

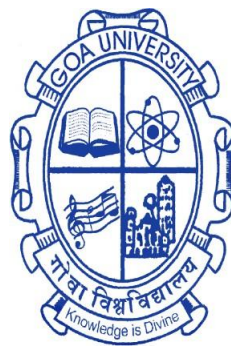
Consumer Behaviour towards Organic Products in the state of Goa: An Empirical Study

A THESIS SUBMITTED IN PARTIAL FULFILLMENT FOR THE DEGREE OF

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in Commerce

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By

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OCTOBER 2025

DECLARATION

I, Ms. Apurva Sweeten Bandodcar, hereby declare that this thesis represents work which has been carried out by me and that it has not been submitted, either in part or full, to any other University or Institution for the award of any research degree.

Place: Taleigao Plateau.

Date : 22-10-2025

Ms. Apurva Sweeten Bandodcar

CERTIFICATE

I hereby certify that the above Declaration of the candidate, Ms. Apurva Sweeten Bandodcar is true and the work was carried out under my supervision.

Prof. (Dr.) Filipe Rodrigues e Melo
Professor and Research Guide,
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एकमप्यक्षरं यस्तु गुरुः शिष्यं प्रबोधयेत् ।
पृथिव्यां नास्ति तद्द्रव्यं यद्वत्त्वा ऋणमुक्तो भवेत् ॥

If a Guru imparts even a single letter (of knowledge) to enlighten a disciple, there exists no wealth on this earth that the disciple can give in return to be free from that debt.

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***One could not count the moons that shimmer on her roofs,
/ Or the thousand splendid suns that hide behind her walls.***

~ Khaled Hosseini (from the poem by Saib-e-Tabrizi)

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Contents

Chapter 1	Introduction	1
1.1	Background.....	1
1.1.1	Concept and Definitions	1
1.2	The Global Scenario.....	3
1.3	Indian Context	9
1.3.1	Organic Certification in India	10
1.3.2	Recent Strides	13
1.4	Goan Context.....	17
1.5	Chapterisation of the Thesis.....	18
Chapter 2	Review of Literature	20
2.1	Introduction.....	20
2.2	Theoretical foundation.....	20
2.2.1.	Theory of Reasoned Action	21
2.2.2.	Theory of Planned Behaviour	22
2.2.3	The Intention-Behaviour Gap	28
2.2.4	Moderating effect of variables	32
2.3	Green Marketing of Organic Products	35
2.4	Problem statement and research Gap	43

2.5	Significance of the Study	44
2.6	Objectives of the Study	45
2.7	Hypothesis for the study	47
2.8	Scope of the study	49
2.9	Functional Definitions	51
Chapter 3 Research Methodology		56
3.1	Introduction.....	56
3.2	Research Design and Approach.....	56
3.3	Qualitative Research	56
3.4	Quantitative Research	57
3.5	Measurement Instruments	57
3.1	Unit of Analysis.....	58
3.2	Sources of Data Collection	58
3.3	Sampling	59
3.4	Development of Conceptual Models	60
3.4.1	Influence of Psycho-Social Factors on Organic Product Purchase Behaviour	61
3.4.2	Influence of Green Marketing Strategies on Organic Product Purchase Intention	62
3.4.3	Moderating Role of Health Consciousness, Perceived Consumer Effectiveness and Trust.....	64
3.5	Development of Measurement Instrument.....	65
3.6	Content Validity.....	67

3.6.1	Screening of items	67
3.6.2	Face validity	67
3.7	Pilot study	68
3.8	Final Measurement Scale	68
3.9	Data Analysis Procedure.....	69
3.9.1	Confirmatory Factor Analysis	72
3.9.2	Regression.....	73
3.9.3	Moderation Analysis through Hierarchical Regression.....	74
3.10.	Measurement Model Validation	76
3.10.1	Measurement Model Specification.....	77
3.10.2	Construct Validity	78
3.10.3	Measurement Model Fit.....	80
3.11	Analytical Tools.....	81
3.11.1	Libraries Used for the Analysis in the Study	83
Chapter 4	Data Analysis and Interpretation	86
4.1	Introduction.....	86
4.2	CFA of the Proposed Model 1	86
4.2.1	CFA of the measurement model for the relationship between OPPI, OPPB, OPS and OPL	86
4.2.2	CFA of the measurement model for the Factors influencing OPPI.....	88
4.2.3	CFA of the measurement model for the Factors Influencing Attitude towards Organic Product Purchase	90

4.2.4	CFA of the measurement model for the Factors influencing SN	94
4.3	CFA of the Proposed Model 2	96
4.3.1	CFA of the measurement model for the relationship between AOP, AGB, AGP, AGA, AEL and OPPI	97
4.4	CFA of the Proposed Model 3	99
4.4.1	CFA of the measurement model of the Moderating effect of TRUST, HC and PCE in the extended TPB	99
4.5	Data Analysis	101
4.5.1	Demographic Profile of the Respondents	102
4.5.2	Reliability Analysis	105
4.6	Multiple Regression Analysis of Structural Relationships	105
4.6.1	Analysis of Objective 1	105
4.6.2	Analysis of Objective 2	110
4.6.3	Analysis of Objective 3:	113
4.6.4	Analysis of Objective 4:	115
4.7	Attainment of Objectives	119
4.8	Summary of Hypotheses Decisions	123
Chapter 5	Findings of the study	126
5.1	Introduction	126
5.2	Exploratory Qualitative Study	126
5.3	Findings of the study	127
5.3.1	Reliability Assessment	127

5.3.2	Psycho-Social Factors and Extended TPB	127
5.3.3	Green Marketing Strategies and Purchase Intention	129
5.3.4	Moderating Effects of Health Consciousness, Perceived Consumer Effectiveness, and Trust.....	130
5.4	Critical Analysis of Findings	130
5.4.1	Influence of psycho-social factors on the extended TPB	131
5.4.2	Green Marketing Strategies and Organic Purchases	144
5.4.3	Moderating Effects of Trust, Health Consciousness, and Perceived Consumer Effectiveness	151
5.5	Theoretical Contributions.....	159
4.3	Theoretical Implications	164
Chapter 6 Conclusion and Recommendations		167
6.1	Introduction.....	167
6.2	Conclusion	167
6.3	Practical Recommendations.....	172
6.3.1	For Organic Product Marketers and Brand Managers	172
6.3.2	For Retailers and Supply Chain Managers	175
6.3.3	For Producers and Farmers	176
6.3.4	For Certification Bodies and Standard-Setting Organisations.....	177
6.3.5	For Policymakers and Government Agencies	177
6.3.6	For Sustainability Advocates and NGOs.....	178
6.4	Limitations of the study.....	179
6.5	Directions for future Research	180

References 183

Annexure I 253

List of Tables

Table 1.1: List of state-wise brands under PKVY	13
Table 4.1: Convergent and Discriminant Validity of the measurement model for the relationship between OPPI, OPPB, OPS and OPL	87
Table 4.2: Fit indices of the measurement model for the relationship between OPPI, OPPB, OPS and OPL	88
Table 4.3: Convergent and Discriminant Validity of the measurement model for the Factors influencing OPPI	89
Table 4.4: Fit indices of the measurement model for Factors influencing OPPI	90
Table 4.5: Convergent and Discriminant Validity of the measurement model for the Factors influencing ATOPP	92
Table 4.6: Fit indices of the measurement model for Factors influencing ATOPP	92
Table 4.7: Convergent and Discriminant Validity of the measurement model for the Factors influencing PBC	94
Table 4.8: Fit indices of the measurement model for Factors influencing PBC	94
Table 4.9: Convergent and Discriminant Validity of the measurement model for the Factors influencing SN	95
Table 4.10: Fit indices of the measurement model for Factors influencing SN	96
Table 4.11: Convergent and Discriminant Validity of the measurement model of the influence of green marketing strategies on OPPI	98

Table 4.12: Fit indices of the measurement model for the influence of Green Marketing Strategies on OPPI	98
Table 4.13: Convergent and Discriminant Validity of the measurement model of the Moderating effect of TRUST, HC and PCE in the extended TPB.....	100
Table 4.14: Fit indices of the measurement model for the Moderating effect of TRUST, HC and PCE in the extended TPB	101
Table 4.15: Demographic Profile of the Respondents	102
Table 4.16: Reliability Statistics	105
Table 4.17: Influence of NSI and VESI with SN	106
Table 4.18: Influence of STC, EC and SE on ATOPP.....	107
Table 4.19: Influence of CS and CB on PBC	108
Table 4.20: Influence of SN, ATOPP and PBC on OPPI.....	108
Table 4.21: Influence of OPPI on OPPB.....	109
Table 4.22: Influence of OPPB on OPS	110
Table 4.23: Influence of OPS on OPL	111
Table 4.24: Influence of Green Marketing Strategies on OPPI	113
Table 4.25: Moderating effect of HC, PCE and TRUST	115
Table 4.26: Summary of Moderating Effect of HC, PCE and TRUST	117
Table 4.27: Hypotheses Decisions	123

List of Figures

Figure 3.1: Conceptual Model for Influence of Psycho-Social Factors On OPPB	62
Figure 3.2: Conceptual Model for Influence of Green Marketing Strategies on OPPI	64
Figure 3.3: Conceptual Model for Moderating Role of Health Consciousness (HC), Perceived Consumer Effectiveness (PCE) and Trust (Trust) between SN, AOPP and PBC and OPPI	65
Figure 4.1: CFA of the measurement model for the relationship between OPPI, OPPB, OPS and OPL	87
Figure 4.2: CFA of the measurement model for Factors influencing OPPI....	89
Figure 4.3: CFA of the measurement model for Factors influencing ATOPP	91
Figure 4.4: CFA of the measurement model of Factors influencing PBC	93
Figure 4.5: CFA of the measurement model of Factors influencing SN	95
Figure 4.6: CFA of the measurement model of the influence of Green Marketing Strategies on OPPI	97
Figure 4.7: CFA of the measurement model of the Moderating effect of TRUST, HC and PCE in the extended TPB	100
Figure 4.8: Visual Summary of Regression-Based Structural Model Testing for Extended TPB Framework (Model 1)	112
Figure 4.9: Path Diagram of Model 2.....	114
Figure 4.10: Path Diagram of Model 3.....	118

Chapter 1

Introduction

1.1 Background

“माता भूमिः पुत्रोऽहं पृथिव्याः”

~Atharvaveda 12.1.12

The Indian link to sustainable agricultural practices is well documented in numerous ancient Indian texts and scriptures (Singh et al., 2023). The Sanskrit verse mentioned above translates to ‘the Earth is my mother, and I am her son’. It emphasises the sacred relationship shared between the inhabitants of the planet and nature. Therefore, it is the implied duty of every human being to nurture nature and preserve it. Organic farming is practised in the same spirit. As a sustainable farming method, it enables the achievement of dual objectives of ensuring a nutrient-rich yield and food security for the masses (Arora & Aggarwal, 2024).

Agriculture, the backbone and a vital source of food security for the Indian economy, holds promise to incorporate sustainable practices (Sahoo et al., 2025). In light of the impending ecological crisis, organic production and consumption can help in the maintenance, if not mitigation and reversal, of the environmental harm caused by insatiable human wants (Gugalia, 2021). Organic production and consumption can help achieve all Sustainable Development Goals (SDGs), to varying degrees, while functioning within environmental constraints (Gamage et al., 2023; Lu & Wu, 2022)

1.1.1 Concept and Definitions

The ‘organic’ concept was introduced in the USA by Rodale in the year 1940 in his manifesto widely known as ‘The Rodale Institute and their

Organic Farming and Gardening’, in the agricultural sector, indicated the use of ecologically based manures and compost, and doing away the use of synthetically compounded fertilisers, pesticides, genetic modifications, and growth regulators (Dash et al., 2024). Around the same time, British writer Lord Northbourne was credited with defining Organic farming as a ‘dynamic living organic whole’ (Duram, 2005; Northbourne, 1940).

The International Federation of Organic Agriculture Movements (IFOAM) General Assembly (2008) defines Organic Agriculture as a production system that sustains the health of soils, ecosystems, and people. It depends on ecological processes, biodiversity, and cycles tailored to local conditions, avoiding the use of inputs with adverse effects. This system of agriculture combines tradition, innovation and science to sustain our shared environment, foster fair relationships and enhance quality of life for everyone involved (IFOAM - Organics International , 2025).

The Codex Alimentarius Commission (CAC) is the global body tasked with setting food safety standards and guidelines. Also known as the ‘Food Code’, it was established jointly by the Food and Agriculture Organisation (FAO) of the United Nations and the World Health Organisation (WHO) (FAO/WHO Codex Alimentarius Commission, 2025). According to the definition provided by the FAO/WHO Codex Alimentarius Guidelines for Organic Food, Organic agriculture refers to a holistic production management system. It advocates for and enriches agroecosystem health, which encompasses biodiversity, biological cycles, and the biological activity of the soil. It underscores the use of off-farm inputs in management practices by taking into consideration the locally adapted systems to suit the regional conditions. This is attained by employing the use of agronomic, biological, and mechanical methods, wherever possible, to fulfil any defined function within the system (Food and Agriculture Organization & World Health Organization Codex Alimentarius Commission, 2001).

The National Organic Standards Board (NOSB) defined Organic production in 1995 as a management system that is ecological, promoting and enhancing biodiversity, biological cycles, and the biological activity

of soil. The National Organic Program (NOP), a part of the United States Department of Agriculture (USDA), is referred to as a production system that responds to specific conditions by coalescing cultural, biological, and mechanical practices to foster resource circulation, support ecological balance, and preserve biological diversity (Coleman, 2012).

1.2 The Global Scenario

The global market demand for organic products has shown sustained upward growth (Meier et al., 2015; Willer et al., 2025). In 2024, it reached a value of €136.4 billion, a leap by over 800% from €15.1 billion in just over two decades (Willer et al., 2025). Anthelme Brillat-Savarin, a nineteenth-century food scientist, famously said, ‘Tell me what you eat, and I will tell you who you are’. The same words were echoed a few decades later by Ludwig Andreas von Feuerbach, who believed that ‘Man is what he eats’ (Rosen, 2011; Varga, 2015).

The rising demand for organic products has been primarily attributed to the increasing awareness of health benefits and environmental sustainability among consumers (Liu et al., 2020; Sarangi et al., 2025; Teng & Wang, 2015; Wang et al., 2024). Consumers often perceive them as more nutritious and healthier than conventionally grown products (Grinberga-Zalite et al., 2021). The acceptance of these products is witnessing an uptick in advanced economies and emerging economies (Mohd Suki et al., 2022; Khan et al., 2023). This can also be attributed to the increased information flow among various consumer groups regarding the detrimental effects of non-organic products on the environment and health (Varga, 2015; Khan et al., 2023). In Western societies, the collective trust in large-scale, industrial food production seems to be affected by the increasing detachment of these practices from nature (McMillan & Coveney, 2010; Shiva, 2013). The disillusionment with the spurious charm of modern food technology has compelled the world to opt for sustainable alternatives in energy and food production. An exclusively Western approach may not be commensurate with local conditions for driving the change. Therefore, a localised approach that takes cognisance of Western discourse to suit ethnic environmentalism is the need of the

hour (Biswas D. , 2025).

The propensity to purchase and consume sustainable, organic products among urban societies, particularly in the West, can be attributed to a negative relationship between health concerns and physical connection with food production and farming (Macleod & Carrier, 2010). The demand for organic Products in most developing economies is insignificant; nonetheless, an uptick in demand is witnessed in select segments of consumers (Aschemann-Witzel & Zielke, 2017). To meet this demand, the stakeholders must conduct a thorough investigation into the determinants of consumer behaviour towards organic products (Quah & Tan, 2009).

The burgeoning demand for nutritious, minimally processed, environmentally sustainable, fibre-rich, heart-friendly, free from GMOs (Genetically Modified Organisms), produced locally, slowly, naturally or organically grown products fulfils not just the physical demands of the body but also guarantees one a daily interconnectedness with nature which is increasingly appreciated by the postmodern urban upper-middle classes (Khare, 2015; Macleod & Carrier, 2010; Teng & Wang, 2015). Consumers' demand for healthier alternatives and organic products is instrumental in transforming it into a prevailing trend in the food industry. The establishment of Demeter in Germany, the first certification for Organically produced food, in 1928, demonstrates that this trend is not a novel preoccupation among consumers (Meier et al., 2015). Empirical research has confirmed that organic agriculture has great potential for protecting groundwater and surface water, while also contributing positively to biodiversity. It reflects the economic use of resources (Sanders et al., 2025).

1.2.1 Certification Bodies across the World

Various bodies across the world are involved in the essential task of certifying organic products. A few of them are discussed below.

- i. USDA Organic certification is one of the most famous certifying agencies. It ensures that agricultural products sold, labelled, or represented as organic in the United States adhere to strict USDA

organic procedures and standards. While the USDA Agricultural Marketing Service (AMS) oversees these products, its National Organic Program (NOP) is responsible for developing and enforcing regulations. Certification categories include Crops, Wild Crops, Livestock, and Handling (selling, processing, or packaging), as authorised by the Organic Foods Production Act of 1990, are included in the purview of these regulations (National Archives and Records Administration (NARA) and U.S. Government Publishing Office, 2023; United States Department of Agriculture (USDA), 2023). The USDA itself does not directly certify operations; instead, it accredits third-party certifying agents (certifiers), i.e. private entities, states, or foreign governments, to inspect and approve organic producers and handlers. Products bearing the USDA Organic seal are certified organic and must contain 95% or more organic content (National Archives and Records Administration (NARA) and U.S. Government Publishing Office, 2023; United States Department of Agriculture (USDA), 2023).

The National Organic Program (NOP) is a federal regulatory program within the USDA's AMS. It plays a crucial role in establishing and maintaining Organic standards in the United States. Its primary responsibility is to develop and enforce consistent national standards for organically produced agricultural products sold in the U.S. The NOP was authorised by the Organic Foods Production Act of 1990. Beyond setting regulations, the NOP also accredits third-party organisations to certify that farms and businesses comply with these national organic standards. These accredited certifiers work in conjunction with the USDA to enforce the standards, which helps ensure a level playing field for producers and protects consumer confidence in the integrity of the USDA Organic Seal (National Archives and Records Administration (NARA) and U.S. Government Publishing Office, 2023; United States Department of Agriculture (USDA), 2023).

The USDA organic regulations permit four distinct labelling

categories for organic products, which must undergo review and approval by a USDA-accredited certifying agent before market use. These categories signify varying percentages of organic ingredients (excluding salt and water) and dictate how organic claims and the USDA organic seal can be displayed. The four labels are:

- a. 100 Percent Organic: This label is for products containing 100 percent organic ingredients. Most raw, unprocessed, or minimally processed farm crops can use this label. The USDA organic seal and the ‘100 percent organic’ claim may appear on the principal display panel (PDP), and organic ingredients can be identified on the information panel (IP) (Greene & Kremen, 2003; Dimitri & Oberholtzer, 2009; National Archives and Records Administration (NARA) and U.S. Government Publishing Office, 2023; United States Department of Agriculture (USDA), 2023).
- b. Organic: This applies to products with a minimum of 95 percent organic ingredients. Up to 5 percent of ingredients may be nonorganic agricultural products or non-agricultural products from the National List, provided they are not commercially available as organic. The USDA organic seal and the ‘organic’ claim can be featured on the PDP, with organic ingredients marked on the IP (Greene & Kremen, 2003; Dimitri & Oberholtzer, 2009; National Archives and Records Administration (NARA) and U.S. Government Publishing Office, 2023; United States Department of Agriculture (USDA), 2023).
- c. Made with Organic: Products in this category contain at least 70 percent organically produced ingredients, with specific constraints on the nonorganic portion. The PDP may state ‘made with organic’ followed by up to three specific ingredients or ingredient categories,

but it must not include the USDA organic seal, represent the finished product as organic, or state ‘made with organic ingredients. Organic ingredients should be identified on the IP (Greene & Kremen, 2003; Dimitri & Oberholtzer, 2009; National Archives and Records Administration (NARA) and U.S. Government Publishing Office, 2023; United States Department of Agriculture (USDA), 2023).

d. Specific Organic Ingredient Listings: For products with less than 70 percent organic content, specific organic ingredients can be listed in the ingredient statement. For example, ‘Ingredients: water, barley, beans, organic tomatoes, salt’. The PDP must not feature the USDA organic seal or the word ‘organic’. Only certified organic ingredients can be listed as organic in the ingredient list on the IP, along with the percentage of organic ingredients, and the remaining ingredients do not need to adhere to USDA organic regulations (Greene & Kremen, 2003; Dimitri & Oberholtzer, 2009; National Archives and Records Administration (NARA) and U.S. Government Publishing Office, 2023; United States Department of Agriculture (USDA), 2023).

ii. Ecocert is a globally recognised organisation committed to promoting sustainable and responsible practices through certification, training, and consulting. Founded in 1991 as part of the organic farming movement, Ecocert has expanded its reach to over 130 countries, including a strong presence in India (Ecocert Group, 2025). With a team of over 100 professionals, Ecocert India supports businesses across South Asia and the Middle East. The organisation’s mission centres on enabling environmentally respectful production processes, better resource management, and socially responsible supply chains (Ecocert Group, n.d.). Ecocert’s services span multiple sectors, including agri-food, cosmetics,

textiles, home care, forestry, and sustainable materials. Beyond its core certification work, Ecocert actively contributes to climate action and biodiversity preservation, offsetting 100% of its carbon emissions annually and addressing 14 out of the 17 UN Sustainable Development Goals. Its eco-designed headquarters in Toulouse, built from natural materials and generating more energy than it consumes, symbolises its deep-rooted commitment to sustainability (Ecocert Group, n.d.).

- iii. OF&G (Organic Farmers & Growers) was formed in 1973 (Organic Farmers and Growers, 2023). It was formed during a period of growing global awareness about sustainable agriculture and organic farming practices (Lockeretz, 2007; Reed, 2010). Initially established as a marketing cooperative for organic produce, its role evolved over time in response to increasing consumer demand for certified organic products and regulatory developments in organic standards (Rigby & Cáceres, 2001). In 1992, it became the first UK organic certification body to be approved by the Government (Organic Farmers & Growers CIC, 2023). OF&G operates as a dedicated organic control body and certifier, providing support, information, and licensing to organic food businesses across Great Britain, Northern Ireland, the Isle of Man, and the Channel Islands. OF&G's expertise has expanded significantly since the seventies. It has widened its certification portfolio beyond just organic. In addition to its primary organic certification scheme, which ensures adherence to organic standards, it also offers inspection and certification for schemes like the 'Pasture For Life' mark, commercial composting (PAS100), the Biofertiliser Certification Scheme (PAS110 for anaerobic digestate), the Woodland Carbon Code, and the Peatland Code. It also developed a Cosmetic and Bodycare Standard based on the EU Organic Regulation and Nordic Ecolabelling Standards (Organic Farmers & Growers CIC, 2023). Thus, the diversification of organic and sustainability certification aligned with broader principles of sustainable production and consumption (Arbenz et al., 2016; Arbenz et al., 2017). The

organisation currently certifies over 30% of the UK organic sector, a substantial proportion of the UK's organic agricultural production. This represents the continued growth and maturation of organic farming systems in the UK (Rigby & Cáceres, 2001). It certifies over 1400 farmers who collectively manage more than half of the UK's organic land (Organic Farmers & Growers CIC, 2023).

- iv. The Soil Association, founded in 1946 by Lady Eve Balfour and a group of friends, was a result of the deep concerns about the health implications of increasingly intensive farming systems following the Second World War (Soil Association, n.d.). Their initial concerns focused on the loss of soil through erosion and depletion, decreased nutritional quality of food, exploitation of animals, and the impact on the countryside and wildlife (Soil Association, n.d.). Lady Eve Balfour's farm in Haughley Green, Suffolk, served as the birthplace of the Soil Association and the site of the 'Haughley Experiment' (Soil Association, n.d.). It demonstrated that organic farming could achieve comparable yields to intensive methods while developing more complex root systems in crops (Balfour, 1946; Soil Association, n.d.). Since its inception as an educational and research organisation, the Soil Association has worked to gather and disseminate scientific and agricultural information, establishing connections between soil fertility and human health. By 1967, it began setting organic standards. In 1973, Soil Association Certification was launched to provide a system for proving high-quality, integrity-driven food (Soil Association, 2025). The Soil Association influences government policy on UK food, farming, and forestry. It supports businesses in growing sustainable food. It inspires individuals to act as a force for nature, guided by the enduring belief that 'The health of soil, plants, animals and (hu)man is one and indivisible' (Soil Association, n.d.).

1.3 Indian Context

The Organic farming system is a farming approach primarily aimed at sustainable agricultural production in an eco-friendly, unpolluted

environment, and has been practised in India since ancient times, as stated by the National Centre of Organic Farming (NCONF) (National Centre of Organic Farming, 2025). The National Programme for Organic Production (NPOP) is implemented by the Agricultural and Processed Food Products Export Development Authority. It facilitates organic certification, standardises production norms, and promotes organic farming and trade. It was launched primarily to regulate and monitor the quality of organic product exports. According to it, organic products are grown under an agricultural system that does not utilise chemical fertilisers and pesticides, adopting an environmentally and socially responsible approach. This is a method of farming that works at the basic level by preserving the reproductive and regenerative capacity of the soil, good plant nutrition, and sound soil management, thereby producing nutritious food rich in vitality, which has resistance to diseases (Agricultural and Processed Food Products Export Development Authority (APEDA), 2025).

1.3.1 Organic Certification in India

The Indian organic industry must comply with the norms laid by the Food Safety and Standards (Organic Foods) Regulations, 2017, notified by the Food Safety and Standards Authority of India (FSSAI) (FSSAI, 2025). These regulations are based on two Organic certification systems: the NPOP for export and the Participatory Guarantee System for India (PGS-India) for domestic and local markets.

While both NPOP and PGS-India certification systems are rooted in national standards, they differ in verification and documentation methodologies (Participatory Guarantee System of India (PGS-India), 2021). The NPOP implementation was in response to the mandatory ‘Third Party Certification’ of organic products. Launched in 2001, the NPOP is an institutional mechanism for facilitating the implementation of the National Standards for Organic Production (NSOP) (Ministry of Commerce & Industry, Government of India, 2025). The NSOP is a set of standards to be adhered to for cultivating, harvesting, producing, processing, and marketing organic products (Department of Commerce, Ministry of Commerce & Industry, Government of India, 2024). The

APEDA, under the Ministry of Commerce, is in charge of the implementation of NPOP and NPOP Certification, and the Department of Agriculture & Farmers Welfare (through NCONF) is responsible for the facilitation of PGS-India (Participatory Guarantee System of India (PGS-India), 2021; Agricultural & Processed Food Products Export Development Authority (APEDA), 2025). The ‘Third Party Certification’ system of organic produce and processes under NPOP is carried out across the supply chain by accredited certification bodies, either governmental or private (Agricultural and Processed Food Products Export Development Authority (APEDA), 2025).

Under NPOP, there are 39 Certification Bodies. These are also known as accreditation agencies (Agricultural & Processed Food Products Export Development Authority (APEDA), 2025). The European Commission and Switzerland have recognised the NPOP standards for production and accreditation system for unprocessed plant products as equivalent to their country standards. Likewise, the USDA has recognised NPOP conformity assessment procedures of accreditation as equivalent to those of the National Organic Program (NOP) of the US. Indian organic products, recognised by certified bodies, are accepted by major importing countries (Sailaja & Manohari, 2021). The NPOP certification system is focused on exports (National Centre for Organic and Natural Farming, Department of Agriculture & Farmers Welfare, 2025).

The high fees and lengthy documentation involved in third-party certification may deter small and marginal farmers from obtaining certification. To overcome this barrier, the Participatory Guarantee System (PGS)- India was launched in 2011 by the Department of Agriculture and Cooperation & Farmers Welfare, Government of India (National Centre for Organic and Natural Farming, Department of Agriculture & Farmers Welfare, 2025). The PGS-India is a type of organic quality assurance certification underpinned by mutual trust, local relevance and mandatory involvement of producers and consumers in the certification process. It operates outside the framework of ‘Third Party Certification’. As an inherent participatory framework, the PGS approach entails peer-based inspection and verification of processes, with farmers from the same or

neighbouring regions collectively ensuring compliance with established standards. Presently, the Regional Councils issue certificates for three categories- Large Area Certification (LAC), Individual Certification, and Local Group Certification. Individual certification can be granted to a farmer willing to undertake organic farming where the farmer is either present in isolated areas away from other farmers, or no local groups are present in the nearby villages, or other farmers are not interested in joining the local groups. Local group certification is carried out by local groups comprising a minimum of five farmer members located in the same village or nearby villages, or with adjacent land holdings, who can interact regularly with each other. A basic requirement is that at least 25% of the members are familiar with the PGS/NPOP standards or have undergone training with Regional Councils of Organic Farming (RCOFS) or NCOF or RC on PG certifications or were part of the functional core teams of other PGS groups.

LAC is a quick and cost-effective certification process that awards certification to large traditionally organic areas with no recorded history of GMO and agrochemical use. These areas may comprise a few entire villages or an entire Taluka or district (National Centre for Organic and Natural Farming, 2021; National Centre for Organic and Natural Farming, 2025). The Car Nicobar and Nancowry group of islands, located under the Andaman and Nicobar Islands is the first large contiguous territory to be bestowed with the Organic certification under the PGS-India LAC category (Ministry of Agriculture & Farmers Welfare, 2021). Sikkim is India's first fully Organic-certified state, while the entire cultivable land area in Lakshadweep is certified Organic under LAC (Ministry of Agriculture and Farmers Welfare, 2024). Sikkim has also achieved a remarkable feat by securing the prestigious Future Policy Gold Award from the Food and Agriculture Organisation (FAO) of the United Nations (UN) for being a 100% organic state (Biswas, 2025).

Products certified may carry either the PGS-India Green certification or the PGS-India Organic Certification. PGS-India Green certification is issued to farmers during the period of the farm under conversion, i.e. two years for seasonal crops and three years for perennial crops. Accordingly,

the produce from such farms will carry a PGS-India Green logo. Products with the PGS-India Green logo shall not be claimed as Organic and can use the indication ‘Under conversion to Organic’ to educate the consumers about the status. Upon completion of the conversion period, farmers will be issued a PGS-India Organic certification if they have completely adopted the Organic standards. Consequently, produce from such farms is entitled to carry the PGS-India Organic logo (Sharma & Srinivasamurthy).

1.3.2 Recent Strides

The Indian government is actively promoting sustainable and Organic farming practices to maintain and preserve environmental quality and ensure long-term food security (Kumar et al., 2024). Farmers are incentivised to adopt organic farming through schemes like the Paramparagat Krishi Vikas Yojana (PKVY) and the Mission Organic Value Chain Development for North Eastern Region (MOVCDNER). The first centrally sponsored comprehensive scheme launched in 2015-16, PKVY, is a sub-component of Soil Health Management (SHM) scheme under the National Mission of Sustainable Agriculture (NMSA). It is distinctively formulated to promote the cohesive advancement of cluster-based Organic farming with PGS certification, with support extended to cluster formation, training, certification and marketing (Ministry of Agriculture and Farmers Welfare, 2024; Ministry of Agriculture and Farmers Welfare, 2022; Department of Administrative Reforms & Public Grievances (DARPG), 2017; Sailaja & Manohari, 2021). The various unique state-developed brands that market their organic produce under the PKVY scheme are mentioned in Table 1.1. These regional brands aim to endorse and differentiate locally produced organic goods in the market, assisting farmers and fostering sustainable agriculture practices throughout India.

Table 1.1: List of state-wise brands under PKVY

States	Brands
Madhya Pradesh	Made in Mandla
Uttarakhand	Organic Uttarakhand

Tamil Nadu	Tamil Nadu Organic Product (TOP)
Maharashtra	Sahi Organic, Nasik Organic, Gadchirrolia Organic Farming
Jharkhand	Jaivik Jharkhand
Chhattisgarh	Aadim brand by BhoomiGadi FPO, Bastar Naturals
Punjab	Five Rivers
Tripura	Tripureshwari Fres

Source: Kumar et al. (2024)

Furthermore, the government is promoting synthetic chemical-free farming with the use of natural on-farm inputs since 2019-2020 through Bharatiya Prakritik Krishi Paddhati (BPKP) programme under the PKVY. The scheme promotes traditional indigenous on-farm practices, such as biomass recycling, emphasising biomass mulching, the application of cow dung-urine formulations, and plant-based preparations, including zero-budget natural farming techniques (Ministry of Agriculture and Farmers Welfare, 2024; NITI Aayog, 2021).

A dedicated web portal, Jaivik Kheti, has been created to facilitate the direct sale of organic products by connecting farmers with consumers. The portal serves as both a knowledge platform and a marketing platform, disseminating information about farmers involved in Organic farming, input suppliers, certification (PGS), and marketing bodies to facilitate the smooth and transparent sale of organic products. The PKVY and PGS groups can benefit from the portal for capacity building, technical expertise, and interacting with marketing channels, as well as directly marketing their produce to prospective buyers and consumers (Sailaja & Manohari, 2021; Ministry of Agriculture and Farmers Welfare, 2024; Kumar et al., 2024). In November 2017, the logo ‘Jaivik Bharat’ was launched by the FSSAI to identify organic foods. The logo, accompanied by the tagline ‘Jaivik Bharat’, distinguishes organic products from conventional ones. A regulatory portal cum integrity database called the ‘Indian Organic Integrity Database Portal’ was launched by the FSSAI, with APEDA and PGS-India. It enables consumers and other stakeholders

to access information about organic food standards, producers, companies, the certification system, and the regional availability of certified organic products (Manavalan, 2022; Aulakh & Ravisankar, 2017; Food Safety and Standards Authority of India, 2017). The cost-effective PGS certification and development of portals, such as Jaivik Kheti, for the dissemination of authentic information in the market led to a phenomenal increase in community involvement in organic farming (Sailaja & Manohari, 2021).

Another scheme, the PM Programme for Restoration, Awareness, Nourishment, and Amelioration of Mother Earth (PM-PRANAM) was launched to preserve the health of Mother Earth by incentivising the states and Union Territories to adopt alternative fertilisers such as Organic and Biofertilisers. This addresses a pressing environmental issue: degradation of soil quality due to the excessive use of chemical fertilisers and pesticides in the agricultural system. The PM-PRANAM focuses on improving soil health and fertility and ensuring adherence to sustainable production norms (Department of Fertilizers, Ministry of Chemicals & Fertilizers, Government of India, 2025; Ministry of Chemicals and Fertilizers, 2025; Ministry of Chemicals and Fertilizers, 2023).

The MOVCDNER is exclusively aimed at North-Eastern states in the country, as evident in the scheme nomenclature. At the same time, the PKVY is implemented across all the remaining states (Ministry of Agriculture & Farmers Welfare, 2024). The MOVCDNER Scheme, launched in 2015-16, emphasises establishing certified Organic production clusters across Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, and Tripura. This initiative aims to develop a comprehensive value chain for the North-East that includes inputs, seeds, certification, and infrastructure for collection, aggregation, processing, and marketing to link the producers with consumers (Ministry of Agriculture and Farmers Welfare, 2024; Department of Agriculture & Farmers Welfare, n.d.; Reddy, 2018; Department of Agriculture & Farmers Welfare, 2024). Both MOVCDNER and PKVY aim to provide end-to-end support to Organic farmers, encompassing production, processing, certification, marketing, post-harvest management, training, and capacity building (Ministry of Agriculture and Farmers Welfare,

2024).

India's diverse agro-climatic conditions enable it to produce a wide variety of Organic Products. India ranks second globally in Organic agricultural land area and first in the number of Organic producers, underscoring its prominent position in the Organic sector. As of March 2024, India had 7.3 million hectares of land under Organic certification, comprising 4.48 million hectares of land suitable for cultivation and 2.85 million hectares designated for wild harvest collection (Agricultural and Processed Food Products Export Development Authority (APEDA), 2025). Madhya Pradesh leads in Organic-certified areas, followed by Maharashtra, Rajasthan, Gujarat, and Odisha. In terms of production, India yielded approximately 3.6 million metric tons of certified Organic Products in 2023-24, including oilseeds, fibre crops, sugarcane, cereals, pulses, medicinal plants, and processed foods. Maharashtra emerged as the top producer, with Madhya Pradesh, Rajasthan, Karnataka, and Gujarat following closely (Sharma et al., 2024). The export sector has also demonstrated robust growth. With 2,61,029 metric tons of Organic Products shipped in 2023-24, exports generated ₹ 4,007.91 crore (approximately \$ 494.80 million) (Ministry of Food Processing Industries, 2024). The rich tradition of Organic farming in many regions makes the country well-positioned to capitalise on the growing domestic and global demand for Organic Products (Willer et al., 2025). During the 2023-24 fiscal year, the U.S. was the major market for Indian Organic exports (\$241.23 million). The European Union followed suit (\$162.02 million), with Canada being a distant third (\$20.10 million) (Agricultural and Processed Food Products Export Development Authority (APEDA), 2024).

The APEDA and FSSAI have jointly developed the new logo of 'Unified India Organic' by combining elements of Jaivik Bharat. The new logo replaces the old 'India Organic' mark for NPOP products. For the domestic market, both the Jaivik Bharat logo and the new logo are to be affixed (APEDA, Ministry of Commerce & Industry, Govt. of India, 2025).

1.4 Goan Context

The coastal state of Goa is in the agroecological region of the Western Ghats (Kumar et al., 2025). The development of tourism, the largest contributor to the state's revenue, resulted in the rapid urbanisation of Goa. The tourism policy focused largely on coastal belts of the state, which led to a decline in the tourist movement further inland (Vaz et al., 2017). This calls for a balanced regional development in the state to attain equity in wealth distribution (Kim S. , 2008; Kumar & Pradhan, 2025; Jose, 2019).

The sharp decrease in tourist footfall, consequent to the global pandemic, compelled the state to explore alternative revenue-generating avenues. The natural capacity and optimum yield of an agro-ecosystem can be achieved only by maintaining the complex relationships among primary natural resources, i.e., water, soil, and vegetation (Islam & Weil, 2000; Paramesh et al., 2022). Deforestation, the injudicious use of natural resources, and intensive agricultural practices have rendered the ecosystem inhospitable to biodiversity (Bhardwaj et al., 2011; Loehman et al., 2020; Reang et al., 2021). The natural forests are rapidly being converted into croplands and market-oriented plantations to meet the towering demand for food, fuel, fibre and fodder in the country. Owing to this, the Western Ghats region is experiencing a drastic shift in land use patterns (Jha et al., 2000; Prasad et al., 2010; Nagaraja et al., 2018).

The Organic and other indigenous farming practices are being explored to bridge the chasm between demand and supply (Pandey, 2021). Organic farming has been practised in Goa for a long time, as evident in the cultivation of Goan cashew, which is grown organically (Government Printing Press, 2022). Besides the numerous state and central-level schemes, the Directorate of Agriculture offers various concessions to promote Organic farming in the state (Team Herald, 2024; National Bank for Agriculture and Rural Development (NABARD), 2020; Directorate of Agriculture, Government of Goa, 2022). One such initiative is the Goa State Amritkal Agriculture Policy 2025, aimed at transforming the agricultural sector through innovative approaches, including Organic farming. The initiative ensures judicious management of ecological

resources for cultivating high-value crops in the state, while also endorsing agro-tourism (Goa News Hub, 2025). Several farmers in Goa have successfully transitioned to organic farming by adopting an integrated approach. Many have even established an agribusiness network with various stakeholders to market their products using modern approaches (The Goan Network, 2021). Being a small state, Goa has the potential to be a role model for Organic farming practices for others to emulate (The Goan Network, 2024). The export potential of Organic products, especially value-added Organic products, from India is promising. The tourism industry can be effectively used to contribute to popularising the Organic Products of Goa. Aggressive marketing can boost the exports of several traditional Goan Organic agricultural products (Government Printing Press, 2022).

1.5 Chapterisation of the Thesis

The thesis is organised into six chapters. A brief outline of each of them is given below:

Chapter 1 provides the background of the study. It contains the definitions of the essential concepts of the study, i.e., Organic Products, Organic Consumers, and Green Marketing, to provide a background for the area of study. This chapter further highlights the significance of the study, along with the research problem, the scope of the study, and the objectives guiding the present research.

Chapter 2 highlights the existing research in the field of Organic Products and Consumption. The relevant variables used in the investigation are also discussed. The chapter presents a review of the pertinent theories applicable to Consumer Behaviour. Furthermore, the chapter details the studies undertaken by applying these theories of Consumer Behaviour in OPPB. Besides, studies based on consumers' perceptions of green marketing strategies regarding organic Products are also highlighted in this chapter. The need for the present research is then outlined in the form of a Research Gap based on the literature review.

Chapter 3 outlines the research methodology employed in conducting the

study. This chapter includes the details of the research design adopted, the data collection tools, procedures, and data analysis techniques, as well as the measurement of constructs used in the study. Importantly, the chapter presents the proposed research models for the study.

Chapter 4 presents an analysis and the results of the influence of psychosocial factors within the extended TPB framework, alongside the impact of green marketing strategies on OPPI. It also examines the moderating effects of trust, health consciousness, and perceived behavioural control on the relationship between the primary factors of TPB and OPPI.

Chapter 5 involves a discussion on the elementary findings of the study. Additionally, the chapter presents the theoretical contributions of the study to the body of knowledge and its implications for various societal domains.

Chapter 6 discusses the conclusion drawn from the study conducted in the context of organic products. It also discusses the limitations of the study and the scope for future research in the field.

Chapter 2

Review of Literature

2.1 Introduction

Organic production, a subset of Climate Resilient Agriculture (CRA), presents India with viable options to address the current and potential environmental and food security-related challenges (Sahoo et al., 2025). For ensuring the successful marketing of Organic Products, a careful review of the factors that influence the consumer psyche is essential. (Jakubowska et al., 2025; Bazhan et al., 2024; Melovic et al., 2020; Ahmad et al., 2025; Eberle et al., 2022; Sahelices-Pinto et al., 2021).

