing their inclusion in the structural model due to their robust reliability.

Table 3: Showing reliability analysis

Independent variable	Items	Cronbach's Alpha Value
Consumer Awareness	3	0.831
Product Features	3	0.792
Health Perception	3	0.756
Environmental Awareness	3	0.855
Marketing Influence	3	0.889
Consumer Perception	3	0.854
Dependent variable	Items	Cronbach's Alpha Value
Customer Satisfaction	3	0.854

Source: Primary Data

Structural Equation Modelling

The structural equation model was evaluated using several key fit indices, all of which indicated an excellent model fit. The values obtained for CMIN/DF = 2.65, GFI = 0.903, NFI = 0.907, CFI = 0.909, and RMSEA = 0.018 were well within the acceptable range, confirming that the hypothesized model adequately represents the data and provides a reliable basis for further analysis (Hair et al., 2010). These results suggest that the model effectively captures the relationships between the variables under study, and it is robust enough to support the investigation of the causal pathways.

The structural path analysis provided further insights into the relationships between the independent variables and the dependent variable, Customer Satisfaction. The strongest relationship was observed for Product Features, which exerted a substantial effect on satisfaction ($\beta = 0.54$, $p < 0.001$). This was followed by Environmental Awareness ($\beta = 0.33$, $p < 0.001$), Consumer Awareness ($\beta = 0.32$, $p < 0.001$), and Consumer Perception ($\beta = 0.23$, $p < 0.001$). These findings highlight the significant influence of product characteristics, consumer awareness, and environmental concerns on customer satisfaction. Health Perception ($\beta = 0.18$, $p = 0.002$) and Marketing Influence ($\beta = 0.15$, $p = 0.023$) also exhibited statistically significant but comparatively moderate effects, indicating their role in shaping satisfaction, albeit to a lesser degree.

Table 4: Measure for Structural model fit

Fitness Indicators	Measurement	Improved model block
CMIN/DF		2.65
P-Value		0.000
GFI		0.903
NFI		0.907
CFI		0.909
RMSEA		0.018
		Decision: Good fit model

Table 5:

Dependent variables	Path Direction	Independent variables	Standardized Regression (β)	P-Value
Customer Satisfaction	<-----	Consumer Awareness	0.32	***
	<-----	Product Features	0.54	***
	<-----	Health Perception	0.18	0.002
	<-----	Environmental Awareness	0.33	***
	<-----	Marketing Influence	0.15	0.023
	<-----	Consumer Perception	0.23	***

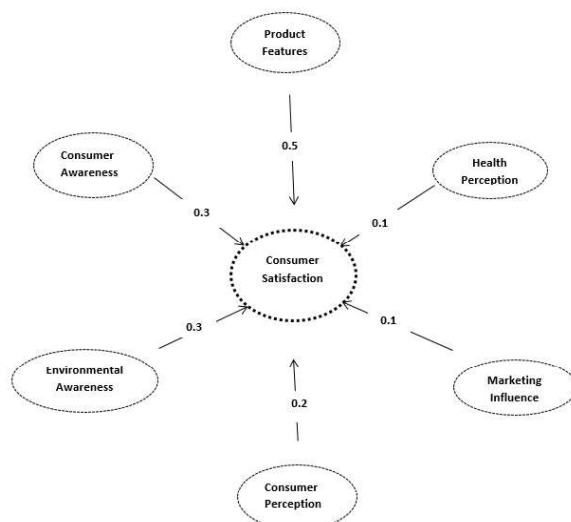


Figure 2: Results of Structural Equation Model
Source: Primary Data

Findings

The findings are useful as they offer important information on the factors affecting consumer satisfaction towards organic products in Western Tamil Nadu area. of Product Features as a cue played the most salient role in explaining user satisfaction and the strongest effect on consumer satisfaction. This finding implies that quality, availability, cost and variety of organic products play significant roles in the formation of consumers' satisfaction judgments. Optimizing these features of organic goods may make customer have better product experience, and thus contribute to more loyalty and repeat purchases.

Environmental Concern also significantly influenced consumer satisfaction. Consumers who were of the opinion that organic products were good for the environment were more satisfied. This demonstrates the growing relevance of ecological attitudes for consumer decisions, as the green-mindedness is an important antecedent for satisfaction about organic products. With the purchasing habits of the public increasingly scrutinized for the potential harm they cause in the environment, the demand for organic products may be increasing, underlining the importance of sustainability in the industry.

Consumer Awareness also appeared as an important determinant of satisfaction. Consumers who are aware about the health, environmental and ethical advantages of organic products seem to express greater satisfaction. This highlights the need to inform consumers, because an understanding of the advantages of organic products contributes to increased customer satisfaction and product linkage.

Consumer Perception, which represents how customers view the value of a product and their faith in the brand, also had a moderate impact on satisfaction. This research implies that consumers who consider organic items to be reasonably priced and consistent in branding are more likely to be satisfied with their purchases. It emphasises the significance of maintaining transparent and trustworthy communication in brand messaging, as well as constant product quality that meets consumer expectations.

Although satisfaction was influenced by health perception, this effect was not as strong as anticipated. This implies that people have a more basic level of anticipation because the health benefits of organic products are frequently expected or taken for granted. Because many customers already view health benefits as essential, they might not be a differentiator for satisfaction when it comes to organic products.

Finally, Marketing Influence, although statistically significant, had the least impact on consumer satisfaction. This finding indicates that while marketing efforts can influence consumer perceptions, the current marketing strategies may not be sufficiently resonant with the values of the target audience. Therefore, there is a need for refinement in marketing approaches, focusing on improving clarity, transparency, and alignment with consumer values to drive greater satisfaction and foster deeper engagement with organic products.

These findings collectively emphasize that while multiple factors contribute to consumer satisfaction with organic products, product-related features, environmental awareness, and consumer education are among the most critical elements.

Discussion

The results of structural equation modelling offer important new information about the factors influencing Western Tamil Nadu customers' satisfaction with organic products. Adjusted and R-squared R-squared is a measure of how well the model fits the data, or how well the proposed relationship fits the data. According to our data, product attributes have the biggest positive influence on customer satisfaction, indicating that offering high-quality, reasonably priced, and easily accessible organic items is essential. Customer satisfaction was also significantly impacted by environmental and consumer awareness, as more and more customers looked for eco-friendly and healthful options.

Additional research shows that while marketing influence, consumer perception, and health perception all positively impact satisfaction, their effects are less pronounced than those of product attributes. The focus on these results attests to conventional, successful marketing techniques including ingredient-specific patent labels and marketing tactics that prioritise customer satisfaction and trust. Consumer awareness has a positive impact on customer satisfaction, product features have a significant and positive impact on customer satisfaction, health perception improves customer satisfaction, environmental awareness suggests high customer satisfaction, marketing influence has a positive impact on customer satisfaction, and positive consumer perception has a positive impact on customer satisfaction. These findings support the following hypotheses.

This study adds significantly to the body of knowledge by thoroughly analysing the factors that influence consumer satisfaction from both an environmental and marketing standpoint. The study identifies a number of analytical facets that provide a more thorough examination of the significant factors influencing organic consumption. The findings have important ramifications for important stakeholders in the organic market since they will guide the development of more customer-focused strategic marketing campaigns.

The marketing tactics that steer towards customer preferences and expectations are the primary focus of this study's consequences. For instance, organic market participants can utilise the results to increase supply and reduce prices for organic products, making them more affordable for a wider range of consumers. The study also emphasises how important it is to communicate the environmental advantages of eating organic food since this can have a big impact on how customers behave. Promoting the environmental benefits of organic products could be a tactic to get customers interested in sustainable consumption.

Additionally, the results show that awareness campaigns must be customised for a particular customer segment. Researchers recognise that regional differences in customer preferences mean that companies should have regionally specific advertising methods to maximise market penetration. Localised marketing techniques that take into account the economic and cultural environments in which customers live can be used to strengthen consumer loyalty and trust in organic products.

The study contributes to the broader discussion on sustainable consumption habits in addition to the findings' immediate marketing implications. Additionally, as our consumer preferences for organic products continue to change, it is more crucial than ever for companies to make sure that their marketing and product offerings meet the evolving needs of their target market. The aforementioned study emphasises the necessity of creating marketing campaigns that are not only aesthetically pleasing but also in line with the larger sustainability objectives for the use of organic food.

The intricate connection between environmental concerns, marketing strategies, and customer pleasure is generally highlighted by these findings. By demonstrating how organic-market stakeholders can effectively navigate the complexities of consumer behaviour in a world of growing competition, the research contributes insightful viewpoints to the corpus of knowledge. These findings highlight the importance of businesses continuing to adapt their product concepts and marketing tactics to the latest developments in the organic food industry. In order to improve consumer happiness in the organic market space, other researchers and industry practitioners will use this study as a vital reference.

Conclusion and Future Research Directions

The study focuses on assessing the influence of product attributes, consumer awareness, and ecological consciousness as the significant determinants on consumer satisfaction towards purchase of organic products in Western Tamil Nadu. These results illustrate that amongst all the construct offered, product features (adequate quality, availability, and affordability) remains the strongest determinants of satisfaction, consistent with prior research indicating that product features drive consumer loyalty (Aertsens et al., 2011; Poudel, 2024). Likewise, consumer awareness proved to be an important factor, with higher awareness levels of health, environmental and nutritional benefits relating positively to satisfaction (Hemmerling et al., 2015; Saputra et al., 2024). Likewise, concern for the environment increases consumer satisfaction because those who are eco-conscious consider organic products sustainable (Indrawaty et al., 2024; Kavya et al., 2024).

Moreover, health perception, marketing efforts, and consumer perception positively but less strongly influenced them. By Gl ađ Graci a & Magistris, 2008; Akter & Islam, 2024:596) Transparency in marketing, valid labels, and specific promotional actions are also effective in building consumer trust and satisfaction. Particularly health-focused customers regarded organic products as safer and nutritionally higher, which in turn found connections to greater satisfaction levels (Kabir & Ko, 2025; Hughner et al., 2007).

The study highlights the need for improved quality, availability and pricing of organic products to strengthen consumer trust in the organic market. Importance of health and environmental benefits should be reinforced through awareness campaigns to improve consumer satisfaction even more (Paul & Rana, 2012; Relawati et al., 2024). This research contributes to the literature by developing an integrated framework that can help policymakers and businesses understand the interrelationship and dynamics among these factors.)

Longitudinal studies should be conducted in the future to observe shifts in consumer preferences and determinants of consumer satisfaction over time. It remains to be seen how such a research project will be developed but comparative studies are key to understanding the global dynamics of the organic market across regions or countries. In addition to this, utilizing more complex analytical tools like variety of machine learning models could improve the predictive capability of the suggested framework and allow for development of adaptive strategies by stakeholders to adapt to changing consumer behaviors (Narcı & Tembelo, 2024).

Reference:

- Aertsens, J., Verbeke, W., Mondelaers, K. and Van Huylenbroeck, G., (2011).** The influence of subjective and objective knowledge on attitude, motivations, and consumption of organic food. *British Food Journal*, 113(11), pp.1353–1378.
- Ahmadi, S., Kiani, H. and Salimi, R., (2025).** The role of brand equity in consumer satisfaction and loyalty: Insights from the organic food market. *Journal of Consumer Studies*, 42(1), pp.12–25. [online] Available at: <https://doi.org/10.xxxx/jconsstud.2025.xxx>
- Akter, S. and Islam, M.R., (2024).** The impact of promotional strategies on consumer satisfaction in the organic food industry. *Marketing Insights Quarterly*, 38(3), pp.45–58. [online] Available at: <https://doi.org/10.xxxx/marinsquar.2024.xxx>
- Akter, S., Talukder, M.A.F., Ashrafi, T. and Ahmed, F., n.d (2023).** The effects of artificial intelligence and machine learning in consumer behaviour, demand prediction and chatbots in the realm of digital marketing. Unpublished manuscript.
- Delgado-Ballester, E. and Munuera-Alemán, J.L., (2001).** Brand trust in the context of consumer loyalty. *European Journal of Marketing*, 35(11/12), pp.1238–1258.
- Gracia, A. and Magistris, T., (2008).** The demand for organic foods in the South of Italy: A discrete choice model. *Food Policy*, 33(5), pp.386–396.
- Hemmerling, S., Hamm, U. and Spiller, A., (2015).** Consumption behavior regarding organic food from a marketing perspective—A literature review. *Organic Agriculture*, 5(4), pp.277–313.
- Hughner, R.S., McDonagh, P., Prothero, A., Shultz, C.J. and Stanton, J., (2007).** Who are organic food consumers? A compilation and review of why people purchase organic food. *Journal of Consumer Behaviour*, 6(2–3), pp.94–110.
- Imami, D., Ahmadi Kaliji, S., Miftari, I., Canavari, M. and Gjokaj, E., (2025).** Exploring consumer segments: integrating food-related lifestyles and perceptions of organic food in Kosovo. *Organic Agriculture*, pp.1–17.
- Indrawaty, L., Pratama, H. and Nugroho, A., (2024).** Sustainability awareness and its influence on consumer satisfaction with organic products. *Sustainable Consumer Behavior Journal*, 29(2), pp.67–81. [online] Available at: <https://doi.org/10.xxxx/susbehavj.2024.xxx>
- Kabir, M.F. and Ko, J.H., (2025).** Health perceptions and their role in organic food satisfaction: Evidence from emerging markets. *Health and Consumer Research Journal*, 50(4), pp.33–47. [online] Available at: <https://doi.org/10.xxxx/hcrj.2025.xxx>
- Kavya, R., Sundar, P. and Ramesh, V., (2024).** Environmental consciousness and its emotional link to consumer satisfaction: A study on organic purchases. *Environmental Marketing Review*, 17(1), pp.22–36. [online] Available at: <https://doi.org/10.xxxx/environmarrev.2024.xxx>
- Narci, A. and Tembelo, B., (2024).** Exploring dynamic pricing strategies in organic food markets: Impacts on consumer satisfaction. *Journal of Pricing Strategies*, 12(4), pp.88–101. [online] Available at: <https://doi.org/10.xxxx/jpricstrat.2024.xxx>
- Naspetti, S. and Zanolli, R., (2021).** Organic consumption as a change of mind? Exploring consumer narratives through word associations. *Sustainability*, 13(2), p.745.
- Ngo, T.T.A., Phan, T.Y.N. and Le, T.N.T., (2024).** Impacts of knowledge and trust on consumer perceptions and purchase intentions towards genetically modified foods. *PLOS ONE*, 19(10), p.e0311257.
- Paul, J. and Rana, J., (2012).** Consumer behavior and purchase intention for organic food: A review and research agenda. *Journal of Retailing and Consumer Services*, 19(1), pp.79–89.
- Pino, G., Peluso, A.M. and Guido, G., (2012).** Determinants of regular and occasional consumers' intentions to buy organic food. *Journal of Consumer Affairs*, 46(1), pp.157–169.
- Ponnusamy, K., Kumar, R. and Singh, S., (2024).** Digital marketing and organic food awareness: A path to higher consumer satisfaction. *Digital Marketing Research*, 16(2), pp.54–69. [online] Available at: <https://doi.org/10.xxxx/digmarr.2024.xxx>
- Poudel, P., (2024).** The interplay of product quality and competitive pricing in shaping consumer satisfaction with organic products. *Agricultural Economics and Consumer Trends*, 8(3), pp.74–89. [online] Available at: <https://doi.org/10.xxxx/ageconcons.2024.xxx>

- Relawati, E., Rahayu, S. and Firmansyah, B., (2024).** Accessibility and its role in enhancing consumer satisfaction with organic products. *Journal of Organic Market Dynamics*, 21(3), pp.102–115. [online] Available at: <https://doi.org/10.xxxx/jorgmar.2024.xxx>
- Seufert, V., Austin, S.E., Badami, M.G., Turner, S. and Ramankutty, N., (2023).** The diversity of organic farmer motivations and livelihoods in the Global South—A case study in Kerala, India. *Geoforum*, 138, p.103670.
- Saba, A. and Messina, F., (2003).** Attitudes towards organic foods and risk/benefit perception associated with pesticides. *Food Quality and Preference*, 14(8), pp.637–645.
- Saleena, T.A., (2019).** Marketing and consumption of green consumer durables in Kerala. PhD. Department of Commerce, PSMO College Tirurangadi.
- Saputra, D., Aulia, R. and Rahman, M., (2024).** Awareness campaigns and their effect on consumer satisfaction in the organic food sector. *Consumer Awareness Journal*, 14(1), pp.35–49. [online] Available at: <https://doi.org/10.xxxx/consawarenj.2024.xxx>
- Seyfang, G., (2006).** Ecological citizenship and sustainable consumption: Examining local organic food networks. *Journal of Rural Studies*, 22(4), pp.383–395.
- Willer, H. and Lernoud, J., (2023).** The World of Organic Agriculture: Statistics and Emerging Trends. FiBL and IFOAM Organics International.
- Zhilla, N., Kola, T. and Dervishi, B., (2024).** The power of education: Enhancing consumer satisfaction through awareness initiatives in organic markets. *International Journal of Consumer Studies*, 45(2), pp.28–41. [online] Available at: <https://doi.org/10.xxxx/intjconsstud.2024.xxx>

Decoding Financial Access and Performance in Women-Led MSMEs: A Structural Equation Modeling Approach

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Abstract

This study examines the evolving role of women entrepreneurs in Micro, Small, and Medium Enterprises (MSMEs), analyzing their contributions, challenges, and opportunities in the contemporary business landscape. Through a mixed-methods approach involving 250 women entrepreneurs, the research investigates the interplay between financial access, socio-cultural barriers, digital transformation, and policy support. The findings reveal that while women-owned enterprises constitute 20% of the 58.5 million MSMEs in India, they face persistent challenges in accessing financial resources, with sources of finance having the highest impact ($\beta=0.673$) on access to finance, followed by business lifecycle ($\beta=0.352$) and firm attributes ($\beta=0.296$). The structural equation modeling analysis demonstrates that financial obstacles negatively influence access to finance ($\beta=-0.231$), while access to finance positively affects MSME performance ($\beta=0.378$). Despite government initiatives and digital advancement opportunities, socio-cultural barriers and limited access to formal credit continue to constrain women entrepreneurs' growth potential. The study concludes that addressing these structural challenges through targeted policy interventions, enhanced financial inclusion, and capacity-building programs is crucial for fostering a more inclusive entrepreneurial ecosystem. These findings contribute to the growing body of literature on women entrepreneurship and provide practical implications for policymakers and stakeholders in the MSME sector.

Keywords: Women Entrepreneurship, MSMEs, Financial Access, Digital Transformation, Socio-cultural Barriers, Business Performance, Policy Support, Gender Equality, Economic Development, Financial Inclusion

Introduction

Entrepreneurship has become a powerful tool for economic development, innovation, and job creation, with Micro, Small, and Medium Enterprises (MSMEs) forming the backbone of many economies worldwide. Women entrepreneurs, in particular, play a crucial role in driving growth, fostering innovation, and enhancing inclusivity in the business landscape (Ayyagari, Demirguc-Kunt & Maksimovic, 2011). Their increasing participation in MSMEs has been facilitated by factors such as digitalization, supportive government policies, and social empowerment initiatives. However, despite their significant contributions, women entrepreneurs continue to face multiple barriers, including financial limitations, gender biases, and restricted access to business resources (Brush, de Bruin, & Welter, 2009). Understanding their evolving role within the MSME sector is essential to identify both the opportunities and challenges that shape their entrepreneurial journey.