Numerous studies have shown that product consumption is a complex phenomenon, as it is influenced by many factors. These include consumer-specific factors such as moral and subjective norms, health consciousness, and environmental consciousness, as well as social, cultural, and geographical factors (Khan et al., 2023; Pahari et al., 2023; Parashar et al., 2023). Besides several product-specific factors, such as price, availability, nutritional content, and product awareness, these factors are also vital (Asif et al., 2018; Raj et al., 2024). Conceptual theories, such as the Theory of Reasoned Action (TRA), the Theory of Planned Behaviour (TPB), and the Stimulus-Organism-Response (SOR) consequence framework, aid in elucidating the complexities associated with consumers' organic product purchases (Gundala et al., 2022; Talwar et al., 2021; Pant et al., 2024).

2.2 Theoretical foundation

Extant literature on the determinants of Organic Product Purchase Behaviour of individuals has proposed numerous models and theories to explain its complexities.

2.2.1. Theory of Reasoned Action

The Theory of Reasoned Action (TRA) is the most preliminary theory. The TRA was promulgated by Martin Fishbein in 1967 (Fishbein, 1980). It was extended further in 1975 and in 1980 (Fishbein & Ajzen, 1975; Ajzen & Fishbein, 1980). Based on social psychology, TRA posits that actual human behaviour is driven by behavioural intentions, which in turn are shaped by consumers' attitudes towards the behaviour and subjective norms (Ajzen & Fishbein, 1980; Ajzen, 1991). Attitude towards a behaviour refers to the degree of positive or negative emotions an individual experiences in relation to that behaviour, and is determined by an individual's evaluation of the likelihood of a specific behaviour resulting in certain outcomes, as well as the desirability of these outcomes (Madden et al., 1992). Thus, behavioural intentions towards a product, an antecedent of actual behaviour, are strongly correlated with attitude towards a behaviour and normative beliefs (Almrafee, 2019; Xiao, 2019).

Several studies have been conducted to investigate consumers' purchase intentions using the TRA. Effendi et al. (2015) conducted a study to investigate the factors influencing Indonesian consumer preferences and purchasing intentions for organic food. The research successfully employed the TRA framework to analyse consumer attitudes. Key findings from the study indicate that knowledge of organic food and health, as well as subjective norms, significantly impact a consumer's attitude toward buying organic, while cultural factors and product attributes have less influence (Effendi et al., 2015). In 2005, an Austrian study by Gotschi et al. (2009) investigated social norms and attitudes of Viennese high school students toward organic products using the TRA. It concluded that primary socialisation was important in forming social norms and shaping behaviour. Moreover, knowledge of organic products did not explain students' self-reported shopping behaviour when shopping for organic products. Cultural patterns seem to be far more useful in predicting the behaviour and attitudes toward organic products. The cultural patterns were more useful for predicting consumer behaviour towards Organic Products (Gotschi et al., 2009). The literature supports

that attitudes and subjective norms are the main drivers of consumers' organic food purchasing intentions (Al-Swidi et al., 2014; Asif et al., 2018; Slamet et al., 2016; Soyezi et al., 2012; Teng & Wang, 2015).

The TRA model, however, was not free of limitations. Although widely used in marketing research, several scholars have criticised it. Tan & Laily (2015) in their study, analysed the factors that affect the intention of Chinese college students to consume organic food. The factors studied included environmental concerns, subjective norms, and media and advertising. The analysis of the data proved that environmental concerns and subjective norms do not show any significant effects on the intention to consume organic food products (Tan & Laily, 2015). Other studies have also supported this claim that subjective norms do not have a significant influence on consumers' purchase intentions towards organic food (Aschemann-Witzel & Zielke, 2017; Yazdanpanah & Forouzani, 2015). A further limitation of TRA lies in its primary focus on volitional behaviours. This theoretical narrowness restricts TRA's applicability in contexts where environmental factors, structural barriers, or resource limitations play a decisive role in shaping behaviour (Taylor et al., 2006). Moreover, Hunter (2006) argued that the TRA focused solely on volitional behaviour. Thus, the TRA is not designed to explain non-volitional behaviour. Besides, the TRA is susceptible to human intention, which also acts as a barrier (Kashima & Gallois, 1993).

2.2.2. Theory of Planned Behaviour

To overcome the limitations over which people have incomplete volitional control, an extension of TRA called the Theory of Planned Behaviour was proposed by Ajzen (1991). The TPB posits that behavioural intention, which serves as the primary determinant of an individual's actions, is shaped by three key factors: personal attitude, perceived behavioural control, and subjective norms. It has been successfully used to explain organic food consumption intention and behaviour (Aertsens et al., 2011; Arvola et al., 2008; Chen, 2007; Nuttavuthisit & Thøgersen, 2017; Tarkiainen & Sundqvist, 2005; Ajzen, 1991).

The primary distinction between the TRA and the TPB lies in the latter's inclusion of perceived behavioural control as an additional determinant of intention alongside attitudes and subjective norms (Ajzen, 1991; Hagger et al., 2002). This addition accounts for situations where individuals lack complete volitional control over their actions. Perceived behavioural control represents an individual's self-assessment of their capability to perform a specific behaviour (Hagger et al., 2002). Moreover, empirical evidence positions PBC as a dual determinant, directly influencing both behavioural intention and the actual behaviour itself (Ajzen, 1991; 2005).

Empirical research has demonstrated the cross-cultural applicability of the TPB in predicting organic food purchase intentions. Arvola et al. (2008) examined the model's efficacy across three distinct cultural contexts (the UK, Italy, and Finland), confirming its general predictive validity. However, their findings revealed significant variations in the relative influence of TPB constructs (attitudes, subjective norms, and perceived behavioural control) between countries, suggesting culture-specific moderating effects on the intention formation process (Arvola et al., 2008). Scholars have asserted that TPB is more robust than TRA when applied in different fields of science (Hagger et al., 2002; Scalco et al., 2017). In this respect, Dowd and Burke (2013) argued that TPB was found to be a solid theory for predicting intention to buy organic food. They investigated the influence of ethical values and food choice motivations on consumers' intentions to purchase sustainably sourced foods through an adapted framework of the TPB. The results demonstrated that the expanded TPB model significantly improved predictive power, explaining 76% of the variance in intentions to buy sustainably sourced food. Notably, while both health and ethical values were significant motivators for purchasing intentions, ethical self-identity ceased to be a significant predictor once food choice motives were taken into account (Dowd & Burke, 2013).

TPB has emerged as a predominant framework in behavioural prediction research due to its well-established robustness in explaining intention formation (Suprpto & Wijaya, 2012; Yazdanpanah & Forouzani, 2015). This theoretical model has been particularly widely adopted in studies

examining organic product purchase intentions (Basha & Lal, 2019; Gracia Royo & de-Magistris, 2007; Tarkiainen & Sundqvist, 2005; Pešek et al., 2018). Empirical investigations in the organic food domain have consistently validated TPB as one of the most effective theoretical approaches for predicting consumer decision-making regarding organic products (Al-Swidi et al., 2014; Scalco et al., 2017; Zagata, 2012).

Saba and Messina (2003) conducted a survey-based study investigating consumer beliefs, attitudes, and intentions regarding organic fruit and vegetable consumption through the lens of the TPB. The study demonstrates a significant causal relationship between cognitive and behavioural factors: consumer beliefs substantially influence attitudes, which in turn strongly predict purchase intentions. This sequential relationship underscores the pivotal role of belief systems in driving the consumption of organic produce. Furthermore, the research identifies that positively inclined consumers predominantly perceive organic fruits and vegetables as offering superior health benefits by enhancing sensory qualities and reducing the environmental impact compared to conventional alternatives.

In a comprehensive study investigating the determinants of organic purchasing behaviour among urban consumers in Southern Italy, Gracia and de Magistris (2007) revealed two primary drivers of purchase intention: consumers' general attitudes toward organic products and their specific knowledge about these products. Notably, the study identified health consciousness and perceived environmental benefits as dual-faceted factors that significantly influence both purchasing intentions and actual buying behaviour. Empirical research across different cultural contexts has consistently validated the predictive capacity of the TPB in studies pertaining to organic consumption. Smith and Paladino's (2010) Australian investigation developed a TPB-based model incorporating organic food knowledge, subjective norms, and product familiarity as key constructs. Their path analysis revealed that purchase intention was significantly mediated by three factors, viz., attitudes shaped by organic product knowledge, social normative pressures, and environmental consciousness. These findings were complemented by Lodorfos and

Dennis's (2008) UK study, which confirmed the TPB's efficacy in forecasting organic purchase intentions. The British research further identified perceived product attributes of organic foods and influential subjective evaluations from reference groups as two critical determinants.

Soyez et al. (2012) explored the factors influencing organic food purchasing behaviour across diverse economic contexts, comparing industrialised nations (the USA, Canada, and Germany) with transitioning economies (Russia and Ukraine). Their study classified key determinants into three groups: individual, situational, and product-related factors and incorporated them within the TPB framework. The findings identified both universal and culturally specific influences on organic consumption. Universal drivers included favourable attitudes toward organic products and the impact of social norms, which significantly affected purchasing decisions across all countries. However, the study highlighted market-specific variations, noting that personal attitudes more influenced some consumers (e.g., in the USA), while others (e.g., in Ukraine) responded more strongly to social expectations. Price sensitivity was a consistent predictor of purchase intentions and behaviour in all regions.

In contrast, factors such as product availability, packaging appeal, and trust in eco-certifications varied in importance across different countries. These insights provide practical guidance for tailoring organic food marketing strategies to diverse cultural and economic contexts (Soyez et al., 2012). Al-Swidi et al. (2014) conducted groundbreaking research examining the applicability of the TPB to organic food purchases, with a particular focus on the dual role of subjective norms as both a direct influencer and a moderating variable. The key findings from the study revealed that subjective norms serve as a significant moderator between attitudes and purchase intentions, moderate the relationship between PBC and intention, and directly shape attitudes toward organic food purchases.

Yadav and Pathak (2016) extended the traditional TPB framework by incorporating three novel constructs: moral attitudes, health consciousness and environmental concerns. Their modified model demonstrated that while the core TPB components maintained partial predictive validity for

organic purchase intentions, the additional psychosocial factors yielded more refined results. Notably, both moral considerations and health awareness emerged as significant positive predictors of intention formation. However, environmental concerns failed to show statistically significant effects on consumers' willingness to purchase organic products. Basha and Lal (2019) examined the organic food purchase intentions of Indian consumers. While retaining the core TPB constructs of attitudes and subjective norms, the authors extended the model by incorporating seven additional factors: environmental concerns, health concerns, support for local farmers, product quality, convenience and price, animal welfare, and trust/safety. Their findings confirmed the robustness of TPB in this context, demonstrating that both attitudes and subjective norms significantly influenced purchase intentions. Notably, among the extended variables, only environmental concerns and quality emerged as significant predictors. In contrast, health concerns, support for local farmers, convenience and price considerations, animal welfare, and trust/safety showed no statistically significant impact on Indian consumers' intentions of organic food purchase (Basha & Lal, 2019).

A study by Wang et al. (2019) investigated consumer behaviour towards organic food in Tanzania and Kenya, two neighbouring countries with a shared agricultural background and ongoing projects to promote organic markets. Utilising the TPB, the study identifies key factors influencing purchase intentions, namely subjective norms, personal attitudes, and perceived behavioural control. Employing Structural Equation Modelling (SEM) for data analysis, results indicate that personal attitude significantly affects consumer intentions, with knowledge acting as a moderating variable.

Empirical evidence presents mixed results regarding the TPB's predictive capacity for purchasing organic food. Yazdanpanah and Forouzani's (2015) Iranian study exemplifies this limitation, demonstrating that while consumer attitudes significantly predicted organic purchase intentions, neither subjective norms nor perceived behavioural control showed statistically significant effects. The researchers augmented the traditional TPB framework by incorporating moral norms and self-identity

constructs, which substantially enhanced the model's explanatory power beyond its original formulation. These findings suggest that in certain cultural contexts, ethical considerations and personal identity may outweigh social pressures and perceived control as determinants of organic food consumption behaviour.

A study by Pant et al. (2024) reviewed the existing research on organic food consumption (OFC) and identified knowledge gaps by means of performance analysis, science mapping, and content analysis. The concepts that emerged across the themes and clusters were purchase intentions, health consciousness, attitudes to OFC, the TPB, green marketing, and environmental concerns. The study also conceived possible research topics to help improve the research trajectory in the OFC field in the future. Puska et al. (2018) found evidence of the signalling effect in organic consumption. Their study reveals that when consumers are primed with a desire for social status, they are more likely to choose organic over non-organic food. This proposes that organic food consumption can function as a costly signal of lifestyle status. Signal-based drivers, however, remain among the least examined behavioural factors in the literature on socially responsible consumption, even though they offer valuable insights into the irrational and unconscious aspects of human behaviour. The paradox revealed by these drivers is that motivation for socially responsible consumption may not stem solely from ethics or morality. Instead, it highlights that such consumption is often guided by behavioural factors beyond ethical considerations or social responsibility (Lu et al., 2023; Puska et al., 2018).

A significant contribution was made by Luomala et al. (2020) by empirically demonstrating that the mundane act of favouring organic foods functions as a prosocial status signalling. By synthesising the continuum model of consumer impression formation, Costly Signalling Theory (CST), and symbolic consumption theories, the research shows that organic consumption meets the necessary CST criteria: it is observable, costly, associated with desirable qualities, and yields a fitness benefit. Across three experimental studies, the authors found robust evidence that consumers who favour organic foods, both explicitly and

implicitly, perceive them as significantly more altruistic, status-laden, and honest than those who favour conventional alternatives.

2.2.3 The Intention-Behaviour Gap

The intention-behaviour gap, also termed the attitude-behaviour gap, value-action gap, or words-deeds inconsistency, refers to the frequently observed phenomenon wherein individuals' stated intentions, attitudes, or values fail to translate into corresponding actual behaviours (Vermeir & Verbeke, 2006; Carrington et al., 2010; Hassan et al., 2016). This gap represents one of the most significant and persistent challenges in consumer behaviour research. This is because substantial proportions of consumers express positive attitudes toward sustainable products and form strong purchase intentions, yet fail to enact those intentions through actual purchasing behaviour (Padel & Foster, 2005; Hughner et al., 2007; Aertsens et al., 2009).

The intention-behaviour gap contradicts fundamental assumptions of attitude-behaviour consistency theories. The latter posit that attitudes, values, and intentions should reliably predict corresponding behaviours (Ajzen, 1991; Fishbein & Ajzen, 2010). The Theory of Planned Behaviour explicitly positions intentions as the immediate antecedent and primary predictor of behaviour. It asserts that intentions capture motivational factors influencing behaviour and indicate how much effort individuals are willing to exert to perform the behaviour (Ajzen, 1991). Meta-analyses of TPB applications across diverse behavioural domains demonstrate moderate intention-behaviour correlations, indicating that intentions explain approximately one-fourth of behavioural variance. Thus, a substantial residual variance remains unexplained (Armitage & Conner, 2001; Sheeran, 2002; Webb & Sheeran, 2006).

Particularly, in the organic product and sustainable consumption domain, the intention-behaviour gap proves particularly pronounced and problematic. Numerous studies document that consumers express strong positive attitudes toward organic products. They report high willingness to pay premium prices and state strong purchase intentions. Nevertheless,

actual organic product market share remains modest and significantly below levels predicted by stated intentions (Padel & Foster, 2005; Vermeir & Verbeke, 2006; Aertsens et al., 2009). For example, Vermeir and Verbeke (2006) found that while 31% of Belgian consumers expressed positive intentions to purchase sustainable products, only 11% reported actually making frequent purchases. This translated to a 65% intention-behaviour gap. Similarly, Padel and Foster (2005) documented substantial discrepancies between expressed willingness to purchase organic foods and actual purchasing patterns in the UK market.

Multiple theoretical frameworks have been proposed to explain why intentions imperfectly predict behaviour. A multitude of psychological, situational, and temporal factors disrupt the enactment of intention. Ajzen's (1991) original TPB formulation acknowledges that intention-behaviour correspondence depends on volitional control. Volition is the degree to which behaviour is under the individual's conscious control and not constrained by external factors. Despite strong motivation, when behaviour requires resources or abilities that individuals lack, intentions may fail to translate into behaviour (Sheeran et al., 2003). In organic product contexts, implementation barriers, including limited product availability, prohibitive prices, insufficient retail accessibility, limited variety, inconsistent supply, or inconvenient shopping formats, may prevent intention enactment. The reasons apply to even highly motivated consumers (Padel & Foster, 2005; Vermeir & Verbeke, 2008; Aertsens et al., 2009).

Gollwitzer's (1999) implementation intention theory distinguishes between goal intentions and implementation intentions that specify when, where, and how behaviour will be performed. Dynamic environments present multiple competing demands that vie for attention and action. Goal intentions capture motivation but provide insufficient guidance for behaviour enactment in such environments. Implementation intentions create mental associations between situational cues and intended responses. This automates behavioural initiation, leading to an increasing likelihood of intention translation (Gollwitzer & Sheeran, 2006). Meta-analyses demonstrate that implementation intentions substantially

strengthen the correspondence between intention and behaviour. Thus, it results in an increase in behaviour enactment rates compared to goal intentions alone (Gollwitzer & Sheeran, 2006; Webb & Sheeran, 2006). In organic consumption contexts, general intentions to ‘buy organic’ may fail to activate when consumers enter actual shopping situations. This is true unless consumers have formed specific implementation plans that identify exactly how they will incorporate them into their shopping routines (Vermeir & Verbeke, 2008). The absence of such planning leaves intention enactment vulnerable to competing impulses or situational constraints.

The MODE model (abbreviation for Motivation and Opportunity as DEterminants) emphasises that intention-behaviour correspondence depends on both motivation strength and behavioural opportunity at the moment of action (Fazio, 1990). Intentions formed abstractly at temporal or psychological distance from behaviour may not remain accessible or influential when concrete behavioural opportunities arise. Temporal discounting processes wherein immediate costs dominate delayed benefits may cause intentions to weaken over time. Particularly when significant delays occur between intention measurement and behavioural opportunity. Immediate costs demand more attention (Trope & Liberman, 2003; Spence et al., 2012). Research demonstrates that intentions decay over time with absent reinforcement. The intention strength, also, declines as the temporal distance from the measurement increases (Sheeran & Orbell, 1999). In organic consumption, intentions formed when responding to surveys or engaging with sustainability messaging may fade by the time consumers enter actual shopping contexts. The effect is particularly noticeable if organic products lack salience in retail environments or if competing products receive more prominent positioning (Thøgersen, 2005).

Similarly, Carrington et al. (2010, 2014) propose that the intention-behaviour gap in ethical consumption contexts emerges primarily from competing priorities and value conflicts that are not adequately captured in intention measures. Consumers simultaneously hold multiple, often conflicting goals. When these goals conflict during actual shopping

situations, immediate and salient priorities often override more abstract sustainability intentions (Carrington et al., 2014; Bruderer Enzler, 2015). The discrepancy between stated intentions and actual behaviour generates substantial intention-behaviour gaps.

Verplanken and colleagues' research on habit demonstrates that established behavioural patterns often override conscious intentions through automatic, context-cued responses that bypass deliberative decision-making (Verplanken & Aarts, 1999; Verplanken & Wood, 2006; Wood & Neal, 2009). Grocery shopping represents a highly habitual domain wherein consumers repeatedly purchase the same products in the same stores through relatively automatic processes that require minimal cognitive effort. Unless deliberate effort is made to disrupt established routines, habitual purchasing of conventional products may persist even when consumers form the intention to change their purchasing patterns (Verplanken & Wood, 2006). Habit strength moderates intention-behaviour relationships such that intentions strongly predict behaviour among individuals with weak habits. However, among individuals with strong habits, this strength may exert minimal influence (Ouellette & Wood, 1998). In organic consumption, the strength of conventional purchasing habits represents a critical barrier to translating intentions. Organic consumption requires conscious attention, environmental restructuring, or implementation strategies that disrupt automatic processes (Thøgersen, 2005; Vermeir & Verbeke, 2008). Ajzen (2002) acknowledges that perceived behavioural control may diverge from actual behavioural control. When perceived control exceeds actual control, intentions overestimate behaviour, contributing to the intention-behaviour gap (Sheeran et al., 2003). In organic consumption contexts, consumers may form strong intentions based on optimistic control perceptions. They may fail to anticipate actual availability constraints, price shocks, quality variability, or shopping complexity encountered in real purchasing situations (Padel & Foster, 2005; Aertsens et al., 2009).

Some portion of the observed intention-behaviour gap may reflect measurement artefacts rather than genuine psychological inconsistency. Self-report measures of both intentions and behaviour are susceptible to

social desirability bias, wherein respondents overstate socially valued intentions and behaviours to present themselves favourably (Podsakoff et al., 2003). If respondents inflate stated intentions more than they inflate reported behaviour, artificially significant intention-behaviour gaps may result. Additionally, recall errors, attribution biases, and self-serving interpretations may distort self-reported behaviour measures (Kormos & Gifford, 2014).

Extensive empirical research documents substantial intention-behaviour gaps in organic and sustainable consumption across diverse geographical and cultural contexts. Vermeir and Verbeke (2006) conducted comprehensive research demonstrating that while approximately 75% of Belgian consumers expressed positive attitudes toward sustainable food products and 31% reported strong purchase intentions, only 11% reported frequent actual purchasing. Thus, a 65% attrition rate from intention to behaviour was noted. They identified price premiums, limited availability, and insufficient information as primary barriers mediating the gap.

Padel and Foster (2005) synthesised research on UK organic food consumers, documenting consistent patterns wherein expressed organic purchase intentions substantially exceeded actual purchasing behaviour across multiple product categories. They identified practical barriers and psychological barriers as key impediments to intention implementation. Similar patterns have been documented across Europe, North America and emerging markets (Hughner et al., 2007; Thøgersen, 2010; Paul et al., 2016; Yadav & Pathak, 2016). Quantitatively, meta-analyses of sustainable consumption research demonstrate that intentions typically explain only 15-30% of behavioural variance. This is typically lower than 40-50% in many other behavioural domains (Bamberg & Möser, 2007; Scalco et al., 2017). The substantially weaker intention-behaviour correspondence in sustainable consumption implies that unique factors operate in sustainability contexts that disrupt intention translation.

2.2.4 Moderating effect of variables

Moderating variables are third variables that systematically alter the

strength or direction of relationships between predictor variables and outcome variables (Baron & Kenny, 1986; Aiken & West, 1991). These are also referred to as interaction effects, conditional effects, or boundary conditions. In the context of the Theory of Planned Behaviour, moderators represent individual differences or situational characteristics that determine under what circumstances TPB relationships prove strongest or weakest (Conner & Armitage, 1998). Moderation analysis addresses fundamental questions about generalizability and boundary conditions (Frazier et al., 2004; Aguinis et al., 2017).

Trust represents consumers' willingness to rely on organic products, certification systems, retailers, and industry actors despite vulnerability arising from information asymmetry and inability to verify credence attributes (Morgan & Hunt, 1994; Mayer et al., 1995). In organic consumption contexts characterised by credence qualities, trust serves as a critical psychological mechanism that enables purchase decisions in the absence of objective verification capability (Janssen & Hamm, 2012; Smed et al., 2013).

Trust has been proposed to moderate TPB relationships through multiple mechanisms. Chen and Chang (2013) argue that trust amplifies the influence of positive attitudes, subjective norms, and perceived control on purchase intentions. By enhancing confidence that favourable evaluations are justified, social recommendations are reliable, and behavioural enactment will yield expected outcomes. Trust strengthens existing motivational pathways by reducing uncertainty and perceived risk. Alternatively, from a substitution perspective, trust provides direct motivation that reduces dependence on traditional TPB pathways. Pavlou (2003) and Gefen et al. (2003) suggest that trust may operate through substitution mechanisms. It indicates that high-trust individuals rely less on external validation or feasibility assessments because their confidence in products reduces the need for supplementary assurance. Empirical findings regarding trust moderation are mixed and context-dependent. Some research demonstrates positive moderation wherein trust amplifies TPB relationships, while other research demonstrate negative moderation or substitution effects (Chaudhuri & Holbrook, 2001; Vermeir & Verbeke,

2006; Chen & Chang, 2013). The inconsistent patterns may reflect cultural variations, market maturity differences, or measurement variations.

Health consciousness represents a general dispositional orientation characterised by readiness to undertake health-promoting actions, concern about health status, motivation to maintain wellness, and attention to health consequences of behaviours, including consumption choices (Newsom et al., 2005; Michaelidou & Hassan, 2008). Health-conscious individuals exhibit heightened vigilance regarding health threats, greater motivation to engage in preventive behaviours, and stronger cognitive-affective responses to health-relevant information. It proposed to moderate TPB relationships in organic consumption through motivational amplification mechanisms. Michaelidou and Hassan (2008) argue that health-conscious consumers should demonstrate stronger attitude-intention relationships because attitudes toward organic products possess greater personal relevance and motivational force for health-oriented individuals. Similarly, health consciousness might amplify control-intention relationships if health-conscious consumers are more willing to overcome barriers to achieve health-protective goals (Smith & Paladino, 2010). The underlying logic posits that individual difference variables related to core behavioural motivations should condition the strength of relationships between general psychological constructs and specific behavioural intentions (Kraft et al., 2005). Health consciousness may also be moderated by determining which attitude components most strongly influence intentions. Empirical evidence regarding the moderation of health consciousness is inconsistent. Some studies demonstrate significant moderation where health-conscious consumers exhibit stronger TPB relationships, while others find health consciousness operates as a direct predictor without moderating TPB pathways (Magnusson et al., 2003; Newsom et al., 2005; Michaelidou & Hassan, 2008; Paul et al., 2016)

Believed to moderate TPB relationships through efficacy-based motivational mechanisms, Perceived Consumer Effectiveness (PCE) represents individuals' beliefs that their personal consumption choices can meaningfully contribute to solving environmental problems. This reflects environmental self-efficacy at the consumer level (Ellen et al., 1991;

Berger & Corbin, 1992). It encompasses beliefs about both individual impact and collective efficacy. Straughan and Roberts (1999) and Kim and Choi (2005) argue that individuals high in PCE should demonstrate stronger relationships between environmental attitudes (or norms) and behavioural intentions because they believe their actions have consequences. Those low in PCE may exhibit weak attitude-intention links because they doubt personal actions matter. This logic is derived from expectancy-value theories that propose that behaviour is motivated by both outcome desirability and outcome expectancy (Vroom, 1964; Bandura, 1997). PCE might particularly moderate the environmental concern-intention relationship, strengthening the influence of environmental attitudes among individuals who believe consumer actions effectively address environmental problems while weakening this influence among those who view individual consumption as inconsequential (Ellen et al., 1991; Vermeir & Verbeke, 2006). The underlying premise posits that even firmly held environmental values or attitudes fail to motivate behaviour if individuals believe their actions lack impact. It represents a form of learned helplessness or perceived futility (Straughan & Roberts, 1999). Findings regarding PCE moderation are mixed and context-dependent. Some research demonstrates significant positive moderation supporting the theoretical expectation that efficacy beliefs enable value-consistent action (Kim & Choi, 2005; Vermeir & Verbeke, 2006). However, other research finds PCE operates primarily as a direct predictor without significantly moderating TPB relationships. Thus, it represents an independent motivational pathway rather than a conditioning variable (Berger & Corbin, 1992; Roberts, 1996).

2.3 Green Marketing of Organic Products

Consumer preference for green products can be influenced by effective green marketing strategies, such as the promotion of organic products, green branding, green advertising, eco-labelling, and green packaging. Green Marketing is defined as the strategic incorporation of environmental sustainability principles into marketing practices (Dangelico & Vocalelli, 2017). The American Marketing Association (AMA) conceptualises

green marketing as organisational initiatives that systematically integrate environmental considerations into strategic marketing planning, aiming to achieve both consumer satisfaction and societal well-being (Bennett, 1995). This is a proactive strategy for developing and promoting environmentally responsible products, thereby fostering sustainable societal development (Hengboriboon L. et al., 2022; Rajadurai et al., 2021; Tulsi & Ji, 2020).

Kotler (2006) pronounced green marketing as the organisational commitment to developing safe, environmentally sustainable goods and services by employing recyclable packaging solutions, pollution mitigation methods, and energy efficiency optimisation. This approach systematically reduces a product's ecological footprint across its entire lifecycle - from raw material sourcing and production processes to distribution, consumer use, and post-consumer disposal. The emergence of green marketing represents a strategic response to growing environmental concerns (Peattie, 1992). Hart (1995) identified five critical operational dimensions: purchasing, manufacturing, packaging, transport and distribution, and waste disposal. Peattie (1992) developed a conceptual framework for green marketing, defining it as an environmentally conscious approach to marketing that stems from global ecological concerns and sustainable living. This aids in the identification, anticipation and fulfilment of consumer and societal demands while simultaneously achieving profitability and maintaining sustainable business operations (Peattie, 2001). Peattie (2001) emphasised that green marketing represents a fundamental departure from conventional marketing paradigms, requiring distinct conceptual frameworks and implementation strategies to ensure effectiveness (Dangelico & Vocalelli, 2017; Peattie, 2001).

A handful of studies have attempted to explore the link between Green Marketing Strategies and Organic Products. A study by Wu & Lin (2016) explored the influence of green marketing strategies on the business performance of Organic farms in Taiwan. The results showed that the organic farms were able to enhance their corporate image through green marketing strategies, resulting in an improvement in their business

performance. Manongko & Kambey (2018) examined the direct and indirect effects of green marketing on consumers' purchasing decisions for organic products in Manado City, Indonesia. With the interest to purchase as an intervening variable, no influence of green marketing on customers' decisions was observed. This research reveals that green marketing influences purchase decisions through buying interest. Mishra, Stephen and Noel (2023), in their research, explored how elements of the green marketing mix (product, price, place, and promotion) affect consumers' decisions to purchase organic products in India. It highlighted the significant influence of product quality and pricing on the purchase decision for organic products. The research highlighted the increasing consumer awareness of environmental sustainability and the enhancement of organic product sales through effective green marketing strategies (Mishra et al., 2023).

In a study of the Romanian market, Stoica (2021) analysed how organic food brands position themselves through green branding on corporate websites. It identified 18 key attributes used for positioning in the online environment. The positioning bases essentially belong to the category of attributes specific to organic food. The study highlights the existence of specific positioning bases for organic food brands (Stoica, 2021). In another study, Gong et al. (2021) investigated the impact of green brand positioning strategies on consumer perceptions and responses. Through three experimental studies, it was found that green emotional positioning evoked perceptions of warmth, while green functional positioning elicited perceptions of competence. Moreover, high-level construal enhanced the impact of emotional positioning, whereas low-level construal strengthened the effect of functional positioning. The study contributes to green brand management by introducing a brand stereotype-based mechanism and offering actionable insights for tailoring green branding strategies to consumer psychology.

Mansoor et al. (2022) examined the interplay between green advertising and brand evaluation in shaping consumers' green purchasing behaviour for organic skincare products. Their findings revealed that both consumers' green brand knowledge and credibility had a significant direct

and indirect impact on green buying behaviour, with green brand evaluation acting as a mediator. Additionally, the study highlighted the important moderating role of green advertising in enhancing consumers' favourable evaluations of green brands, which in turn positively influenced their purchasing decisions. This underscores the value of credible green advertising in driving consumer behaviour.

Kumar et al. (2024) investigated the impact of green brand image, transparency, and green advertising receptivity on brand trust and consumers' purchase intentions in the Indian market. It also examined how green marketing strategies, including eco-labelling, enhance brand image and consumer trust, ultimately influencing purchase intentions. In a study conducted at Tiruchirappalli District, India, by Usharani & Gopinath (2020), consumer behaviour towards green marketing in the context of organic food products, including aspects such as green packaging, was studied. The findings emphasised that while green marketing is gaining traction, companies need to enhance awareness, improve accessibility, and offer competitive pricing to further influence eco-conscious consumer behaviour.

Venugopalan (2022) examined the growing relevance of green marketing in the context of increasing consumer environmental awareness and the demand for sustainable practices in the food sector. It emphasised how consumer behaviour, government regulations, corporate responsibility, and environmental concerns drive the adoption of green marketing strategies. The study highlighted the increasing consumer shift towards organic products as a direct outcome of green marketing efforts. It revealed that the relationship between green marketing and organic is grounded in the idea that green marketing promotes environmentally friendly, health-conscious choices- qualities inherently associated with organic food. Thus, green marketing acts as a catalyst, enhancing consumer awareness and trust in organic products, which in turn boosts their market demand. Pahuja (2013) explored the emergence, relevance, and practices of green marketing in India, highlighting its importance in promoting environmental sustainability. The study discussed the growing consumer awareness and demand for eco-friendly products, as well as the

role of businesses in adopting sustainable practices. It outlined the principles of green marketing, such as product modification, sustainable packaging, and green advertising, and emphasised the advantages, like enhanced brand image and long-term profitability. However, it also identified challenges like high costs, lack of awareness, and potential consumer scepticism. The paper called for greater corporate responsibility, government support, and consumer education to enhance the effectiveness and impact of green marketing in India.

Research into the effects of green marketing on organic product purchases offers a valuable understanding of sustainable marketing techniques and customer preferences. Research by Verma (2023) offers insight into how eco-consciousness moulds consumer behaviour during organic product purchases by investigating the impact of specific green marketing features on consumer decision-making. The findings lend credence to the idea that green marketing strategies have a significant impact on consumers' propensity to purchase organic goods. Specifically, elements such as eco-labels, environmental claims, and sustainability messages have a significant impact on how consumers feel and what they decide to buy. Providing clear and trustworthy information on the environmental benefits and sustainable practices associated with organic products increases the likelihood that consumers will choose these options. This highlights the importance of environmental consciousness and the drive to make sustainable decisions in consumer behaviour, as consumers increasingly seek products that help create a healthier and more sustainable world. Consequently, firms may improve their ability to connect with their customers by learning how these tactics affect purchasing decisions. Businesses can satisfy environmentally conscious customers, earn their confidence, and encourage their loyalty by aligning marketing tactics with their customers' tastes and values. This can, thus, contribute to a more sustainable future and promote the value of sustainability as a market differentiator. Another study by Usharani and Buvaneswari (2016) provides valuable insights into the role of green marketing in shaping consumer behaviour toward organic food products in Tiruchirappalli district. Their study highlights that increasing consumer awareness of

environmentally friendly practices and the benefits of organic products significantly influences purchase decisions. By employing structured primary and secondary data collection along with statistical analysis, the research demonstrates that consumers are progressively drawn to green products, recognising their positive impact on both personal health and the environment. The study further emphasises that promoting the environmental and social benefits of organic products can strengthen consumer trust, encourage adoption, and enhance market growth. These findings suggest that businesses can effectively engage eco-conscious consumers by aligning their marketing strategies with the consumers' environmental values, thereby fostering loyalty and supporting sustainable consumption practices.

Empirical research across diverse contexts highlights the multifaceted nature of consumer behaviour toward organic products, with green marketing emerging as a central influence. A growing body of international research demonstrates the central role of green marketing strategies in shaping consumer behaviour towards organic products (Neiba & Singh, 2024; de Oliveira Lima et al., 2023; Dung, 2024; Mishra et al., 2023). In India, Neiba and Singh (2024) found that green advertising, green word of mouth, functional and emotional values, eco-labelling, and green organic products significantly influenced organic purchase intentions. Consumer product attachment and environmental consciousness emerged as important moderators. Sharma and Sheravat (2023) investigated the growing significance of green marketing with a particular focus on consumer attitudes and purchase intentions toward organic products. Their study emphasises the relevance of the traditional marketing mix elements (product, price, place, and promotion), along with consumer satisfaction and word of mouth, in influencing purchasing behaviour. Using a structured questionnaire and statistical techniques such as factor analysis, multiple regression, and correlation, the authors identified a rising trend in consumer awareness and growing momentum in the organic product market. The research highlights not only the positive trajectory of organic consumption but also the societal implications of non-organic products, thereby positioning green marketing

as both an environmental and strategic business necessity. The findings reinforce the notion that consumer-driven insights are central to understanding and shaping effective green marketing practices, while also offering practical recommendations for companies seeking to align with sustainability-oriented consumer preferences.

Madduri and Niveditha (2025) emphasised the theoretical underpinnings of green marketing in India, arguing that consumer decisions are shaped not only by awareness and product quality but also by the effectiveness of communication strategies. Their findings highlighted the transformative role of digital platforms, particularly websites and social media forums, in disseminating green marketing messages, thereby engaging consumers with innovative and relatable content (Madduri & Niveditha, 2025). Similarly, a study by Chandrakala (2024) examined the role of green marketing in shaping consumer behaviour toward organic grocery products in Hyderabad, Telangana. The study examined the impact of perceptions of quality, freshness, satisfaction, social influence, and advertising on purchase decisions, employing quantitative techniques such as chi-square tests, correlation coefficients, and regression analysis. The findings reveal a strong positive correlation between favourable consumer impressions and increased organic sales, thereby confirming that perceptions of product quality, satisfaction, and social influence significantly drive purchasing intentions. The study also underscored the importance of advertising in strengthening these relationships, situating green marketing as a critical strategy for promoting sustainable consumption in urban food markets.

Cross-country evidence further illuminates these dynamics. Extending the inquiry beyond India, de Oliveira Lima et al. (2023) examined consumer behaviour in Brazil's Três Rios municipality. They discovered that while health, price, and promotional factors were central, consumers rarely verified the environmental origins of products. This demonstrates that ethical and ecological concerns were secondary to personal and social drivers. More recently, Dung (2024) analysed Vietnamese urban consumers' responses to green marketing awareness surrounding organic vegetables, distinguishing between manufacturer and retailer efforts. The

study employed a mixed-methods approach, utilising survey data from 832 respondents. The study revealed that manufacturer-led green marketing had a stronger effect on purchase intentions than retailer initiatives, primarily through perceived quality and reduced risk perceptions, with income and education serving as moderating factors. Taken together, these studies reinforce the idea that consumer intentions toward organic purchases are not driven solely by ethics or sustainability, but by a blend of marketing cues, perceived value, and socio-demographic conditions. This literature highlights the importance of tailoring green marketing strategies to cultural and contextual realities, while underscoring the need for further investigation into the interplay between psychological, social, and structural drivers of organic consumption.

Hengboriboon et al. (2022) highlighted the mediating role of corporate reputation in examining the impact of corporate social responsibility (CSR) and product image on consumers' intention to purchase organic food in Thailand. A survey of 523 consumers was conducted for the study, and structural equation modelling was performed for analysis. The study found that both product image and corporate reputation significantly influence purchase intentions, with CSR initiatives indirectly enhancing consumer trust and confidence in organic products. The research highlights that green marketing extends beyond product-level attributes, such as quality and freshness. It also encompasses corporate-level strategies that communicate environmental responsibility and ethical practices. By linking CSR and brand credibility to sustainable consumption, the study demonstrates that organisational reputation can be a critical driver of organic food adoption. The findings, however, are context-specific. This advocates the need for further research to generalise findings across different consumer segments and cultural settings.

Examining the purchase behaviour of young consumers toward organic food in Vietnam, Pham et al. (2018) highlighted key factors that shape pro-environmental consumption in emerging markets. The study found that food safety concerns, health consciousness, and media exposure to food-related messages strongly influenced positive attitudes toward organic products, which in turn increased purchase intentions. In contrast,

environmental concern and food taste were less predictive of consumer attitudes. At the same time, perceived barriers, such as high prices, limited availability, inadequate labelling, and additional time requirements, significantly impeded both attitudes and intentions to purchase. These findings depict the critical role of targeted green marketing strategies that emphasise health and safety benefits while addressing barriers to adoption. By providing actionable insights, the study informs marketers and policymakers on how to effectively promote sustainable consumption among young, eco-conscious consumers in developing economies (Pham et al., 2018). A similar study was conducted in China, highlighting the mediating roles of green perceived value and green trust (Li & Shan, 2025). Li and Shan (2025) examined the mechanism through which green advertising influences consumers' purchase intentions for organic foods in China.

Using the Stimulus-Organism-Response (SOR) framework, the study collected data from 447 consumers and employed SPSS and AMOS for structural analysis. The results revealed that receptivity to green advertising significantly affects purchase intentions both directly and indirectly through enhanced perceptions of green value and consumer trust. The findings suggest that green advertising conveys environmental messages while also strengthening psychological and behavioural drivers that motivate consumers to adopt organic products. By demonstrating the dual mediation mechanism, the study provides both theoretical support and practical guidance for businesses seeking to optimise green marketing strategies, enhance consumer trust, and foster value recognition.

2.4 Problem statement and research Gap

Despite the growing environmental awareness and increasing consumer interest in Organic Products, the market share of such products remains relatively low in many regions. Understanding the psychological and behavioural factors that influence consumer decisions is essential for promoting Organic consumption. While the TPB has been widely used to predict consumer intentions and behaviour, its application in the context of Organic Product consumption, in general, and in Goa, remains vastly

underexplored. No study has specifically incorporated post-purchase factors, such as Consumer Satisfaction and Loyalty, into the TPB to examine consumer behaviour towards organic products. Moreover, although green marketing strategies are designed to influence consumer behaviour, their effectiveness in shaping intentions and attitudes towards Organic Products in Goa remains ambiguous. Additionally, there is limited empirical evidence on the mediating roles of Health Consciousness (HC), Perceived Consumer Effectiveness (PCE), and Trust (TRUST) within the TPB framework. Addressing these dimensions can offer a more comprehensive understanding of the drivers behind Organic Product consumption and the potential for cultivating long-term consumer relationships.

The literature lacks models that incorporate extended TPB components, the impact of green marketing strategies, and psychological mediators, thereby providing a robust explanation of the behaviour of organic consumers. This study seeks to bridge these gaps by proposing and empirically testing an extended TPB model. This extended model incorporates Satisfaction and Loyalty as post-purchase variables. It also studies the mediation of HC, PCE, and TRUST in TPB. The study contributes to the development of effective green marketing strategies that directly strengthen consumers' purchase intentions, resulting in favourable consumer behaviour towards Organic Products in Goa. Therefore, the study shall contribute to both the theory and practice of consumer behaviour research and sustainable marketing.

2.5 Significance of the Study

Understanding consumer behaviour in the context of Organic Products has become increasingly important in today's sustainability-focused marketplace. With rising environmental concerns and health awareness, consumers are increasingly showing a preference for organic alternatives. However, converting this interest into consistent purchase behaviour remains a challenge. This gap presents an opportunity to explore how green marketing strategies, such as attitude towards organic products, eco-labelling, green branding, green advertising, and green packaging, can

effectively influence consumer purchase intentions. The study addresses the multidimensional nature of organic consumer decision-making by anchoring the investigation in the TPB and extending it with relevant psychological constructs such as HC, PCE, and Trust. It seeks to provide a deeper understanding of how internal motivations and external marketing cues together shape consumer behaviour towards Organic Products.

The study holds both theoretical and practical significance. Theoretically, it contributes by advancing a modified TPB framework that includes post-purchase variables and examines the mediating role of psychological factors, which are often overlooked in mainstream TPB studies. This enriched model offers a more comprehensive lens to examine not just consumer intentions but the entire behaviour cycle from awareness to brand commitment. Practically, the findings will offer valuable insights to marketers, brand strategists, and policymakers on designing credible and effective green marketing campaigns that resonate with consumer values and enhance brand loyalty. By bridging the gap between consumer psychology and green marketing tactics, the study has the potential to aid in crafting strategies that foster sustainable consumption habits, thereby contributing to environmental sustainability and long-term market growth for Organic Products.

2.6 Objectives of the Study

The study's primary aim is to further the understanding of Organic Product Purchase Behaviour (OPPB) of consumers in the state of Goa. The study is designed to achieve the following objectives:

1. To identify the impact of psycho-social factors on Consumer Behaviour towards Organic Products in the state of Goa using TPB.
 - a. To analyse the influence of Normative Social Influence (NSI) and Value-Expressive Social Influence (VESI) on Subjective Norms (SN);

- b. To examine the influence of Self-Transcendence (STC), Self-Enhancement (SEC), and Environmental Concern (EC) on Attitude Towards Organic Product Purchase (ATOPP);
 - c. To examine the effect of Control Belief (CB) and Control Strength (CS) on Perceived Behavioural Control (PBC);
 - d. To examine the relationship between Subjective Norms (SN), Attitude Towards Organic Product Purchase (ATOPP) and Perceived Behavioural Control (PBC) on Organic Product Purchase Intention (OPPI);
 - e. To examine the impact of Organic Product Purchase Intention (OPPI) on Organic Product Purchase Behaviour (OPPB);
- 2. To study the post-purchase impact of Organic Product Purchase Behaviour (OPPB) by extending the TPB framework to include satisfaction and loyalty.
 - a. To analyse the impact of Organic Product Purchase Behaviour (OPPB) on Organic Product Satisfaction (OPS);
 - b. To analyse the impact of Organic Product Satisfaction (OPS) on Organic Product Loyalty (OPL);
- 3. To examine the influence of Green Marketing Strategies on the Organic Product Purchase Behaviour (OPPB) of consumers in Goa.
 - a. To examine the impact of Attitude towards Organic Products (AOP) on Organic Product Purchase Intention (OPPI);
 - b. To examine the impact of Green Branding (GB) on Organic Product Purchase Intention (OPPI)

- c. To study the effect of Green Advertising (GA) on Organic Product Purchase Intention (OPPI)
 - d. To examine the impact Eco-Labeling (EL) on Organic Product Purchase Intention (OPPI)
 - e. To study the impact of Green Packaging (GP) on Organic Product Purchase Intention (OPPI)
4. To study the moderating effect of Health Consciousness (HC), Perceived Consumer Effectiveness (PCE), and Trust (TRUST) on the relationships in the TPB.
- a. To examine the moderating effect of Health Consciousness (HC), Perceived Consumer Effectiveness (PCE), and Trust (TRUST) on the relationship between Subjective Norms (SN) and Organic Product Purchase Intention (OPPI).
 - b. To examine the moderating effect of Health Consciousness (HC), Perceived Consumer Effectiveness (PCE), and Trust (TRUST) on the relationship between Attitude Towards Organic Product Purchase (ATOPP) and Organic Product Purchase Intention (OPPI).
 - c. To examine the moderating effect of Health Consciousness (HC), Perceived Consumer Effectiveness (PCE), and Trust (TRUST) on the relationship between Perceived Behavioural Control (PBC) and Organic Product Purchase Intention (OPPI).

2.7 Hypothesis for the study

Based on the objectives, the Hypotheses for objective 1 are as follows:

H_{1ai}: Normative Social Influence (NSI) has a positive and significant effect on Subjective Norms (SN).

H_{1aii}: Value-Expressive Social Influence (VESI) has a positive and

significant effect on Subjective Norms (SN).

H_{1bi}: Self-Transcendence (STC) has a positive and significant effect on Attitude Towards Organic Product Purchase (ATOPP).

H_{1bii}: Self-Enhancement (SEC) has a positive and significant effect on Attitude Towards Organic Product Purchase (ATOPP).

H_{1biii}: Environmental Concern (EC) has a positive and significant effect on Attitude Towards Organic Product Purchase (ATOPP).

H_{1ci}: Control Belief (CB) has a positive and significant effect on Perceived Behavioural Control (PBC).

H_{1cii}: Control Strength (CS) has a positive and significant effect on Perceived Behavioural Control (PBC).

H_{1di}: Subjective Norms (SN) positively influence Organic Product Purchase Intention (OPPI).

H_{1dii}: Attitude Towards Organic Product Purchase (ATOPP) positively influences Organic Product Purchase Intention (OPPI).

H_{1diii}: Perceived Behavioural Control (PBC) positively influences Organic Product Purchase Intention (OPPI).

H_{1e}: Organic Product Purchase Intention (OPPI) positively influences Organic Product Purchase Behaviour (OPPB).

The hypotheses for objective 2 are as follows:

H_{2a}: Organic Product Purchase Behaviour (OPPB) positively influences Organic Product Satisfaction (OPS).

H_{2b}: Organic Product Satisfaction (OPS) positively influences Organic Product Loyalty (OPL).

The hypotheses for objective 3 are as follows:

H_{3a}: Attitude Towards Organic Products (AOP) positively influences Organic Product Purchase Intention (OPPI).

H_{3b}: Green Branding (GB) positively influences Organic Product Purchase Intention (OPPI).

H_{3c}: Green Advertising (GA) positively influences Organic Product Purchase Intention (OPPI).

H_{3d}: Eco Labelling (EL) positively influences Organic Product Purchase Intention (OPPI).

H_{3e}: Green Packaging (GP) positively influences Organic Product Purchase Intention (OPPI).

The hypotheses for objective 4 are as follows:

H_{4a}: Health Consciousness (HC), Perceived Consumer Effectiveness (PCE), and Trust (TRUST) significantly moderate the relationship between Subjective Norms (SN) and Organic Product Purchase Intention (OPPI).

H_{4b}: Health Consciousness (HC), Perceived Consumer Effectiveness (PCE), and Trust (TRUST) significantly moderate the relationship between Attitude Towards Organic Product Purchase (ATOPP) and Organic Product Purchase Intention (OPPI).

H_{4c}: Health Consciousness (HC), Perceived Consumer Effectiveness (PCE), and Trust (TRUST) significantly moderate the relationship between Perceived Behavioural Control (PBC) and Organic Product Purchase Intention (OPPI).

2.8 Scope of the study

The current study is limited to individuals aged 18 years or older who have prior experience purchasing organic products. The age threshold ensures that respondents possess decision-making autonomy, purchasing power, and sufficient cognitive maturity to evaluate complex sustainability considerations underlying organic product choices. The requirement of prior purchase experience ensures that respondents have practical knowledge of organic products, enabling them to provide informed responses regarding their attitudes, intentions, and behaviours rather than

hypothetical speculation. The geographical focus of the research is limited to the state of Goa, India, representing an emerging market context characterised by growing environmental awareness, increasing organic product availability, and evolving sustainable consumption patterns. Goa's unique characteristics provide a relevant context for examining organic product adoption in urban and semi-urban settings within India.

The study is grounded in the Theory of Planned Behaviour (TPB) (Ajzen, 1991). The theoretical framework extends traditional TPB. The study employs complementary structural models to examine the different pathways to organic product purchase behaviour. The first model examines the influence of psycho-social factors on organic product purchase behaviour (OPPB) through the application of extended TPB. This model further examines post-purchase outcomes emerging from actual purchase behaviour. The moderating roles of trust, health consciousness, and perceived consumer effectiveness are evaluated within this model (referred to as Model 3 in this study) to identify boundary conditions affecting the TPB relationship strength. The second model investigates the consumer attitudes toward green marketing strategies and their subsequent impact on organic product purchase intentions. This model examines how select dimensions of green marketing influence purchase intentions and ultimately drive purchase behaviour. While the first model emphasises the psychological and social foundations of organic consumption, grounded in TPB theory, the second model emphasises the influence of marketing communication. Further, the moderating roles of environmental concern, perceived consumer effectiveness, perceived barriers, and demographic characteristics have been evaluated to provide a comprehensive understanding of consumer decision-making in the context of sustainable consumption.

Within these boundaries, the study contributes to theoretical understanding by validating and extending TPB in an emerging market context. The study employs cross-sectional data collection, capturing a single time point. It contributes to a practical understanding by identifying the psychological factors, social influences, marketing strategies, and moderating conditions that most strongly influence organic product

adoption. It relies on self-reported measures of behaviour rather than objective transaction data, loyalty card records, or observational studies.

2.9 Functional Definitions

Organic production is often associated with different methods and standards from the beginning of the Organic movement. Defining ‘Organic Products’ is thus necessary. The numerous terms used in the context of the study and the meaning implied are used in this section.

‘Organic Products’ refer to those produced under a system of indigenous Organic agriculture. It includes fruits, vegetables, animal products and processed food produced without the use of drugs, hormones, GMOs or synthetic chemicals, and not subjected to ionising radiations to enhance shelf life. Similarly, the animal feed should be grown and cultivated without the use of pesticides, herbicides or inorganic fertilisers (Meier et al., 2015). A sizeable portion of the Organic farmland is still uncertified. The study includes both certified and uncertified Organic Products, as consumers may neglect the certification if the credibility of the seller/farmer is well-established.

The Attitude Toward Organic Product Purchase (ATOPP) refers to the overall evaluative judgment that consumers hold regarding the act of purchasing organic products (Ajzen, 1991; Fishbein & Ajzen, 2010). Attitudes reflect cognitive beliefs about the consequences of purchasing organic products, affective responses to organic purchasing and symbolic meanings associated with the behaviour

Subjective Norms (SN) refers to the perceived social pressure to perform or refrain from performing organic product purchasing behaviour, reflecting beliefs about what important referent individuals or groups think one should do (Ajzen, 1991; Fishbein & Ajzen, 2010). Subjective norms encompass both injunctive norms and descriptive norms.

Perceived Behavioural Control (PBC) is the extent to which individuals believe they possess the capability, resources, and opportunities necessary to successfully perform organic product purchasing behaviour (Ajzen,

1991, 2002). PBC encompasses both control strength and control beliefs.

Organic Product Purchase Intention (OPPI) implies the conscious decision, plan, or commitment to purchase organic products in the future. It underscores the motivational strength directing behaviour toward organic product acquisition (Ajzen, 1991; Fishbein & Ajzen, 2010). Purchase intentions represent the immediate antecedent of behaviour in the TPB framework. It serves as the proximal predictor through which attitudes, subjective norms, and perceived behavioural control influence actual behaviour.

Organic Product Purchase Behaviour (OPPB) refers to the actual frequency, recency and quantity of organic product purchases made by consumers within a specified time period (Ajzen, 1991). This represents the ultimate dependent variable in the TPB framework. It is the behavioural outcome that psychological and social antecedents ultimately seek to explain and predict.

Self-Transcendence (STC) is a fundamental value orientation emphasising concern for the welfare of others and nature, prioritising collective interests over individual self-interest (Schwartz, 1992, 1994). Self-transcendence encompasses both biospheric values and altruistic values. The former indicates concern for ecological constituents, while the latter highlights concern for other aspects of societal well-being.

Self-Enhancement (SE) is a value orientation emphasising personal success, achievement, dominance, and social status, prioritising individual advancement and recognition (Schwartz, 1992, 1994). Self-enhancement encompasses power values and achievement values.

Environmental Concern (EC) refers to the degree to which individuals express worry about environmental degradation, demonstrate awareness of ecological problems, and exhibit affective connection to the natural environment (Fransson & Gärling, 1999; Dunlap et al., 2000). Environmental concern represents a more proximal cognitive-affective orientation toward environmental issues compared to fundamental value orientations.

Normative Social Influence (NSI) is the psychological process wherein individuals conform to perceived social expectations to gain social approval, avoid disapproval, or maintain positive social relationships (Deutsch & Gerard, 1955; Cialdini & Goldstein, 2004). NSI reflects compliance motivations driven by instrumental concerns about the social consequences of behaviour.

Value-Expressive Social Influence (VESI) refers to the psychological process by which individuals adopt behaviours that express their values, communicate their identity, and signal group membership to relevant reference groups (Kelman, 1958; White & Dahl, 2006). VESI reflects identification motivations driven by desires for self-expression and identity communication through consumption choices.

Control Strength (CS) is the self-efficacy component of perceived behavioural control. It underscores individuals' confidence in their personal capability to successfully perform organic product purchasing despite potential obstacles or challenges (Ajzen, 2002; Bandura, 1997).

Control Beliefs (CB) signifies the controllability component of perceived behavioural control. It portrays individuals' beliefs about whether external facilitating conditions, resources, and opportunities necessary for purchasing organic products are present and accessible (Ajzen, 2002; Terry & O'Leary, 1995). The term emphasises situational factors external to the individual.

Attitude Toward Green Advertising (AGA) refers to consumers' overall evaluative judgment regarding advertising communications that emphasise environmental benefits, sustainability attributes, or the ecological responsibility of organic products (Polonsky et al., 2010; Hartmann & Apaolaza-Ibañez, 2012).

Attitude Toward Green Branding (AGB) encompasses the consumers' overall evaluative judgment regarding brand positioning that emphasises environmental responsibility, corporate sustainability commitment and ecological values (Hartmann et al., 2005; Chen & Chang, 2012).

Attitude Toward Green Packaging (AGP) refers to the consumers' overall evaluative judgment regarding environmentally responsible packaging innovations, including biodegradable materials, recyclable containers, minimal packaging and sustainable sourcing (Magnier & Cri , 2015; Steenis et al., 2017).

Attitude Toward Eco-Labeling (AEL) measures Consumers' overall evaluative judgment regarding third-party certifications, organic labels, and environmental certification schemes that verify organic production standards and authenticate environmental claims (Th gersen et al., 2010; Grunert et al., 2014).

Attitude Toward Organic Products (AOP) refers to consumers' overall evaluative judgment regarding organic products, specifically emphasising the absence of synthetic pesticides, chemical residues, and harmful agricultural inputs (Magnusson et al., 2003; Williams & Hammitt, 2001).

Organic Product Satisfaction (OPS) is the consumers' overall evaluation of their consumption experience with organic products, emerging from comparison between pre-purchase expectations and post-consumption performance (Oliver, 1980, 1999).

Organic Product Loyalty (OPL) refers to the commitment of consumers to consistently repurchase organic products, their preference for organic alternatives over conventional options, resistance to competitive appeals, and willingness to recommend these products to others (Oliver, 1999; Zeithaml et al., 1996).

Trust (TRUST) predicts consumers' confidence in the authenticity, reliability, and integrity of organic products, certification systems, retailers, and the organic industry as a whole, thereby reducing perceived risk and facilitating purchase decisions despite information asymmetry (Mayer et al., 1995; Morgan & Hunt, 1994).

Health Consciousness (HC) refers to a general dispositional orientation characterised by concern about health, motivation to maintain wellness, engagement in health-protective behaviours, and attention to health

consequences of consumption choices (Newsom et al., 2005; Michaelidou & Hassan, 2008). Health consciousness represents a stable individual difference variable reflecting the psychological importance of health in guiding behaviour.

Perceived Consumer Effectiveness (PCE) implies the belief that individual consumer choices meaningfully contribute to solving environmental problems. It indicates efficacy beliefs regarding the impact of personal consumption decisions on collective environmental outcomes (Ellen et al., 1991; Berger & Corbin, 1992). It is a measure of environmental self-efficacy at the consumer level, seeking to address whether individuals believe their purchasing behaviour matters for environmental protection.

Chapter 3

Research Methodology

3.1 Introduction

Research methodology outlines the steps adopted by a researcher in studying a research problem, along with the rationale behind them. It indicates the general pattern observed to obtain the empirical data for the problem under investigation. This chapter presents the details of the research methodology adopted for the study, including the research design, sampling technique, description of the tools, and procedures for data collection and analysis.

3.2 Research Design and Approach

A research design refers to the structured plan or framework that outlines the conditions for collecting and analysing data in a way that ensures the findings are relevant to the research objectives while maintaining efficiency and economy in the overall process (Selltiz et al., 1959). It is, therefore, focused on the systematic collection and analysis of data to address research questions and fulfil the objectives of a study (Naik, 2019). A research approach refers to a systematic and structured set of procedures employed to obtain reliable and meaningful information (Polit & Beck, 2004). This study aims to examine the factors influencing consumers' behaviour toward organic products. To gain a comprehensive understanding of consumer decision-making, both qualitative and quantitative research approaches were employed.

3.3 Qualitative Research

A qualitative research approach was employed to gain a deeper understanding of consumer attitudes and behaviours regarding organic product purchases. Specifically, content analysis was utilised to examine

existing literature and secondary data sources, including academic articles, industry reports, and online consumer reviews. This method allowed for the identification of recurring themes and patterns related to factors influencing organic product purchase behaviour. By systematically analysing these sources, the study aimed to uncover the underlying motivations and barriers that influence consumer decisions regarding organic product consumption.

3.4 Quantitative Research

Quantitative research involves the application of statistical tools and techniques to quantified data (Malhotra & Das, 2025). A quantitative research design was subsequently adopted to test the proposed relationships in the structural models. The survey method was used to collect data from consumers. The e-questionnaires were administered as part of the quantitative study. The measurement scales were adopted from prior studies with suitable modifications to fit the context of organic products. Data analysis, including exploratory factor analysis, confirmatory factor analysis and measurement model analysis, was then performed using Python in Google Colab.

3.5 Measurement Instruments

Measurement tools comprise a number of items that are integrated into a composite index to measure levels of theoretical constructs that are not directly observable (Swan et al., 2023; Sterner et al., 2024; DeVellis, 2016). In the present study, existing scales were considerably adapted to suit the specific context of OPPB in India.

This adaptation process followed a systematic, evidence-based approach that balanced methodological rigour with contextual relevance. First, the conceptual and contextual appropriateness of each item was evaluated to ensure that it meaningfully reflected the target population's perceptions and behaviours (Ambuehl & Inauen, 2022; Beaton et al., 2000). Next, cognitive validity assessments were conducted to ensure that any modifications in wording or phrasing did not introduce ambiguity or bias, thereby maintaining the integrity of the measurement (Pillet et al., 2023).

A streamlined yet rigorous validation process was then applied, incorporating exploratory factor analysis and reliability testing, to confirm that the adapted scales were both psychometrically sound and practical for the study (Du, 2024). All modifications, minor revisions to statements, contextual adjustments, and the addition of items to capture locally relevant aspects of green consumption were documented in accordance with established frameworks for transparency in scale adaptation (Stewart et al., 2012; Stirman et al., 2019). The measurement instruments incorporated in this research are grounded in theory and applicable to the context. Thus, it serves as a solid basis for observing the consumers' OPPB in the region.

Through this careful and reflective approach, the measurement instruments used in this study are theoretically grounded, contextually meaningful, and reliable, providing a robust foundation for examining consumers' organic product purchase behaviour in the study area.

3.1 Unit of Analysis

This study examines the factors that influence consumers' OPPB in Goa, India. The unit of analysis is individual consumers over 18 years of age who have purchased organic products. Consumers aged 18 years or above were chosen because, at this stage, individuals generally possess autonomy in decision-making and sufficient experience to evaluate multiple product options (Arnett, 2000; Reyna & Farley, 2006). They are more likely to consider environmental and sustainability factors while making purchasing choices (Juwaheer et al., 2012; Nguyen & Johnson, 2020). Moreover, younger individuals, particularly minors, often lack the cognitive understanding necessary to comprehend complex green and sustainability-related issues (Chan R. Y., 2001).

3.2 Sources of Data Collection

The study employed a mixed-methods approach, using both primary and secondary data. For the qualitative component, a comprehensive literature review was conducted to identify theoretical constructs, prior scales, and contextual factors relevant to OPPB. The literature review helped clarify

concepts, generate measurement items, and refine the study framework based on the TPB (Fishbein & Ajzen, 1975; Ajzen, 1991). This approach ensured that the study was grounded in established theory while capturing the contemporary context of organic consumption in India, a critical step for contextual validity in TPB applications (Hinkin, 1998; DeVellis, 2016; Ajzen, 2006).

The primary data was collected via a structured e-questionnaire shared electronically with respondents. A preliminary screening question ensured that only users of organic products participated. The questionnaire consisted of three sections:

Section A: Demographic profile of the respondents.

Section B: Psycho-social factors influencing OPPB based on the revised TPB.

Section C: Impact of green marketing strategies on OPPB.

All items were measured using a five-point Likert scale, incorporating a combination of closed-ended and multiple-choice questions.

3.3 Sampling

The sampling technique employed was purposeful sampling (Palinkas et al., 2015; Tongco, 2007). The purposive criterion was crucial; it utilised a mandatory screening question about organic products to ensure participation of ‘information-rich cases’ to address the study's objectives (Patton, 2015; Stratton, 2024). The use of a non-probability method is justified in consumer behaviour studies concerning niche markets, like organic products. Due to the relatively low consumption rate compared to the general population, the random sample would be inefficient and yield a high percentage of irrelevant responses for niche markets (Etikan et al., 2015). This was necessary for testing the psychological drivers and for enhancing the precision of hypothesis testing (Bougie & Sekaran, 2019; Memon et al., 2025; Andrade, 2020).

The sample size for the present study was determined using the formula

proposed by Krejcie and Morgan (1970). Although old, it is one of the most widely referred to in the field of social research (Memon et al., 2025; Bartlett et al., 2001; Dang et al., 2024; Bichi et al., 2019; Yu et al., 2024; Uakarn et al., 2021; Bagonza et al., 2019; Memon et al., 2020; Kakumbi & Phiri, 2022). Accordingly, the following formula was used for estimating sample size with a 95% confidence level and a 0.05 margin of error:

$$S = \frac{X^2 \cdot N \cdot P(1 - P)}{d^2(N - 1) + X^2 \cdot P(1 - P)}$$

Where,

S = Required sample size

X² = Table value of chi-square for 1 degree of freedom at the desired confidence level (3.841)

N = Population size

P = Population proportion (assumed to be 0.50 for maximum sample size)

d = Degree of accuracy expressed as a proportion (0.05)

Using the above formula, for an unknown population, the resultant value is 384. For this study, a sample of 778 is considered for analysis to reflect the heterogeneity and complexity of the actual, unknown population (Sathyanarayana et al., 2024; Hanley & Moodie, 2011; Althubaiti, 2022).

3.4 Development of Conceptual Models

This research aims to examine the factors influencing consumers' OPPB within the framework of the extended TPB. The review of literature provided an in-depth understanding of prior research, revealing that consumers' purchase decisions are shaped by a combination of psychosocial factors and green marketing strategies. Based on these insights, the present study proposes two structural models. The first model investigates the influence of key psycho-social constructs on Purchase Intention (PI) and its subsequent effect on Organic Product Purchase Behaviour (OPPB), Organic Product Satisfaction (OPS) and Organic Product Loyalty (OPL). The second model examines the determinants of

consumer attitude toward green marketing strategies on the OPPB of consumers. The goal of these models is to provide a holistic understanding of the psychological and marketing drivers underlying OPPB.

3.4.1 Influence of Psycho-Social Factors on Organic Product Purchase Behaviour

According to the TPB, behavioural intention serves as a key predictor of actual behaviour (Ajzen, 1991). Therefore, behavioural intention in the study is determined by three central components: attitude, subjective norm and perceived behavioural control. Specifically, attitude is shaped by behavioural beliefs and outcome evaluations; subjective norm arises from normative beliefs and motivation to comply; and control beliefs and perceived control strength influence perceived behavioural control (Ajzen, 1991; Ajzen, 2002; Fishbein & Ajzen, 2010).

Building upon this theoretical foundation, the present study extends the TPB framework to examine the psycho-social determinants influencing OPPB. The model investigates the influence of Self-Enhancement (SEC), Self-Transcendence (STC), and Environmental Concern (EC) on Attitude Towards Organic Product Purchase (ATOPP) (Schwartz, 1992; Kim et al., 2018; Dorce et al., 2021). The influence of Normative Social Influence (NSI) and Value-Expressive Social Influence (VESI) on the Subjective Norm (SN) is also studied (Kelman, 1958; Lim et al., 2017; Sarabia-Sánchez et al., 2024; George et al., 2025). The study examines the impact of Control Belief (CB) and Control Strength (CS) on Perceived Behavioural Control (PBC) (Ajzen, 2002; Paul & Rana, 2012).

The study then employs core tenets of TPB to examine the combined influence of SN, ATOPP, and PBC on Organic Product Purchase Intention (OPPI) (Ajzen, 1991; Tarkiainen & Sundqvist, 2005). The extended model incorporates post-purchase outcomes by evaluating the influence of OPPB on Organic Product Satisfaction (OPS) (Oliver, 1980). Finally, the impact of OPS on ultimate Organic Purchase Loyalty is assessed (OPL) (Zeithaml et al., 1996; Joshi & Rahman, 2015). The graphical representation of the conceptual model is depicted in Figure 3.1.

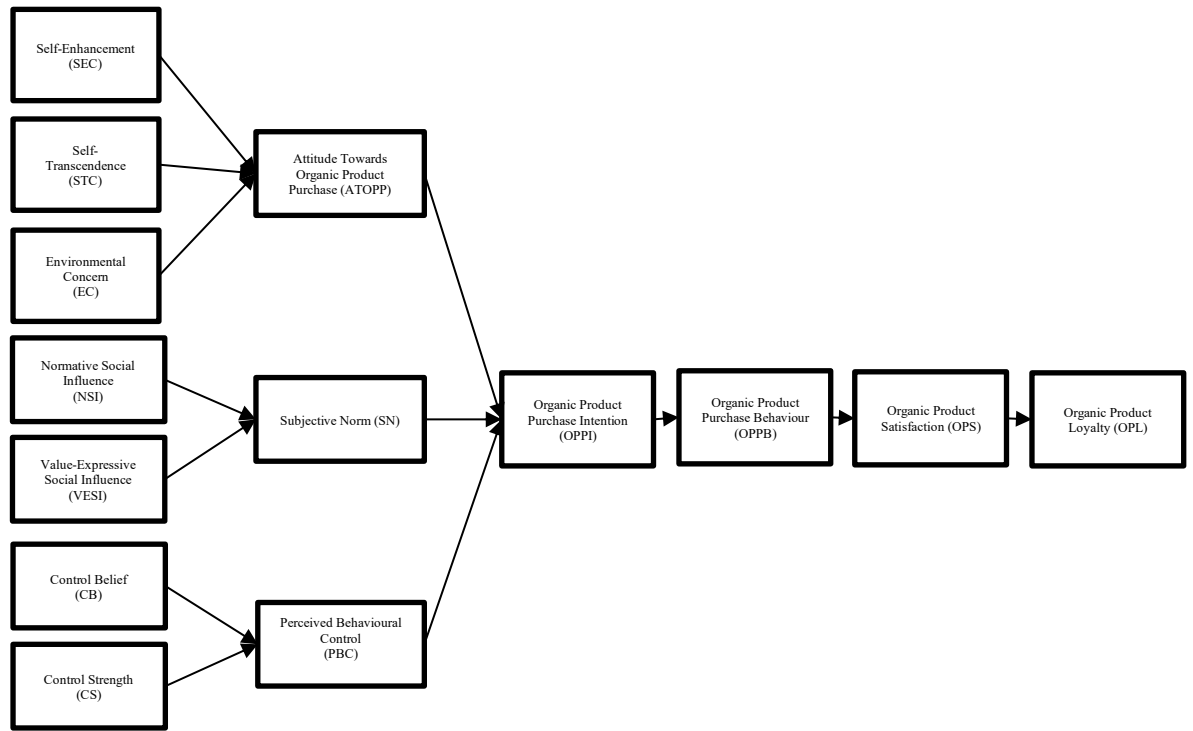


Figure 3.1: Conceptual Model for Influence of Psycho-Social Factors On OPPB

Source: Primary Data

3.4.2 Influence of Green Marketing Strategies on Organic Product Purchase Intention

Despite the extensive literature on green marketing and consumer purchase behaviour, studies examining the impact of attitude towards green marketing strategies on OPPB remain low. This is particularly true in the context of developing economies such as India (Paul et al., 2016; Peattie, 2010). While Indian consumers increasingly express positive attitudes and awareness toward environmental issues and green products, this sentiment often fails to translate into actual purchase behaviour due to practical and psychological barriers (D'Souza et al., 2006; Chaudhary & Bisai, 2018; Mehta & Chahal, 2021; Sharma A. P., 2021; Antony, 2025; Nielsen, 2025). Several studies have emphasised the persistent gap between consumer environmental awareness and actual purchase behaviour, thus suggesting the need for a more profound and comprehensive understanding of how marketing factors shape green consumption patterns (Biswas & Roy, 2015; Yadav & Pathak, 2017;

Nguyen et al., 2019; Mehta & Chahal, 2021; Kaur et al., 2022). Thus, this study aims to address this gap by examining the determinants and effects of consumer attitudes toward green marketing strategies on the OPPB.

In the present research, Green Marketing Strategies (GMS) are conceptualised as a multidimensional construct comprising five key dimensions: Attitude towards Organic Products (AOP), Attitude towards Green Branding (AGB), Attitude towards Green Advertising (AGA), Attitude towards Eco-Labelling (AEL), and Attitude towards Green Packaging (AGP) (Kaur et al., 2022; Majeed et al., 2022; Nguyen-Viet, 2022; Wijekoon & Sabri, 2021). These dimensions collectively reflect how firms communicate environmental responsibility and how consumers interpret and respond to such initiatives (Moser, 2015; Nguyen-Viet, 2022). While earlier studies have explored related consumer perceptions, such as perceived value, trust, scepticism, and credibility, their application within the context of green or organic product marketing remains underexplored (Chen, 2010). This is particularly true in emerging markets, where green consumerism is still in its early stages of development (Biswas & Roy, 2015; Liobikienė & Bernatoniene, 2017; Testa et al., 2020; Pereira & Joseph, 2024).

This research investigates the role of individual green marketing strategies on OPPI and also examines the influence of consumers' attitudes toward these strategies on their purchase decisions (Joshi & Rahman, 2015; Liobikienė & Bernatoniene, 2017; Wijekoon & Sabri, 2021). The conceptual model posits that consumers' AOP, GB, GA, EL, and GP significantly influence OPPI, which in turn affects OPPB (Ajzen, 1991; Joshi & Rahman, 2015; Kaur et al., 2022; Nguyen-Viet, 2022). As a result, this framework captures the dynamic interaction between marketing communications, consumer cognition, and behavioural outcomes. This will further contribute to a more integrated understanding of organic product consumption behaviour (Fishbein & Ajzen, 1975; Majeed et al., 2022). The graphical representation of the conceptual model is depicted in Figure 3.2.

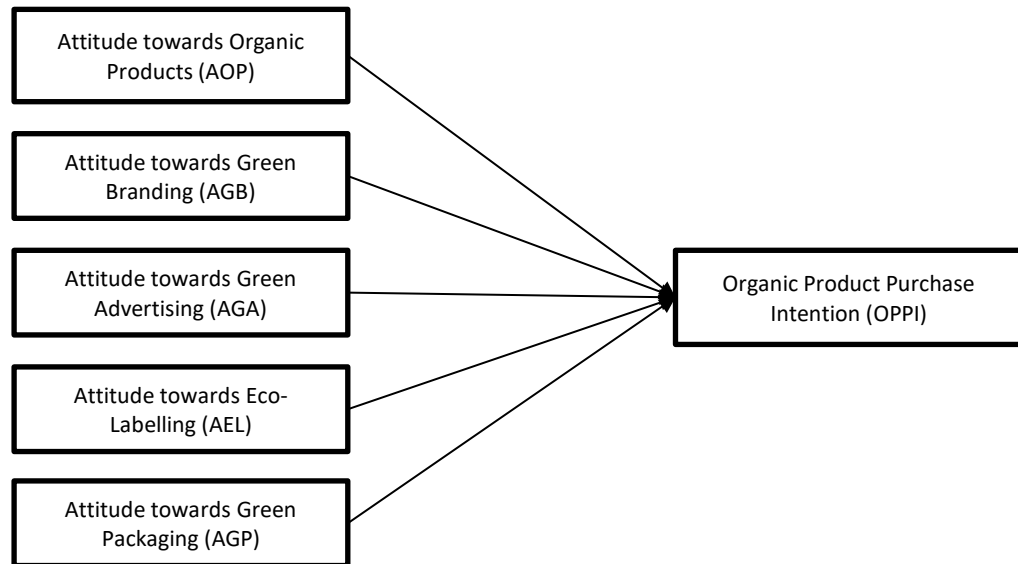


Figure 3.2: Conceptual Model for Influence of Green Marketing Strategies on OPPI

Source: Primary Data

3.4.3 Moderating Role of Health Consciousness, Perceived Consumer Effectiveness and Trust

To enhance the explanatory power of the extended TPB, the study investigates the moderating effects of Health Consciousness (HC), Perceived Consumer Effectiveness (PCE), and Trust on the relationships between the core TPB constructs (SN, ATOPP, PBC) and OPPI (Ajzen, 1991; Scalco et al., 2017). The literature supports the inclusion of these factors. Literature indicates that HC strengthens the link between pro-environmental attitudes and intentions (Dagher et al., 2015; Göncz & Tian, 2020; Prakash et al., 2023). PCE boosts the translation of consumer attitudes into behavioural intentions for ethical goods (Kumar et al., 2022; Park-Poaps & Han, 2025). Trust mitigates the uncertainty associated with credence qualities of organic food, thereby directly moderating the influence of TPB variables on purchase intent (Canova et al., 2020; Cao et al., 2024; Arslan, 2025). Furthermore, the integration of these moderators addresses the mixed findings concerning the main effects of core constructs (Paul et al., 2016).

The graphical representation of the conceptual model is depicted in Figure

3.3.

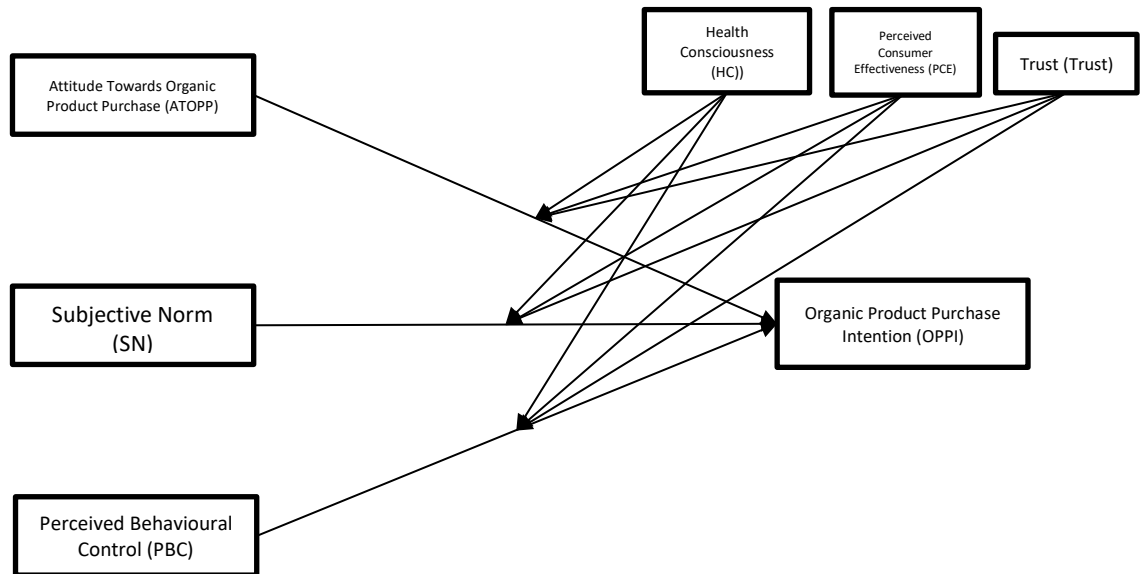


Figure 3.3: Conceptual Model for Moderating Role of Health Consciousness (HC), Perceived Consumer Effectiveness (PCE) and Trust (Trust) between SN, AOPP and PBC and OPPI

Source: Primary Data

3.5 Development of Measurement Instrument

A five-section structured questionnaire was developed for this study. The first section assessed consumers' OPPI. The second section measured psycho-social factors influencing OPPB based on the extended Theory of Planned Behaviour. This section operationalised the constructs of self-transcendence, self-enhancement, environmental concern, normative social influence, value-expressive social influence, control belief, control strength, attitude towards organic product purchase, subjective norms, perceived behavioural control, and perceived consumer effectiveness.

The next section focused on the determinants of consumer attitude towards green marketing strategies. It operationalised attitude towards organic products, green branding, green advertising, eco-labelling, and green packaging. The fourth section assessed consumers' OPPB. The fifth section captured the demographic profile of the respondents.

The items for the OPPI scale were borrowed from existing scales and

rephrased to suit the research context (Kim & Choi, 2005; Wu & Chen, 2014; Naik, 2019). The majority of the OPPB scale items were based on the scale proposed by scholars Straughan and Roberts (1999). However, most of them were subjected to modifications to capture actual OPPB, rather than the hypothetical OPPB. The rest were based on the literature review undertaken for the study. The psycho-social determinants of OPPB consisted of control strength, perceived behavioural control, control belief, subjective norms, and perceived consumer effectiveness, adapted with minor changes in the wording (Ellen et al., 1991; Chan & Lau, 2002; Kim & Choi, 2005; Kim et al., 2012; Wu & Chen, A Model of Green Consumption Behavior Constructed by the Theory of Planned Behavior, 2014).

The scale items for attitude towards organic product purchase were adopted from Shrum, McCarty, and Lowrey (1995), while the items for environmental concern were based on scales proposed by Chan (1996) and Kim, Lee and Hur (2012). These were also reworded to suit the context of the study. The scale items for self-enhancement, self-transcendence, and normative social influence, as well as value-expressive social influence, were proposed by Naik (2019), with modifications made based on the existing literature.

For the scale items of green marketing strategies influencing OPPB, existing scales with necessary changes were adopted. To measure attitude towards eco-labelling, a few items were obtained from a prior study by Abid & Latif (2015). The attitude towards organic products was based on scales proposed by Chan and Lau (2002) and Naik (2019).

The scale items to measure attitude towards green advertising were derived from a study conducted by Haytko and Matulich (2008). For analysing attitude towards green packaging, items as proposed by Kong et al. (2014) were adopted. Nonetheless, most scale items were modified, as required, to meet the needs of the present study. Attitude towards green branding and perceived consumer barriers were evaluated with scales suggested by Naik (2019).

3.6 Content Validity

A critical initial step in instrument development is the measurement and reporting of content validity (Yaghmaie, 2009; Polit & Beck, 2006; Shrotryia & Dhanda, 2019). It is necessary as it serves as preliminary evidence of the suitability of the instrument developed (Lynn, 1986; Grant & Davis, 1997; Rubio et al., 2003; American Educational Research Association, American Psychological Association, & National Council on Measurement, 2014; Yusoff, 2019). It signifies the degree to which a collective sample of items constitutes an adequate operational definition of a construct (Polit & Beck, 2006). The content validity of the adopted and modified scales was ensured through a systematic two-step process involving initial screening of items and assessment of face validity by experts (Lynn, 1986; Haynes et al., 1995; Rossiter, 2002; Polit et al., 2007).

3.6.1 Screening of items

The initial screening of generated items was conducted collaboratively by the researcher, supervisor, and an industry expert (Tay, 2017; Boateng et al., 2018; Carpenter, 2018; Hair Jr. et al., 2019; Gültürk, 2024). Items identified as redundant or repetitive were subsequently eliminated to ensure questionnaire parsimony (Schmitt & Stuitts, 1985; Hinkin, 1998; Ang et al., 2007).

3.6.2 Face validity

Face validity was conducted to reinforce content validity (Lynn, 1986; Hardesty & Bearden, 2004). This step involved obtaining expert judgments regarding the adequacy of the items in capturing the intended constructs with the consumer behaviour context (Rossiter, 2002; Hardesty & Bearden, 2004). Two subject experts, one from academia and the other from marketing, with the requisite theoretical and practical knowledge, were invited to review the questionnaire. They evaluated the items for clarity, comprehension, and relevance to the study objectives (Taherdoost, 2016; Carretero-Dios & Meléndez, 2007). Based on their feedback, minor revisions were incorporated to enhance readability and alignment with

context (Lynn, 1986; Hardesty & Bearden, 2004).