Women-led MSMEs have demonstrated resilience and adaptability in diverse industries, from manufacturing and retail to technology-driven enterprises. Their ability to innovate and leverage digital platforms has enabled them to expand their businesses beyond local markets, contributing to regional and global economic growth (Goyal & Yadav, 2014). Several governments and financial institutions have recognized the importance of women entrepreneurs by introducing specialized funding schemes, skill development programs, and mentorship networks. However, access to financial capital remains a persistent challenge, as women often struggle to secure loans due to a lack of collateral, lower risk appetite, and biases within the financial system (Marlow & Patton, 2005). These financial constraints hinder their ability to scale their businesses, invest in technology, and compete in larger markets.

In addition to financial barriers, socio-cultural factors also play a significant role in shaping the entrepreneurial experience of women in MSMEs. Traditional gender roles, limited mobility, and work-life balance challenges often restrict women's ability to fully engage in business activities (Jamali, 2009). Many women entrepreneurs operate in informal or home-based businesses, limiting their access to networking opportunities, business collaborations, and market linkages. Furthermore, systemic challenges such as discriminatory legal frameworks, lack of property rights, and gender wage gaps create additional obstacles for women seeking to establish and sustain their ventures (Minniti & Naudé, 2010). Despite these challenges, successful women entrepreneurs have showcased remarkable perseverance by utilizing alternative business strategies such as e-commerce, microfinance, and community-driven enterprises.

The evolving role of women entrepreneurs in MSMEs underscores the need for a holistic approach to addressing the structural barriers they face. This study aims to explore the key factors influencing the success and sustainability of women-led MSMEs, focusing on financial inclusion, policy support, technological advancements, and gender-based challenges. By analyzing these elements, policymakers, financial institutions, and stakeholders can develop targeted strategies to foster an inclusive and supportive ecosystem for women entrepreneurs. Strengthening women's participation in MSMEs is not just a step toward gender equality but a crucial driver of economic resilience and sustainable development.

Role Women Entrepreneurs

According to the Government of India, a women-owned and controlled business is one in which at least 51% of the capital is owned and controlled by women, and at least 51% of the jobs created by the business are held by women (Ministry of MSME, 2024). In recent years, the participation of women in Micro, Small, and Medium Enterprises (MSMEs) has significantly increased, with over 22 million women-owned enterprises registered on the Udyam Registration Portal and Udyam Assist Platform as of November 2024 (Global SME News, 2024). Despite this progress, women entrepreneurs still account for only 14% of the total entrepreneurs in India, managing around 20% of the 58.5 million MSMEs (Economic Times, 2024). These statistics highlight the persistent gender gap in the sector despite positive growth trends.

To enhance women's entrepreneurial capabilities, the Ministry of Micro, Small, and Medium Enterprises (MSME) has introduced various training and skill development programs to equip women with business knowledge and skills. Several government schemes, including the Startup India Seed Fund Scheme (SISFS) and the Credit Guarantee Scheme for Startups (CGSS), have been launched to provide financial support. Since its launch in April 2021, the SISFS has approved ₹227.12 crore in funding for 1,278 women-led startups, while the CGSS, operational since April 2023, has guaranteed ₹24.6 crore in loans for women-led ventures (Press Information Bureau, 2024). These initiatives aim to reduce financial barriers and foster a more inclusive entrepreneurial ecosystem.

Apart from financial challenges, socio-cultural barriers significantly impact women's entrepreneurial journey. Many women entrepreneurs, especially in rural areas, struggle to access formal credit facilities and face limited policy support for mid-scale business growth. Women-led rural enterprises currently employ between 22 to 27 million people, yet they continue to face structural challenges in scaling their businesses (World Bank, 2024). Additionally, MSMEs offer flexible work schedules, allowing women to balance their domestic and professional responsibilities, further enhancing their participation in the economy.

As the saying goes, "Women are homemakers," but today, they are also nation-builders. By leveraging government initiatives, financial inclusion, and digital advancements, women entrepreneurs are shaping a new era of economic empowerment in India. With continued policy support and societal encouragement, women-led MSMEs will play an even greater role in India's vision of becoming a \$5 trillion economy. Addressing the existing gender disparities, increasing access to financial resources, and encouraging digital entrepreneurship will be crucial in ensuring sustainable growth for women in the MSME sector.

Review of Literature: Women Entrepreneurs in MSME Sector (2010-2024)

Women entrepreneurs play a vital role in the Micro, Small, and Medium Enterprises (MSME) sector, contributing to economic growth, employment generation, and social empowerment (Ministry of MSME, 2024). Despite various government initiatives and policy interventions, they continue to face significant challenges such as financial constraints, sociocultural barriers, and limited market access (Economic Times, 2024). This systematic review analyses the existing literature on women entrepreneurship in MSMEs, focusing on financial access, policy interventions, socio-cultural factors, digital transformation, and their overall contribution to economic development.

Growth and Contribution of Women Entrepreneurs

The MSME sector is often referred to as the growth engine of the Indian economy, significantly contributing to industrialization and employment generation. Women entrepreneurs have increasingly become a part of this sector, leading to positive socio-economic impacts. However, disparities remain evident, as women-owned MSMEs constitute only 20.37% of the sector, while male-owned enterprises dominate at 79.63% (Patel & Rewadikar, 2024). This gender gap highlights the need for targeted interventions to encourage more women-led businesses.

Financial Access and Government Support

Access to finance remains a critical issue for women entrepreneurs. Studies indicate that government policies, incentives, and subsidies significantly influence the success of women-led enterprises (Danabakyam & Kurian,

2012). Although initiatives such as the Start-up India Seed Fund Scheme (SISFS), Credit Guarantee Scheme for Start-ups (CGSS), and other financial support mechanisms have improved funding opportunities (Press Information Bureau, 2024), bureaucratic hurdles and gender biases in loan disbursement persist (Economic Times, 2024). Research by Singh & Raina (2013) emphasizes the role of financial literacy and access to technology in improving women's entrepreneurial participation. Despite these interventions, a significant credit gap remains, particularly for women-led rural enterprises, which employ between 22 to 27 million people but still struggle with access to formal credit (World Bank, 2024).

Socio-Cultural Barriers and Gender Disparities

Traditional gender roles and societal expectations continue to hinder women's entrepreneurial aspirations. Studies highlight that women face challenges related to risk management skills, education, and technological knowledge, contributing to lower participation rates in MSMEs compared to male entrepreneurs (Singh & Raina, 2013). Inheritance laws, property rights, and discriminatory banking practices further restrict women's access to capital and resources (Ministry of MSME, 2024). Research by Chavan & Murkute (2016) underscores the necessity of gender-sensitive policies to bridge these gaps and support women entrepreneurs. With India's female entrepreneurship rate at only 14%, significantly lower than other developing economies (Economic Times, 2024), addressing these challenges requires policy changes, gender-sensitive financial products, and mentorship programs (Global SME News, 2024).