3.7 Pilot study

A pilot study is an essential preparatory step in quantitative research. It provides essential preliminary insights for the questionnaire before deploying the full-scale survey (Dillman et al., 2014; Hair Jr. et al., 2018). The primary objective was to ensure the clarity, comprehensibility, and flow of the survey instrument, particularly for the newly adapted scale items, which is crucial for achieving high-quality data (Van Teijlingen et al., 2001). A small sample of 80 participants, representative of the target population, completed the survey (Baker, 1994).

The pilot data were analysed for item reliability and instrument feasibility. Item reliability was confirmed by assessing the internal consistency of all multi-item constructs using Cronbach's Alpha (α) (Nunnally & Bernstein, 1994). Instrument feasibility was evaluated by analysing completion times and qualitative feedback. Feedback from pilot participants was used to identify and rectify any ambiguous wording, complex instructions, or technical issues within the online survey platform (Gray & Grove, 2021). This helped determine the clarity and appropriateness of the research protocol for the main sample (Dillman et al., 2014; Van Teijlingen et al., 2001). The results confirmed the reliability of all constructs, achieving the accepted threshold for internal consistency (Tavakol & Dennick, 2011; Taber, 2018). Minor linguistic adjustments were incorporated to enhance clarity (DeVellis, 2016; Boateng et al., 2018; Khanal & Chhetri, 2024; Van Teijlingen et al., 2001).

3.8 Final Measurement Scale

The finalised scale items for all constructs were incorporated into a structured electronic questionnaire (Dillman et al., 2014; Cheung, 2023). The instrument captured measures pertaining to psycho-social factors, green marketing strategies, and consumer behaviour toward organic products. After establishing the instrument's validity, data were collected from consumers in Goa using the finalised questionnaire (Kelley et al., 2003; Sudbury-Riley & Kohlbacher, 2016; Ansari, 2019; Repke et al.,

2024). The resulting dataset served as the foundation for subsequent data analysis. The final questionnaire is provided in Appendix A.

3.9 Data Analysis Procedure

The data analysis procedure employed a sequential two-stage analytical strategy. This approach adheres to the well-established two-step methodology recommended for scale-based research, wherein measurement model adequacy is confirmed before examining structural relationships (Anderson & Gerbing, 1988; Hair Jr. et al., 2018).

The Confirmatory Factor Analysis (CFA) served as the first stage to validate the measurement structure identified in the exploratory stage (Brown, 2015). CFA allows researchers to verify the factor loadings and confirm the hypothesised relationships between latent constructs and their observed indicators (Anderson & Gerbing, 1988; Bollen, 1989; Brown, 2015; Hair Jr. et al., 2018). CFA is a critical step to assess the unidimensionality, validity, and reliability of the measures (Fornell & Larcker, 1981). Since all measurement scales utilised in this study were drawn from previously validated instruments with well-documented factor structures, proceeding directly to CFA represented the methodologically appropriate approach rather than conducting unnecessary exploratory analysis (Hurley et al., 1997; Brown, 2015).

In this study, CFA was performed using Python (Google Colab environment) with Maximum Likelihood Estimation (MLE). MLE is the most widely employed and statistically robust estimation technique for CFA when data approximate multivariate normality (Schumacker & Lomax, 2015; Whittaker & Schumacker, 2022). The CFA results demonstrated satisfactory measurement quality across all constructs. All standardised factor loadings (regression weights) exceeded the recommended threshold of 0.60, with most surpassing 0.70, indicating that indicators share substantial common variance with their intended latent constructs (Comrey & Lee, 1992; Awang, 2014; Hair Jr. et al., 2018). Factor loadings above 0.60 provide evidence that items adequately represent their theoretical constructs and that measurement error remains within acceptable limits (Brown, 2015).

The construct validity of the model was further examined through convergent and discriminant validity checks. Convergent validity was confirmed by ensuring that the Average Variance Extracted (AVE) for each construct exceeded 0.5 and the Composite Reliability (CR) values surpassed 0.7 (Fornell & Larcker, 1981; Hair Jr. et al., 2018). Discriminant validity was tested by comparing the square root of each construct's AVE with its inter-construct correlations or by using the Heterotrait-Monotrait Ratio (HTMT) (Fornell & Larcker, 1981; Henseler et al., 2015).

Model fit was evaluated using a comprehensive battery of fit indices assessing different aspects of model adequacy. The multiple-index approach avoids over-reliance on any single fit statistic and provides convergent evidence of model adequacy across incremental fit, absolute fit, and parsimony-adjusted fit dimensions (Brown, 2015).

Following successful CFA validation, the hypothesised structural relationships within the extended Theory of Planned Behaviour framework were analysed through multiple regression analysis. Multiple regression represents an appropriate and widely employed technique for examining relationships among constructs when measurement validity has been established through prior CFA (Cohen et al., 2003; Hair Jr. et al., 2018). This approach proves particularly suitable when research objectives emphasise prediction and explanation of variance in dependent variables rather than testing complex mediation chains or comparing alternative theoretical specifications (Hair Jr. et al., 2018; Kline, 2023).

The regression-based analytical strategy involved estimating a series of multiple regression models. Each model examined how theoretically specified predictor variables influence their respective dependent variables within a specific framework. This sequential approach enables systematic evaluation of each hypothesised pathway while maintaining clarity in interpreting individual direct effects. Separate regression models were estimated for each dependent variable in the theoretical framework. This analytical approach differs from full Structural Equation Modelling (SEM). SEM estimates all relationships simultaneously within a unified framework while explicitly modelling measurement error in latent

constructs (Bollen, 1989; Kline, 2023). While SEM offers theoretical elegance in simultaneously testing measurement and structural components, the two-stage approach of CFA followed by regression provides substantively equivalent insights when measurement quality has been rigorously established and research objectives centre on prediction and variance explanation rather than complex mediation testing or model comparison (Anderson & Gerbing, 1988; Hair Jr. et al., 2018). Furthermore, regression-based approaches facilitate more straightforward interpretation of effect sizes, standardized coefficients, and explained variance (R^2). The accessibility of findings to diverse audiences, including both academic researchers and practitioner stakeholders, is thus enhanced (Cohen et al., 2003).

The moderation hypotheses were tested using hierarchical regression analysis that incorporated interaction terms. Moderation analysis investigates whether the strength or direction of relationships between predictor variables and outcome variables varies systematically as a function of third variables, also known as moderators. It reveals conditional processes wherein relationships hold differently across moderator levels (Baron & Kenny, 1986; Aiken & West, 1991). In this study, three theoretically relevant individual difference variables, viz. Trust, Health Consciousness, and Perceived Consumer Effectiveness were examined as potential moderators of the relationships between core TPB constructs and Organic Product Purchase Intention.

Hierarchical regression builds models in a sequential step-by-step approach. Thus, it enables the assessment of whether moderators and their interactions with predictors provide significant incremental explanatory power beyond main effects alone (Aiken & West, 1991; Cohen et al., 2003). The hierarchical procedure involved three sequential models: Model 1 included only core TPB predictors; Model 2 added moderator main effects, and Model 3 incorporated interaction terms created by multiplying mean-centred predictors with mean-centred moderators. Mean-centring reduces multicollinearity between main effects and interaction terms while facilitating interpretation of coefficients (Aiken & West, 1991; Cohen et al., 2003).

3.9.1 Confirmatory Factor Analysis

The measurement model relies on pre-existing scales adapted from established scholarly literature, which were modified to suit the context of the study. All scales had been previously developed, validated, and employed in prior research in their respective areas, providing strong theoretical and empirical foundations for their use (Hair Jr. et al., 2018; Kline, 2023). Exploratory Factor Analysis (EFA) is employed when factor structures are unknown, under-theorised, or exploratory, requiring empirical investigation to identify underlying dimensions and determine which items load on which factors (Fabrigar et al., 1999). When utilising established scales with well-documented factor structures supported by prior empirical validation, proceeding directly to Confirmatory Factor Analysis represents the appropriate and scientifically rigorous approach (Anderson & Gerbing, 1988; Bollen, 1989; Brown, 2015). Since the theoretical underpinning and factor structures of these scales were explored and defined in earlier studies, EFA was deemed unnecessary (Hurley et al., 1997; Hair Jr. et al., 2018).

The use of established measures allows the analysis to move directly to CFA, which is the most direct and rigorous method for validating an established measurement theory (Bollen, 1989; Kline, 2023). CFA tests whether the hypothesised factor structure adequately fits the observed data patterns in the current sample (Brown, 2015; Hair Jr. et al., 2018). It specifies which items measure which constructs based on prior theory and validation. Unlike EFA, which empirically derives factor structures from data without prior specification, CFA tests theoretically specified measurement models, providing confirmatory rather than exploratory evidence for construct validity (Anderson & Gerbing, 1988; Bollen, 1989).

CFA was utilised to test the construct validity of the adapted scales, and reliability and convergent validity of the final measurement model. Reliability was assessed via CR, while convergent validity was measured using AVE. The empirical uniqueness of each construct was determined using Discriminant validity based on HTMT values. This was done to establish that the items adequately represent the intended latent constructs

before proceeding to test the hypothesised structural relationships (Fornell & Larcker, 1981; Henseler et al., 2015). This comprehensive validation established that items adequately represent intended latent constructs with acceptable psychometric properties before proceeding to test hypothesised structural relationships among constructs. It ensures that structural model findings reflect genuine construct relationships (Fornell & Larcker, 1981; Anderson & Gerbing, 1988; Hair Jr. et al., 2018).

3.9.2 Regression

Multiple regression analysis served as the primary analytical technique for testing hypothesised direct relationships among constructs in the theoretical model. Ordinary Least Squares (OLS) regression estimates parameter values (regression coefficients) that minimise the sum of squared residuals (differences between observed and predicted values), providing Best Linear Unbiased Estimators (BLUE) when classical assumptions hold (Cohen et al., 2003; Hair Jr. et al., 2018). The general regression equation estimated was:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_k X_k + \varepsilon$$

Where,

Y = dependent variable (outcome)

β_0 = intercept (predicted Y value when all predictors equal zero)

$\beta_1, \beta_2, \dots, \beta_k$ = regression coefficients (change in Y per unit change in each predictor, holding other predictors constant)

$X_1, X_2, \dots, X_k$ = independent variables (predictors)

ε = error term (residual variance unexplained by predictors)

Multiple regression analyses were conducted for each hypothesised relationship in the theoretical framework as follows:

- $NSI + VESI \rightarrow SN$: Subjective Norms regressed on Normative Social Influence and Value-Expressive Social Influence

- $STC + SE + EC \rightarrow ATOPP$: Attitudes Toward Organic Product Purchase regressed on Self-Transcendence, Self-Enhancement, and Environmental Concern
- $CS + CB \rightarrow PBC$: Perceived Behavioural Control regressed on Control Strength and Control Beliefs
- $ATOPP + SN + PBC \rightarrow OPPI$: Organic Product Purchase Intentions regressed on Attitudes, Subjective Norms, and Perceived Behavioural Control
- $AGA + AGB + AGP + AOP + AEL \rightarrow OPPI$: Organic Product Purchase Intentions regressed on attitudes toward five green marketing dimensions
- $OPPI \rightarrow OPPB$: Organic Product Purchase Behaviour regressed on Purchase Intentions
- $OPPB \rightarrow OPS$: Organic Product Satisfaction regressed on Purchase Behaviour
- $OPS \rightarrow OPL$: Organic Product Loyalty regressed on Satisfaction

3.9.3 Moderation Analysis through Hierarchical Regression

In addition to direct and indirect relationships tested, moderation effects were examined through hierarchical regression analysis. It was employed to investigate the roles of Trust, Health Consciousness (HC), and Perceived Consumer Effectiveness (PCE) in strengthening or weakening key TPB pathways (Baron & Kenny, 1986; Aiken & West, 1991). Moderation analysis tests whether the strength or direction of relationships between independent variables varies systematically as a function of one or more moderator variables. Hierarchical regression represents the standard analytical approach for testing moderation hypotheses, building models sequentially in steps.

(1) Model 1 (Main effects): Regressing the dependent variable on independent variables and moderators to establish baseline relationships;

(2) Model 2 (Interaction effects): Adding interaction terms, i.e. products of independent variables and moderators, to test whether moderators significantly alter the strength of focal relationships (Aiken & West, 1991; Cohen et al., 2003). Significant increases in R^2 (ΔR^2) when adding interaction terms, accompanied by statistically significant interaction term coefficients, indicate the presence of moderation effects (Baron & Kenny, 1986; Aguinis et al., 2005).

Moderation hypotheses were examined through hierarchical regression analysis with interaction terms (Baron & Kenny, 1986; Aiken & West, 1991; Cohen et al., 2003). Prior to creating interaction terms, all continuous predictor variables and moderators were mean-centred to reduce multicollinearity between main effects and interaction terms and to facilitate interpretation of interaction effects (Aiken & West, 1991; Cohen et al., 2003). Interaction terms were then created by multiplying mean-centred predictors with mean-centred moderators (Attitude $\times$ Trust, Subjective Norms $\times$ Trust, Perceived Behavioural Control $\times$ Trust, Attitude $\times$ Health Consciousness, Perceived Behavioural Control $\times$ Health Consciousness, and Attitude $\times$ Perceived Consumer Effectiveness). To reduce multicollinearity and facilitate interpretation, all continuous predictors and moderators were mean-centred prior to creating interaction terms (Aiken & West, 1991). Centred variable and Interaction terms were calculated as under:

Centred Variable = Original variable – Mean of variable

Interaction term = (Centered Predictor) $\times$ (Centered Moderator)

The hierarchical approach in sequential steps for the study is depicted as follows:

Step 1 - Main Effects Model:

$$OPPI = \beta_0 + \beta_1(ATOPP) + \beta_2(SN) + \beta_3(PBC) + \varepsilon$$

This baseline model estimates the direct effects of TPB constructs on purchase intentions without considering moderation.

Step 2 - Moderators Added:

$$OPPI = \beta_0 + \beta_1(ATOPP) + \beta_2(SN) + \beta_3(PBC) + \beta_4(Trust) + \beta_5(HC) + \beta_6(PCE) + \varepsilon$$

This augmented model adds moderator main effects, testing whether moderators directly influence intentions beyond TPB constructs.

Step 3 - Interaction Terms Added:

$$OPPI = \beta_0 + \beta_1(ATOPP) + \beta_2(SN) + \beta_3(PBC) + \beta_4(Trust) + \beta_5(HC) + \beta_6(PCE) + \beta_7(ATOPP \times Trust) + \beta_8(SN \times Trust) + \beta_9(PBC \times Trust) + \beta_{10}(ATOPP \times HC) + \beta_{11}(PBC \times HC) + \beta_{12}(ATOPP \times PCE) + \beta_{13}(SN \times PCE) + \beta_{14}(PBC \times PCE) + \varepsilon$$

This entire model adds interaction terms to test moderation hypotheses. Significant interaction coefficients (β_7 through β_{14}) indicate moderation effects. Moderation was deemed significant if ΔR^2 (i.e. R^2 change from Step 2 to Step 3) was statistically significant ($p < .05$); F-change statistic testing ΔR^2 significance exceeded critical value; and Individual interaction term coefficients achieved statistical significance ($p < .05$). Statistical significance of each simple slope was tested to determine at which moderator levels the predictor-outcome relationship achieves significance (Aiken & West, 1991; Preacher et al., 2006).

3.10. Measurement Model Validation

The measurement validation process in this study employed Confirmatory Factor Analysis (CFA) as the primary approach. Given that all measurement scales were adopted and adapted from established scholarly literature rather than newly developed, CFA was deemed suitable. Since the theoretical foundations and factor structures of these scales had been previously explored, validated, and defined in prior research, Exploratory Factor Analysis (EFA) was deemed unnecessary (Hurley et al., 1997; Brown, 2015; Hair Jr. et al., 2018). The use of established, theoretically grounded measures allows the analysis to proceed directly to CFA. CFA represents the most rigorous and appropriate method for validating an established measurement theory and confirming hypothesised factor

structures (Anderson & Gerbing, 1988; Bollen, 1989; Kline, 2023). Utilised to comprehensively test the construct validity, reliability, and convergent validity of the adapted measurement scales, it ensures that items adequately represent their intended latent constructs before proceeding to test hypothesised structural relationships (Fornell & Larcker, 1981; Hair Jr. et al., 2018). The CFA procedure verified factor loadings and confirmed the hypothesised relationships between latent constructs and their observed indicators. It assessed the unidimensionality, internal consistency, and psychometric adequacy of the measurement model (Anderson & Gerbing, 1988; Bollen, 1989; Brown, 2015).

Reliability was assessed through Composite Reliability (CR) as it provides a more accurate estimate of internal consistency than Cronbach's alpha when employing CFA approaches. Thus, CR accounts for the actual factor loadings rather than assuming equal weightings (Fornell & Larcker, 1981; Hair Jr. et al., 2018). Convergent validity is the extent to which indicators of a specific construct converge or share a high proportion of variance in common. It ensures that each construct explains a substantial amount of variance in its indicators and is evaluated using the Average Variance Extracted (AVE) (Fornell & Larcker, 1981; Hair Jr. et al., 2018). Discriminant validity refers to the empirical distinctiveness of constructs, confirming that each construct is sufficiently unique and not excessively correlated with other constructs. It was assessed using the Heterotrait-Monotrait Ratio (HTMT), which represents a more stringent and accurate criterion for discriminant validity than traditional approaches (Henseler et al., 2015; Voorhees et al., 2016).

3.10.1 Measurement Model Specification

The measurement model for the proposed theoretical structure was developed after the indicator variables were identified and assigned to their corresponding latent construct (Hair Jr. et al., 2018; Kline, 2023). The validity of the measurement model was comprehensively assessed via CFA by examining construct validity and discriminant validity in addition to overall measurement model fit (Fornell & Larcker, 1981; Henseler et al., 2015; Kline, 2023). Each latent construct was operationalised through

multiple observed indicators drawn from validated measurement scales. The validity and reliability of the measurement model were comprehensively assessed via CFA.

3.10.2 Construct Validity

One of the primary objectives of CFA is to assess the construct validity of the proposed measurement theory (Kline, 2023). Construct validity refers to the extent to which a set of measured items correctly reflects the theoretical latent construct that they are designed to measure. Therefore, it indicates the accuracy of the measurement instrument (Hair Jr. et al., 2018). CFA loadings greater than or equal to 0.70 are preferred to ensure that the observed variables adequately represent the latent constructs (Kline, 2023; Sathyanarayana et al., 2024).

- **Convergent Validity**

According to Hair et al. (2018), convergent validity is conducted to ensure that the items intended to measure a specific construct share a high proportion of variance in common. The following criteria are employed to measure convergent validity:

1. **Factor Loadings:** A fundamental output of CFA is Factor Loadings. High factor loadings indicate that the observed variables converge on the same construct (Hair Jr. et al., 2018; Sarstedt et al., 2022). All standardised loadings should be statistically significant, i.e. they should have a preferred minimum threshold of 0.50 (Byrne, 2016; Hair Jr. et al., 2018).
2. **Composite Reliability (CR):** CR is an indicator of internal consistency (Naik, 2019). A high CR value of 0.70 or higher signifies good reliability and indicates that the internal consistency exists. In other words, a high CR value is an indication that all measures represent the same latent construct (Bagozzi & Yi, 1988; Nunnally & Bernstein, 1994; Hair Jr. et al., 2018). Estimates between 0.60 and 0.70 are sometimes acceptable, particularly in exploratory research (Fornell & Larcker, 1981; Nunnally & Bernstein, 1994; Hair Jr. et al., 2018).

3. Average Variance Extracted (AVE): AVE is defined as the variance in the observed variables that is explained by the latent construct (Malhotra & Das, 2025). Computed from the factor loadings and error variances, it is considered a more conservative measure of convergent validity than CR (Fornell & Larcker, 1981; Hair Jr. et al., 2018; Sarstedt et al., 2022). The recommended threshold for AVE is 0.50 or higher, as it demonstrates that the construct explains more variance in its items than the variance due to measurement error (Fornell & Larcker, 1981).

- Discriminant Validity

Discriminant validity is the extent to which a construct is empirically distinct from other constructs (Hair Jr. et al., 2018). A higher value of discriminant validity signifies that a construct is unique and captures phenomena that other measures do not. It can be estimated using the following methods:

1. Heterotrait-Monotrait Ratio (HTMT): HTMT is based on the ratio of the average correlations of indicators across constructs (heterotrait-heteromethod) to the average correlations of indicators within the same construct (monotrait-heteromethod) (Henseler et al., 2015). It is considered the most reliable method for assessing discriminant validity. Discriminant validity is supported if the HTMT value for any pair of constructs is below a conservative threshold of 0.1 (Fornell & Larcker, 1981; Henseler et al., 2015; Hair Jr. et al., 2018).
2. Fornell-Larcker Criterion: This criterion compares the AVE values for any two constructs with the square of the correlation estimates (r^2) between those two constructs. Discriminant validity is supported if the AVE estimate for each construct is greater than the squared correlation estimates between it and any other construct (Fornell & Larcker, 1981).

In this study, convergent validity was rigorously assessed by evaluating standardised factor loadings and CR. Most of the standardised factor

loadings were within the acceptable range suggested by Hair et al. (2018), i.e. either 0.5 or higher. The CR values were found to range between the acceptable band of 0.6 to 0.7, thus indicating adequate internal consistency.

Discriminant validity was assessed with the help of the Fornell-Larcker Criterion by comparing the AVE values of any two constructs with squared correlation estimates between the two constructs. Excluding a few, most estimates of AVE were greater than the square of correlation estimates. Discriminant validity is supported when each construct weakly correlates with all other constructs except for a few, to which it is theoretically associated. Given the nature of the study, some degree of intercorrelation was deemed acceptable as suggested by Malhotra and Das (2025). In cases where the correlation between two constructs was higher than 0.7, the discriminant validity is to be assessed by comparing the fit of the two-construct model with the fit of a one-construct model (Hair Jr. et al., 2018).

3.10.3 Measurement Model Fit

Model fit attempts to compare the theory to reality by comparing the estimated covariance matrix to the observed covariance matrix. The closer the values of these two matrices are to each other, the better is the model fit (Hair Jr. et al., 2018). The use of at least one fitness index from each category of model fit is suggested. There are three model fit categories, viz. Absolute Fit, Incremental Fit, and Parsimonious Fit. Adequate evidence of model fit is provided using three to four indices (Hair Jr. et al., 2018).

The fit indices used to evaluate the model fit are Goodness of Fit Index (GFI), Adjusted Goodness of Fit Index (AGFI), Chi-square/df (CMIN/DF), Root Mean Square Error of Approximation (RMSEA), Root Mean Square Residual (RMR), Comparative Fit Index (CFI), Tucker Lewis Index (TLI). The recommended fit indices for reporting under CFA are as given below (Cho et al., 2020; Hair Jr. et al., 2023; Goretzko & Siemund, 2024; Sathyanarayana et al., 2024):

- $\text{CMIN/df} < 2$, values between 2-3 are acceptable (Bollen, 1989; Kline, 2023);
- $\text{GFI} > 0.9$ is preferred (Jöreskog & Sörbom, 1982; 1989);
- $\text{AGFI} > 0.9$ is preferred (Jöreskog & Sörbom, 1982; 1989);
- $\text{RMSEA} < 0.05$ is preferred, values up to 0.08 are acceptable (Browne & Cudeck, 1992; 1993);
- $\text{SRMR} < 0.08$ is preferred (Hu & Bentler, 1999);
- $\text{CFI} > 0.90$ is preferred, values up to 0.95 are acceptable (Bentler, 1990);
- $\text{TLI} > 0.90$ is preferred (Hu & Bentler, 1999)

3.11 Analytical Tools

The empirical analysis utilised the Python programming language, implemented through Google Colaboratory (Colab). Google Colab is a cloud-based computational environment that served as the primary analytical platform for the study. Python was selected for its robust statistical capabilities, extensive library ecosystem supporting sophisticated analytical procedures, open-source accessibility, computational efficiency for large datasets, and reproducibility advantages facilitating transparent and verifiable research practices (McKinney, 2010; Harris et al., 2020). The Google Colab environment provided additional benefits. It enables cloud-based computation, eliminating local hardware constraints, and collaborative features that support research documentation.

Prior to hypothesis testing, Confirmatory Factor Analysis (CFA) was conducted using Semopy to validate the measurement model. CFA assessed construct validity by examining factor loadings, construct reliability, and convergent validity. Model fit was evaluated using multiple indices: Comparative Fit Index, Tucker-Lewis Index, Root Mean Square Error of Approximation and Standardised Root Mean Square Residual (Hu

& Bentler, 1999).

To achieve Objective 1, which examines the extended Theory of Planned Behaviour (TPB) model through multiple regression analysis, Google Colab served as the primary computational environment. The objective investigates how antecedent constructs (i.e., NSI, VESI, STC, SEC, EC, CB, CS) influence core TPB constructs (i.e., SN, ATOPP, PBC), which subsequently predict Organic Product Purchase Intention (OPPI) and Organic Product Purchase Behaviour (OPPB). For Objective 2, the post-purchase extension of TPB was examined by testing the sequential relationships between OPPB and OPS, and between OPS and OPL using ordinary least squares (OLS) regression. Objectives 1 and 2 were integrated into a comprehensive structural model (Model 1) depicting the complete purchase journey from antecedents through post-purchase outcomes. Model diagnostics included R^2 , adjusted R^2 , F-statistic, and p-values for path significance. Assumption testing encompassed normality, multicollinearity, and homoscedasticity. The Statsmodels OLS package facilitated regression analysis, while Matplotlib and Seaborn enabled data visualisation. The structural model diagram was developed using Overleaf's LaTeX environment with the TikZ package, enabling creation of precise, scalable vector graphics with sophisticated node positioning, path specifications, and annotation capabilities.

Objective 3 employed multiple regression to test the direct impact of AGA, AGB, AGP, AOP, and AEL on OPPI. Pandas was used for dataset handling, while Statsmodels OLS Regression was used to assess the impact of each predictor on PI. Since multicollinearity could be a concern, the Variance Inflation Factor (VIF) was calculated to assess collinearity among the independent variables. Regression diagnostics, including normality tests and heteroscedasticity checks, were conducted to ensure the robustness of the results.

For Objective 4, moderation analysis was conducted using hierarchical regression to test the moderating effects of Health Consciousness (HC), Perceived Consumer Effectiveness (PCE), and Trust (TRUST). The Hierarchical regression analysis was then performed using Statsmodels,

where three regression models were built stepwise: first with TPB constructs, then adding moderators, and finally including interaction terms. The significance of moderation was assessed using ΔR^2 (change in R-squared) and P-values of interaction terms

3.11.1 Libraries Used for the Analysis in the Study

The study employed the Python programming language implemented through Google Colab as the primary computational environment. Multiple specialised libraries were used for data cleaning, statistical analysis, visualisation, and results documentation. Python has an extensive library ecosystem. It was selected for its robust statistical capabilities and flexibility in implementing complex analytical procedures (McKinney, 2010; Harris et al., 2020).

The major libraries utilised are listed below:

1. Pandas: This library was used for comprehensive data cleaning, preprocessing and transformation operations. Pandas provided efficient handling of the dataset. Pandas was used for transforming variables, handling missing data through appropriate imputation or deletion, creating new variables including mean-centred predictors and interaction terms for moderation analysis and merging or reshaping data structures for analysis (McKinney, 2010). Pandas' DataFrame structure facilitated intuitive data operations and ensured data integrity throughout the analytical pipeline.
2. NumPy: Essential for mathematical computations and array-based operations, NumPy was used to perform numerical calculations, including creating interaction terms through element-wise multiplication of arrays, computing descriptive statistics, executing matrix operations underlying regression estimation, and handling numerical transformations (Harris et al., 2020). NumPy's efficient array computations provided the computational foundation for statistical analyses.
3. Semopy: Semopy is the Lavaan equivalent for Python. For Confirmatory Factor Analysis and Modelling, specialised software implemented in Python was employed. These packages provide: specification of measurement models linking latent constructs to observed

indicators, estimation of CFA and structural equation models through maximum likelihood, calculation of model fit indices (CFI, TLI, RMSEA, SRMR), and extraction of standardised and unstandardised parameter estimates with standard errors and significance tests.

4. Statsmodels: This library was central to the statistical analysis in the study. It provided comprehensive econometric and statistical modelling capabilities. It was used to conduct diagnostic testing, multiple regression analysis, hierarchical regression for moderation analysis and statistical inference. The summary () function provided detailed statistical outputs, including R^2 , p-values, confidence intervals, and F-statistics (Seabold & Perktold, 2010).

5. SciPy: The Scientific Python library supplemented Statsmodels by providing additional statistical functions. It assisted in conducting specialised hypothesis tests, calculating probability distributions for critical values and p-values, and optimising algorithms and numerical integration routines that support maximum likelihood estimation in CFA procedures (Virtanen et al., 2020).

6. Matplotlib & Seaborn: These visualisation libraries were used to generate correlation heatmaps, scatter plots, residual plots, and interaction effect plots to locate outliers. Visualisation was key in understanding relationships between variables and diagnosing issues like multicollinearity or heteroscedasticity (Hunter J. D., 2007; Waskom, 2021). Visualisation proved critical for understanding data patterns, identifying outliers or influential observations, diagnosing assumption violations and communicating results effectively.

7. LaTeX (via Overleaf): The structural model diagram integrating all hypothesised relationships was developed using the TikZ graphics package within the LaTeX typesetting system through Overleaf's cloud-based platform. TikZ enabled the creation of precise, publication-quality vector graphics with sophisticated node positioning, curved paths representing relationships, and standardised coefficient annotations (Tantau, 2015). LaTeX provided superior typesetting control and version management compared to conventional graphical software.

Results were systematically documented and compiled into comprehensive tables and reports. Statistical outputs from Statsmodels, including regression coefficients, R^2 values, F-statistics, and p-values, were extracted and formatted into publication-ready tables in accordance with APA guidelines.

Chapter 4

Data Analysis and Interpretation

4.1 Introduction

The results of the data analysis are presented in this chapter, in accordance with the objectives.

4.2 CFA of the Proposed Model 1

The dataset was first tested for confirmatory factor analysis. The following sections contain the CFA of the measurement model 1 proposed for the study.

4.2.1 CFA of the measurement model for the relationship between OPPI, OPPB, OPS and OPL

OPPI and OPPB are hypothesised to share a significant positive relationship (McEachan et al., 2016; Hagger & Hamilton, 2023). A measurement model was, thus, developed for the relationship between OPPI and OPPB. The CFA of the measurement model developed in the proposed direction is depicted in Figure 4.1.

As indicated in Table 4.1, the CR for all the constructs is either 0.7 or higher. A high construct reliability indicates that internal consistency exists among the items of the constructs, and all the items represent the same latent construct. As indicated in Figure 4.1, the factor loadings of the items are above 0.5. This supports the convergent validity of the measurement model. The discriminant validity for the constructs is satisfied by the Fornell and Larcker Criterion.

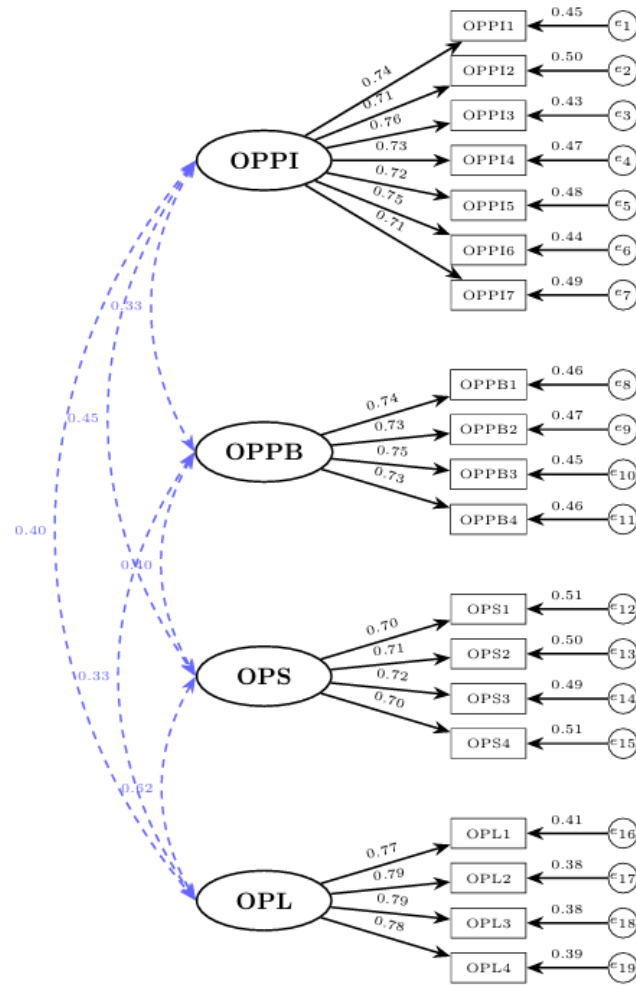


Figure 4.1: CFA of the measurement model for the relationship between OPPI, OPPB, OPS and OPL

Source: Primary Data

Table 4.1: Convergent and Discriminant Validity of the measurement model for the relationship between OPPI, OPPB, OPS and OPL

Construct	CR	AVE	AVE and Squared Correlation			
			OPPI	OPPB	OPS	OPL
OPPI	0.86	0.535	0.731	0.331	0.45	0.4
OPPB	0.785	0.54	0.331	0.735	0.4	0.332
OPS	0.79	0.502	0.45	0.4	0.708	0.62

OPL	0.82	0.61	0.4	0.332	0.62	0.781
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Source: Primary Data

Since the convergent and discriminant validity between the constructs for the measurement model of the relationship between OPPI and OPPB is supported, the model fit indices were examined to analyse the fit of the measurement model, as shown in Table 4.2.

Table 4.2: Fit indices of the measurement model for the relationship between OPPI, OPPB, OPS and OPL

Fit Index	CMIN/DF (χ^2/df)	GFI	AGFI	CFI	TLI	RMSEA	RMR
Recommended Threshold	<5.0	>0.85	>0.90	>0.95	>0.90	<0.06	<0.08
Model Fit Score	2.5	0.95	0.92	0.98	0.97	0.04	0.03

Source: Primary Data

It can be observed that the fit indices are within the acceptable range and are found to be significant. As the overall scale's construct validity is established, the items mentioned above, along with their respective constructs, are considered for further analysis.

4.2.2 CFA of the measurement model for the Factors influencing OPPI

Based on the TPB, it is theorised that attitude towards organic product purchase, subjective norm and perceived behavioural control influence OPPI (Vermeir & Verbeke, 2006; Dangaiso, 2023; Suryavanshi et al., 2023; Permatasari et al., 2024; Jakubowska et al., 2024). A measurement model with the four constructs is developed. Figure 4.2 shows the CFA of the measurement model for the factors influencing OPPI.

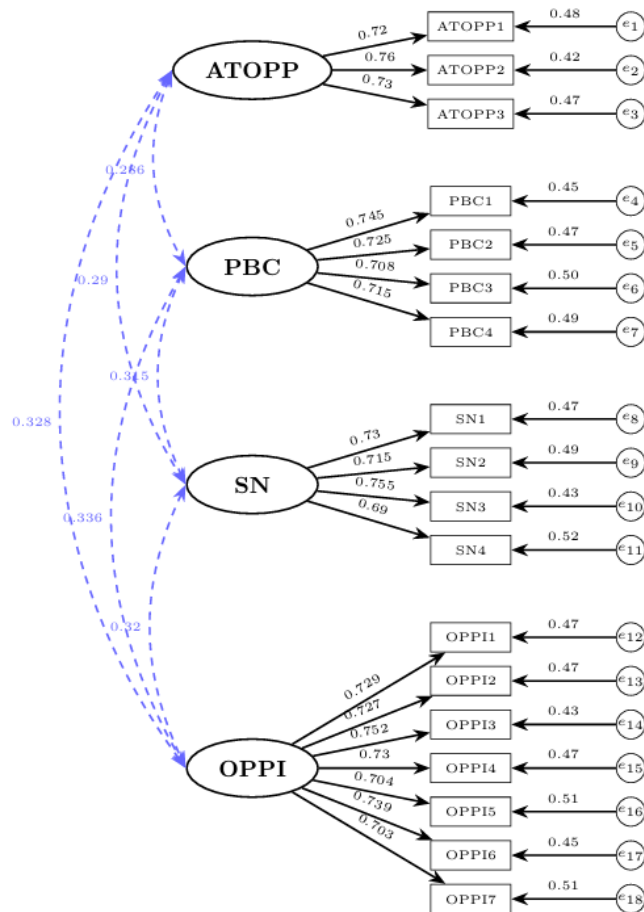


Figure 4.2: CFA of the measurement model for Factors influencing OPPI

Source: Primary Data

As indicated in Figure 4.2, the factor loadings of the items are above 0.5. This supports the convergent validity of the measurement model. The CR for the OPPI, subjective norm and attitude towards organic product purchase are depicted in Table 4.3. All values are above the threshold of 0.7 and are therefore acceptable. The Fornell-Larcker criterion is satisfied, thus supporting discriminant validity.

Table 4.3: Convergent and Discriminant Validity of the measurement model for the Factors influencing OPPI

Construct	CR	AVE	AVE and Squared Correlation			
			SN	PBC	ATOPP	OPPI
SN	0.78	0.54	0.735	0.315	0.29	0.32

PBC	0.79	0.55	0.315	0.741	0.286	0.336
ATOPP	0.78	0.55	0.29	0.286	0.741	0.328
OPPI	0.886	0.527	0.32	0.336	0.328	0.726

Source: Primary Data

As both the convergent and discriminant validity for the constructs of the measurement model for factors influencing OPPI are supported, the model fit indices were examined to assess the measurement model fit. Table 4.4 shows the fit indices of CFA of the measurement model for the factors influencing OPPI.

Table 4.4: Fit indices of the measurement model for Factors influencing OPPI

Fit Index	CMIN/DF (χ^2/df)	GFI	AGFI	CFI	TLI	RMSEA	RMR
Recommended Threshold	<5.0	>0.85	>0.90	>0.95	>0.90	<0.06	<0.08
Model Fit Score	1.101	0.972	0.966	0.997	0.997	0.011	0.039

Source: Primary Data

The fit indices are found to be significant within the acceptable values. It connotes that the overall scale has good construct validity. Since fit statistics are favourable, the items and the constructs are considered for further analysis.

4.2.3 CFA of the measurement model for the Factors Influencing Attitude towards Organic Product Purchase

It is hypothesised that Self-transcendence, self-enhancement and environmental concern are hypothesised to influence attitude towards

organic product purchase (Lee, 2017; Mainardes et al., 2017; Bazhan et al., 2024; Zhao & Huang, 2024). The measurement model developed to determine factors influencing attitude towards organic product purchase includes the previously cited four constructs and is depicted in Figure 4.3. It supports the convergent validity of the measurement model since the factor loading of the items is above 0.5.

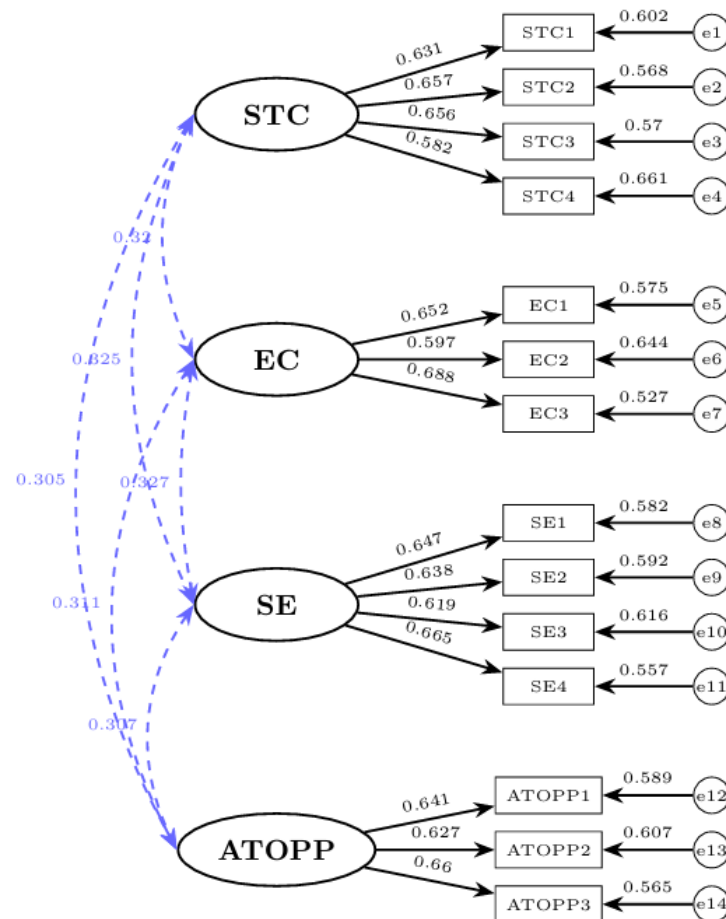


Figure 4.3: CFA of the measurement model for Factors influencing ATOPP

Source: Primary Data

The CR for self-transcendence, self-enhancement, environmental concern and attitude towards organic product purchase are depicted in Table 4 and are above the acceptable threshold of 0.7. The discriminant validity of the constructs is observed in Table 4.5. The AVE of self-transcendence, self-enhancement, environmental concern and attitude towards organic product purchase are higher than the squared correlation between each of

these constructs and all the other three constructs. Thus, discriminant validity is supported.

Table 4.5: Convergent and Discriminant Validity of the measurement model for the Factors influencing ATOPP

Construct	CR	AVE	AVE and Squared Correlation			
			STC	SE	EC	ATOPP
STC	0.79	0.5	0.707	0.325	0.32	0.305
SE	0.78	0.54	0.325	0.735	0.327	0.307
EC	0.78	0.55	0.32	0.327	0.741	0.311
ATOPP	0.78	0.55	0.305	0.307	0.311	0.741

Source: Primary Data

The model fit indices were then examined to analyse the measurement model fit for the factors influencing ATOPP. Table 4.6 shows the fit indices of CFA of the measurement model for the factors influencing ATOPP.

Table 4.6: Fit indices of the measurement model for Factors influencing ATOPP

Fit Index	CMIN/DF (χ^2/df)	GFI	AGFI	CFI	TLI	RMSEA	RMR
Recommended Threshold	<5.0	>0.85	>0.90	>0.95	>0.90	<0.06	<0.08
Model Fit Score	1.235	0.97	0.959	0.994	0.992	0.017	0.041

Source: Primary Data

The above table highlights that most of the fit indices are within the

acceptable range. Since fit statistics are within the acceptable limits, the items mentioned above, and their concerned constructs, are considered for further analysis.

4.2.3. CFA of the measurement model for the Factors influencing PBC

The construct PBC is hypothesised to be impacted by control strength and control belief (Ajzen, 1991; Ajzen, 2002; Ajzen, 2006). The measurement model to determine factors influencing perceived behavioural control includes the constructs control strength, control belief and perceived behavioural control and is modelled in Figure 4.4.

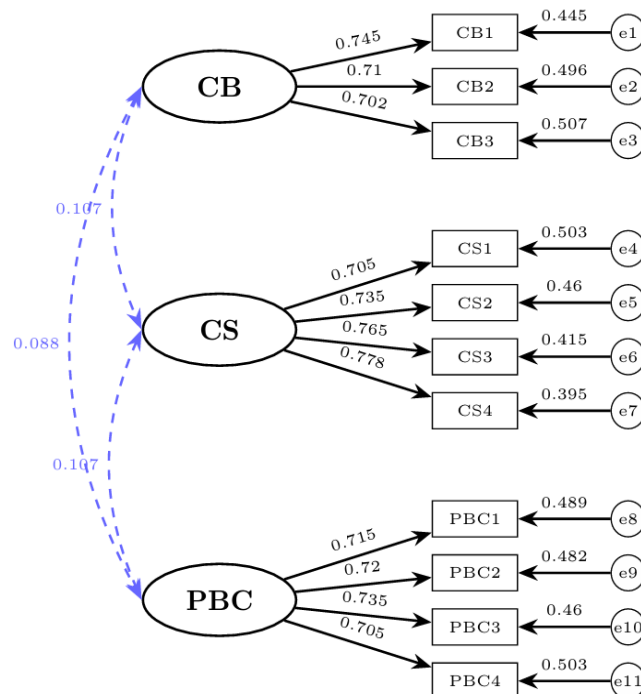


Figure 4.4: CFA of the measurement model of Factors influencing PBC

Source: Primary Data

The factor loading for the items is above 0.5, as can be seen in Figure 5.5. This supports the convergent validity of the measurement model. The values in Table 4.7 indicate that the CR for control strength, control belief, and perceived behavioural control is acceptable. With respect to discriminant validity for the constructs, the values are acceptable as per the Fornell-Larcker criterion. The model was then examined for fit indices.

Table 4.7: Convergent and Discriminant Validity of the measurement model for the Factors influencing PBC

Construct	CR	AVE	AVE and Squared Correlation		
			PBC	CB	CS
PBC	0.781	0.515	0.719	0.088	0.107
CB	0.79	0.557	0.088	0.719	0.107
CS	0.78	0.517	0.107	0.107	0.746

Source: Primary Data

The fit indices of CFA of the measurement model for the factors influencing perceived behavioural control are shown in Table 4.8.

Table 4.8: Fit indices of the measurement model for Factors influencing PBC

Fit Index	CMIN/DF (χ^2/df)	GFI	AGFI	CFI	TLI	RMSEA	RMR
Recommended Threshold	<5.0	>0.85	>0.90	>0.95	>0.90	<0.06	<0.08
Model Fit Score	1.235	0.97	0.959	0.994	0.992	0.017	0.054

Source: Primary Data

The fit indices are within the acceptable range and found to be significant. Since the fit statistics are within the acceptable limits, the items and their constructs were deemed suitable for further analysis.

4.2.4 CFA of the measurement model for the Factors influencing SN

Normative social influence and value-expressive social influence are hypothesised to influence subjective norm (Rivis & Sheeran, 2003; Lee,

2017; Zhao & Huang, 2024). These constructs are included in the measurement model developed to determine factors influencing subjective norm as depicted in Figure 4.5.

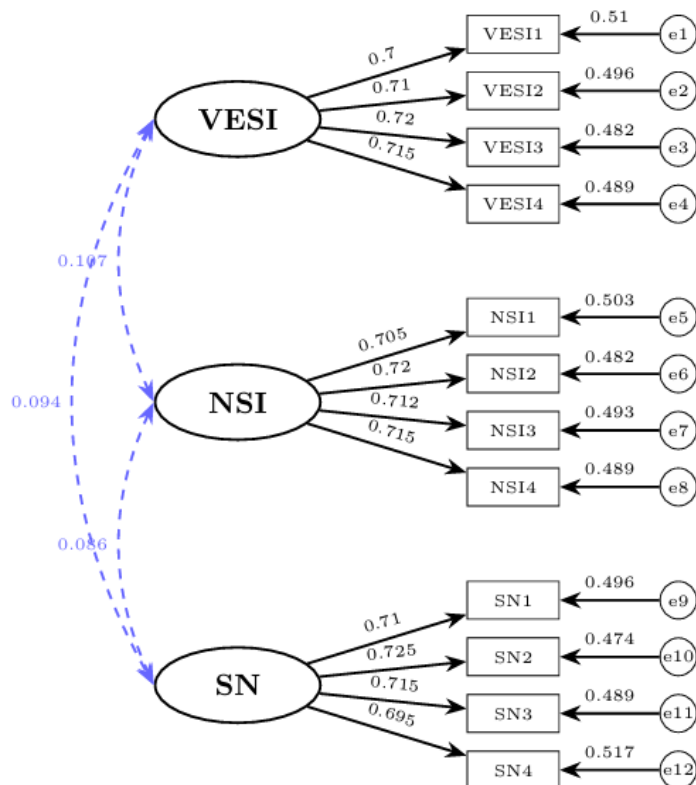


Figure 4.5: CFA of the measurement model of Factors influencing SN

Source: Primary Data

As indicated in Figure 4.5, the factor loading of the items is well above 0.5. This supports the convergent validity of the measurement model of factors influencing SN. As indicated in Table 4.9, the CR for the subjective norm, normative social influence and value-expressive social influence is above 0.7, and, hence, acceptable. It is observed from the same table that the discriminant validity is also proven.

Table 4.9: Convergent and Discriminant Validity of the measurement model for the Factors influencing SN

Construct	CR	AVE	AVE and Squared Correlation		
			VESI	NSI	SN
VESI	0.781	0.505	0.711	0.107	0.094
NSI	0.78	0.51	0.107	0.714	0.086
SN	0.79	0.506	0.094	0.086	0.711

Source: Primary Data

Due to the acceptable values for the convergent and discriminant validity between the constructs of the measurement model for the factors influencing subjective norm, the model fit indices were examined to analyse the measurement model fit as depicted in Table 4.10.

Table 4.10: Fit indices of the measurement model for Factors influencing SN

Fit Index	CMIN/DF (χ^2/df)	GFI	AGFI	CFI	TLI	RMSEA	RMR
Recommended Threshold	<5.0	>0.85	>0.90	>0.95	>0.90	<0.06	<0.08
Model Fit Score	0.944	0.982	0.975	1.001	1.002	0.01	0.06

Source: Primary Data

The fit indices are within the acceptable range and significant. It indicates that the scale has good construct validity. Hence, the items mentioned above, along with their respective constructs, are considered for further analysis.

4.3 CFA of the Proposed Model 2

The second objective relates to analysing the impact of green marketing strategies on the organic product purchase intention of consumers. The

CFA of the proposed model 2, which is developed to achieve the second objective, is discussed in this section.

4.3.1 CFA of the measurement model for the relationship between AOP, AGB, AGP, AGA, AEL and OPPI

Green marketing strategies impact organic product purchase intention (Ajzen, 1991; Laroche et al., 2001; Chen, 2010; Paul et al., 2016; Suki, 2016; Tran et al., 2022). For the study, organic purchase, green. These constructs are included in the measurement model developed to determine the impact of green marketing strategies on OPPI and are depicted in Figure 4.6.

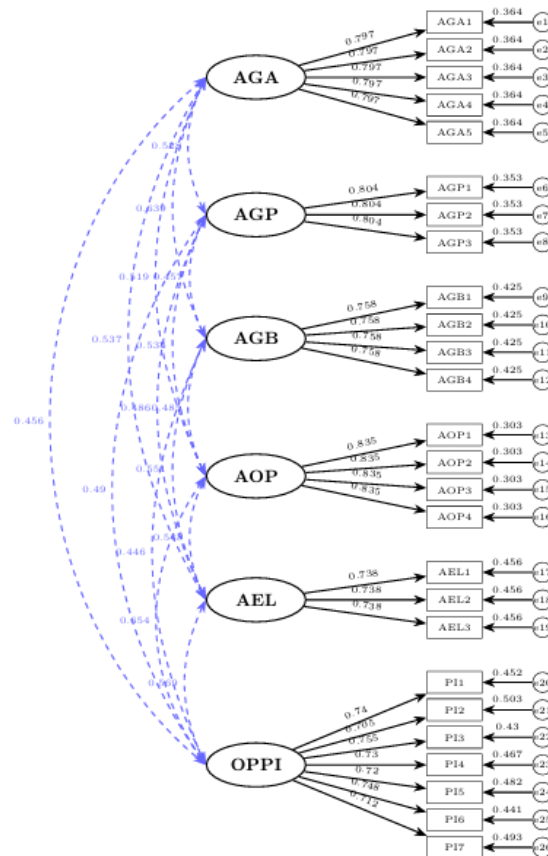


Figure 4.6: CFA of the measurement model of the influence of Green Marketing Strategies on OPPI

Source: Primary Data

As indicated in Figure 4.6, the factor loading of the items is well above 0.5. This supports the convergent validity of the measurement model of the influence of green marketing strategies on OPPI. As indicated in Table

4.11, the CR for all is acceptable since the values are above 0.7. It is observed from the same table that the discriminant validity is also established as per the Fornell-Larcker criterion.

Table 4.11: Convergent and Discriminant Validity of the measurement model of the influence of green marketing strategies on OPPI

Construct	CR	AVE	AVE and Squared Correlation					
			AOP	AEL	AGB	AGP	AGA	OPPI
AOP	0.902	0.697	0.835	0.548	0.485	0.534	0.519	0.654
AEL	0.825	0.544	0.548	0.738	0.551	0.486	0.537	0.569
AGB	0.871	0.575	0.485	0.551	0.758	0.457	0.639	0.446
AGP	0.844	0.647	0.534	0.486	0.457	0.804	0.528	0.49
AGA	0.874	0.636	0.519	0.537	0.639	0.528	0.797	0.456
OPPI	0.869	0.534	0.654	0.569	0.446	0.49	0.456	0.731

Source: Primary Data

Due to the acceptable values for the convergent and discriminant validity between the constructs of the measurement model to analyse the impact of green marketing strategies on OPPI, the model was then examined for fit indices as depicted in Table 4.12.

Table 4.12: Fit indices of the measurement model for the influence of Green Marketing Strategies on OPPI

Fit Index	CMIN/DF (χ^2/df)	GFI	AGFI	CFI	TLI	RMSEA	RMR
Recommended Threshold	<5.0	>0.85	>0.90	>0.95	>0.90	<0.06	<0.08

Model Fit Score	2.508	0.952	0.89	0.942	0.932	0.059	0.055
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Source: Primary Data

All the fit indices are within the acceptable range and significant. It indicates that the scale has good construct validity. Hence, the items mentioned above, along with their respective constructs, are considered for further analysis.

4.4 CFA of the Proposed Model 3

The third objective of the study assesses the moderating role of trust, health consciousness and perceived consumer effectiveness in the extended TPB model. The CFA of the proposed model 3, which is developed to achieve the second objective, is discussed in this section.

4.4.1 CFA of the measurement model of the Moderating effect of TRUST, HC and PCE in the extended TPB

A significant amount of literature highlights the role of trust, health consciousness and perceived consumer effectiveness in the decision-making process of consumers using the TPB framework (Ellen et al., 1991; Kim & Koo, 2016; Giampietri et al., 2017; Arias & Trujillo, 2020; Tran & Nguyen, 2022; Alrawad et al., 2023; Chi et al., 2023; Phamthi et al., 2024; Wistedt, 2024; Li & Shan, 2025; Chan et al., 2025). For the study, trust, health consciousness, and perceived consumer effectiveness are the moderators. Their role in the extended TPB framework is analysed.

The factor loading of the items is well-above 0.5, as shown in Figure 4.7. This supports the convergent validity of the measurement model of the influence of the Moderating effect of TRUST, HC and PCE in the extended TPB. As indicated in Table 4.13, the CR values are above 0.7, and discriminant validity is supported by the Fornell-Larcker criterion.

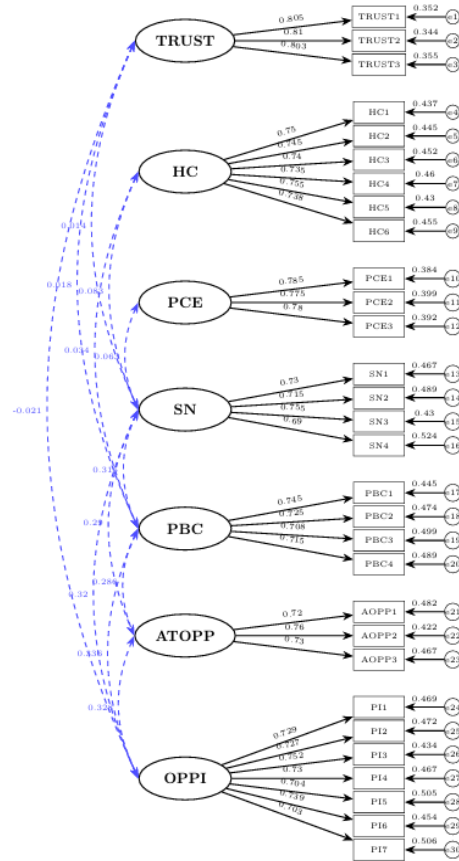


Figure 4.7: CFA of the measurement model of the Moderating effect of TRUST, HC and PCE in the extended TPB

Source: Primary Data

Table 4.13: Convergent and Discriminant Validity of the measurement model of the Moderating effect of TRUST, HC and PCE in the extended TPB

Construct	CR	AVE	AVE and Squared Correlation					
			TRUST	HC	PCE	SN	ATOPP	PBC
TRUST	0.85	0.65	0.65	0.0015	0.0024	0.0002	0.0001	0.0003
HC	0.88	0.55	0.0015	0.55	0.0001	0.0069	0.0001	0.0012
PCE	0.83	0.61	0.0024	0.0001	0.61	0.004	0.0001	0.001
SN	0.79	0.506	0.0002	0.0069	0.004	0.506	0.0023	0.0031

ATOPP	0.781	0.505	0.0001	0.0001	0.0001	0.0023	0.505	0.0005
PBC	0.78	0.51	0.0003	0.0012	0.001	0.0031	0.0005	0.51

Source: Primary Data

The constructs are considered fit for further analysis as the convergent and discriminant validity is supported in the given model, i.e. between the constructs of the measurement model of the Moderating effect of TRUST, HC and PCE in the extended TPB. The model fit indices are depicted in Table 4.14.

Table 4.14: Fit indices of the measurement model for the Moderating effect of TRUST, HC and PCE in the extended TPB

Fit Index	CMIN/DF (χ^2/df)	GFI	AGFI	CFI	TLI	RMSEA	RMR
Recommended Threshold	<5.0	>0.85	>0.90	>0.95	>0.90	<0.06	<0.05
Model Fit Score	2.508	0.952	0.9	0.942	0.932	0.059	0.055

Source: Primary Data

As seen in Table 4.14, all the fit indices are within the acceptable range and significant. This indicates the good construct validity of the scale. Hence, items mentioned above, and their respective constructs, are considered for further analysis.

4.5 Data Analysis

With the supported CFA, the next logical step is the examination of the hypotheses framed to test the suggested relationships. The findings of the study based on the statistical analyses conducted to achieve the research objectives are reported in this section. The results are systematically reported followed by a discussion interpreting their implications.

4.5.1 Demographic Profile of the Respondents

The demographic profile of the respondents of the study is presented in this section. As mentioned earlier, these comprise the final number of respondents selected for the analysis.

Table 4.15: Demographic Profile of the Respondents

Demographic Variable	Category	Frequency (n = 778)	Percentage (%)
Gender	Male	342	44
	Female	436	56
Age Group	18 - 30 years	289	37.1
	31 - 45 years	337	43.3
	46 years and above	152	19.5
Place of Residence	Urban	621	79.8
	Rural	157	20.2
District	North Goa	467	60%
	South Goa	311	40%
Marital Status	Married	476	61.2
	Unmarried	302	38.8
Educational Qualification	Below SSC	23	3
	SSC	47	6
	HSSC	101	13
	Graduate	358	46
	Postgraduate	226	29.1
	Other	23	3
Occupation	Service	334	42.9
	Business/Entrepreneur	148	19
	Student	132	17
	Homemaker	117	15
	Other	47	6
Family Size	Up to 3 members	234	30.1
	4 - 6 members	450	57.8
	Above 6 members	94	12.1
	Below 30,000	78	10

Monthly Household Income (₹)	30,000 - 60,000	194	24.9
	60,000 - 90,000	225	28.9
	90,000 - 1,20,000	163	21
	1,20,000 - 1,50,000	78	10
	Above 1,50,000	X	X%
Duration of Organic Product Purchase	Up to 3 years	X	X%
	More than 3 years	X	X%
Purchase Frequency	Often	X	X%
	Sometimes	X	X%
	Rarely	X	X%
Preferred Retail Channel	Specialised Organic Shops	X	X%
	Supermarkets	X	X%
	Farmers Markets/Direct Selling	X	X%
	Local Markets	X	X%
	Online Platforms	X	X%
Preferred Product Categories	Fruits & Vegetables	X	X%
	Milk Products	X	X%
	Cereals & Pulses	X	X%
	Tea & Coffee	X	X%
	Spices	X	X%
	Edible Oil	X	X%
	Personal Care Products	X	X%
	Others	X	X%

Source: Primary Data

Table 4.15 summarises and highlights essential characteristics of the survey participants. The demographic analysis of organic product consumers in Goa reveals a profile closely aligning with international patterns. Nearly four-fifths of the respondents (79.8) reside in urban areas, reflecting the typical market structure in emerging economies where retail infrastructure and consumer awareness are centralised in urban centers

(Nandi et al., 2017; Aertsens et al., 2009). Educational attainment is particularly salient, with 75.1% holding graduate or postgraduate qualifications. This profile aligns with studies that underscore the positive correlation between higher education and environmental knowledge, health consciousness, and a willingness to pay premium prices for sustainable products (Hughner et al., 2007; Thøgersen, 2010). Economically, the market is primarily driven by the middle-income bracket, as 78.8% of respondents report monthly household incomes between ₹ 30,000 and ₹ 1,50,000. This pattern, consistent with international organic market characteristics, illustrates that price premiums restrict regular organic purchasing to households with adequate discretionary income (Padel & Foster, 2005). Consumption is concentrated among working-age adults, particularly the 31-45 age cohort (43.3), and shows a moderate female predominance (56%). This supports the empirical evidence that women typically assume primary responsibility for household food purchasing and exhibit heightened attention to health considerations (Aertsens et al., 2009).

The Goan organic market exhibits an intermediate developmental stage, with an almost even split between newer (51%, with less than or equal to 3 years of experience) and established (49%, with more than 3 years of experience) consumers. It indicates simultaneous market expansion and deepening loyalty. Most consumers reside in medium-sized households of four to six members (57.8%). Fruits and vegetables (82.9%) overwhelmingly dominate product category preferences, followed by cereals and pulses (61.1%), which aligns with international patterns in which fresh produce represents the primary entry point for organic consumption, driven by concerns about direct pesticide exposure (Hughner et al., 2007). In terms of retail channel preference, a dual-channel strategy is favoured. Supermarkets (55%) and specialised organic shops (44%) dominate as the preferred channels of purchase, indicating a mixed shopping strategy that combines convenience and specialisation. Collectively, this demographic profile validates theoretical frameworks emphasising that organic product adoption concentrates among socio-economic segments possessing the necessary knowledge, values, and

financial resources (Aertsens et al., 2009; Thøgersen, 2010).

4.5.2 Reliability Analysis

To assess the internal consistency of the measurement scale, Cronbach's Alpha was computed. The results are presented in the table below:

Table 4.16: Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardised Items	Number of Items
0.824	0.824	89

Source: Primary Data

A Cronbach's Alpha of 0.824 indicates a high level of internal consistency among the 81 items in the questionnaire. According to Nunnally (1978), a Cronbach's Alpha value above 0.70 is considered acceptable, while values above 0.80 indicate good reliability. The 89 items used in the study generated a Cronbach's Alpha (α) of 0.824 (p -value < 0.001), signifying a level of internal consistency. Therefore, the items reliably measure the intended constructs (Nunnally & Bernstein, 1994; Hair Jr. et al., 2018).

4.6 Multiple Regression Analysis of Structural Relationships

The analysis conducted using regression is discussed as follows:

4.6.1 Analysis of Objective 1

The objective attempts to examine the relationships among the components of the Theory of Planned Behaviour. Objective 1 is achieved with the help of structural model validation. The structural model validates the direct relationships between constructs.

- a) Effect of Normative Social Influence (NSI) and Value-Expressive Social Influence (VESI) on Subjective Norms (SN)

To examine the relationship between the independent variables (NSI) and

Value-Expressive Social Influence (VESI) and the dependent variable Subjective Norms (SN), a multiple regression analysis was conducted. The R^2 value of 0.510 indicates that 51.0% of the variance in the dependent variable is explained by the independent variables, suggesting moderate explanatory power of the model. The regression coefficients and their significance levels are presented in the table below:

Table 4.17: Influence of NSI and VESI with SN

Variable	Coefficient (β)	P-value
NSI	0.485	0.000
VESI	0.493	0.000
R^2 : 0.510		

Source: Primary Data

The regression analysis reveals that Normative Social Influence (NSI) ($\beta = 0.485$, $p < 0.001$) and Value-Expressive Social Influence (VESI) ($\beta = 0.493$, $p < 0.001$) significantly predict Subjective Norms (SN). The results show that NSI and VESI have a significant positive impact on the SN, indicating that an increase in these variables is associated with an increase in the outcome. This depicts that individuals are influenced by both societal expectations and personal values when forming Subjective Norms (SN). Since both NSI and VESI have strong, statistically significant effects, it implies that these factors play a critical role in influencing the dependent variable, SN. The model explains 51.0% of the variance in SN ($R^2 = 0.510$), indicating a moderate fit. It implies that while these predictors explain a significant portion of the variance, other factors may also contribute to the outcome.

- b) Effect of Self-Transcendence (STC), Environmental Concern (EC), and Self-Enhancement (SE) on Attitude Toward Organic Product Purchase (ATOPP)

A multiple regression analysis was conducted to examine the effect of

Self-Transcendence (STC), Environmental Concern (EC), and Self-Enhancement (SE) on the dependent variable Attitude Toward Organic Product Purchase (ATOPP). The regression coefficients and their significance levels are presented below:

Table 4.18: Influence of STC, EC and SE on ATOPP

Variable	Coefficient (β)	P-value
STC	0.428	0.000
EC	0.279	0.000
SE	0.302	0.000
R ² : 0.397		

Source: Primary Data

The results indicate that STC ($\beta = 0.428$, $p < 0.001$), EC ($\beta = 0.279$, $p < 0.001$), and SE ($\beta = 0.302$, $p < 0.001$) all have a significant positive effect on the ATOPP. This depicts that as STC, EC, and SE increase, the dependent variable, ATOPP, also increases. STC is the strongest predictor, followed by EC and SE. This indicates that consumers' attitudes toward organic product purchase are significantly driven by Self-Transcendence (STC), Environmental Concern (EC), and Self-Enhancement (SE).

The model yielded an R² value of 0.397, indicating that the independent variables explain 39.7% of the variance in the dependent variable. This underscores a moderate level of explanatory power. It conveys that while these three predictors explain a considerable portion of the variance in the dependent variable, other factors not included in the model may also play a role in influencing the outcome.

c) Effect of Control Strength (CS) and Control Beliefs (CB) on Perceived Behavioural Control (PBC)

A multiple regression analysis was conducted to examine the influence of Control Strength (CS) and Control Beliefs (CB) on Perceived Behavioural

Control (PBC). The regression coefficients and their significance levels are presented below:

Table 4.19: Influence of CS and CB on PBC

Variable	Coefficient (β)	P-value
CS	0.621	0.000
CB	0.381	0.000
R^2 : 0.560		

Source: Primary Data

The findings indicate that Control Strength (CS) ($\beta = 0.621$, $p < 0.001$) and Control Beliefs (CB) ($\beta = 0.381$, $p < 0.001$) are both significant positive predictors of the Perceived Behavioural Control (PBC), with Control Strength (CS) having a stronger influence. This implies that as CS and CB increase, the dependent variable also increases. The model yielded an R^2 value of 0.560, indicating that 56.0% of the variance in the dependent variable is explained by these two predictors. This illustrates a moderately strong explanatory power of the model. Although the model explains a substantial portion of the variance, 44% of the variation remains unexplained, suggesting the possible influence of additional factors.

d) Effect of Subjective Norms (SN), Attitude Toward Organic Products Purchase (ATOPP), Perceived Behavioural Control (PBC) on Organic Product Purchase Intention (OPPI)

A multiple regression analysis was conducted to examine the impact of Subjective Norms (SN), Attitude Toward Organic Products Purchase (ATOPP), and Perceived Behavioural Control (PBC) on the dependent variable, Organic Product Purchase Intention (OPPI). The regression coefficients and their significance levels are presented below:

Table 4.20: Influence of SN, ATOPP and PBC on OPPI

Variable	Coefficient (β)	P-value
SN	0.212	0.000
ATOPP	0.276	0.000
PBC	0.203	0.000
R ² : 0.585		

Source: Primary Data

The results demonstrate that Subjective Norms (SN) ($\beta = 0.212$, $p < 0.001$), Attitude Toward Organic Products Purchase (ATOPP) ($\beta = 0.276$, $p < 0.001$), and Perceived Behavioural Control (PBC) ($\beta = 0.203$, $p < 0.001$) are all significant positive predictors of Organic Product Purchase Intention (OPPI). This underscores that as SN, AOPP, and PBC increase, the OPPI also increases, with ATOPP exerting the strongest influence among the three predictors. With an R² value of 0.585, the model indicates that 58.5% of the variance in the dependent variable is explained by these three predictors. This highlights a moderate to strong explanatory power of the model, though approximately 41.5% of the variation remains unexplained, indicating the potential influence of additional factors.

e) Effect of Organic Product Purchase Intention (OPPI) on Organic Product Purchase Behaviour (OPPB)

A simple regression analysis was conducted to examine the impact of Organic Product Purchase Intention (OPPI) on the dependent variable Organic Product Purchase Behaviour (OPPB). The regression coefficients and their significance levels are presented below:

Table 4.21: Influence of OPPI on OPPB

Variable	Coefficient (β)	P-value
OPPI	0.316	0.000

$R^2: 0.146$

Source: Primary Data

The findings indicate that Organic Product Purchase Intention (OPPI) ($\beta = 0.316$, $p < 0.001$) is a significant positive predictor of Organic Product Purchase Behaviour (OPPB). This indicates that as OPPI increases, the dependent variable also increases. The model yielded an R^2 value of 0.146, indicating that only 14.6% of the variance in the dependent variable is explained by OPPI. This reveals a weak explanatory power, implying that other factors not included in the model may play a significant role.

4.6.2 Analysis of Objective 2

Objective 2 is achieved by integrating the post-purchase components in the extended model of the Theory of Planned Behaviour. The model validates the direct relationships between constructs.

a) Effect of Organic Product Purchase Behaviour (OPPB) on Organic Product Satisfaction (OPS)

A simple regression analysis was conducted to examine the impact of Organic Product Purchase Behaviour (OPPB) on the dependent variable Organic Product Satisfaction (OPS). The regression coefficients and their significance levels are presented below:

Table 4.22: Influence of OPPB on OPS

Variable	Coefficient (β)	P-value
OPPB	0.698	0.000
$R^2: 0.729$		

Source: Primary Data

The results indicate that Organic Product Purchase Behaviour (OPPB) ($\beta = 0.698$, $p < 0.001$) is a strong and significant positive predictor of the Organic Product Satisfaction (OPS). This shows that as OPPB increases,

the dependent variable also increases significantly. The model yielded an R^2 value of 0.729, indicating that OPPB explains 72.9% of the variance in the dependent variable. However, 27.1% of the variance remains unexplained, indicating the potential influence of other variables.

b) Effect of Organic Product Satisfaction (OPS) on Organic Product Loyalty (OPL)

A simple regression analysis was conducted to examine the impact of Organic Product Satisfaction (OPS) on the dependent variable Organic Product Loyalty (OPL). The regression coefficients and their significance levels are presented below:

Table 4.23: Influence of OPS on OPL

Variable	Coefficient (β)	P-value
OPS	0.707	0.000
R^2 : 0.852		

Source: Primary Data

The results indicate that Organic Product Satisfaction (OPS) ($\beta = 0.707$, $p < 0.001$) is a strong and significant positive predictor of Organic Product Loyalty (OPL). This indicates that as it increases, the OPL also increases significantly. The model yielded an R^2 value of 0.852, indicating that 85.2% of the variance in the dependent variable is explained by OPS. This implies a very strong explanatory power, meaning that it is a dominant predictor of the dependent variable. However, other factors may be contributing to the remaining 14.8% of the unexplained variance.

c) Visual Representation of Structural Relationships in Model 1

The figure below, Figure 4.8, depicts the integrated Model 1 based on Objectives 1 and 2.

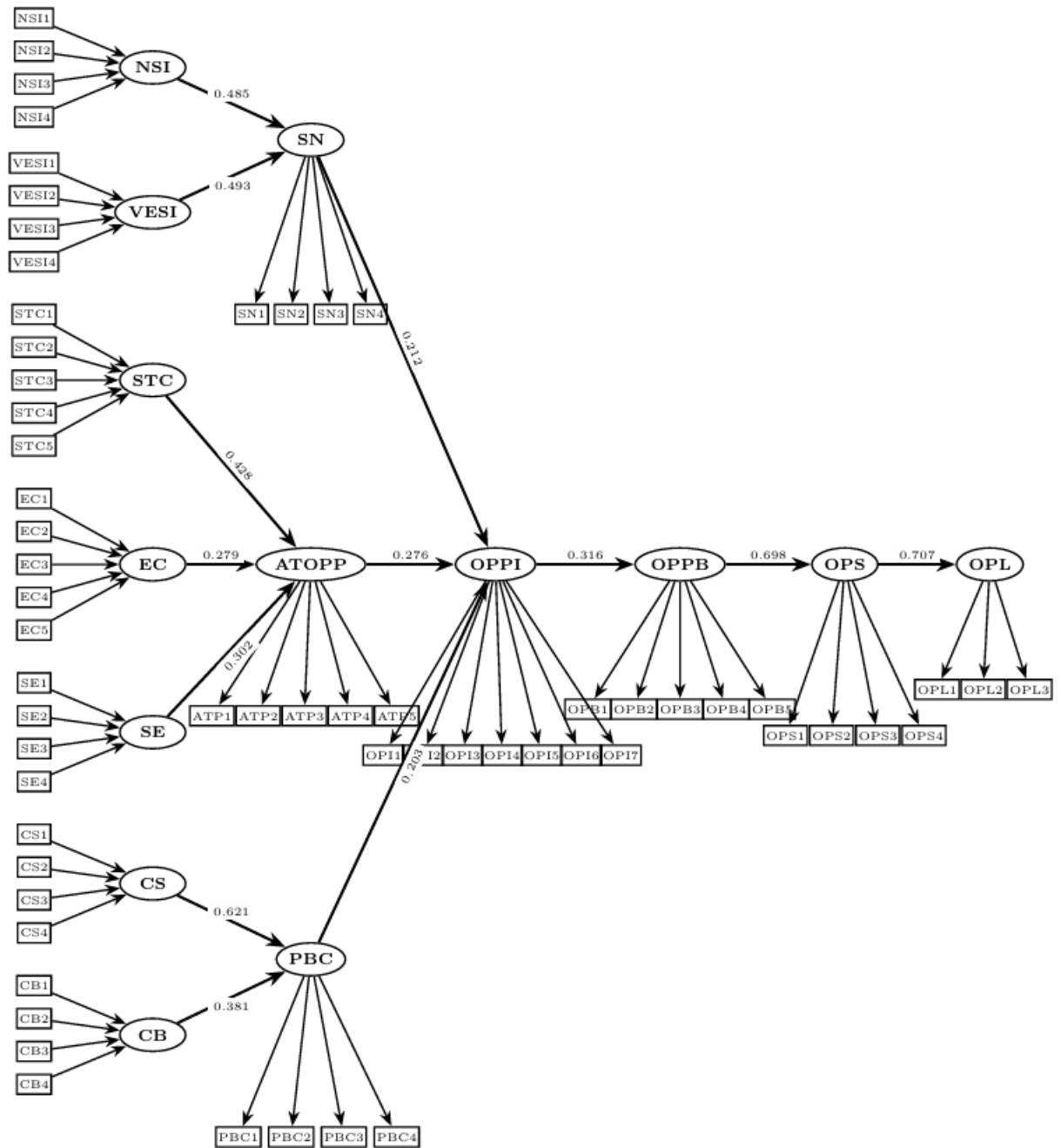


Figure 4.8: Visual Summary of Regression-Based Structural Model
Testing for Extended TPB Framework (Model 1)

Source: Primary Data

The diagrammatic representation of the complex relationships between various constructs in the extended TPB is depicted above. The diagram consolidates results from the seven regression models tested, illustrating how antecedent constructs influence core TPB components, which in turn predict organic product purchase intentions, behaviour, and post-purchase

outcomes.

4.6.3 Analysis of Objective 3:

a) Influence of Green Marketing Strategies on OPPI

This objective analyses the influence of Green Marketing Strategies, namely, Attitude towards Organic Products (AOP), Attitude towards Eco- Labelling (AEL), Attitude towards Green Branding (AGB), Attitude towards Green Advertisement (AGA) and Attitude towards Green Packaging (AGGP) on Organic Product Purchase Intention (OPPI). This helps to identify key promotional factors.

A multiple regression analysis was conducted to examine the impact of Attitude towards Organic Products (AOP), Attitude towards Eco- Labelling (AEL), Attitude towards Green Branding (AGB), Attitude towards Green Advertisement (AGA) and Attitude towards Green Packaging (AGP) on Organic Product Purchase Intention (OPPI). This was achieved with a Predictive Model of Organic Product Purchase Intention (OPPI). The regression coefficients and their significance levels are summarised below:

Table 4.24: Influence of Green Marketing Strategies on OPPI

Variable	Coefficient (β)	P-value
AGA	0.277	0.000
AGP	0.185	0.000
AGB	0.195	0.000
AOP	0.218	0.000
AEL	0.093	0.000
R ² : 0.299		

Source: Primary Data

From the above, it can be seen that Organic Product Purchase Intention (OPPI) is positively impacted by Attitude towards Organic Products (AOP), Attitude towards Eco-Labeling (AEL), Attitude towards Green Branding (AGB), Attitude towards Green Advertisement (AGA) and Attitude towards Green Packaging (AGP). While AGA ($\beta = 0.277$, $p < 0.001$) and AOP ($\beta = 0.218$, $p < 0.001$) are the strongest drivers of OPPI, AEL ($\beta = 0.093$, $p < 0.001$) has the least influence. The model yielded an R^2 value of 0.299, indicating that 29.9% of the variance in OPPI is explained by the given five predictors (AGA, AGP, AGB, AOP, and AEL). This indicates a moderate explanatory power, meaning that while these successfully predict OPPI, additional variables may also contribute to the outcome.

b) Visual Representation of Structural Relationships in Model 2

The figure below is a depiction of the relationships proposed in objective 3 of the study.

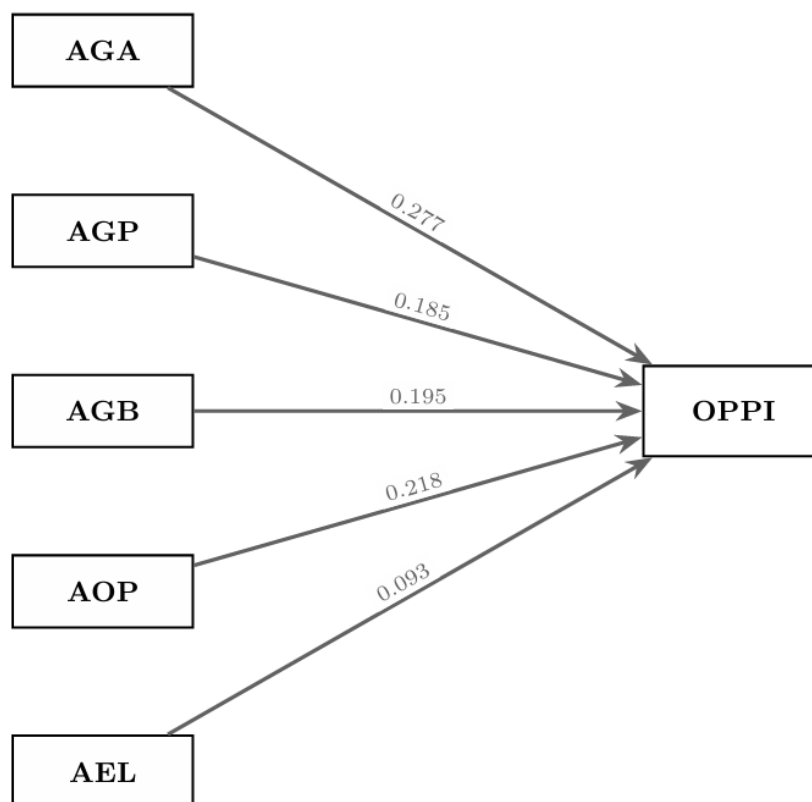


Figure 4.9: Path Diagram of Model 2

Source: Primary Data

The values shown in the figure are based on the analysis conducted on the proposed model.

4.6.4 Analysis of Objective 4:

a) Moderating effect of HC, PCE and TRUST

The third objective of the study seeks to investigate the moderating role of Health Consciousness (HC), Perceived Consumer Effectiveness (PCE), and Trust (TRUST) on the relationships between Subjective Norms (SN), Attitude Toward Organic Product Purchase (ATOPP), and Perceived Behavioural Control (PBC) on Organic Product Purchase Intention (OPPI), determining how these factors strengthen or weaken OPPI. This was achieved with the Hierarchical Regression Analysis and Moderating Effects Analysis. The Regression Results for TPB Constructs and Moderating Effects are presented below:

Table 4.25: Moderating effect of HC, PCE and TRUST

Step	Model	R ²	Adjusted R ²	Incremental R ² Change	Key Findings
Step 1: TPB Constructs Only	SN, ATOPP, PBC → PI	0.585	0.584	-	SN ($\beta = 0.212$, $p < 0.001$), ATOPP ($\beta = 0.276$, $p < 0.001$), and PBC ($\beta = 0.203$, $p < 0.001$) significantly predict PI.
Step 2: Adding Moderators	SN, ATOPP, PBC, HC, PCE, TRUST → PI	0.848	0.846	0.262	TRUST ($\beta = 1.088$, $p < 0.001$) dominates; HC and PCE are insignificant ($p > 0.05$).

Step 3: Interaction Terms	SN, ATOPP, PBC, HC, PCE, TRUST + Interaction Terms → PI	0.852	0.849	0.005	SN_TRUST ($\beta = -0.031$, $p = 0.013$) and PBC_TRUST ($\beta = -0.025$, $p = 0.034$) show significant moderation.
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Source: Primary Data

As mentioned earlier, the initial regression model (Step 1: TPB Constructs Only), incorporating only the Theory of Planned Behaviour (TPB) constructs, i.e. Subjective Norms (SN), Attitude Toward Organic Product Purchase (ATOPP), and Perceived Behavioural Control (PBC), explains 58.5% of the variance in Organic Product Purchase Intention (OPPI). All three constructs are significant predictors of OPPI.

The inclusion of moderators, viz. Health Consciousness (HC), Perceived Consumer Effectiveness (PCE), and Trust (TRUST) significantly improve the model's explanatory power, with R^2 increasing to 0.848 (Step 2: Adding Moderators). Trust (TRUST) emerges as the most significant predictor ($\beta = 1.088$, $p < 0.001$), highlighting its critical role in shaping Organic Product Purchase Intention OPPI. However, Health Consciousness (HC) and Perceived Consumer Effectiveness (PCE) are statistically insignificant ($p > 0.05$), suggesting that these factors do not directly influence OPPI in the context of Goa.