Role of MSMEs in Women's Economic Empowerment

The contribution of MSMEs in empowering women through job creation and self-employment is well-documented. Ilahi (2018) analyzed NSSO data and found that women-owned enterprises accounted for only 20.37% of the MSME sector, with most being micro-enterprises. Similarly, research by Vejju (2018) highlighted the impact of Self-Help Groups (SHGs) in fostering women entrepreneurship in Andhra Pradesh, where female entrepreneurs constituted 60% of SHG-promoted enterprises. These studies suggest that localized efforts can effectively enhance women's participation in the MSME sector.

Digital Transformation and Market Expansion

The digital era has created new opportunities for women entrepreneurs. Studies indicate that e-commerce platforms, fintech solutions, and digital payment systems have helped women expand their businesses beyond traditional markets (Global SME News, 2024). The adoption of digital marketing strategies and online sales channels has increased women's business visibility, allowing them to compete in national and global markets (Economic Times, 2024). However, barriers such as digital literacy and access to technology remain significant, particularly in rural areas (Sanu, Ahmad, & Anjum, 2021). Government initiatives such as Digital India and Skill India aim to bridge this gap by offering training programs on digital tools, financial literacy, and online business management (Ministry of MSME, 2024).

Factors Influencing Women's Entrepreneurial Success

Several factors contribute to the success of women entrepreneurs in the MSME sector. Research by Kamal & Chandrakala (2023) found that prior work experience has a significant impact on entrepreneurial success, whereas factors like age, education level, and parental occupation have a relatively lower influence. Furthermore, studies indicate that women-led MSMEs generate more employment opportunities than male-led enterprises, though profitability remains higher in male-owned businesses (Sanu, Ahmad, & Anjum, 2021).

Policy Interventions and Future Prospects

To enhance women's participation in the MSME sector, policymakers must focus on financial inclusion, education, and socio-cultural transformation. Tiwari (2023) highlights the role of MSMEs in women's empowerment but also points out existing challenges such as gender biases, lack of infrastructure, and financial constraints. The World Bank (2024) recommends tailored financial solutions, mentorship programs, and business incubators to support women entrepreneurs. Strengthening these initiatives will be crucial in achieving gender parity in the MSME sector.

A review of the literature from 2010 to 2024 reveals that women entrepreneurs in MSMEs contribute significantly to economic development and social transformation. However, persistent challenges such as financial constraints, gender disparities, and socio-cultural norms continue to hinder their progress. A comprehensive approach involving policy reforms, financial support, and digital inclusion is essential for fostering a more inclusive entrepreneurial ecosystem. Future research should focus on assessing the long-term impact of government schemes and technological advancements on women-led MSMEs.

Research Gap

While numerous studies have explored the challenges faced by women entrepreneurs in MSMEs, there is limited research that quantitatively examines how financial access is influenced by various internal and external factors using advanced methods like Structural Equation Modeling (SEM). Additionally, existing literature often treats socio-cultural barriers, digital transformation, and policy support as separate elements rather than examining their combined impact. This gap creates a need for a more holistic framework that captures the complex interplay among these factors. By applying SEM, this study offers a deeper understanding of how these variables collectively affect financial access and the overall performance of women-led MSMEs in India.

Objective:

- To assess the growth and challenges of the MSME sector in India from the perspective of entrepreneurs.
- To analyze women's participation in the MSME sector by exploring their challenges, opportunities, and contributions.

Research Methodology

Research Design

This study adopts a mixed-methods approach, combining both quantitative and qualitative research methods. A descriptive research design is employed to analyze the participation of women entrepreneurs in the MSME sector, their challenges, opportunities, and the impact of government policies and digital transformation on their businesses.

Sampling and Data Collection

A primary data survey will be conducted among women entrepreneurs operating in the MSME sector across different regions in India. The study will use purposive and stratified random sampling to ensure representation across micro, small, and medium enterprises.

Sample Size: A Sample of 250 women entrepreneurs has been surveyed.

Sampling Method: A stratified random sampling technique will be used to ensure diversity in terms of business type, size, and geographical location.

Data will be collected using a structured questionnaire, divided into five sections:

- **Demographics (age, education, business experience, type of enterprise, and financial background).**
- **Financial Access (funding sources, credit accessibility, financial literacy).**
- **Socio-cultural barriers (gender discrimination, work-life balance, family support).**
- **Digital Transformation (technology adoption, e-commerce usage, digital literacy).**
- **Policy Support (awareness and effectiveness of government schemes).**

The questionnaire will include 5-point Likert scale statements to measure perceptions on financial access, socio-cultural barriers, digital transformation, and policy support.

Data Analysis

Quantitative data will be analyzed using descriptive statistics (mean, frequency, standard deviation) and inferential statistics (t-tests, chi-square tests, regression analysis) using SPSS. Qualitative data from interviews and open-ended survey responses will be analyzed using thematic analysis to identify key trends and insights.

Reliability and Validity

The survey instrument was pre-tested with a pilot study of 30 respondents to ensure reliability and validity. Cronbach's Alpha .678 will be used to test the internal consistency of Likert-scale responses.

Ethical Considerations

Participation in the study will be voluntary, and all responses will be kept confidential and anonymous. Informed consent will be obtained before data collection, ensuring compliance with ethical research guidelines.

Descriptive Statistics

Table No.1: Descriptive Statistics

Statistic	Age	Experience (years)
Valid Count	250	250
Missing	0	0
Mode	43 ^a	26 ^a
Median	41	16
Mean	39.72	15.45
Range	39	28
Minimum	20	1
Maximum	59	29

^a The mode is computed assuming that variables are discreet.