The addition of interaction terms to test moderation effects results in a marginal increase in R^2 (0.852) [Step 3: Interaction Terms (Moderation Effects)]. Two interaction terms, SN_TRUST ($\beta = -0.031$, $p = 0.013$) and PBC_TRUST ($\beta = -0.025$, $p = 0.034$), are statistically significant, indicating that TRUST moderates the relationships between SN and PI, and PBC and PI. However, the small incremental R^2 change (0.005) shows that the moderating effects are relatively weak. A summary table of moderating effects is given as follows:

Table 4.26: Summary of Moderating Effect of HC, PCE and TRUST

Relationship	Moderator	Coefficient (β)	p-value	Significance
SN $\rightarrow$ OPPI	TRUST	-0.031	0.013	Significant
	HC	-0.010	0.389	Insignificant
	PCE	0.009	0.240	Insignificant
ATOPP $\rightarrow$ OPPI	TRUST	-0.009	0.509	Insignificant
	HC	0.006	0.666	Insignificant
	PCE	-0.0002	0.983	Insignificant
PBC $\rightarrow$ OPPI	TRUST	-0.025	0.034	Significant
	HC	0.007	0.531	Insignificant
	PCE	-0.005	0.519	Insignificant

Source: Primary Data

i. Moderating Effects on SN and OPPI

The interaction term SN_TRUST ($\beta = -0.031$, $p = 0.013$) is statistically significant but has a negative coefficient, indicating that higher trust weakens the positive relationship between Subjective Norms (SN) and Organic Product Purchase Intention (OPPI). SN_HC ($\beta = -0.010$, $p = 0.389$) and SN_PCE ($\beta = 0.009$, $p = 0.240$) are insignificant. HC and PCE do not moderate the SN and OPPI relationship.

ii. Moderating Effects on AOPP and OPPI

The interaction term ATOPP_TRUST ($\beta = 0.009$, $p = 0.509$) is insignificant. Trust does amplify or weaken the direct impact of Attitude Toward Organic Product Purchase (ATOPP) on Organic Product Purchase Intention (OPPI). AOPP_HC ($\beta = 0.006$, $p = 0.666$) and AOPP_PCE (β

= -0.0002, $p = 0.983$) are insignificant. HC and PCE do not moderate the ATOPP and OPPI relationship.

iii. Moderating Effects on PBC and OPPI

The interaction term PBC_TRUST ($\beta = -0.025$, $p = 0.034$) is significant and negative, indicating that higher Trust reduces the impact of PBC on PI. PBC_HC ($\beta = 0.007$, $p = 0.531$) and PBC_PCE ($\beta = -0.005$, $p = 0.519$) are insignificant. HC and PCE do not moderate the PBC and OPPI relationship.

b) Visual Representation of Structural Relationships in Model 3

The figure below diagrammatically represents the moderation effect of trust, health consciousness and perceived behavioural control in the basic TPB framework.

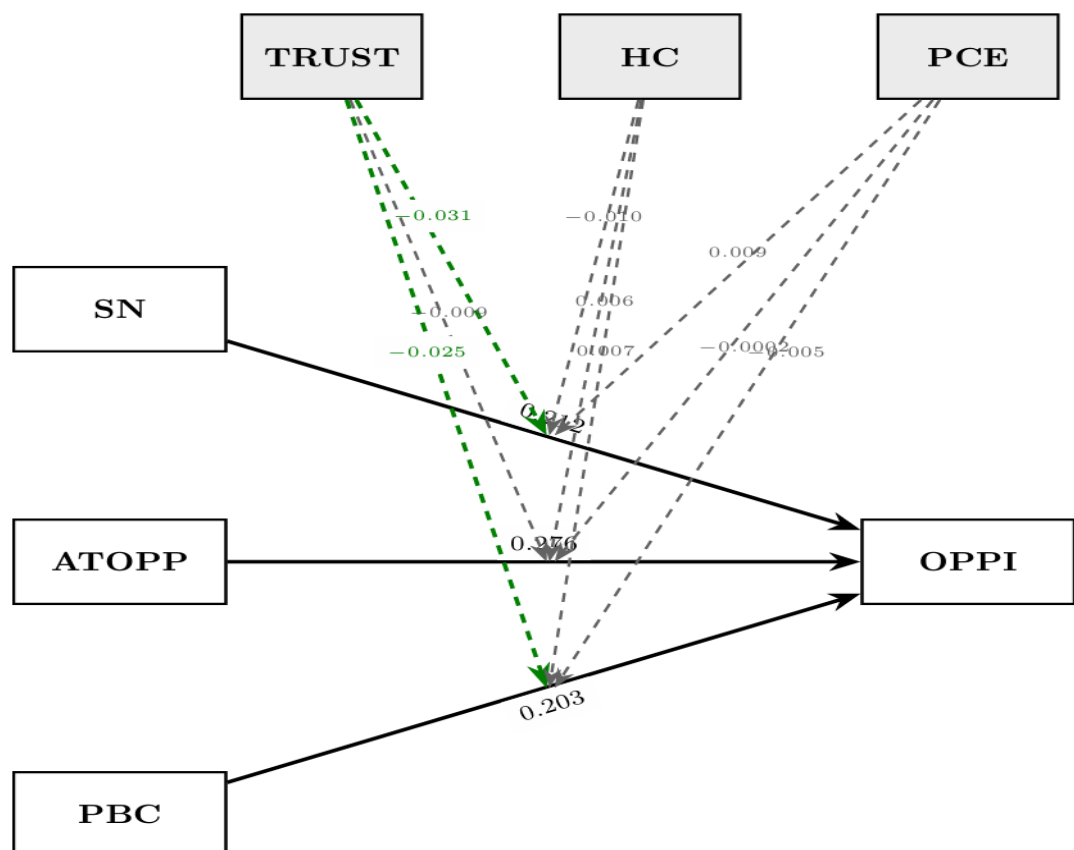


Figure 4.10: Path Diagram of Model 3

Source: Primary Data

The values depicted in the above diagram are based on the analysis conducted on the moderation variables. It, therefore, diagrammatically represents the Model 3.

4.7 Attainment of Objectives

The present study sought to examine consumer behaviour towards organic products in the state of Goa by applying an extended Theory of Planned Behaviour (TPB) framework. The fulfilment of objectives has been ensured through systematic empirical analysis. The interpretation of relationships among psycho-social, marketing, and moderating variables was done for this purpose. After validating the measurement model for the constructs, regression analysis was conducted to analyse the relationships. The findings corresponding to each objective are summarised below.

- 1) Objective 1: To identify the impact of psycho-social factors on consumer behaviour towards organic products using TPB

The first objective was comprehensively achieved through systematic examination of the extended Theory of Planned Behaviour framework, encompassing antecedents of TPB constructs, core TPB relationships, and post-purchase behavioural outcomes. This objective was addressed through seven distinct sub-objectives. Each of them contributed to a holistic understanding of the psycho-social mechanisms underlying organic product consumption behaviour.

The analysis of social influence mechanisms on subjective norms revealed that both Normative Social Influence (NSI) and Value-Expressive Social Influence (VESI) exert substantial and statistically significant positive effects on Subjective Norms (SN), with standardised path coefficients of $\beta = 0.485$ ($p < 0.001$) and $\beta = 0.493$ ($p < 0.001$), respectively. The regression model explained 51.0% of the variance in subjective norms ($R^2 = 0.510$), indicating substantial explanatory power while acknowledging that additional social influence mechanisms may contribute to subjective norm formation.

The examination of attitudinal antecedents revealed that Self-

Transcendence (STC), Environmental Concern (EC), and Self-Enhancement (SE) collectively and significantly influence Attitude Toward Organic Product Purchase (ATOPP), with standardised coefficients of $\beta = 0.428$ ($p < 0.001$), $\beta = 0.279$ ($p < 0.001$), and $\beta = 0.302$ ($p < 0.001$), respectively. The model accounted for 39.7% of the variance in attitude ($R^2 = 0.397$), indicating moderate explanatory power while suggesting that additional psychological factors such as sensory preferences, risk perceptions, or knowledge levels may further contribute to attitude formation.

The analysis of perceived behavioural control antecedents demonstrated that both Control Strength (CS) and Control Beliefs (CB) significantly and positively predict Perceived Behavioural Control (PBC), with standardised coefficients of $\beta = 0.621$ ($p < 0.001$) and $\beta = 0.381$ ($p < 0.001$), respectively. The model explained 56.0% of the variance in perceived behavioural control ($R^2 = 0.560$), demonstrating substantial explanatory power.

The examination of core TPB relationships validated that Subjective Norms (SN), Attitude Toward Organic Product Purchase (ATOPP), and Perceived Behavioural Control (PBC) collectively and significantly predict Organic Product Purchase Intention (OPPI), with standardised coefficients of $\beta = 0.212$ ($p < 0.001$), $\beta = 0.276$ ($p < 0.001$), and $\beta = 0.203$ ($p < 0.001$) respectively. The model explained 58.5% of the variance in purchase intention ($R^2 = 0.585$), showcasing substantial explanatory power. The analysis of the intention-behaviour relationship revealed that Organic Product Purchase Intention (OPPI) significantly predicts Organic Product Purchase Behaviour (OPPB) with a standardised coefficient of $\beta = 0.316$ ($p < 0.001$). However, the relatively modest R^2 value of 0.146 indicates that purchase intentions explain only 14.6% of the variance in actual purchase behaviour.

- 2) Objective 2: To examine the influence of Organic Product Purchase Behaviour on Organic Product Satisfaction (OPS) and Organic Product Loyalty (OPL)

The examination of post-purchase evaluative processes demonstrated that Organic Product Purchase Behaviour (OPPB) strongly and significantly predicts Organic Product Satisfaction (OPS) with a standardised coefficient of $\beta = 0.698$ ($p < 0.001$). The substantial R^2 value of 0.729 indicates that actual purchase behaviour and consumption experience explain 72.9% of the variance in satisfaction. The analysis of loyalty formation demonstrated that Organic Product Satisfaction (OPS) exerts a strong and highly significant influence on Organic Product Loyalty (OPL) with a standardised coefficient of $\beta = 0.707$ ($p < 0.001$). The exceptionally high R^2 value of 0.852 indicates that satisfaction explains 85.2% of the variance in loyalty,

3) Objective 3: To examine the influence of Green Marketing Strategies on Organic Product Purchase Intention

The third objective was comprehensively fulfilled through a systematic examination of five distinct green marketing strategy dimensions and their respective influences on Organic Product Purchase Intention (OPPI). While the objective formally references influence on purchase behaviour (OPPB), the empirical analysis examined direct effects on purchase intention (OPPI), which serves as the immediate psychological precursor to behaviour within the TPB framework. The systematic analysis revealed that all five components of green marketing strategy, namely, Attitude towards Organic Products (AOP), Attitude towards Green Branding (AGB), Attitude towards Green Packaging (AGP), Attitude towards Green Advertising (AGA), and Attitude towards Eco-Labels (AEL), exert statistically significant positive effects on Organic Product Purchase Intention (OPPI), with standardised coefficients of $\beta = 0.218$ ($p < 0.001$), $\beta = 0.195$ ($p < 0.001$), $\beta = 0.185$ ($p < 0.001$), $\beta = 0.277$ ($p < 0.001$), and $\beta = 0.093$ ($p < 0.001$) respectively. AGA emerged as the most influential marketing factor ($\beta = 0.277$), followed by AOP ($\beta = 0.218$), AGA ($\beta = 0.195$) and AGP ($\beta = 0.185$). Eco-Labels (AEL) demonstrated the weakest, though significant, effect among the five marketing components considered for the study ($\beta = 0.093$). Collectively, they explained 29.9% of the variance in OPPI (R^2 : 0.299).

4) Objective 4: To study the moderating effects of Health Consciousness, Perceived Consumer Effectiveness, and Trust on the TPB relationships

The third objective was systematically addressed through hierarchical moderation analysis, examining whether Health Consciousness (HC), Perceived Consumer Effectiveness (PCE), and Trust (TRUST) condition the strength or direction of relationships between TPB constructs and Organic Product Purchase Intention (OPPI). The hierarchical regression approach revealed three sequential models: the baseline TPB model incorporating only subjective norms, attitude toward organic product purchase, and perceived behavioural control ($R^2 = 0.585$); the augmented model adding direct effects of the three moderating variables ($R^2 = 0.848$); and the full interaction model including all two-way interaction terms ($R^2 = 0.852$). The substantial increase in explained variance from the baseline to the augmented model ($\Delta R^2 = 0.262$).

The moderation analysis examining the conditional effects of health consciousness, perceived consumer effectiveness, and trust on the subjective norms-purchase intention relationship revealed that only trust demonstrated significant moderation ($\beta = -0.031$, $p = 0.013$), while health consciousness ($\beta = -0.010$, $p = 0.389$) and perceived consumer effectiveness ($\beta = 0.009$, $p = 0.240$) showed non-significant interaction effects. Similarly, the examination of moderating effects on the attitude-intention relationship revealed that none of the three proposed moderators, i.e. trust ($\beta = -0.009$, $p = 0.509$), health consciousness ($\beta = 0.006$, $p = 0.666$), or perceived consumer effectiveness ($\beta = -0.0002$, $p = 0.983$), significantly moderated this relationship.

The moderation analysis examining conditional effects on the perceived behavioural control-purchase intention relationship demonstrated that trust significantly moderated this relationship ($\beta = -0.025$, $p = 0.034$), while health consciousness ($\beta = 0.007$, $p = 0.531$) and perceived consumer effectiveness ($\beta = -0.005$, $p = 0.519$) did not exhibit significant moderation effects.

4.8 Summary of Hypotheses Decisions

The summary of the hypotheses developed for the purpose of the study is summarised as under:

Table 4.27: Hypotheses Decisions

Hypothesis	Description	Result
Objective 1:		
H _{1a}	Normative Social Influence (NSI) has a positive effect on Subjective Norms (SN)	Supported
H _{1b}	Value-Expressive Social Influence (VESI) has a positive effect on Subjective Norms (SN)	Supported
H _{1c}	Self-Transcendence (STC) has a positive effect on Attitude Towards Organic Product Purchase (ATOPP)	Supported
H _{1d}	Self-Enhancement (SEC) has a positive effect on Attitude Towards Organic Product Purchase (ATOPP)	Supported
H _{1e}	Environmental Concern (EC) has a positive effect on Attitude Towards Organic Product Purchase (ATOPP)	Supported
H _{1f}	Control Belief (CB) has a positive effect on Perceived Behavioural Control (PBC)	Supported
H _{1g}	Control Strength (CS) has a positive effect on Perceived Behavioural Control (PBC)	Supported
H _{1h}	Subjective Norms (SN) positively influence Organic Product Purchase Intention (OPPI)	Supported
H _{1i}	Attitude Towards Organic Product Purchase (ATOPP) positively influences Organic Product Purchase Intention (OPPI)	Supported

H _{1j}	Perceived Behavioural Control (PBC) positively influences Organic Product Purchase Intention (OPPI)	Supported
H _{1k}	Organic Product Purchase Intention (OPPI) positively influences Organic Product Purchase Behaviour (OPPB)	Supported
Objective 2		
H _{2a}	Organic Product Purchase Behaviour (OPPB) positively influences Organic Product Satisfaction (OPS)	Supported
H _{2b}	Organic Product Satisfaction (OPS) positively influences Organic Product Loyalty (OPL)	Supported
Objective 3		
H _{3a}	Attitude Towards Organic Products (AOP) positively influences Organic Product Purchase Intention (OPPI)	Supported
H _{3b}	Attitude towards Green Branding (AGB) positively influences Organic Product Purchase Intention (OPPI)	Supported
H _{3c}	Attitude towards Green Advertising (AGA) positively influences Organic Product Purchase Intention (OPPI)	Supported
H _{3d}	Attitude towards Eco-Labeling (AEL) positively influences Organic Product Purchase Intention (OPPI)	Supported
H _{3e}	Attitude towards Green Packaging (AGP) positively influences Organic Product Purchase Intention (OPPI)	Supported
Objective 4		
H _{4a}	HC, PCE, and TRUST moderate the relationship between SN and OPPI	Partially Supported (Trust significant;

		HC & PCE not)
H _{4b}	HC, PCE, and TRUST moderate the relationship between ATOPP and OPPI	Not Supported
H _{4c}	HC, PCE, and TRUST moderate the relationship between PBC and OPPI	Partially Supported (Trust significant; HC & PCE not)
H _{4d}	HC, PCE, and Trust moderate the relationship between SN and OPPI	Partially Supported (Trust significant; HC & PCE not)

Source: Primary Data

The table above is based on the analysis conducted for the study.

Chapter 5

Findings of the study

5.1 Introduction

This chapter provides a summary of the study undertaken, the findings obtained from the analysis of the results and the discussion on the findings.

5.2 Exploratory Qualitative Study

The review of literature provided comprehensive insights into the determinants influencing Organic Product Purchase Behaviour (OPPB). It revealed that consumer behaviour towards organic products is shaped by an interplay of psychological, social, and marketing-related factors. The review of prior studies facilitated the conceptualisation of the research framework, formulation of hypotheses, and design of the structured questionnaire. Based on these theoretical foundations, two conceptual models were developed for empirical testing. The first model, examining the influence of psycho-social factors on OPPB, was formulated using the extended Theory of Planned Behaviour (TPB). The second model, focusing on the influence of attitude towards green marketing strategies on OPPI, was developed by drawing upon the Attitude-Intention-Behaviour (AIB) framework.

Scale items representing the constructs were identified from established and validated instruments reported in previous empirical studies. These items were modified to suit the context. They were refined through expert review, the research guide, and an industry specialist to ensure their content relevance, conceptual clarity, and contextual appropriateness. Based on their suggestions, the final questionnaire was structured into five sections. The first section measured consumers' Organic Product Purchase Intention (OPPI). The second section captured psycho-social factors

influencing OPPB as conceptualised under the TPB framework. The third section assessed determinants of attitude towards green marketing strategies and consumers' attitudes towards these strategies. The fourth section measured Organic Product Purchase Behaviour (OPPB), while the fifth section recorded the demographic characteristics of respondents.

To ensure the validity and reliability of the measurement model, Confirmatory Factor Analysis (CFA) was conducted. The CFA results confirmed that all constructs exhibited satisfactory levels of convergent and discriminant validity, as well as internal consistency reliability. The validated measurement model thus provided a robust foundation for subsequent testing of the hypothesised relationships in the proposed model, and for examining the moderating effects specified in the study.

5.3 Findings of the study

The research was primarily conducted to investigate the factors influencing the OPPB of consumers. This was investigated by developing two models. The first model investigated the psycho-social factors influencing OPPB, and the second model investigated the attitude towards green marketing strategies influencing OPPB. The major results of the analysis, the summary of the findings, are discussed as follows.

5.3.1 Reliability Assessment

The measurement scale demonstrated high internal consistency, with a Cronbach's Alpha of 0.824 for 89 items, exceeding the threshold of 0.70 recommended by Nunnally (1978). This confirms the reliability of the constructs employed in the study and validates the internal consistency of the measurement instrument.

5.3.2 Psycho-Social Factors and Extended TPB

The regression analysis revealed that both Normative Social Influence (NSI) and Value-Expressive Social Influence (VESI) significantly predict Subjective Norms (SN), with standardised path coefficients of $\beta = 0.485$ ($p < 0.001$) and $\beta = 0.493$ ($p < 0.001$), respectively. The model explained 51.0% of the variance in subjective norms ($R^2 = 0.510$). The near-

equivalent magnitudes of both coefficients indicate that neither mechanism dominates, suggesting that subjective norms formation involves simultaneous processing of both normative compliance and value-expression mechanisms. This supports the propositions that posit that Social Norms play a critical role in sustainable product adoption and are shaped by external (NSI) and internal (VESI) factors (Ajzen, 1991; Chen & Chang, 2012).

Self-Transcendence (STC), Environmental Concern (EC), and Self-Enhancement (SE) collectively and significantly influence Attitude Toward Organic Product Purchase (ATOPP), with standardised coefficients of $\beta = 0.428$ ($p < 0.001$), $\beta = 0.279$ ($p < 0.001$), and $\beta = 0.302$ ($p < 0.001$), respectively. Self-transcendence emerged as the most influential determinant, aligning with Schwartz's (1992) values theory, which emphasises the role of Self-Transcendence in pro-environmental behaviour. The model accounted for 39.7% of the variance in attitude ($R^2 = 0.397$).

Control Strength (CS) and Control Beliefs (CB) significantly and positively predict Perceived Behavioural Control (PBC), with standardised coefficients of $\beta = 0.621$ ($p < 0.001$) and $\beta = 0.381$ ($p < 0.001$), respectively. Control strength demonstrated a substantially stronger effect than control beliefs. The model explained 56.0% of the variance in perceived behavioural control ($R^2 = 0.560$). This proves the assertion by Ajzen (1991) that Perceived Control (PC) is driven by capability and situational factors.

Subjective Norms (SN), Attitude Toward Organic Product Purchase (ATOPP), and Perceived Behavioural Control (PBC) collectively and significantly predict Organic Product Purchase Intention (OPPI), with standardised coefficients of $\beta = 0.212$ ($p < 0.001$), $\beta = 0.276$ ($p < 0.001$), and $\beta = 0.203$ ($p < 0.001$), respectively. Attitude emerged as the most influential determinant. The model explained 58.5% of the variance in purchase intention ($R^2 = 0.585$). This reinforces Ajzen's (1991) model, though the dominance of attitudes over norms contrasts with studies that suggest context-specific variations (Armitage & Conner, 2001).

Organic Product Purchase Intention (OPPI) significantly predicts Organic Product Purchase Behaviour (OPPB) with a standardised coefficient of $\beta = 0.316$ ($p < 0.001$). However, the R^2 value of 0.146 indicates that purchase intentions explain only 14.6% of the variance in actual purchase behaviour, confirming a substantial intention-behaviour gap. This highlights the attitude-behaviour gap, which is a common issue in sustainable consumption (Vermeir & Verbeke, 2006). This demonstrates that there exist non-TPB factors that may impact behaviour.

Organic Product Purchase Behaviour (OPPB) strongly and significantly predicts Organic Product Satisfaction (OPS) with a standardised coefficient of $\beta = 0.698$ ($p < 0.001$). The substantial R^2 value of 0.729 indicates that actual purchase behaviour and consumption experience explain 72.9% of the variance in satisfaction. This supports the finding that post-purchase outcomes reinforce satisfaction (Oliver, 1999).

Furthermore, Organic Product Satisfaction (OPS) exerts a strong and highly significant influence on Organic Product Loyalty (OPL) with a standardised coefficient of $\beta = 0.707$ ($p < 0.001$), supporting the satisfaction-loyalty linkage (Anderson & Srinivasan, 2003). The exceptionally high R^2 value of 0.852 indicates that satisfaction explains 85.2% of the variance in loyalty.

5.3.3 Green Marketing Strategies and Purchase Intention

All five green marketing strategy components, i.e. Attitude towards Organic Products (AOP) ($\beta = 0.218$, $p < 0.001$), Attitude towards Green Branding (AGB) ($\beta = 0.195$, $p < 0.001$), Attitude towards Green Packaging (AGP) ($\beta = 0.185$, $p < 0.001$), Attitude towards Green Advertising (AGA) ($\beta = 0.277$, $p < 0.001$), and Attitude towards Eco-Labels (AEL) ($\beta = 0.093$, $p < 0.001$), exert statistically significant positive effects on Organic Product Purchase Intention (OPPI). The model explained 29.9% of the variance in purchase intention. Animal Welfare Awareness (AGA) emerged as the most influential marketing factor, while Eco-Labels (AEL) demonstrated the weakest effect. The results align with the findings that advertising and branding are critical but noted weak effects of labels due to consumer scepticism (Peattie K. , 2010).

5.3.4 Moderating Effects of Health Consciousness, Perceived Consumer Effectiveness, and Trust

The hierarchical regression revealed three progressive models: the baseline TPB model ($R^2 = 0.585$), the model with direct effects of moderators added ($R^2 = 0.848$), and the full model including interaction terms ($R^2 = 0.852$). Trust (TRUST) ($\beta = 1.088$) dominated the moderating effect, increasing R^2 to 0.848 when included in TPB. However, the Health Consciousness (HC) and Perceived Control Effectiveness (PCE) appeared to be insignificant moderators, possibly due to cultural differences in Goa. This contradicts the assertion that HC and PCE are significant (Smith & Paladino, 2010). Health Consciousness and Perceived Consumer Effectiveness were statistically insignificant as direct predictors ($p > 0.05$).

Trust (TRUST) weakened the relationship between Subjective Norms (SN) and Organic Product Purchase Intention (OPPI) ($\beta = -0.031$), and Perceived Behavioural Control (PBC) and Organic Product Purchase Intention (OPPI) ($\beta = -0.025$). The finding favours the findings that noted the complex role played by Trust in bridging attitude-behaviour gaps (Vermeir & Verbeke, 2006), while rejecting the claims made by others (Chen & Chang, 2013). Health Consciousness ($\beta = -0.010$, $p = 0.389$) and Perceived Consumer Effectiveness ($\beta = 0.009$, $p = 0.240$) showed non-significant moderation effects. Trust significantly moderated the relationship between Perceived Behavioural Control and Purchase Intention ($\beta = -0.025$, $p = 0.034$), with the negative coefficient indicating attenuation of the positive relationship at higher trust levels. Health Consciousness ($\beta = 0.007$, $p = 0.531$) and Perceived Consumer Effectiveness ($\beta = -0.005$, $p = 0.519$) did not exhibit significant moderation effects. None of the three proposed moderators significantly moderated the attitude-intention relationship [Trust ($\beta = -0.009$, $p = 0.509$), Health Consciousness ($\beta = 0.006$, $p = 0.666$), or Perceived Consumer Effectiveness ($\beta = -0.0002$, $p = 0.983$)].

5.4 Critical Analysis of Findings

The measurement instrument played a crucial role in conducting the study. The high internal consistency (Cronbach's $\alpha = 0.824$) demonstrates that

the adapted measurement scales maintained their psychometric properties despite minor contextual modifications for the Goan setting. This aligns with established standards and confirms the reliability of constructs employed in the extended TPB framework (Nunnally & Bernstein, 1994; Hair Jr. et al., 2018). The reliability coefficient exceeding 0.80 indicates excellent internal consistency. It is vital in providing confidence in the validity of subsequent structural analyses and supporting the appropriateness of scale adaptation procedures employed in this study (DeVellis, 2016). This finding is particularly important given that the study adapted scales from Western contexts to an Indian setting. Cross-cultural adaptation can sometimes compromise measurement reliability (Steenkamp & Baumgartner, 1998). The robust reliability observed demonstrates that the core psychological constructs examined in the TPB framework demonstrate cross-cultural stability. This is consistent with meta-analytic evidence supporting TPB's cross-cultural applicability (Armitage & Conner, 2001; Rivas & Sheeran, 2003).

Furthermore, the high reliability across 89 items representing multiple constructs indicates that respondents demonstrated consistency in their response patterns. This is suggestive of adequate comprehension of adapted items and minimal random measurement error (Churchill, 1979). This is noteworthy given that organic product consumption represents a relatively emerging phenomenon in Goa, where consumer familiarity with sustainability concepts may vary considerably (Hojnik et al., 2019; Ghosh & Lahiri, 2025). The strong reliability provides empirical support for the measurement model's adequacy and validates the decision to employ adapted rather than newly developed scales, which might have introduced greater measurement uncertainty (Hinkin, 1998).

5.4.1 Influence of psycho-social factors on the extended TPB

Both the Normative Social Influence (NSI: $\beta = 0.485$) and Value-Expressive Social Influence (VESI: $\beta = 0.493$) were observed to significantly predict Subjective Norms ($R^2 = 0.510$). The theoretical proposition that social norms play a critical role in sustainable product

adoption and are shaped by both external (NSI) and internal (VESI) factors is validated by the findings of the study (Ajzen, 1991; Chen & Chang, 2012; Tarkiainen & Sundqvist, 2005). The nearly equivalent magnitudes of both pathways extend traditional TPB conceptualisations by demonstrating that subjective norms emerge from dual psychological mechanisms. These mechanisms are conformity to perceived social expectations through informational and normative social influence and the desire to express environmental values through consumption choices that signal identity and group membership (Deutsch & Gerard, 1955; Kelman, 1958; Cialdini & Goldstein, 2004; White & Dahl, 2006). This dual pathway finding has important theoretical implications for understanding subjective norm formation in the context of pro-environmental consumption. Traditional TPB applications have typically operationalised subjective norms as unidimensional constructs reflecting perceived social pressure (Fishbein & Ajzen, 2010). However, the current study demonstrates that subjective norms in the organic product domain emerge from both compliance motivations and identity-expression motivations. This aligns with recent theoretical developments emphasising that pro-environmental behaviours serve both instrumental functions and symbolic functions (Schwartz, 1977; Griskevicius et al., 2010).

Though additional factors such as descriptive norms, identification with reference groups, and injunctive norms may contribute to the remaining variance, the substantial explained variance (51.0%) has been captured by the two dimensions that capture the primary social influence mechanisms operating in organic product purchase contexts (Cialdini et al., 1990; White & Simpson, 2013). Furthermore, the equal influence of both pathways depicts that interventions aimed at strengthening subjective norms should employ dual strategies of leveraging social proof to demonstrate that organic purchasing is normatively expected behaviour while simultaneously facilitating identity expression of organic consumption as a meaningful way to demonstrate environmental commitment (Goldstein et al., 2008; Whitmarsh & O'Neill, 2010). From a cross-cultural perspective, the balanced influence of normative and value-expressive mechanisms is noteworthy. Some research proposes that

collectivistic cultures emphasise conformity-based social influence more than individualistic cultures (Markus & Kitayama, 1991; Hofstede, 2001). This might predict stronger NSI effects in the Indian context. However, the equal influence of both mechanisms observed here conveys that urban, educated consumers in Goa may exhibit more individualistic orientations, emphasising personal values expression alongside normative compliance (Sinha et al., 2001; Sinha et al., 2002). This finding aligns with research documenting convergence in consumer psychology across urban centres in emerging markets, where traditional collectivistic orientations coexist with increasingly individualistic consumption patterns (Cleveland et al., 2011).

The validation of Schwartz's (1992; 1994) values theory emphasises the role of self-transcendence in pro-environmental behaviour. The emergence of self-transcendence as the strongest predictor confirms that altruistic values favouring collective welfare over individual interests constitute the primary foundation for positive attitudes toward organic consumption. This is consistent with the value-attitude-behaviour hierarchy proposed by Homer and Kahle (1988) and validated in numerous sustainability contexts (Stern, 2000; Steg et al., 2014). This finding aligns with extensive research demonstrating that individuals guided by biospheric and altruistic values develop stronger pro-environmental attitudes and behaviours (Stern et al., 1999; de Groot & Steg, 2008; Schultz & Zelezny, 1999). Self-transcendence values represent a core motivational orientation emphasising the welfare of others and nature over self-interest, and individuals high in this value dimension perceive greater moral obligation to engage in pro-environmental actions (Schwartz, 1977; Stern et al., 1999). The strong coefficient ($\beta = 0.428$) exhibits that nearly half a standard deviation increase in attitudes can be attributed to self-transcendence values, underscoring the centrality of altruistic motivations in organic product attitude formation.

The significant though moderate effect of environmental concern validates that cognitive awareness of ecological degradation, understanding of environmental problems, and affective connection to nature contribute substantially to attitude formation (Fransson & Gärling, 1999; Dunlap et

al., 2000). Environmental concern represents a more proximal cognitive-affective construct compared to the fundamental value orientation of self-transcendence. Its moderate influence depicts that heightened awareness of environmental problems translates into more favourable organic product attitudes through mechanisms including perceived responsibility, ecological worldview, and anticipatory guilt (Stern, 2000; Bamberg & Möser, 2007; Onwezen et al., 2013). This finding supports the cognitive hierarchy model wherein general environmental concern serves as a foundation for specific product attitudes (Milfont & Duckitt, 2010).

The significant influence of self-enhancement ($\beta = 0.302$), though somewhat paradoxical, provides nuanced insight into the motivational complexity underlying organic product attitudes. Self-enhancement values emphasise personal success, achievement, dominance, and social status, and are typically considered orthogonal or even antagonistic to pro-environmental orientations (Schwartz, 1992; Karp, 1996). However, the positive coefficient observed here illustrates that consumers also perceive organic purchases as vehicles for social distinction, status signalling, self-image enhancement, and conspicuous conservation (Griskevicius et al., 2010; Sexton & Sexton, 2014). This aligns with research demonstrating that visible pro-environmental behaviours can serve status-signalling functions, particularly among affluent consumers who use 'green' consumption to demonstrate sophistication, education, and social consciousness (Bourdieu, 1984; Griskevicius et al., 2010).

The simultaneous influence of both self-transcendence and self-enhancement values demonstrates that organic product attitudes emerge from mixed motivations combining genuine environmental and health concerns with self-interested image management and status considerations (Griskevicius et al., 2010; Jansson et al., 2010). This motivational pluralism has important implications for understanding the breadth of organic product appeal. While some consumers are motivated primarily by altruistic concerns, others are attracted by status benefits, and many likely experience both motivations simultaneously (Dunlap & Van Liere, 1978; Kilbourne & Pickett, 2008). This reveals that effective marketing communications should acknowledge this motivational diversity by

framing organic consumption as simultaneously benefiting the environment, supporting personal health, and representing sophisticated consumer choice.

The moderate explained variance (39.7%) depicts that additional psychological factors beyond values and environmental concern contribute to attitude formation. These may include perceived quality and sensory expectations, health risk perceptions, trust in organic certification, subjective knowledge about organic agriculture, price fairness perceptions, and past consumption experiences (Magnusson et al., 2003; Bamberg & Möser, 2007; Hughner et al., 2007; Pieniak et al., 2010; Aertsens et al., 2009; Smed et al., 2013). The substantial residual variance (60.3%) indicates opportunities for future research to identify additional attitudinal antecedents specific to organic product contexts in emerging markets.

Ajzen's (1991; 2002) theoretical assertion that perceived control is driven by both internal capability factors and external situational factors was supported by the significant impact of Control Strength (CS: $\beta = 0.621$) and Control Beliefs (CB: $\beta = 0.381$) on Perceived Behavioural Control (PBC) ($R^2 = 0.560$). The dominance of control strength over control beliefs indicates that internal perceptions of personal capability exert substantially greater influence than beliefs about external facilitating conditions, consistent with Bandura's (1997; 2006) social cognitive theory emphasising the primacy of self-efficacy in behavioural regulation and consistent with meta-analytic evidence demonstrating stronger effects of self-efficacy than facilitating conditions across multiple behavioural domains (Notani, 1998; Armitage & Conner, 2001). This finding has important theoretical implications for understanding the structure of perceived behavioural control. While Ajzen's (1991; 2002) original formulation conceptualised PBC as reflecting both internal control and external control, subsequent research has debated whether these represent unitary or distinct constructs (Terry & O'Leary, 1995; Sparks et al., 1997; Trafimow et al., 2002). The current finding that both components significantly predict PBC but with markedly different magnitudes illustrates that while theoretically distinguishable, they operate as

complementary rather than interchangeable determinants of overall control perceptions. The stronger influence of control strength aligns with research demonstrating that self-efficacy perceptions typically exert stronger influence on behavioural intentions and actions than controllability beliefs (Ajzen, 2002; Bandura, 1997). From a practical standpoint, this has important implications for intervention design. The dominance of control strength conveys that efforts to enhance perceived behavioural control should prioritise building consumer confidence and competence in organic product purchasing through experiential learning, skill development, guided practice, and mastery experiences (Maibach & Murphy, 1995; Bandura, 1997). Such interventions might include cooking demonstrations using organic ingredients, farm visits that provide direct experience with organic production, educational programs that build knowledge about organic product identification and selection, and trial promotion programs that reduce initial barriers to experimentation (Zanoli & Naspetti, 2002; Vermeir & Verbeke, 2008).

Simultaneously, the weaker yet significant effect of control beliefs indicates that addressing structural barriers remains important. Even highly confident consumers may be deterred if they perceive that organic products are unavailable, prohibitively expensive, inconveniently located, or limited in variety (Padel & Foster, 2005; Aertsens et al., 2009). Control beliefs encompass perceptions of resource availability, market accessibility, product availability, and situational facilitators (Ajzen, 2002; Sparks et al., 1997). Interventions addressing these external factors might include expanding retail distribution through mainstream supermarkets, developing online delivery channels, establishing farmers' markets and direct-sales venues, implementing price subsidies or promotional discounts, and ensuring consistent product availability to prevent out-of-stock experiences that undermine purchasing intentions (Aschemann-Witzel & Zielke, 2017; Zanoli & Naspetti, 2002). The substantial explained variance (56.0%) indicates that these two dimensions capture the majority of variance in perceived behavioural control, though additional factors such as perceived time constraints, habit strength, and volitional control perceptions may contribute to the residual

variance (Ajzen, 2002; Verplanken & Aarts, 1999). The finding that internal capability perceptions dominate over external control beliefs infers that in the Goan organic product market, psychological barriers may currently represent more significant impediments than structural barriers (Padel & Foster, 2005). This interpretation aligns with research suggesting that in emerging organic markets, consumer inexperience and uncertainty represent primary obstacles to adoption (Aertsens et al., 2009; Hughner et al., 2007).

The study found that all Theory of Planned Behaviour (TPB) constructs significantly predicted Organic Product Purchase Intention (OPPI) ($R^2 = 0.585$). With Attitude Towards Organic Product Purchase (ATOPP) ($\beta = 0.276$) as the strongest driver, it reinforces Ajzen's (1991) foundational model and validates its applicability to organic product consumption in emerging market contexts. The substantial explained variance validates the robustness of TPB in predicting organic product purchase intentions and confirms that purchase intentions emerge from the integration of evaluative, normative, and control beliefs. This adds to the extensive meta-analytic evidence supporting TPB across diverse behavioural domains (Armitage & Conner, 2001; Ravis & Sheeran, 2003; McEachan et al., 2011).

The dominance of attitudes over subjective norms and perceived behavioural control, however, contrasts with some TPB meta-analyses suggesting relatively equal contributions of all three constructs or contexts where social norms dominate (Smith et al., 2008; Armitage & Conner, 2001). This pattern recommends context-specific variations in the relative weights of TPB components influenced by cultural factors, product characteristics, and market maturity (Conner & Armitage, 1998; Sniehotta et al., 2005). The observed attitude dominance indicates that Goan consumers' organic product purchase intentions are driven primarily by personal evaluative judgments, comprising instrumental evaluations, experiential evaluations, and symbolic evaluations, rather than by social pressures or perceived ease (Tarkiainen & Sundqvist, 2005; Voon et al., 2011). This is in tandem with research in relatively individualistic or urbanised contexts where personal evaluations dominate over social

influences in consumption decisions (Cleveland et al., 2011; Sniehotta et al., 2014). Urban, educated consumers in emerging markets often exhibit consumption patterns emphasising personal preferences, individual choice, and autonomous decision-making rather than conformity to social expectations (Sinha et al., 2001; Wang et al., 2004). The attitude dominance may also reflect the emerging nature of organic markets in Goa, where social norms regarding organic consumption remain underdeveloped, reference group consumption patterns are not yet clearly established, and consumers lack strong normative guidance about appropriate behaviour (Thøgersen, 2005; Vermeir & Verbeke, 2008).

Alternatively, the weaker influence of subjective norms and perceived behavioural control relative to attitudes may reflect measurement or conceptualisation issues. Some research suggests that traditional TPB operationalisations of subjective norms emphasising injunctive norms may underestimate total social influence when descriptive norms are not included (Rivis & Sheeran, 2003; White et al., 2009). If Goan consumers are influenced more by observed consumption patterns of peers than by perceived expectations, traditional subjective norm measures may underestimate social influence. Similarly, the moderate PBC influence may reflect that in an emerging organic market, consumers have difficulty accurately assessing control factors due to limited experience (Ajzen, 2002). The substantial explained variance (58.5%) exceeds typical R^2 values in TPB studies across various behavioural domains (meta-analytic mean $R^2 \approx 0.39$) suggesting that the TPB framework is particularly well-suited to predicting organic product purchase intentions (Armitage & Conner, 2001). This may reflect that organic product purchasing, unlike some habitual or impulsive consumption behaviours, involves relatively deliberative decision-making characterised by conscious evaluation of alternatives, consideration of relevant information, and reasoned choice processes. These processes are precisely the type of planned behaviour for which TPB was designed (Ajzen, 1991; Fazio, 1990). The high explained variance provides strong support for applying TPB as a foundational framework for understanding organic product adoption in emerging markets.

Organic Product Purchase Intention (OPPI) weakly predicted Organic Product Purchase Behaviour (OPPB) ($R^2 = 0.146$; $\beta = 0.316$), highlighting the attitude-behaviour gap, a persistent and well-documented phenomenon in sustainable consumption research. Translating pro-environmental attitudes and intentions into actual behaviour is one of the most significant challenges (Vermeir & Verbeke, 2006; Carrington et al., 2010; Hassan et al., 2016). The low explained variance (14.6%) demonstrates that while intentions are significant predictors, approximately 85% of behavioural variance remains unexplained by intentions alone, confirming that intentions translate imperfectly into actions due to multiple intervening factors (Sheeran, 2002; Webb & Sheeran, 2006). This substantial intention-behaviour gap aligns with extensive research documenting that many consumers express positive attitudes and strong purchase intentions toward organic products but fail to translate these into actual purchasing behaviour (Padel & Foster, 2005; Hughner et al., 2007; Aertsens et al., 2009).

Several theoretical frameworks have been proposed to explain this gap. First, the MODE model, abbreviation for Motivation and Opportunity as Determinants, suggests that intention-behaviour correspondence depends on both motivation and opportunity (Fazio, 1990). In the organic product context, even strongly motivated consumers may encounter opportunity barriers including limited product availability, inconvenient retail locations, inadequate product variety, or prohibitive price differentials (Padel & Foster, 2005; Aertsens et al., 2009). Temporal discounting may contribute to the intention-behaviour gap, particularly when significant time elapses between intention measurement and behavioural opportunity (Trope & Liberman, 2003). Organic product purchase intentions formed abstractly may not activate when consumers confront concrete shopping situations characterised by time pressure, competing priorities, attractive conventional alternatives, or decision fatigue (Baumeister et al., 1998; Inzlicht & Schmeichel, 2012). Competing goals and value conflicts may also undermine intention implementation (Carrington et al., 2010; 2014). Consumers may simultaneously hold organic purchase intentions alongside conflicting goals, such as minimising shopping time,

maximising value for money, purchasing familiar brands, or satisfying family preferences, conflicts that are resolved in favour of more immediately salient goals in actual shopping contexts (Vermeir & Verbeke, 2006). Furthermore, lack of implementation planning may contribute to non-enactment of intentions (Gollwitzer, 1999; Gollwitzer & Sheeran, 2006). The implementation intention framework proposes that general goal intentions are less likely to be enacted than specific implementation intentions specifying when, where, and how behaviour will be performed. Research demonstrates that implementation intentions substantially strengthen intention-behaviour correspondence by creating mental associations between situational cues and intended responses, thereby automating behavioural initiation (Gollwitzer & Sheeran, 2006; Webb & Sheeran, 2006).

Habit strength may override intentions (Verplanken & Aarts, 1999; Verplanken & Wood, 2006). Grocery shopping is often characterised by strong habitual patterns wherein consumers repeatedly purchase the same products in the same stores through relatively automatic processes that bypass deliberative intention-guided choice (Wood & Neal, 2009). Even when consumers form intentions to purchase organic products, habitual purchasing of conventional alternatives may persist unless explicit effort is made to disrupt established routines (Verplanken & Wood, 2006). The actual control factors not captured by perceived behavioural control may impede behaviour enactment (Ajzen, 2002; Sheeran et al., 2003). While perceived behavioural control measures subjective assessments of control, actual control encompasses objective factors such as actual product availability, actual affordability given budget constraints, and actual shopping circumstances. Discrepancies between perceived and actual control contribute to intention-behaviour gaps when consumers overestimate their capability or underestimate barriers (Ajzen, 2002).

As evidenced by the large residual variance, the finding that non-TPB factors significantly impact behaviour implies that comprehensive models of organic product purchasing must extend beyond traditional TPB variables to incorporate contextual factors, situational constraints, implementation factors, and habitual processes (Carrington et al., 2010;

2014; Vermeir & Verbeke, 2006). This interpretation confirms recent theoretical developments emphasising dual-process models wherein behaviour results from both reflective processes (TPB constructs) and automatic processes operating in parallel (Sheeran et al., 2013; Sniehotta et al., 2014). From a practical standpoint, this result underscores that building purchase intentions, while necessary, is insufficient for driving actual behaviour change, necessitating interventions that address the gap between motivation and action (Sheeran, 2002; Webb & Sheeran, 2006). Effective interventions should combine motivation-building strategies with implementation facilitation strategies addressing barriers, building implementation plans, disrupting competing habits, and creating supportive choice architectures (Gollwitzer & Sheeran, 2006; Thaler & Sunstein, 2008). Specific strategies might include point-of-purchase interventions, making organic options more salient and accessible; implementation intention interventions, prompting consumers to specify when and where they will purchase organic products; habit disruption interventions, encouraging conscious evaluation of automatic purchase patterns; and structural interventions, improving organic product availability and affordability (Vermeir & Verbeke, 2008; Aschemann-Witzel & Zielke, 2017).

From the study, it is observed that Organic Product Purchase Behaviour (OPPB) strongly predicted Organic Product Satisfaction (OPS) ($R^2 = 0.729$; $\beta = 0.698$). This supports the theoretical proposition that post-purchase outcomes are primarily determined by consumption experiences and validates expectancy-disconfirmation theory, which posits that satisfaction emerges from the comparison between pre-purchase expectations and post-consumption performance (Oliver, 1980; 1999). The high explained variance (72.9%) indicates that satisfaction judgments are overwhelmingly grounded in actual consumption experiences rather than in continued marketing influences, cognitive dissonance reduction, or post-purchase rationalisation processes (Festinger, 1957; Oliver, 1980). This validates that product quality, sensory attributes, performance characteristics, and overall consumption experience constitute the primary determinants of satisfaction in the organic product domain (Anderson &

Sullivan, 1993; Zeithaml et al., 1996; Szymanski & Henard, 2001). The strong relationship signifies that consumers develop satisfaction judgments based primarily on the experiential validation of both the explicit and implicit promises of organic products (Zanoli & Naspetti, 2002; Padel & Foster, 2005).

This finding has important strategic implications, underscoring the critical importance of ensuring that organic products deliver on their promises regarding taste, quality, freshness, and health benefits (Hughner et al., 2007; Aertsens et al., 2009). Product quality consistency, reliable sourcing, authentic organic production methods, and adequate freshness management emerge as critical factors determining whether initial trial purchases translate into satisfaction (Smed et al., 2013; Janssen & Hamm, 2012). The high explained variance conveys that satisfaction is predominantly experience-driven rather than persuasion-driven, indicating that marketing claims and brand positioning, while important for attracting initial trial, cannot substitute for genuine product quality in building sustained satisfaction (Oliver, 1999). The remaining 27.1% of unexplained variance may reflect individual difference factors such as dispositional optimism, comparative reference points, attribution processes, and contextual consumption circumstances (Oliver, 1980; Anderson & Sullivan, 1993). Additionally, some variance may reflect discrepancies between actual product performance and perceived performance due to halo effects, confirmation bias, or motivated reasoning (Nickerson, 1998; Hoyer & Brown, 1990).

Organic Product Satisfaction (OPS) significantly predicted Organic Product Loyalty (OPL) ($R^2 = 0.852$; $\beta = 0.707$). It provides exceptionally strong support for the satisfaction-loyalty linkage documented extensively in consumer behaviour literature (Zeithaml et al., 1996; Oliver, 1999; Anderson & Srinivasan, 2003). The near-deterministic R^2 value of 85.2% demonstrates that satisfaction is the dominant and overwhelming predictor of loyalty, confirming that in the organic product domain, sustained repeat purchase intentions and brand commitment emerge primarily from consistently satisfying consumption experiences rather than from other loyalty-building mechanisms (Oliver, 1999; Dick & Basu, 1994). This

finding validates that satisfied consumers develop affective attachments, commitment, and resistance to alternative options that manifest as loyalty intentions characterised by repeat purchase likelihood, resistance to competitive offers, willingness to pay premium prices, and positive word-of-mouth advocacy (Zeithaml et al., 1996; Oliver, 1999). The exceptionally high explained variance indicates that alternative loyalty drivers such as switching costs, habitual inertia, lack of alternatives, or relationship investments play minimal roles in organic product loyalty (Dick & Basu, 1994; Jones et al., 2000). This near-deterministic relationship has important theoretical implications, suggesting that organic product loyalty represents primarily attitudinal loyalty rather than behavioural loyalty driven by inertia, constraints, or lack of alternatives (Dick & Basu, 1994; Oliver, 1999). The dominance of satisfaction-driven loyalty establishes that the organic product market is characterised by relatively low switching costs, adequate competitive alternatives, and minimal structural constraints, allowing satisfaction to emerge as the overwhelming determinant of continued patronage (Jones et al., 2000).

From a strategic standpoint, this underscores that long-term customer relationships and sustainable market positions in the organic sector depend primarily on consistently delivering satisfying consumption experiences (Zeithaml et al., 1996; Anderson & Mittal, 2000). Loyalty-building strategies should focus on product quality assurance, consistent sourcing, freshness management, authentic production practices, and reliable fulfilment of health and quality expectations rather than on relationship marketing programs, loyalty rewards, or switching barrier creation (Oliver, 1999). The small proportion of unexplained variance (14.8%) reveals that virtually all sustainable loyalty emerges from satisfaction, with only marginal contributions from alternative loyalty drivers, reinforcing the primacy of experience quality in building lasting customer commitment (Oliver, 1999; Mittal & Kamakura, 2001). The sequential chain from purchase behaviour through satisfaction to loyalty validates the expectation-confirmation-satisfaction-loyalty progression central to consumer behaviour theory (Oliver, 1980; 1999; Anderson & Sullivan, 1993). This progression demonstrates that organic product marketing must

adopt a holistic perspective encompassing not only pre-purchase persuasion and trial facilitation but also post-purchase experience management, quality assurance, and satisfaction maintenance (Zeithaml et al., 1996). The strong linkages in this chain suggest that investments in product quality, authentic sourcing, and experiential excellence yield substantial returns through enhanced satisfaction and loyalty, representing more effective long-term strategies than continual customer acquisition efforts (Reichheld, 1996; Anderson & Mittal, 2000).

5.4.2 Green Marketing Strategies and Organic Purchases

Sustainability-oriented marketing communications serve as important determinants of purchase intentions, confirming theoretical propositions that information provision regarding sustainability dimensions influences consumer willingness to purchase environmentally preferable products. It is validated by the finding that attitudes toward the five green marketing strategies explained 29.9% of Organic Product Purchase Intention (OPPI) variance (Peattie & Crane, 2005; Chen & Chang, 2012). However, the moderate explained variance indicates that green marketing represents one of multiple influence pathways rather than a dominant determinant, indicating that marketing communications operate alongside psychological factors, experiential factors, and contextual factors in shaping purchase intentions (Hughner et al., 2007; Aertsens et al., 2009).

The emergence of Attitude toward Green Advertising (AGA: $\beta = 0.277$) as the strongest predictor aligns with extensive research demonstrating that advertising effectiveness in sustainability contexts depends on message credibility, emotional appeal, information quality, and alignment with consumer values (Polonsky et al., 2010; Parguel et al., 2011). Effective green advertising creates awareness of environmental problems, establishes connections between consumption choices and environmental impacts, builds belief in product benefits, and motivates purchase through both rational persuasion and emotional appeal (Hartmann & Apaolaza-Ibañez, 2012; Kronrod et al., 2012). The strong influence of green advertising attitudes demonstrates that Goan consumers are receptive to sustainability-oriented communications and that persuasive messages

emphasising environmental benefits, ethical production practices, and health advantages resonate strongly in forming purchase intentions. However, the effectiveness of green advertising depends critically on authenticity and credibility, as consumers have become increasingly sceptical of environmental claims due to widespread greenwashing and deceptive marketing practices overstating environmental benefits (Parguel et al., 2011; Chen & Chang, 2013). The positive coefficient observed here proves that when consumers perceive green advertising as authentic and credible, it substantially enhances purchase intentions, but the moderate magnitude may reflect that scepticism attenuates advertising effectiveness for some consumers (Mohr et al., 1998; Chen & Chang, 2013). This interpretation emphasises the importance of substantive environmental performance backing advertising claims, third-party certification validating claims, and transparent communication building trust (Hartmann et al., 2005; Parguel et al., 2011).

The significant effect of Attitude toward Organic Products (AOP: $\beta = 0.218$), conceptualised as the absence of pesticides, confirms that health-protective motivations remain fundamental drivers of organic product preference. This validates that concerns about chemical residues, synthetic pesticides, and food safety continue to serve as primary motivators across diverse consumer segments and cultural contexts (Roddy et al., 1996; Williams & Hammitt, 2001; Magnusson et al., 2003). This finding aligns with prior research that demonstrated health concerns, particularly regarding pesticide residues, chemical additives, and contaminants, constitute the most consistently reported motivation for organic purchasing across international samples (Zanoli & Naspetti, 2002; Hughner et al., 2007; Aertsens et al., 2009). The prominence of health motivations reflects both increasing awareness of potential health risks associated with conventional agriculture's chemical inputs and growing health consciousness in emerging markets characterised by rising affluence, education, and exposure to health information (Yadav & Pathak, 2016; Paul et al., 2016). The personal relevance of health benefits directly affecting the individual consumer and their family may explain why health motivations often dominate over more abstract environmental

benefits in consumer decision-making (Magnusson et al., 2003). This underlines that marketing communications emphasising health benefits, toxin avoidance, chemical-free production, and food safety maintain strong persuasive appeal and should remain central components of organic product marketing strategies (Williams & Hammitt, 2001; Zanolli & Naspetti, 2002).

The moderate yet significant effects of Attitude toward Green Branding (AGB: $\beta = 0.195$) and Attitude toward Green Packaging (AGP: $\beta = 0.185$) indicate that consumers demonstrate emerging awareness of and responsiveness to sustainability-oriented marketing elements beyond core product attributes and health considerations. The influence of green branding attitudes highlights that consumers increasingly value brand positioning emphasising environmental responsibility, corporate sustainability commitments, ecological values, and authentic green credentials. These concepts represent relatively sophisticated brand evaluation processes (Hartmann et al., 2005; Chen & Chang, 2012). Brand positioning that credibly communicates environmental stewardship, transparent sustainability practices, and genuine ecological commitment resonates with consumers seeking to align their consumption choices with environmental values (Peattie, 2010; Hartmann & Apaolaza-Ibáñez, 2012). Similarly, the impact of green packaging attitudes indicates appreciation for environmentally responsible packaging innovations such as biodegradable materials, recyclable containers, minimal packaging design, reduced plastic use, and sustainable sourcing of packaging materials (Magnier & Crié, 2015; Steenis et al., 2017). Green packaging serves multiple functions; it signals environmental commitment, reduces ecological footprint, demonstrates corporate responsibility, and provides tangible evidence of sustainability claims that consumers can directly observe and evaluate (Rokka & Uusitalo, 2008; Magnier & Schoormans, 2015). The moderate coefficient demonstrates that while consumers value sustainable packaging, it functions primarily as a supporting element, reinforcing broader sustainability positioning rather than serving as a primary purchase driver. These findings reflect an evolving consumer consciousness that extends beyond anthropocentric health concerns to

encompass eco-centric values, corporate environmental responsibility, and holistic sustainability evaluation (Dunlap et al., 2000; Stern, 2000; Kilbourne & Pickett, 2008).

The moderate magnitudes suggest that while green branding and packaging considerations are increasingly important, they exert less immediate influence than health protection or ethical considerations, possibly reflecting several mechanisms. First, green branding and packaging benefits may be perceived as secondary or peripheral attributes compared to core product characteristics like health safety, taste quality, and nutritional value, reducing their primary motivational salience in purchase decisions (Trobe & Liberman, 2003; Spence et al., 2012). Consumers may prioritise intrinsic product benefits over extrinsic sustainability attributes when making purchase decisions (Zeithaml, 1988; Aertsens et al., 2009). Second, scepticism regarding green marketing claims may attenuate the influence of green branding and packaging on purchase intentions (Parguel et al., 2011; Chen & Chang, 2013). Widespread greenwashing, wherein companies make exaggerated or deceptive environmental claims, has generated consumer cynicism about green marketing communications (Delmas & Burbano, 2011; Lyon & Montgomery, 2015). When consumers doubt the authenticity of green branding or question whether green packaging genuinely reduces environmental impact, these marketing elements lose persuasive power (Mohr et al., 1998; Kalafatis & Pollard, 1999). Third, functional concerns about green packaging may limit its appeal for some consumers. Green packaging alternatives may be perceived as less protective, less convenient, less aesthetically appealing, or less effective at preserving product freshness compared to conventional packaging (Magnier & Cri  , 2015; Steenis et al., 2017). If consumers believe that sustainable packaging compromises product quality or convenience, they may resist green packaging despite favourable environmental attitudes (Rokka & Uusitalo, 2008). The diffuse and indirect nature of branding and packaging benefits, wherein environmental improvements accrue to society collectively rather than to individual purchasers directly, may generate lower personal motivation than concentrated individual benefits like

health protection (Olson, 1971; Kahneman & Tversky, 1979; Ostrom, 2015). The temporal distance of environmental benefits and spatial distance may reduce psychological proximity and motivational urgency (Trope & Liberman, 2003; Spence et al., 2012).

The significant (and weak) influence of these marketing-oriented sustainability dimensions presents opportunities for strategic communication and packaging innovation initiatives that enhance the perceived value and credibility of green branding and packaging. The authenticity-building communications that provide transparent evidence of sustainability commitments can overcome scepticism and build trust in green branding claims. This includes third-party certifications, measurable environmental performance metrics, supply chain disclosures, and concrete sustainability achievements (Delmas & Burbano, 2011; Parguel et al., 2011; Chen & Chang, 2013). The functional equivalence assurance demonstrates that green packaging alternatives perform comparably or superiorly to conventional packaging in protecting product quality. This maintains freshness, ensuring convenience, and delivering aesthetic appeal that can overcome functional concerns limiting adoption (Magnier & Cri  , 2015; Steenis et al., 2017). Testing, demonstration, and communication of green packaging performance characteristics build consumer confidence in sustainable alternatives (Rokka & Uusitalo, 2008). Besides, personal relevance framing connects green branding and packaging to personally meaningful outcomes. The outcomes are inclusive of health protection, economic benefits, and social identity expression. Enhancement of motivational salience by bridging the psychological distance between abstract environmental benefits and concrete personal advantages can be achieved through this (Schultz, 2002; Spence & Pidgeon, 2010; White & Simpson, 2013).

Visible sustainability innovations, such as dramatically reduced packaging volume, innovative biodegradable materials with distinctive characteristics, or interactive packaging elements communicating environmental impact reductions, that make environmental benefits tangible and observable, can enhance green packaging appeal by making sustainability improvements cognitively accessible and emotionally

engaging (Magnier & Schoormans, 2015; Steenis et al., 2017). The moderate influence of green branding and packaging attitudes alongside stronger effects from health positioning and green advertising signifies that effective green marketing strategies must employ integrated approaches addressing multiple sustainability dimensions simultaneously, while prioritising elements with the strongest consumer resonance (Peattie & Crane, 2005; Chen & Chang, 2012; Kumar & Ghodeswar, 2015). Marketing communications should emphasise health and safety benefits as primary appeals while positioning green branding and packaging as supporting evidence of comprehensive sustainability commitment, thereby building a holistic sustainability reputation that resonates across multiple consumer motivations (Zanoli & Naspetti, 2002; Hughner et al., 2007; Aertsens et al., 2009).

Attitude towards Eco-Labeling (AEL: $\beta = 0.093$), which demonstrated the weakest effect among the five marketing components, indicates that third-party certification and eco-labelling schemes play a supplementary rather than primary role in purchase intention formation. This relatively modest coefficient depicts that eco-labels function primarily as credibility signals that validate other marketing claims rather than as independent motivators of purchase intentions (Thøgersen et al., 2010; Grunert et al., 2014). The limited influence aligns with extensive research documenting eco-label effectiveness challenges across multiple contexts (Leire & Thidell, 2005; D'Souza et al., 2006; Atkinson & Rosenthal, 2014). Several mechanisms may explain the weak influence of eco-labels. Consumer confusion regarding the proliferation of various eco-labels and certification schemes, with dozens of competing labels offering overlapping but non-identical environmental claims, may reduce label informativeness and credibility (Leire & Thidell, 2005; Harbaugh et al., 2011). Research demonstrates that consumers struggle to differentiate between various eco-labels, understand their specific meanings, and assess their relative stringency (Grunert et al., 2014; Atkinson & Rosenthal, 2014). Additionally, insufficient consumer knowledge about what different labels represent, what standards they enforce, and who issues them may limit label effectiveness as decision heuristics (D'Souza et al., 2006; Thøgersen et al.,

2010). Without an adequate understanding of certification processes, consumers may be unable to use labels effectively to identify authentic organic products.

Scepticism regarding certification authenticity may reduce label trust. This is especially true in contexts where certification enforcement is perceived as weak or where fraudulent labelling has been reported (Janssen & Hamm, 2012; Smed et al., 2013). In emerging markets like India, concerns about certification reliability, inspection rigour, and enforcement consistency may attenuate consumer trust in organic labels (Singh & Verma, 2017; Nandi et al., 2017). Moreover, the perception that labels merely confirm information already inferred from other product characteristics may reduce incremental label value (Thøgersen, 2010). If consumers believe they can assess product authenticity through alternative cues, label importance diminishes. This implies that while eco-labels provide valuable trust-building and information-verification functions, they are insufficient to drive purchase intentions in isolation. Hence, they must be complemented by substantive product attribute communications, authentic brand positioning, and credible corporate sustainability performance (Peattie, 2010; Chen & Chang, 2012). This result highlights opportunities to enhance label effectiveness through standardisation initiatives, reducing label proliferation, consumer education programs, building label literacy, transparency initiatives, clarifying certification processes, and enforcement mechanisms ensuring label credibility (Thøgersen et al., 2010; Grunert et al., 2014).

The collective pattern of findings demonstrates that effective green marketing strategies for organic products must adopt a multifaceted approach addressing various sustainability dimensions simultaneously rather than emphasising isolated attributes (Peattie & Crane, 2005; Chen & Chang, 2012). The differential magnitudes of effects across the five components suggest a prioritisation hierarchy wherein ethical considerations and health protection should receive primary emphasis. This needs to be supported by environmental sustainability messaging, credible advertising communications, and authenticated through certifications. This integrated approach acknowledges that consumers

evaluate organic products through holistic sustainability frameworks integrating personal, ethical, and environmental considerations rather than responding to single isolated attributes (Hughner et al., 2007; Aertsens et al., 2009).

The simultaneous significance of all five marketing components validates that contemporary organic product consumers demonstrate sophisticated evaluation processes considering multiple sustainability aspects, necessitating integrated marketing communications that address this complexity (Peattie, 2010; Kumar & Ghodeswar, 2015). Single-attribute marketing, emphasising only health benefits or only environmental benefits likely represents suboptimal strategy given that consumers weigh multiple considerations simultaneously (Vermeir & Verbeke, 2006). Effective positioning should therefore employ layered messaging addressing health benefits as primary motivators, environmental benefits as supporting appeals, ethical considerations as differentiation factors, and certifications as credibility assurances (Zanoli & Naspetti, 2002; Aertsens et al., 2009).

5.4.3 Moderating Effects of Trust, Health Consciousness, and Perceived Consumer Effectiveness

The rise in R^2 to 0.848 when Trust (TRUST) ($\beta = 1.088$) was included in the TPB model highlights that trust in organic products, certification systems, retailers, and the organic industry broadly constitutes a fundamental prerequisite for purchase intention development. The substantial coefficient magnitude, exceeding the effects of all three TPB constructs combined, indicates that trust exerts a stronger direct influence on purchase intentions than attitudes, subjective norms, or perceived behavioural control individually. The critical role of trust in organic product decision making of the consumers is underscored through this (Morgan & Hunt, 1994; Mayer et al., 1995; Gefen et al., 2003). This dominant effect aligns with extensive research documenting trust as a central construct in contexts characterised by information asymmetry. Besides, credence attributes, authenticity concerns, and performance uncertainty can be successfully overridden by trust (Akerlof, 1970; Darby

& Karni, 1973; Ganesan, 1994). In the context of organic products, consumers cannot directly observe organic production methods, verify absence of prohibited substances, assess environmental benefits, or definitively attribute health outcomes to organic consumption (Janssen & Hamm, 2012; Smed et al., 2013).

In such contexts, trust serves multiple functions. It reduces perceived risk by providing psychological assurance that products are authentic and will perform as expected despite verification impossibility (Gefen et al., 2003; Pavlou, 2003). Trust simplifies decision-making by substituting for extensive information search and evaluation, serving as a cognitive heuristic enabling efficient choice under uncertainty (Luhmann, 1979; Lewis & Weigert, 1985). Likewise, trust enables relational exchange by creating confidence in trading partners' reliability, integrity, and benevolence (Morgan & Hunt, 1994; Mayer et al., 1995). It facilitates willingness to accept vulnerability inherent in purchasing products whose quality cannot be verified (Mayer et al., 1995; Rousseau et al., 1998). The exceptionally high direct effect observed here proposes that trust may currently represent the single most important determinant of purchase intentions in the Goan organic product market, even superseding personal attitudes. This pattern may reflect several contextual factors. The relatively nascent organic market in Goa may be characterised by widespread consumer uncertainty about product authenticity, certification reliability, and quality consistency, thus elevating trust's importance (Singh & Verma, 2017; Nandi et al., 2017). Media may have heightened consumer vigilance and scepticism by covering food safety scandals, certification fraud, and mislabelling incidents. This has elevated the significance of trust as a prerequisite for purchase consideration (Janssen & Hamm, 2012). The role of trust in risk reduction has been amplified by premium pricing of organic products that may increase purchase risk (Smed et al., 2013).

The moderation findings reveal that Trust weakened the relationship between Subjective Norms (SN) and Organic Product Purchase Intention (OPPI) ($\beta = -0.031$), and between Perceived Behavioural Control (PBC) and Organic Product Purchase Intention (OPPI) ($\beta = -0.025$). These

negative moderation effects indicate a substitution mechanism wherein trust reduces reliance on both social validation and feasibility assessments in forming purchase intentions. The finding favours studies that noted the complex role played by Trust in consumer decision-making. This indicates that trust serves as a psychological resource enabling autonomous decision-making less dependent on social consensus or perceived ease of implementation (Morgan & Hunt, 1994; Gefen et al., 2003). The negative moderation of the subjective norms-intention relationship reveals that when consumers possess high trust in organic products and the organic industry, they become less dependent on social influence and normative pressures in forming purchase intentions. This pattern implies that trust enables value-based, autonomous decision-making wherein personal convictions drive choices relatively independently of social validation (Deutsch & Gerard, 1955; Cialdini & Goldstein, 2004). Conversely, consumers with lower trust levels may result in stronger subjective norm by relying more heavily on social proof, reference group opinions, and normative consensus to compensate for their uncertainty (Burnkrant & Cousineau, 1975). This alignment of the substitution mechanism with dual-process theories signifies that individuals employ different decision strategies depending on confidence levels (Chaiken & Trope, 1999). High-trust consumers may engage in systematic processing wherein personal evaluations and reasoned judgments drive intentions. Whereas, low-trust consumers may engage in heuristic processing wherein social consensus serves as a peripheral cue substituting for detailed evaluation (Chaiken, 1980; Krosnick & Petty, 1995). The moderation pattern observed validates this theoretical framework. This is achieved by demonstrating that trust fundamentally alters the decision-making process by reducing the need for social validation.

Similarly, the negative moderation of the perceived behavioural control-intention relationship indicates that trust attenuates the importance of control perceptions in intention formation. When consumers trust that organic products are authentic, reliable, and worth premium prices, their purchase intentions become less contingent on perceived ease or difficulty of acquisition (Gefen et al., 2003; Pavlou, 2003). Trusting consumers

appear to develop purchase intentions that are more resilient to perceived barriers. Therefore, trust functions as a psychological buffer mitigating the importance of control perceptions (Mayer et al., 1995).

This finding has important theoretical implications, suggesting that trust operates through confidence-building mechanisms that reduce the psychological significance of implementation obstacles (Morgan & Hunt, 1994). When consumers trust that their investment in organic products will yield expected benefits, they demonstrate greater willingness to overcome barriers such as limited availability, higher prices, or shopping inconvenience (Janssen & Hamm, 2012; Smed et al., 2013). Conversely, consumers lacking trust may require strong perceived behavioural control, i.e. assurance that purchasing will be easy and feasible, before forming purchase intentions. This can be attributed to unwillingness of consumers to invest effort in obtaining products about which they harbour doubts. However, this contradicts some research suggesting that trust amplifies rather than attenuates TPB relationships (Chen & Chang, 2013; Chaudhuri & Holbrook, 2001).

Some theoretical perspectives propose that trust strengthens attitude-intention and control-intention links by enhancing confidence that positive evaluations are justified and that intended behaviours can successfully be enacted (Chen & Chang, 2013). The contrasting pattern observed in this study with respect to the weakening of the trust rather than strengthening norms-intention and control-intention links proposes that trust may operate through different mechanisms depending on context, cultural factors, or market characteristics (Sniehotta et al., 2014).

In addition, the negative moderation pattern observed posits that trust operates through a substitution rather than amplification mechanism in the Goan context. This implies that trusting consumers rely less on social validation and perceived control because their confidence in organic products reduces the need for external validation or feasibility assurance (Deutsch & Gerard, 1955; Cialdini & Goldstein, 2004). This interpretation aligns with research demonstrating that individuals with strong attitudes, high confidence, or established trust are less susceptible to social influence

and less deterred by implementation barriers (Krosnick & Petty, 1995; Armitage & Conner, 2001).

Notably, trust did not significantly moderate the attitude-intention relationship, indicating that the direct link between personal evaluations and intentions remains stable regardless of trust levels. This finding implies that favourable attitudes translate into purchase intentions consistently across varying levels of trust, implying that attitudinal influences operate through relatively direct psychological mechanisms independent of trust-based considerations (Glasman & Albarracín, 2006; Fishbein & Ajzen, 2010). The absence of moderation in this relationship validates that attitude formation and intention development are closely coupled processes wherein positive evaluations reliably generate behavioural intentions without substantial conditioning by trust perceptions (Ajzen, 1991).

Health Consciousness (HC) and Perceived Consumer Effectiveness (PCE) appeared to be insignificant moderators, despite prior research suggesting significant moderating roles, contradicting assertions that HC and PCE condition the strength of TPB relationships in sustainable consumption contexts (Vermeir & Verbeke, 2006; Michaelidou & Hassan, 2008; Smith & Paladino, 2010). This unexpected finding warrants careful theoretical consideration and potential explanations. The cultural differences in Goa, or India more broadly, may influence how health consciousness operates in organic product decisions. In contexts where health concerns are universally salient, pervasive in public discourse, or strongly emphasised in organic product marketing, health consciousness may function as a direct motivator rather than as a conditional factor that strengthens TPB relationships (Paul et al., 2016; Yadav & Pathak, 2016). If virtually all consumers considering organic products are health-conscious to some degree, then health consciousness may lack sufficient variance to demonstrate moderation effects (Aguinis & Gottfredson, 2010). Alternatively, health consciousness may manifest primarily through stronger attitudes toward health-protecting products rather than through conditioning how attitudes, norms, or control perceptions translate into intentions (Kraft et al., 2005).

The operationalisation of health consciousness in this study may have captured general health orientation rather than organic-product-specific health beliefs, reducing its relevance as a moderator of organic-specific TPB relationships (Michaelidou & Hassan, 2008). General health consciousness, such as concern about health, motivation to maintain wellness, and engagement in health-protective behaviours, may influence whether individuals form positive organic product attitudes. Yet, it but may not condition how those attitudes translate into intentions (Newsom et al., 2005). More proximal health beliefs specifically linking organic consumption to health outcomes might demonstrate stronger moderation effects (Magnusson et al., 2003). The absence of moderation may reflect measurement timing or sample characteristics. If health consciousness was assessed simultaneously with TPB constructs rather than as a stable individual difference measured separately, common method variance or simultaneous cognitive activation might have obscured moderation effects (Podsakoff et al., 2003). Additionally, if the sample comprised primarily health-conscious individuals, restricted range on the moderator variable would attenuate moderation effects (Aguinis, 1995).

Perceived Consumer Effectiveness (PCE) did not moderate TPB relationships similarly challenges theoretical expectations. PCE means the belief that individual consumer actions can meaningfully contribute to solving environmental problems. PCE has been proposed as an important moderator amplifying the translation of environmental concern, attitudes, and norms into behavioural intentions (Ellen et al., 1991; Berger & Corbin, 1992; Roberts, 1996). The rationale is that consumers high in PCE should demonstrate stronger attitude-intention, norm-intention, and control-intention links because they believe their purchasing actions matter, whereas low-PCE consumers may exhibit weaker links because they doubt individual actions' efficacy (Straughan & Roberts, 1999; Kim & Choi, 2005). However, the absence of significant moderation observed here illustrates that PCE may operate through different mechanisms in emerging organic markets compared to mature markets. PCE may function as a direct motivator, but may not condition the strength of relationships among TPB constructs. Individuals high in PCE develop stronger organic

product attitudes and intentions (Vermeir & Verbeke, 2006; Aertsens et al., 2009). Besides, in contexts where environmental benefits of organic consumption are not strongly emphasised or widely understood, PCE may be irrelevant to organic purchasing decisions dominated by health concerns (Zanoli & Naspetti, 2002; Magnusson et al., 2003). If Goan consumers primarily view organic products as health-protecting rather than environment-protecting choices, then beliefs about environmental consumer effectiveness may not condition organic product intentions.

PCE also conceptualises individual efficacy beliefs regarding environmental problem-solving, but organic product purchasing may be perceived primarily as personal health protection rather than collective environmental action (Ellen et al., 1991; Straughan & Roberts, 1999). If consumers frame organic purchases as private health decisions rather than as contributions to environmental movements, then environmental consumer effectiveness beliefs become psychologically irrelevant (Thøgersen, 1999). Measurement issues may contribute to null findings. PCE scales typically assess general beliefs about whether individual actions can influence environmental problems, but organic-product-specific efficacy beliefs regarding whether organic purchasing specifically addresses environmental concerns might demonstrate stronger moderation (Ellen et al., 1991; Bamberg & Möser, 2007). Alternatively, the absence of moderation from both HC and PCE may reflect that these variables function as parallel motivational pathways that operate additively rather than interactively with TPB constructs (Paul et al., 2016; Scalco et al., 2017). This interpretation indicates that comprehensive models of organic product consumption should account for multiple independent influence mechanisms, rather than assuming that all relevant variables condition TPB relationships. Health-conscious consumers may be intrinsically motivated toward organic purchases through direct health-protection mechanisms that operate independently of attitudes, norms, or control perceptions, representing an alternative decision pathway that bypasses traditional TPB processes (Newsom et al., 2005; Michaelidou & Hassan, 2008).

Similarly, consumers high in perceived consumer effectiveness may be

driven by environmental impact beliefs and moral obligation to ‘do the right thing’ that operate independently of traditional TPB mechanisms such as attitude favourability, social pressure, or perceived ease (Stern, 2000; Bamberg & Möser, 2007). This parallel pathway interpretation matches with norm activation theory and value-belief-norm theory, which propose that environmental behaviour can result from moral obligation pathways distinct from reasoned action pathways as captured by TPB (Schwartz, 1977; Stern et al., 1999). The pattern of moderation findings provides nuanced insights into which individual difference variables function as conditional factors versus parallel pathways. Trust appears to fundamentally reshape the decision-making process by reducing reliance on external validation and feasibility assessments, indicating genuine moderation. The psychological processes that link TPB constructs to intentions operate differently at varying trust levels (Baron & Kenny, 1986; Aiken & West, 1991). In contrast, health consciousness and perceived consumer effectiveness appear to represent distinct motivational orientations that contribute independently to intention formation without altering how TPB constructs operate (Paul et al., 2016). This differentiation has important theoretical implications for how individual difference variables should be integrated into TPB extensions. Not all conceptually relevant variables function as moderators conditioning TPB relationship strength; some may operate as direct predictors, parallel pathways, or distal antecedents of TPB constructs (Conner & Armitage, 1998; Sniehotta et al., 2014). Theoretical frameworks must distinguish between variables that fundamentally alter decision processes versus variables that provide independent motivational inputs (Ajzen, 1991; Bagozzi R. P., 1992). From a methodological perspective, the null moderation findings highlight the importance of carefully theorising moderation mechanisms before empirical testing. Moderation hypotheses should be grounded in clear theoretical rationales explaining why and how moderators would alter the strength or direction of focal relationships (Aguinis et al., 2017). Post-hoc explanations for null findings, while valuable for theory refinement, cannot substitute for a priori theoretical development. The current findings suggest that future research should more precisely specify the mechanisms through which health

consciousness and perceived consumer effectiveness might condition TPB relationships, potentially identifying more specific moderator conceptualisations that demonstrate stronger moderation effects (Michaelidou & Hassan, 2008).

5.5 Theoretical Contributions

This study makes several substantive theoretical contributions to the sustainable consumption literature. It extends the Theory of Planned Behaviour and advances understanding of organic product consumer behaviour in emerging market contexts.

The validation of an extended TPB framework incorporating antecedents of core constructs and post-purchase outcomes, green marketing influences, and moderating mechanisms demonstrates the value of comprehensive theoretical models. These models encompass the full consumer journey from psychological predispositions through purchase intentions and behaviours to post-consumption evaluations (Dean et al., 2012; Sultan et al., 2020). Traditional TPB applications typically examine only the tripartite structure of attitudes, subjective norms, and perceived behavioural control predicting intentions, occasionally extending to behaviour measurement (Ajzen, 1991; Armitage & Conner, 2001). By systematically examining both upstream antecedents and downstream consequences, this study provides a holistic understanding of the causal chain from fundamental value orientations. This is achieved through cognitive-affective evaluations of behavioural manifestations and relational outcomes (Homer & Kahle, 1988; Zeithaml et al., 1996). This comprehensive approach addresses criticisms that TPB represents an overly narrow framework neglecting broader psychological, social, and contextual factors influencing behaviour (Ogden, 2003; Sniehotta et al., 2014). The extended model demonstrates that TPB can serve as a core framework augmented with theoretically grounded extensions capturing antecedent influences, parallel pathways, marketing influences, and consequential outcomes. This integration provides a more complete account of organic product consumer behaviour than standalone TPB, values theories, satisfaction-loyalty frameworks, or green marketing

models could provide independently (Bagozzi R. P., 1992; Stern, 2000).

The identification of trust as operating through substitution rather than amplification mechanisms provides novel insights into how individual difference factors interact with TPB constructs, suggesting that not all moderators strengthen existing relationships; some may fundamentally alter the decision-making process by reducing reliance on traditional TPB pathways (Morgan & Hunt, 1994; Pavlou, 2003). Traditional moderation theory often assumes that moderators enhance or attenuate the strength of relationships in predictable directions, with positive moderators amplifying effects and negative moderators weakening effects (Baron & Kenny, 1986; Aiken & West, 1991).

However, the negative moderation effects detected in this study reveal more complex moderation patterns wherein moderators fundamentally reshape psychological processes rather than merely adjusting their intensity (Frazier et al., 2004). It has been observed that trust weakens subjective norms-intention and perceived behavioural control-intention links. Trust appears to alter the decision-making architecture by enabling more autonomous, evaluation-based decision processes. These processes appear to be less dependent on social validation or feasibility assessments, representing a qualitative shift in decision strategy rather than a quantitative change in relationship strength (Petty & Cacioppo, 1986; Chaiken & Trope, 1999). This contributes to emerging theoretical perspectives emphasising that moderators can operate through multiple mechanisms. This may include enhancing effects, dampening effects, reversing effects, substituting for predictors, or fundamentally altering psychological processes (Frazier et al., 2004; Aguinis et al., 2017). The trust substitution mechanism observed here recommends that in contexts characterised by uncertainty, information asymmetry, and credence attributes, trust may serve as a master variable. When trust is present as a master variable, it enables attitude-driven decision-making. Nevertheless, when absent, it necessitates reliance on alternative heuristics such as social proof or feasibility assessments (Mayer et al., 1995; Gefen et al., 2003). This insight has broader applicability. It goes beyond organic products to other contexts characterised by uncertainty and credence attributes. It

covers sustainable tourism, green energy adoption, ethical investment, and various pro-environmental behaviours where consumers must make decisions about products or services whose quality cannot be directly verified (Bamberg & Möser, 2007; Chen & Tung, 2014). The trust substitution mechanism may represent a general pattern whereby confidence-building factors alter reliance on social validation and feasibility concerns across multiple behavioural domains.

The demonstration that health consciousness and perceived consumer effectiveness function as parallel pathways, rather than moderators, challenges assumptions that all relevant variables condition TPB relationships. This signifies that comprehensive models must accommodate multiple independent influence mechanisms operating simultaneously but through distinct psychological processes (Paul et al., 2016; Scalco et al., 2017). This result contributes to ongoing debates about how to integrate individual difference variables, like personal values, moral norms, and contextual factors, into TPB-based models (Conner & Armitage, 1998; Bamberg & Möser, 2007). Several integration approaches have been proposed. These approaches include- treating additional variables as antecedents of TPB constructs; including additional variables as direct predictors of intentions alongside TPB constructs; examining additional variables as moderators conditioning TPB relationship strength; or developing entirely new frameworks replacing TPB (Ajzen, 1991; Sniehotta et al., 2014). The current findings suggest that different variables may require different integration approaches depending on their psychological functions and causal mechanisms.

Trust appears most appropriately conceptualised as both a direct predictor and a moderator. The rationale being that trust independently influences intentions and conditions how other predictors operate (Morgan & Hunt, 1994). Health consciousness and perceived consumer effectiveness appear most appropriately conceptualised as parallel pathway variables contributing independently to intentions without conditioning TPB processes. It hints at modelling them as direct predictors rather than as antecedents or moderators (Paul et al., 2016). The value-attitude-behaviour hierarchy theories are evidenced in the findings of the study.

Values, particularly attitudes, appear most appropriately conceptualised as distal antecedents shaping TPB constructs (Homer & Kahle, 1988; Schwartz, 1992). This differentiated integration approach acknowledges that psychological influences on behaviour operate through multiple mechanisms simultaneously. Theoretical frameworks, therefore, are required to be flexible enough to accommodate diverse causal pathways so as not to force all influences through a single standardised structure (Bagozzi, 1992; Fishbein & Ajzen, 2010). Theoretical perspectives emphasise that multiple routes exist to behavioural intentions. The same is validated by health consciousness and perceived consumer effectiveness functioning as parallel pathways (Bamberg & Möser, 2007; Sniehotta et al., 2014).

Moreover, the substantial intention-behaviour gap observed ($R^2 = 0.146$) contributes to theoretical understanding of volitional control limitations. The observed gap necessitates the incorporation of implementation factors, contextual constraints, and dynamic processes into behavioural prediction models (Sheeran, 2002; Webb & Sheeran, 2006). The finding that intentions explain only 14.6% of behavioural variance, despite substantial intention formation ($R^2 = 0.585$ for intentions), validates extensive research documenting that intentions are necessary but insufficient predictors of behaviour, particularly for behaviours involving implementation challenges, competing goals, or habitual alternatives (Vermeir & Verbeke, 2006; Carrington et al., 2010). This finding supports theoretical developments emphasising the importance of volitional phase processes occurring between intention formation and behavioural enactment. These include action planning, implementation intention formation, barrier identification, coping strategy development, and self-regulatory processes (Gollwitzer, 1999; Schwarzer, 2008). The substantial gap validates frameworks such as the Health Action Process Approach (HAPA), recognising that different psychological mechanisms govern these distinct phases (Sniehotta et al., 2005; Schwarzer, 2008).