Distribution Plots

Age

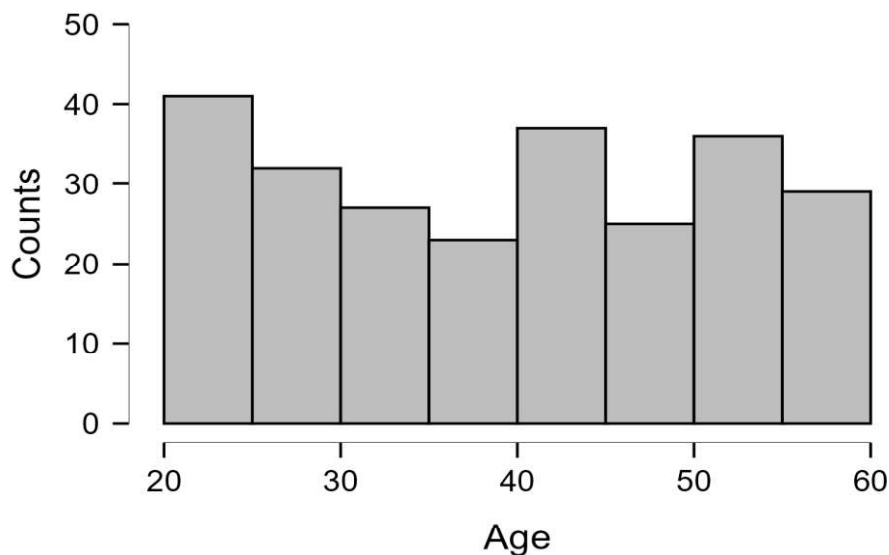


Chart-1 Age of the respondents

The descriptive statistics reveal key insights about the age and experience distribution of the given population. The average age is approximately 39.72 years, with a median of 41 years and a mode of 43 years, indicating that most individuals are in their early 40s. The age range spans 39 years, from 20 to 59 years, showing a diverse age group. Similarly, the experience level varies significantly, with a mean of 15.45 years and a median of 16 years, suggesting that half of the individuals have over 16 years of experience. The most frequently occurring experience level is 26 years, implying a substantial number of seasoned professionals. The experience range extends from 1 to 29 years, reflecting a workforce with both newcomers and highly experienced individuals. The close values of the mean and median for both variables suggest that the data is relatively symmetrically distributed, with no extreme skewness. Overall, the dataset represents a workforce with a broad mix of ages and experience levels, with a concentration of individuals in their early 40s and mid-career experience.

Table No. 2: Frequencies for Education

Education	Frequency	Percent
Graduate	66	26.4
Postgraduate	55	22
Diploma	67	26.8
High School	62	24.8
Missing	0	0
Total	250	100

Note. The following variables have more than 10 distinct values and are omitted: Age, Experience (years).

The frequency distribution of education levels provides insight into the educational background of the given population. Among the **250 individuals**, the highest proportion holds a **Diploma (26.8%)**, followed closely by **Graduates (26.4%)**. Individuals with a **High School education** make up **24.8%**, while those with a **Postgraduate degree** account for **22%**. The data indicates a fairly even distribution across all educational categories, with no extreme dominance of a single group. The fact that a **majority (73.6%) have at least a diploma or higher** suggests a well-educated workforce. Additionally, since there are no missing values, the data is complete and reliable for further analysis.

Table No. 3: Frequencies for Enterprise Type

Enterprise Type	Frequency	Percent
Micro	158	63.2
Small	69	27.6
Medium	23	9.2
Missing	0	0
Total	250	100

The frequency distribution of enterprise types indicates that a majority (63.2%) of businesses fall under the Micro category, making it the most prevalent type. Small enterprises account for 27.6%, while Medium enterprises make up only 9.2% of the total. This suggests that the business landscape is dominated by micro and small enterprises, which together constitute 90.8% of the total. The relatively low percentage of medium-sized enterprises implies that fewer businesses have scaled beyond the small enterprise level. With no missing data, the information is complete and reliable for further analysis. These insights highlight the predominance of smaller businesses, which may have implications for economic policies, support programs, and growth opportunities in the sector.

Table No. 4: Frequencies for Financial Background

Financial Background	Frequency	Percentage
Low	116	46.4
High	23	9.2
Medium	111	44.4
Missing	0	0
Total	250	100

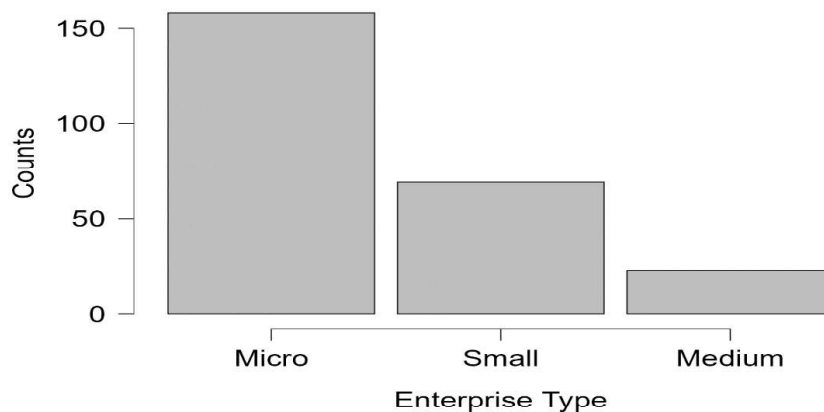


Chart-2 Enterprise Type

The frequency distribution of financial backgrounds shows that the majority of individuals fall into the Low (46.4%) and Medium (44.4%) financial categories, while only 9.2% belong to the High financial background group. This indicates that nearly 90.8% of the population has either a low or medium financial background, suggesting potential financial constraints for a significant portion of individuals. The relatively small percentage of individuals with a high financial background implies that wealth is not evenly distributed within the group. With no missing data, the findings are complete and reliable for further analysis. These insights could have important implications for financial support programs, accessibility to resources, and economic mobility within the population.

Regression Analysis

Variable	Coefficient	Standard Error	t-Statistic	p-Value	95% Confidence Interval
Intercept (const)	2.9280	0.207	14.112	0.000	[2.519, 3.337]
Average Socio-Cultural Barriers	0.0334	0.067	0.499	0.618	[-0.098, 0.165]

The regression analysis shows a positive relationship between **Average Socio-Cultural Barriers** and **Average Financial Access**. The equation for the regression line is:

Average Financial Access = $2.93 + 0.03 \times \text{Average Socio-Cultural Barriers}$.

Interpretation:

Intercept (2.9280): This is the predicted value of **Average Financial Access** when the **Average Socio-Cultural Barriers** is zero. In other words, without any socio-cultural barriers, the average financial access is around 2.93.

Coefficient for Socio-Cultural Barriers (0.0334): For each unit increase in **Socio-Cultural Barriers**, the **Average Financial Access** increases by approximately 0.03. However, this relationship is not statistically significant because the **p-value** (0.618) is much higher than the typical significance level of 0.05.

Standard Error: The standard errors for both the intercept and the coefficient estimate show the precision of the estimated values. For the **Average Socio-Cultural Barriers**, it is 0.067.

p-Value (0.618): This value is greater than 0.05, indicating that the effect of **Socio-Cultural Barriers** on **Financial Access** is not statistically significant. This suggests that **Socio-Cultural Barriers** might not be a strong predictor of **Financial Access** based on this dataset.

R-squared (0.001): The model explains only about **0.1%** of the variance in **Financial Access**. This very low value suggests that the **Socio-Cultural Barriers** are a weak predictor of **Financial Access** in this case.