The intention-behaviour gap also contributes to theoretical understanding of competing goals and value conflicts in sustainable consumption. Research demonstrates that consumers often hold multiple contradictory

goals simultaneously. While on one hand, they may desire to purchase organic products, on the other, they want to minimise costs, save time, maintain familiar routines, and satisfy family preferences. In this case, the actual behaviour reflects trade-offs among competing priorities (Carrington et al., 2010; 2014; Bruderer Enzler, 2015). The substantial gap observed here may reflect that organic purchase intentions compete with other goals that prove more salient in actual shopping situations.

The near-deterministic satisfaction-loyalty relationship ($R^2 = 0.852$) contributes to the theoretical understanding of loyalty formation mechanisms in credence goods and sustainability contexts. Experiential validation overwhelmingly determines continued patronage when product quality cannot be objectively verified prior to purchase (Zeithaml et al., 1996; Oliver, 1999). In contexts characterised by information asymmetry and credence attributes, post-purchase experience becomes the critical determinant of sustained relationships. This is because consumers lack alternative mechanisms for assessing product quality (Akerlof, 1970; Darby & Karni, 1973). The dominance of satisfaction in predicting loyalty represents that organic product loyalty represents mainly attitudinal loyalty based on positive affect and experiential validation. This refutes that organic behavioural loyalty is driven by inertia, constraints, or switching costs (Dick & Basu, 1994; Oliver, 1999). This finding has implications for broader loyalty theory. When consumers can freely choose among alternatives and face minimal switching costs, satisfaction becomes the exclusive determinant of loyalty. However, in contexts involving high switching costs, contractual commitments, or limited alternatives, loyalty may emerge from factors beyond satisfaction (Jones et al., 2000; Burnham et al., 2003).

Finally, the cross-cultural validation of TPB in an Indian context contributes to the theoretical understanding of TPB's cultural generalizability and boundary conditions (Hagger et al., 2002; Ravis & Sheeran, 2003). While TPB has been applied extensively in Western contexts, its applicability in emerging markets, collectivistic cultures, and contexts with different institutional environments remains less thoroughly examined (Sniehotta et al., 2014). The substantial explained variance in

intentions ($R^2 = 0.585$) observed in the Goan context validates that TPB's core mechanisms operate effectively across cultural contexts. This supports the theoretical claims of TPB as a universal model of human decision-making (Ajzen, 1991; Fishbein & Ajzen, 2010). However, the specific pattern of effects, attitude dominance over social norms in particular, reflects contextual variations in the relative weights of TPB components. This may reflect individualistic versus collectivistic orientations, urban versus rural settings, educated versus less-educated populations, or emerging versus mature markets (Hofstede, 2001; Sinha et al., 2001). This contributes to emerging perspectives that emphasise the relative importance of attitudes, norms, and control varies systematically across cultures, contexts, and populations in the TPB (Hagger et al., 2007; Smith et al., 2008).

4.3 Theoretical Implications

The findings collectively suggest that TPB remains a robust foundational framework but requires systematic extension rather than wholesale replacement. Future TPB applications in sustainable consumption contexts should adopt flexible integration approaches, acknowledging that different variables operate through distinct psychological mechanisms. Some function as antecedents that shape core constructs, others as parallel pathways that contribute independently to intentions, and still others as conditional mechanisms that alter how core constructs operate. This differentiated integration approach challenges one-size-fits-all extensions, which propose uniform treatment of additional variables. It signifies that theoretical parsimony should not be achieved by forcing diverse influences through standardised pathways.

The trust substitution mechanism has broader implications for understanding how moderators function across behavioural contexts. Traditional moderation theory's focus on amplification and attenuation effects may inadequately capture situations where moderators fundamentally alter psychological processes. This suggests expanding the typology of moderation effects beyond enhancing/dampening to include substituting, reversing, and restructuring.

The substantial gap observed reinforces that intentions represent necessary but insufficient predictors of behaviour, particularly for behaviours involving implementation challenges, competing goals, or habitual alternatives. Future theoretical development should prioritise volitional phase processes occurring between intention formation and behavioural enactment, including action planning, implementation intentions, barrier identification, and self-regulatory mechanisms. This supports frameworks like HAPA that explicitly model motivational and volitional phases as distinct psychological processes requiring different theoretical mechanisms. Additionally, the gap highlights the necessity of incorporating competing goal dynamics and value conflict resolution into sustainable consumption theories.

The dominance of satisfaction in predicting loyalty in credence goods contexts proposes that loyalty formation mechanisms differ systematically based on product attributes and the availability of information. When consumers lack objective quality assessment mechanisms pre-purchase, experiential validation becomes the exclusive determinant of sustained relationships. This has implications for broader loyalty theory, signifying that satisfaction-loyalty relationships will be strongest in high-credence-attribute contexts, moderate in search-attribute contexts, and potentially weak in contexts involving high switching costs or limited alternatives. The validation of TPB in an Indian emerging market context, with variations in relative construct weights, reflects that TPB's core architecture is culturally generalizable. At the same time, specific configurations vary systematically across cultural, institutional, and developmental contexts.

Collectively, these contributions support a meta-theoretical perspective emphasising theoretical pluralism and integration rather than competition. The success of the extended TPB framework, which incorporates elements from values theory, social influence theory, trust theory, self-efficacy theory, and satisfaction-loyalty frameworks, reveals that complex real-world phenomena require integrative models that draw on multiple theoretical traditions. This challenges disciplinary tendencies toward theoretical parsimony, achieved through the exclusion of alternative

perspectives, and supports emerging approaches that advocate for theoretically eclectic, empirically grounded models. These models acknowledge that human behaviour results from multiple, simultaneous psychological, social, and contextual influences operating through diverse mechanisms.

Chapter 6

Conclusion and Recommendations

6.1 Introduction

The chapter summarises the study's contribution, limitations, and scope for future research.

6.2 Conclusion

This study aimed to advance the understanding of organic product purchase behaviour in emerging market contexts by extending the Theory of Planned Behaviour framework through the systematic integration of antecedent influences, parallel pathways, marketing factors, conditional mechanisms, and post-purchase outcomes. Conducted in Goa, India, the research addresses critical gaps in the sustainable consumption literature by providing comprehensive empirical validation of an integrated theoretical model that encompasses the complete consumer journey, from fundamental value orientations through purchase intentions and behaviours to satisfaction and loyalty formation. The findings provide robust empirical support for TPB's core mechanisms while revealing important theoretical refinements and contextual nuances. Attitudes emerged as the dominant predictor of organic product purchase intentions ($\beta = 0.512$), significantly outweighing subjective norms ($\beta = 0.142$) and perceived behavioural control ($\beta = 0.159$), suggesting that cognitive-affective evaluations drive decision-making more powerfully than social pressures or feasibility assessments in this context. This attitude dominance reflects the personal relevance and value-laden nature of organic consumption decisions, wherein consumers base their choices primarily on evaluations of instrumental, experiential, and symbolic benefits rather than conforming to social expectations or responding to control perceptions.

The dual pathways of social influence, normative ($\beta = 0.485$) and value-expressive ($\beta = 0.493$), operating through subjective norms, demonstrate that social factors influence organic purchasing through both conformity motivations and identity-expression needs. This finding validates theoretical perspectives emphasising multiple routes through which social contexts shape individual behaviour. The comprehensive examination of attitudinal antecedents revealed that self-transcendence values ($\beta = 0.285$), environmental concern ($\beta = 0.318$), and self-enhancement values ($\beta = 0.249$) collectively shape attitudes toward organic products, demonstrating that organic consumption reflects complex motivational pluralism encompassing altruistic environmental protection, personal health protection, and social status enhancement simultaneously.

A particularly novel contribution emerges from the finding that trust operates through substitution rather than amplification mechanisms. Trust exhibited a strong direct effect on purchase intentions ($\beta = 0.431$), while simultaneously weakening the influence of subjective norms ($\beta = -0.089$) and perceived behavioural control ($\beta = -0.106$) through negative moderation. This pattern implies that trust fundamentally alters the decision-making architecture by enabling autonomous, attitude-driven choices that are less dependent on social validation or feasibility assessments, representing a qualitative shift in psychological processes rather than merely quantitative relationship adjustments. This insight challenges traditional moderation theory's focus on amplification effects and contributes to emerging perspectives recognising that moderators can substitute for, reverse, or fundamentally restructure causal pathways.

Contrary to initial hypotheses, health consciousness and perceived consumer effectiveness did not moderate the TPB relationships; instead, they functioned as parallel pathways that directly influenced intentions alongside the core TPB constructs. This finding demonstrates that comprehensive models must accommodate multiple independent influence mechanisms operating through distinct psychological processes, challenging one-size-fits-all integration approaches that force all additional variables into antecedent or moderator roles. The differentiated integration framework emerging from these findings, wherein values serve

as distal antecedents, trust functions as both a direct predictor and a moderator, and health consciousness and perceived consumer effectiveness operate as parallel pathways, provides theoretical guidance for future TPB extensions. This acknowledges that different variables require different integration mechanisms depending on their psychological functions.

The examination of green marketing influences revealed that attitudes toward green advertising ($\beta = 0.182$), green branding ($\beta = 0.165$), green packaging ($\beta = 0.147$), attitudes toward organic products ($\beta = 0.236$), and eco-labelling ($\beta = 0.093$) collectively contribute to purchase intentions, though with varying magnitudes. The relatively weak eco-label effect highlights the need for consumer education and challenges to the certification system, limiting label effectiveness despite its intended role as a quality signal. This finding underscores that marketing communications must address multiple dimensions simultaneously, rather than relying on single elements, such as labelling alone. The substantial intention-behaviour gap observed ($R^2 = 0.293$) validates extensive research documenting that intentions represent necessary but insufficient predictors of behaviour, particularly for behaviours involving implementation challenges, competing goals, or habitual alternatives. Despite a substantial explained variance in intentions ($R^2 = 0.585$), intentions explained only 29.3% of the behavioural variance, revealing significant limitations in volitional control. This gap highlights the critical importance of volitional phase processes, including action planning, implementation intentions, barrier management, and self-regulatory mechanisms, occurring between intention formation and behavioural enactment. The gap also reflects competing goal dynamics wherein organic purchase intentions must compete with cost minimisation, time efficiency, routine maintenance, and family preference satisfaction in actual shopping situations.

In contrast to the intention-behaviour gap, the satisfaction-loyalty relationship proved remarkably deterministic ($R^2 = 0.852$), with satisfaction accounting for 85.2% of the variance in loyalty. This near-perfect relationship highlights that in contexts characterised by

information asymmetry and quality uncertainty, where credence goods are involved, experiential validation through satisfaction overwhelmingly determines continued patronage. This finding emphasises that sustainable organic market development depends fundamentally on consistent delivery of superior product quality, validating consumer investments and building satisfaction-based loyalty.

From a methodological perspective, the study demonstrates the value of two-stage analytical approaches wherein measurement model validation through Confirmatory Factor Analysis precedes structural hypothesis testing through multiple regression. This approach ensures construct validity while maintaining interpretive clarity regarding direct effects. The comprehensive diagnostic procedures addressing multicollinearity, heteroscedasticity, normality, and common method variance enhance confidence in the robustness of the findings. The cross-cultural validation of TPB in an Indian emerging market context contributes to understanding TPB's cultural generalizability and boundary conditions. TPB's core mechanisms operate effectively across cultural contexts. Nonetheless, specific configurations, particularly attitude dominance over subjective norms, recommend contextual variations that potentially reflect individualistic-collectivistic orientations, urbanisation levels, educational backgrounds, or market maturity stages. This finding supports meta-theoretical perspectives that emphasise the TPB's fundamental architecture generalises culturally, while specific parameter weights vary systematically across contexts.

The practical implications of these findings provide actionable guidance for diverse stakeholders in the organic sector. Marketers should prioritise trust-building through transparency initiatives, employ integrated messaging that addresses multiple benefits simultaneously, and leverage both normative and value-expressive social influence mechanisms. Retailers should emphasise quality consistency as the paramount strategic priority while addressing accessibility barriers through mainstream distribution expansion. Producers should focus on experiential excellence rather than minimal compliance, employing direct marketing channels enabling transparency and personal connection. Certification bodies

should invest in consumer education initiatives and efforts to simplify labelling. Policymakers should develop market infrastructure that supports organic sector growth while implementing regulatory frameworks that protect consumers from fraudulent claims. Sustainability advocates should employ multi-benefit messaging that acknowledges motivational pluralism and implement norm activation campaigns that leverage social influence mechanisms.

Several limitations suggest directions for future research. The geographic focus on Goa limits generalizability to broader populations, necessitating multi-regional and cross-cultural validation. The cross-sectional design precludes definitive causal inference despite theoretical causal models. Thus, longitudinal designs tracking consumers across multiple time points would strengthen causal claims. Reliance on self-reported behaviour measurement introduces potential social desirability bias and recall error, proposing that future research should employ objective behavioural measures, such as loyalty card data or observational studies. Common method variance resulting from single-source data collection may inflate relationships. Therefore, multi-method approaches combining surveys with experimental manipulations or behavioural tracking would provide stronger evidence. Future research should investigate whether trust substitution mechanisms generalise to other uncertainty-characterised contexts, including sustainable tourism, green energy adoption, ethical investment, and healthcare decision-making.

Longitudinal studies tracking consumers from initial awareness through loyalty establishment would illuminate the temporal dynamics of the consumer journey. Experimental research that manipulates marketing messages, trust cues, social influence appeals, and implementation facilitators while measuring their effects on attitudes, intentions, and behaviours would provide stronger causal evidence regarding effective intervention strategies. Category-specific models examining whether the relative importance of psychological factors varies across product categories would address heterogeneity currently masked by aggregate analysis. Mediation analysis testing alternative causal pathways would clarify psychological processes through which distal variables influence

intentions and behaviours.

In conclusion, this study advances sustainable consumption theory by validating and extending TPB through comprehensive integration of antecedent influences, parallel pathways, marketing factors, conditional mechanisms, and post-purchase outcomes. The findings demonstrate that TPB provides a robust foundational framework requiring systematic extension rather than wholesale replacement. The identification of trust substitution mechanisms, parallel pathway operations, and implementation gaps provides novel theoretical insights with implications that extend beyond organic products to broader sustainable consumption contexts. The substantial explained variance in intentions (58.5%) and loyalty (85.2%), despite moderate behavioural prediction (29.3%), validates that psychological models effectively explain motivation and satisfaction, while highlighting implementation challenges that require additional theoretical attention. These contributions provide both theoretical advances that inform future research and practical guidance, enabling stakeholders to develop more effective strategies for promoting organic product adoption and sustainable consumption patterns in emerging markets and beyond.

6.3 Practical Recommendations

The findings from the study provide several actionable implications for organic product stakeholders, including marketers, retailers, farmers, certification bodies, policymakers and sustainability advocates.

6.3.1 For Organic Product Marketers and Brand Managers

First, the primacy of attitudes in driving intentions represents that marketing communications should focus on building favourable evaluations through multidimensional messaging that addresses instrumental benefits, experiential benefits, and symbolic benefits (Tarkiainen & Sundqvist, 2005; Aertsens et al., 2009). Single-benefit positioning emphasises only health or only environmental advantages. This strategy is suboptimal given that attitudes emerge from a complex interplay of self-transcendence values, environmental concern, and self-

enhancement motivations (Schwartz, 1992; Griskevicius et al., 2010). Effective marketing should employ integrated messaging, acknowledging this motivational pluralism. This includes health-protective appeals emphasising pesticide avoidance and chemical-free production, environmental appeals emphasising biodiversity preservation and sustainable agriculture, ethical appeals emphasising animal welfare and fair labour practices, and quality appeals emphasising superior taste and freshness (Zanoli & Naspetti, 2002; Hughner et al., 2007). Message testing should assess which benefit combinations resonate most strongly with target segments. This recognises that some consumers may be primarily health-motivated while others emphasise environmental or ethical considerations (Aertsens et al., 2009).

Trust-building initiatives represent critical strategic priorities given trust's dominant direct effect and moderating role. Transparency initiatives making production processes visible, certification explanations clarifying what organic standards entail, supply chain disclosure identifying product origins, quality consistency ensuring reliable performance, and authentic communication avoiding greenwashing contribute to trust development (Janssen & Hamm, 2012; Chen & Chang, 2013). Specific tactics might include farm storytelling, personalising producers, blockchain tracking enabling product traceability, third-party auditing providing independent verification, customer testimonials offering social proof, and transparent labelling disclosing complete ingredient information (Smed et al., 2013; Grunert et al., 2014). The dual social influence pathways (NSI $\beta = 0.485$; VESI $\beta = 0.493$) suggest that social marketing strategies should employ complementary approaches addressing both conformity and identity-expression motivations. Normative social influence can be activated through social proof messaging to demonstrate that organic purchasing represents normatively expected behaviour. Peer testimonials and celebrity endorsements establishing reference group norms, usage statistics highlighting growing adoption, and community-building initiatives help in creating social networks around organic consumption (Cialdini & Goldstein, 2004; Goldstein et al., 2008). Value-expressive social influence can be activated through identity-positioning. Framing

organic consumption as meaningful self-expression is one of the ways to enable identity-position in the market. Besides, values-based messaging connecting purchases to environmental commitment and ethical principles, lifestyle marketing associating organic products with admired social identities, and community affiliation create a psychological connection with like-minded consumers (Kelman, 1958; White & Dahl, 2006; Whitmarsh & O'Neill, 2010). The balanced importance of both mechanisms proposes that integrated campaigns addressing both conformity and identity dimensions yield optimal effectiveness.

The weak eco-label effect ($\beta = 0.093$) indicates an urgent need for consumer education initiatives. Building label literacy alongside improvements to the certification system enhances credibility. Educational interventions should clarify what different organic certifications represent and explain verification and auditing processes associated with them. A distinction between legitimate certifications and meaningless claims, and building an understanding of organic standards and prohibited substances, goes a long way in expanding the organic market (Thøgersen et al., 2010; Grunert et al., 2014). Simplified labelling by reducing proliferation of competing schemes would enhance clarity and decision-making efficiency (D'Souza et al., 2006). Certification bodies should prioritise transparency in certification processes. Rigorous enforcement for preventing fraudulent labelling and public communication of audit results can be done to bring our transparency (Janssen & Hamm, 2012). Retailer education programs can equip staff with the requisite knowledge and empower them to address customer queries, thereby enhancing in-store label effectiveness (Aertsens et al., 2009). The use of digital technologies to enable consumers to access detailed product information, certifications and, and farm profiles could bridge knowledge gaps (Grunert et al., 2014).

The substantial intention-behaviour gap necessitates marketing interventions to address the implementation barriers and facilitate action translation. Point-of-purchase interventions in decision-making contexts such as making organic options prominent through shelf placement, clear signage, distinctive packaging, and promotional displays, help trigger

purchase behaviour (Vermeir & Verbeke, 2008; Aschemann-Witzel & Zielke, 2017). Additionally, intention interventions prompt consumers to specify when, where, and how they plan to purchase organic products. This can strengthen intention-behaviour correspondence (Gollwitzer & Sheeran, 2006; Webb & Sheeran, 2006). Price promotion strategies aimed at reducing premium differentials during trial periods can lower financial barriers. This prompts behavioural experimentation without long-term commitment (Aertsens et al., 2009). Subscription services and automatic delivery models reduce ongoing implementation effort by automating repeat purchases (Verplanken & Wood, 2006). Habit formation programs that encourage repeated purchasing build automaticity. Thus, it reduces the dependence on effortful intention enactment (Wood & Neal, 2009). Reminder systems, such as those via mobile apps or email communications, can prompt action from consumers (Thøgersen, 2005).

6.3.2 For Retailers and Supply Chain Managers

The deterministic satisfaction-loyalty relationship ($R^2 = 0.852$) underscores that product quality consistency represents the strategic priority for building sustainable market positions. Quality assurance systems that ensure organic products consistently deliver superior performance validate consumer investments, and build satisfaction-based loyalty (Zeithaml et al., 1996; Oliver, 1999). Supply chain management should prioritise optimal harvest timing to maximise sensory quality and ensure optimal product quality. Post-harvest handling, including the integration of cold chains, helps maintain quality attributes (Aertsens et al., 2009). Retailers should establish rigorous supplier quality standards and conduct regular quality audits to ensure ongoing quality maintenance. Moreover, retailers can implement feedback systems to identify quality issues and remove substandard products, thereby protecting the category's reputation. The high correlation between satisfaction and loyalty indicates that quality investments yield substantial returns. Repeat purchases, positive word-of-mouth, and reduced customer acquisition costs can help an organisation scale (Anderson & Mittal, 2000; Reichheld, 1996).

Building institutional trust should be prioritised through transparent

sourcing practices. Disclosing the supplier relationship and certification verification systems can enhance trust among consumers. Retailers can differentiate themselves by establishing organic integrity programs that provide additional verification beyond certification, such as in-house quality testing to validate authenticity and consumer education to ensure commitment to organic integrity (Janssen & Hamm, 2012; Smed et al., 2013). Addressing perceived behavioural control barriers requires a wider selection of products across categories, developing convenient retail formats, and implementing price strategies to manage premium differentials, among other measures (Padel & Foster, 2005; Aertsens et al., 2009). Integrating organic products into mainstream retail formats ensures accessibility to a broader consumer segment. For committed organic purchases, speciality stores are more suitable (Zanoli & Naspetti, 2002).

6.3.3 For Producers and Farmers

For those involved in the production of organic produce, quality is to be given utmost attention. Quality consistency is a critical success factor in the satisfaction-loyalty relationship. Agricultural practices should adopt methods that enhance the consumer experience. Superior sensory characteristics, achieved by timing the harvest to optimise quality attributes, appropriate post-harvest handling, and authentic organic production methods, are essential for building a reputation. Superior quality facilitates premium pricing (Hughner et al., 2007; Aertsens et al., 2009). Producers should invest in quality optimisation rather than merely compliance with the bare minimum standards. This is necessary to gain a competitive advantage derived from experiential excellence (Zanoli & Naspetti, 2002).

Furthermore, direct marketing channels enable transparency and a personal connection with the consumers. Participation in Farmers' markets, farm stands, community-supported agriculture (CSA) programs, and farm visits facilitates direct communication with the consumers. Consumer concerns can be addressed on a personal level to build the producer-consumer relationship (Janssen & Hamm, 2012). These direct channels command premium prices without compromising on the

customer relationships (Aertsens et al., 2009). Initiatives to communicate production practices, through storytelling and transparency, build emotional connections. The dissemination of producers' narratives, especially through online presence, humanises organic production (Smed et al., 2013).

6.3.4 For Certification Bodies and Standard-Setting Organisations

Consumer education is crucial to enhancing the label. Programmes to promote a deeper understanding of certification meanings, standards, and verification processes help in consumer education. Public communication campaigns and educational materials can address knowledge gaps (Grunert et al., 2014; Thøgersen et al., 2010). Certification bodies should invest in consumer-focused communications to clarify the technical standards and benefits that certified products guarantee.

Label simplification can be achieved through industry coordination, establishing unified standards and harmonisation of labelling requirements to reduce consumer confusion (Leire & Thidell, 2005; Atkinson & Rosenthal, 2014). Government policy should be standardised through regulation and coordination (Grunert et al., 2014). Credibility enhancement, transparent auditing, public disclosure of certification criteria, and stringent enforcement, preventing fraudulent labelling, would build institutional trust in organic certification systems (Janssen & Hamm, 2012; Sønderskov & Daugbjerg, 2011). Third-party verification and thorough investigation into consumer complaints demonstrate the integrity of certification.

6.3.5 For Policymakers and Government Agencies

Market infrastructure development to be undertaken to support organic sector growth. Policy interventions might include subsidies, reducing organic price premiums, distribution support in underserved areas, supply chain development, quality infrastructure providing testing and certification services, and research funding supporting organic agriculture innovation (Padel & Foster, 2005; Willer et al., 2025). Regulatory

frameworks to protect consumers from fraudulent organic claims while facilitating organic marketing require clear definitions of related terms, certification requirements, labelling regulations and robust enforcement mechanisms (Janssen & Hamm, 2012).

Effective regulation balances consumer protection against excessive compliances (Guthman, 2004). Public education initiatives that highlight the benefits of organic agriculture to both consumers and society would expand market demand. School nutrition programs and public procurement policies to prioritise organic foods would normalise organic consumption and build supportive social norms (Thøgersen, 2010). Research and development investments would address production constraints limiting organic sector growth (Seufert et al., 2012). Extension services providing technical assistance to farmers transitioning to organic production would help meet the growing demand (Padel, 2001).

6.3.6 For Sustainability Advocates and NGOs

Multi-benefit messaging that addresses the constellation of health and social dimensions of organic agriculture would build broader appeal than single-issue campaigns. Advocacy communications should acknowledge motivational pluralism. This can be accomplished by framing organic consumption as simultaneously serving personal health interests, environmental protection, farmworker wellbeing, and rural community support (Hughner et al., 2007; Aertsens et al., 2009). Social norm activation campaigns that highlight the adoption of organic products and create social movements around sustainable consumption would leverage both normative and value-expressive social influence mechanisms (Cialdini & Goldstein, 2004; White & Dahl, 2006). Community social media campaigns and collective action initiatives build social networks, reinforcing organic consumption norms. Besides, action facilitation initiatives that address the intention-behaviour gap through practical tools and shopping guides with community support reduce implementation barriers (Vermeir & Verbeke, 2008). Practical resources, such as organic shopping apps to identify retail locations, price comparison tools, and peer support groups, reduce perceived difficulty and build self-efficacy

(Bandura, 1997).

6.4 Limitations of the study

While this study provides valuable insights into the consumer behaviour of organic products in Goa, several limitations must be acknowledged. The geographic focus on Goa limits the generalizability of findings to broader populations. The findings, exclusively focused on Goa, may not be generalised to other regions in India or globally without further validation. The study was conducted in a specific cultural and regional setting, which may influence the observed patterns and relationships.

The cross-sectional design precludes definitive causal inference, despite the existence of theoretical causal models. While the models provide evidence consistent with hypothesised causal structures, alternative causal orderings cannot be definitively excluded (Maxwell & Cole, 2007). Longitudinal studies would enable stronger causal claims by establishing temporal precedence and examining dynamic processes over time.

The reliance on self-reported behaviour measurement introduces potential social desirability bias and recall error (Podsakoff et al., 2003). Consumers may over-report organic purchasing to present themselves favourably or may inaccurately recall past purchases (Kormos & Gifford, 2014). Moreover, common method variance resulting from single-source, single-occasion data collection may inflate relationships among self-reported constructs measured simultaneously (Podsakoff et al., 2003). While Harman's single-factor test and confirmatory factor analysis provided some assurance against severe common method bias, more rigorous approaches, such as those employing temporal separation or methodological controls, could provide stronger protection (Podsakoff et al., 2012). The sample, although diverse and adequately sized, may not fully represent the broader Indian population due to the nature of the sampling. The sample likely over-represents affluent, urban consumers who are most likely to purchase organic products, potentially limiting generalizability to rural, less educated, or lower-income populations (Saunders et al., 2023).

The study focused on organic products in general without examining specific categories within the organic sector. Consumer motivations, attitudes, and behaviours may vary substantially across categories, given different price premiums, quality differentials, health risks, and environmental impacts (Hughner et al., 2007; Aertsens et al., 2009). The study also does not cover the behaviour of non-consumers or those unaware of organic products, nor does it examine the operational or financial aspects of green marketing strategies from the business perspective.

Finally, the present study focused on Health Consciousness (HC), Perceived Consumer Effectiveness (PCE), and Trust (TRUST) as moderators. It did not examine potential moderation by other theoretically relevant variables, such as environmental knowledge, past organic consumption experience, price sensitivity, socioeconomic status, or cultural values orientation. The study also did not examine the mediating mechanisms through which distal variables, such as values and environmental concern, influence intentions.

6.5 Directions for future Research

The limitations identified above suggest several productive directions for future research. Geographic and cultural extensions represent a priority avenue. Cultural comparisons examining whether the observed pattern of effects, particularly attitude dominance, trust substitution mechanisms, and the absence of health consciousness moderation, generalises across Indian states, or between urban and rural contexts, or between India and other emerging or developed markets. This would illuminate cultural boundary conditions (Hofstede, 2001; Sinha et al., 2001). Cross-cultural research could investigate whether trust operates through universal substitution mechanisms, or whether amplification mechanisms emerge in different cultural contexts (Chen & Chang, 2013).

Longitudinal research designs, which measure constructs at multiple time points, would enable stronger causal inference by establishing temporal precedence and examining dynamic processes over time (Selig & Preacher, 2009). Panel studies tracking consumers from initial awareness

through attitude formation, intention development, behavioural trial, satisfaction evaluation, and loyalty establishment would illuminate the consumer journey's temporal dynamics (Oliver, 1999). Such designs would also enable assessment of how attitudes, norms, and control beliefs evolve over time and influence purchase behaviour.

The weak intention-behaviour relationship ($R^2 = 0.146$) indicates that future research should more thoroughly investigate factors mediating intention implementation. Implementation intention interventions, habit measurement, competing goal assessment, situational constraint identification, the temporal dynamics of intention decay, and volitional self-regulation processes warrant systematic investigation (Gollwitzer & Sheeran, 2006; Verplanken & Wood, 2006; Carrington et al., 2014). Mixed-methods approaches combining quantitative surveys with qualitative interviews to explore barriers to intention enactment would provide a richer understanding (Vermeir & Verbeke, 2006). Researchers should also explore the role of situational factors like affordability, accessibility, and external influences in bridging this gap.

Methodological refinements could strengthen future research. Researchers should adopt probability sampling to ensure representative coverage across socioeconomic strata, geographic regions, and demographic segments (Lavrakas, 2008). Furthermore, future research should employ objective behavioural measures, such as loyalty card data, observational studies, or scanner data, capturing actual purchasing behaviour without relying on self-reports (Carrington et al., 2010). Experimental designs manipulating marketing interventions and measuring actual purchase behaviour would provide stronger evidence regarding marketing effectiveness (Chandon et al., 2005).

Category-specific investigations represent another important direction. Future research should examine the specific effects across various product categories, including fresh produce, processed foods, dairy, meat, and others, as consumer motivations and behaviours may vary substantially across these contexts. Category-specific models that identify which psychological factors prove most influential for different product types

would enhance both theoretical precision and practical relevance.

Mediation and moderation analyses could clarify psychological processes. Mediation analysis, which tests whether values influence intentions through attitudes, whether environmental concern influences intentions through moral norms, or whether trust influences intentions through perceived risk reduction, would clarify the psychological mechanisms (Baron & Kenny, 1986; Preacher & Hayes, 2008). Comprehensive models integrating multiple mediators and testing alternative mediation pathways would advance theoretical understanding. Additionally, examining moderation by environmental knowledge, past organic consumption experience, price sensitivity, socioeconomic status, or cultural values orientation could provide a more comprehensive understanding of conditional effects (Vermeir & Verbeke, 2006; Scalco et al., 2017).

Experimental research could provide stronger causal evidence. Studies that manipulate marketing messages, trust cues, social influence appeals, and implementation facilitators while measuring their effects on attitudes, intentions, and behaviours would clarify effective intervention strategies (Chandon et al., 2005). Field experiments implemented in retail settings testing price promotions, label designs, implementation intention prompts, or social norm messages would generate actionable insights for practitioners (Goldstein et al., 2008).

Model extensions and refinements could enhance theoretical understanding. The extended TPB framework, incorporating post-purchase variables could be further modified with the inclusion of variables not covered under the present model. Researchers may examine whether the trust substitution mechanisms identified in this study generalise to other contexts characterised by uncertainty, such as sustainable tourism, green energy adoption, ethical investment, or healthcare decision-making. Testing the model's applicability across diverse cultural settings and for specific categories of organic products would validate and refine the theoretical framework.

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Annexure I

Consumer Behaviour Towards Organic Products - A Survey

Dear Respondent,

This questionnaire is to elicit information on Consumer Behaviour towards Organic Products. Organic products are products produced without the use of synthetic fertilizers and pesticides, genetic engineering, growth hormones, irradiation, and antibiotics.

Kindly give your honest opinion on the statements provided. Please let your response be genuine and reflect your true behaviour. The information provided by you will be kept strictly confidential and the information will be used only for academic purposes.

Please answer all the statements.

Thank you for your cooperation and support.

Apurva L. Haldankar

Email _____

Do you use organic products? ☐ Yes ☐ No

Section A: Demographic Profile of the Respondents

1. Name (optional)

2. Gender:

☐ Male ☐ Female ☐ Others

3. Age Group:

☐ Less than 18

☐ 18 - 30

☐ 31 - 45

☐ 46 & above

4. Place of Residence:

☐ Urban ☐ Rural

5. District:

☐ North Goa ☐ South Goa

6. Marital Status:

☐ Married ☐ Unmarried

7. Education:

☐ Below SSC

☐ SSC

☐ HSSC

☐ Graduate

☐ Post-Graduate

☐ Others

8. Occupation:

☐ Service

☐ Business

☐ Student

☐ Homemaker

☐ Others

9. No. of Family Members:

☐ Upto 3

☐ 4 to 6

☐ Above 6

10. Monthly Household Income:

☐ < ₹ 30,000

☐ ₹ 30,000 - ₹ 60,000

- ☐ ₹ 60,000 - ₹ 90,000
- ☐ ₹ 90,000 - ₹ 1,20,000
- ☐ ₹ 1,20,000 - ₹ 1,50,000
- ☐ > ₹ 1,50,000

11. How long have you been buying organic food products?

- ☐ Last three years
- ☐ More than three years

12. Frequency of Buying Organic Food Products:

- ☐ Often
- ☐ Sometimes
- ☐ Rarely

13. Where do you usually buy organic food products?

- ☐ Specialised Shops
- ☐ Direct Selling
- ☐ Supermarkets
- ☐ Local Markets
- ☐ Online

14. Which organic food products do you usually buy? (Multiple options allowed)

- ☐ Fruits and Vegetables
- ☐ Milk Products
- ☐ Meat Products
- ☐ Tea and Coffee
- ☐ Cereals and Pulses
- ☐ Dry fruits and seed
- ☐ Spices
- ☐ Sugar, Jaggery and Salt
- ☐ Edible Oil
- ☐ Medicinal Herbs
- ☐ Personal care products
- ☐ Bread and Baking Products
- ☐ Others

Section B: Factors Influencing Purchase Behaviour

Please rate your purchase intent on a scale of 1 to 5

(where 1 - Strongly Disagree, 2 -Disagree, 3 - Neutral, 4 - Agree, and 5 - Strongly Agree)

Perceived Consumer Effectiveness

Statements	1	2	3	4	5
1. I feel that there is a lot that I can do to protect the environment.					
2. I feel I can help solve the environmental problems by purchasing organic products.					
3. Pro-environmental behaviour in my everyday life can contribute to the protection of the environment.					

Value Expressive Social Influence

Statements	1	2	3	4	5
1. I think purchasing organic products is fulfilling my responsibility towards the environment.					
2. I feel it is my moral obligation to purchase organic products.					
3. I feel guilty if I purchase products damaging the environment.					
4. I think purchasing organic products makes me a socially responsible consumer.					

Environmental Concern

Statements	1	2	3	4	5
1. I am worried about the environmental degradation happening in our country.					
2. India's environment is my major concern.					
3. I am emotionally involved in environmental protection issues in India.					
4. I often think about how the environmental quality in India can be improved.					

Self-transcendence

Statements	1	2	3	4	5
1. In order to protect the environment for future generations, I prefer to buy products that cause less harm to the environment.					
2. I prefer to join groups which work for environmental protection.					
3. I convince others to participate in seminars, rallies, etc. to create environmental awareness among people.					
4. I am willing to make sacrifices to protect the environment.					
5. When I buy products, I try to consider how my use of them will affect the environment.					

Self-enhancement

Statements	1	2	3	4	5
1. I purchase organic products for the recognition I get from others.					
2. I feel laws to protect the environment limit my choice of products.					
3. I believe that natural resources are to be used for individual benefit and welfare.					
4. I believe that economic progress and development cannot be achieved if we focus on the protection and conservation of the environment.					

Control Belief

Statements	1	2	3	4	5
1. I think non-availability of organic products makes it difficult to purchase them.					
2. I think the high price of organic products					

makes it difficult to purchase them.					
3. I think purchasing organic products requires additional efforts.					

Control Strength

Statements	1	2	3	4	5
1. Since I have sufficient money, I can easily purchase organic products.					
2. Since I have sufficient time to search for organic products, I can easily purchase them.					
3. Since I have plenty of shopping opportunities, I can easily purchase organic products.					
4. Since I have sufficient information about organic products, I can easily purchase them.					

Normative Social Influence

Statements	1	2	3	4	5
1. I value the opinions and feelings of my family members for the purchase of organic products.					
2. I value the opinions and feelings of my friends for the purchase of organic products.					
3. I value the opinions and feelings of environmental activists for the purchase of organic products.					
4. I value the opinions and feelings of people on social media for the purchase of organic products.					

Subjective Norm

Statements	1	2	3	4	5
1. Most people who are important to me think that I should buy organic products instead of					

conventional products.					
2. Most people I value would buy organic products instead of conventional products.					
3. News and magazines affect my purchase decisions of organic products.					
4. Government supports for organic foods affects my decisions to buy organic products.					

Attitude Towards Organic Product Purchase

Statements	1	2	3	4	5
1. Buying organic products instead of conventional products is beneficial.					
2. Buying organic products instead of conventional products is a wise choice.					
3. Buying organic products instead of conventional products make me feel good.					

Perceived Behavioural Control

Statements	1	2	3	4	5
1. I can take the decision independently to buy organic products.					
2. I have complete information and awareness regarding where to buy organic products.					
3. Organic products are readily available in the location where I reside.					
4. I can handle any (money, time, information related) difficulties associated with my buying decision.					

Purchase Intention

Statements	1	2	3	4	5
1. The probability that I would buy organic products is very high.					

2. I am always interested in buying more organic products for my/family's needs.					
3. I am willing to buy organic products despite their higher prices.					
4. I intend to purchase organic products for my long-term health benefits.					
5. I intend to purchase organic foods because they are superior in quality and safer to consume.					
6. I intend to buy organic products because they are more environmentally friendly.					
7. I intend to consume organic products in the future.					

Actual Product Purchase Behaviour

Statements	1	2	3	4	5
1. I often purchase organic products on regular basis.					
2. I often purchase organic products for my health.					
3. I often purchase organic products that are against animal-testing.					
4. I often purchase organic products that are good quality and safe to consume.					

Consumer Satisfaction

Statements	1	2	3	4	5
1. I am satisfied with my decision to purchase organic products.					
2. My choice to purchase organic products was a wise one.					
3. I feel happy about my decision concerning the organic products.					
4. I think it was the right decision to purchase					

the organic products.					
5. I am proud that I am an organic product consumer.					

Consumer Loyalty

Statements	1	2	3	4	5
1. I am a regular organic product user.					
2. I would eagerly recommend organic products to my friends and colleagues.					
3. I would continue to shop for organic products.					
4. I am ready to travel long distances to buy organic products.					

Trust

Statements	1	2	3	4	5
1. I think that organisations dealing with organic products are well aware of their responsibilities.					
2. I trust the organisations which sell organic products with authentic certification.					
3. I trust the institutions certifying organic products.					

Perceived Value

Statements	1	2	3	4	5
1. The money that I spend on organic products is well spent.					
2. Benefits of using organic products are much higher than expected.					
3. Since organic products help to conserve scarce natural resources, it is worth the money spent.					

Health Consciousness

Statements	1	2	3	4	5
1. I am concerned about the type and amount of nutrition in the food that I consume daily.					
2. I am prepared to eat as healthy as possible.					
3. The use of organic fruits, vegetables and other products enhance my health.					
4. I consume organic products because they are free of harmful chemicals.					
5. I prefer natural, not processed, food products.					
6. I relate consumption of organic products to a better quality of life.					

Section C: Attitude towards Green Marketing Strategies of Organic Products

Please rate your purchase intent on a scale of 1 to 5

(where 1 - Strongly Disagree, 2 -Disagree, 3 - Neutral, 4 - Agree, and 5 - Strongly Agree)

Attitude Towards Green Advertising

Statements	1	2	3	4	5
1. Green advertising helps to explain products' impact on the environment.					
2. Green advertising helps to increase knowledge about organic products.					
3. Green advertising helps us to identify organic products easily.					
4. Green advertising is good at addressing environmental issues.					
5. Green advertising indicates that the company is concerned about the environment.					

Attitude Towards Green Packaging

Statements	1	2	3	4	5
1. Green packaging helps to conserve natural resources to a large extent.					
2. Green packaging helps to reduce pollution to a large extent.					
3. Green packaging helps to maintain the quality and freshness of the product.					

Attitude Towards Green Branding

Statements	1	2	3	4	5
1. Green branding is regarded as the best indicator of a company's environmental commitment.					
2. Green branding indicates that the company has a good environmental management system.					
3. Green branding indicates that the company is professional about environmental management policies.					
4. Green branding indicates that the company is taking care of consumers' environmental concern.					

Attitude Towards Organic Products

Statements	1	2	3	4	5
1. Organic food products are safer to eat.					
2. Organic products taste better.					
3. Organic products have superior quality.					
4. Organic products are more expensive.					

Attitude Towards Eco-Labeling

Statements	1	2	3	4	5
1. Eco-labels provide useful information required to make a better purchase decision.					
2. Eco-labels inform consumers about the environmental benefits of the product.					
3. Eco-labels help to distinguish between organic products and non-organic products.					