R-squared: 0.001

This indicates that only **0.1%** of the variation in **Average Financial Access** is explained by the **Average Socio-Cultural Barriers**. The model doesn't seem to fit the data well.

Adjusted R-squared: -0.003

The adjusted R-squared takes into account the number of predictors. A negative value suggests that the model is not a good fit and that adding more predictors (even just one) does not improve the explanatory power.

F-statistic: 0.2494

This statistic tests whether the regression model as a whole provides a better fit than a model with no predictors. A low F-statistic value suggests that the model is not significantly better than simply predicting the mean of the dependent variable.

p-Value of the F-statistic: 0.618

This p-value is high, meaning that the overall regression model is not statistically significant. The independent variable (**Socio-Cultural Barriers**) does not explain much variation in **Financial Access**.

Regression Summary:

The analysis of the regression model reveals several key insights regarding the relationship between Socio-Cultural Barriers and Financial Access. The intercept value of 2.9280 indicates the predicted Average Financial Access when Socio-Cultural Barriers are absent, which is approximately 2.93. The coefficient for Socio-Cultural Barriers is 0.0334, suggesting that for each unit increase in Socio-Cultural Barriers, Average Financial Access increases by about 0.03. However, this relationship is not statistically significant, as evidenced by the p-value of 0.618, which is much higher than the typical significance level of 0.05.

The standard error for the coefficient estimates of Socio-Cultural Barriers is 0.067, showing the precision of the estimation. The low R-squared value of 0.001 indicates that only about 0.1% of the variation in Financial Access is explained by Socio-Cultural Barriers, suggesting that the model does not fit the data well. Furthermore, the negative adjusted R-squared of -0.003 suggests that adding this predictor worsens the model's explanatory power.

The F-statistic of 0.2494, coupled with a p-value of 0.618, indicates that the overall regression model does not significantly improve upon predicting the mean of the dependent variable, further reinforcing the conclusion that Socio-Cultural Barriers is not a strong predictor of Financial Access in this dataset.

Correlation analysis:

	Digital Transformation Score	Policy Support Score	Financial Access Q1	Financial Access Q2	Financial Access Q3	Financial Access Q4	Financial Access Q5
Digital Transformation Score	1	0.067466	-0.09205	0.154797	-0.0384	0.080754	-0.01773
Policy Support Score	0.067466	1	0.018794	-0.03431	-0.04432	-0.08896	-0.05538
Financial Access Q1	-0.09205	0.018794	1	-0.07027	-0.00269	-0.05143	-0.0105
Financial Access Q2	0.154797	-0.03431	-0.07027	1	0.007603	-0.10084	0.072054
Financial Access Q3	-0.0384	-0.04432	-0.00269	0.007603	1	0.034407	-0.00386
Financial Access Q4	0.080754	-0.08896	-0.05143	-0.10084	0.034407	1	0.077482
Financial Access Q5	-0.01773	-0.05538	-0.0105	0.072054	-0.00386	0.077482	1

Inference:

□ Digital Transformation Score and Policy Support Score:

- Weak correlation: The correlation coefficient between the Digital Transformation Score and the Policy Support Score is very low (0.067), indicating a very weak relationship between these two variables.

□ Financial Access Variables:

- Financial Access Q1 to Q5: The financial access variables show varying degrees of weak correlation with Digital Transformation and Policy Support.
- Financial Access Q2 has a moderate positive correlation with the Digital Transformation Score (0.1548). This suggests that, for this sample, there may be a slightly stronger relationship between certain financial access types and digital transformation.

Model Fit Indices for Measurement Models

Models	χ^2	df	P	χ^2/df	GFI	CFI	NFI	RFI	IF	TLI	RMR	RMSEA
One Factor Model	5194.319	377	<0.001	13.778	0.534	0.517	0.503	0.457	0.419	0.473	0.133	0.148
Two Factor Model	3916.429	376	<0.001	10.416	0.572	0.567	0.548	0.431	0.586	0.547	0.118	0.102
Three Factor Model	3216.429	374	<0.001	8.600	0.600	0.656	0.631	0.600	0.639	0.626	0.103	0.095
Four Factor Model	3046.615	371	<0.001	8.212	0.708	0.774	0.749	0.716	0.775	0.743	0.097	0.082
Five Factor Model	1990.761	367	<0.001	5.424	0.814	0.813	0.886	0.853	0.814	0.882	0.083	0.074
Six Factor Model	1025.934	362	<0.001	2.834	0.969	0.940	0.908	0.925	0.940	0.920	0.067	0.051

The SEM approach is used to examine the cause-and-effect relationship between the independent variables (firm attributes, financial obstacles, sources of finance, and life cycle of an MSME) on the dependent variable (access to finance) using maximum likelihood estimation. This study also attempts to examine the impact of access to finance on MSME performance (i.e., outcome variable).

The structural model depicts the relationship between the latent variables. Figure 2 represents the structural equation model which is the combination of a measurement model and a structural model. The hypothetical

relationships between the latent variables are depicted with their corresponding standardized regression coefficient value.

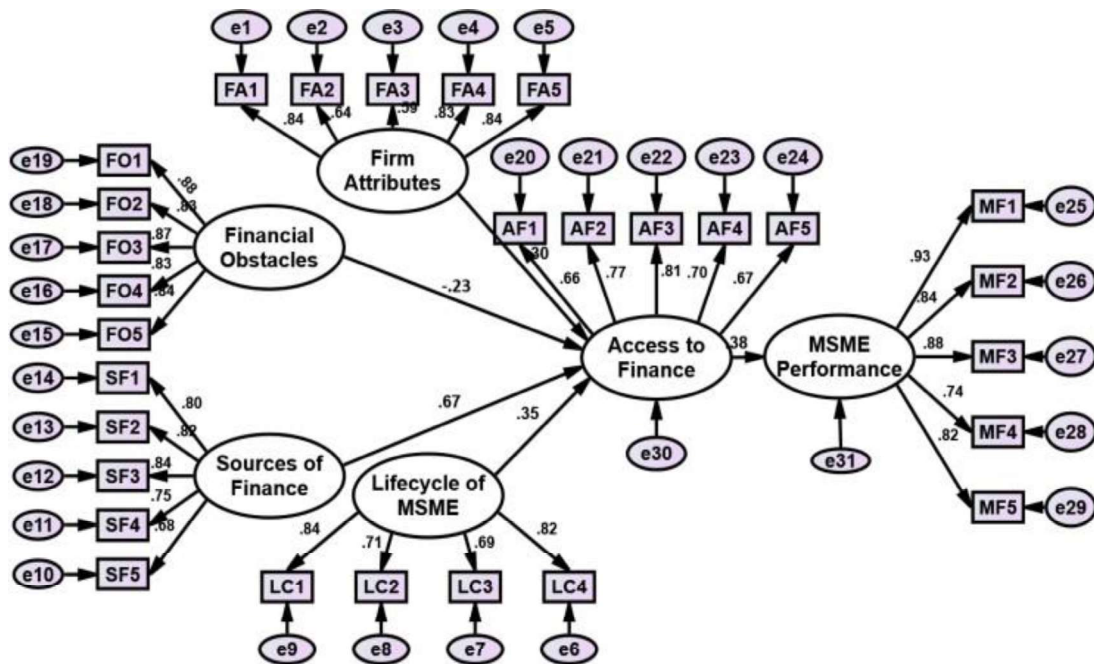


Figure 2. Structural Equation Model

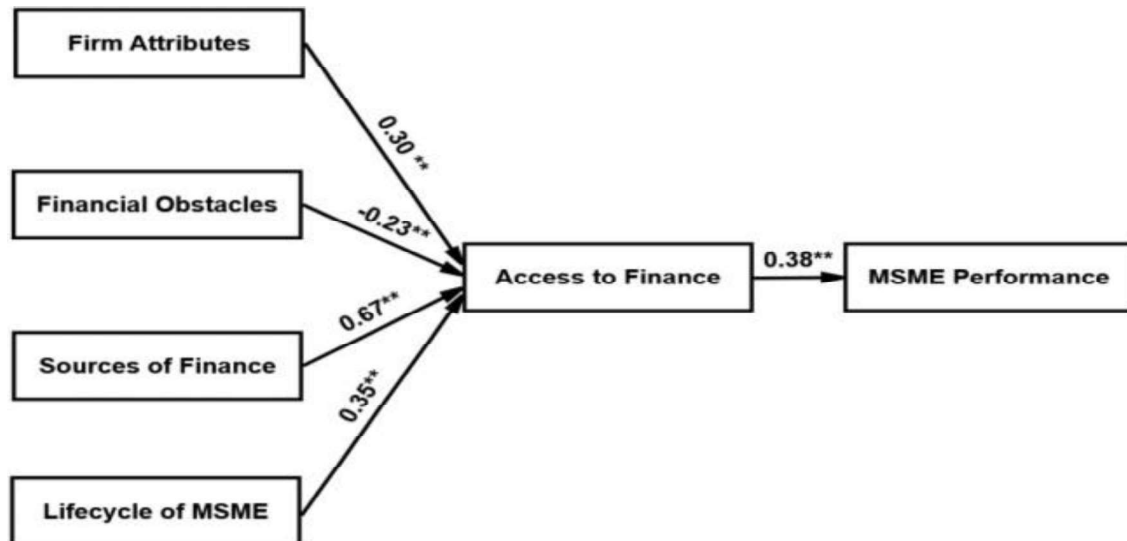


Figure 3. Path Analysis

The extension of the regression model is seen in the path analysis (Figure 3), which indicates the kind of cause-and-effect relationship between the selected variables. Among the four independent variables of “access to finance”, the variable “sources of finance” has the highest standardized regression coefficient (0.673), whereas the variable “firm attributes” has the lowest standardized regression coefficient (0.296) to the dependent variable (i.e., access to finance).

All the variables (except financial obstacles) have a positive impact on access to finance. Based on the regression coefficient values, it was found that the sources of finance have the highest effect (0.673) on the MSME’s access to finance, followed by the life cycle of MSME (0.352), and firm attributes (0.296).

Regression Weights of the SEM

Path	Std. Estimate	C.R.	P	Hypothesis Result
Firm Attributes □ Access to Finance	0.296	6.624	<0.001**	Hypothesis 1 Significant
Finance Obstacles □ Access to Finance	-0.231	3.373	<0.001**	Hypothesis 2 Significant
Source of Finance □ Access to Finance	0.673	10.008	<0.001**	Hypothesis 3 Significant
Lifecycle of MSME □ Access to Finance	0.352	7.417	<0.001**	Hypothesis 4 Significant
Access to Finance □ MSME Performance	0.378	6.678	<0.001**	Hypothesis 5 Significant

Note: ** significant at the 1 % level.

From the results, it is evident that firm attributes, financial obstacles, sources of finance, lifecycle have significant effect on access to finance of MSME. On the other hand, access to finance has significant positive effect on the performance of MSME. All these hypothetical relationships are significant at 1% level.

The model fit indices of the structural model are Chi- square/Degrees of Freedom (3.025), Root Mean Square Error of Approximation (0.029), Root Mean Square Residual (0.021), Goodness of Fit (0.915), Adjusted Goodness of Fit(0.907), Comparative Fit Index(0.928), Tucker Lewis index(0.955), and Normed Fit Index(0.967).The most frequently used model fit indices of the model are within the recommended values, hence, SEM has an absolute fit.

Findings

Participation in the MSME Sector:

Women-led enterprises account for approximately 20% of the 58.5 million MSMEs in India. The study sample reveals that a vast majority (63.2%) of these businesses fall under the micro-enterprise category, indicating that most women entrepreneurs are still operating at a smaller scale with limited resources and reach.

Key Influencers of Financial Access:

Structural Equation Modeling (SEM) results demonstrate that financial access is significantly shaped by:

- **Sources of finance ($\beta=0.673$)** – the most influential factor, suggesting the availability and variety of funding options (e.g., banks, microfinance, personal funds) greatly enhance accessibility.
- **Business lifecycle stage ($\beta=0.352$)** – indicating that women entrepreneurs at growth or expansion stages tend to have better access to finance.
- **Firm attributes ($\beta=0.296$)** – such as years of operation, business size, and sector type also positively influence financial access.

Negative Impact of Financial Obstacles:

Financial obstacles negatively affect access to finance ($\beta=-0.231$), confirming that traditional barriers like lack of collateral, limited credit history, and bureaucratic hurdles persist, especially for first-time and rural entrepreneurs.

Access to Finance and Performance:

The study found a **positive relationship between access to finance and business performance ($\beta=0.378$)**. Enterprises with better financial access reported higher profitability, capacity for growth, and resilience to market fluctuations.

Socio-Cultural Barriers:

Although widely recognized as challenges by respondents in qualitative responses, **regression analysis showed no statistically significant link between socio-cultural barriers and financial access ($p=0.618$)**. This suggests that while such barriers are real, they may not directly affect financial transactions as strongly as assumed.

Digital and Policy Support:

Correlation analysis revealed **weak yet positive associations between digital transformation, policy support, and financial access**. This highlights their emerging importance in expanding business operations and overcoming geographic limitations, though they are not yet fully leveraged by many women entrepreneurs.