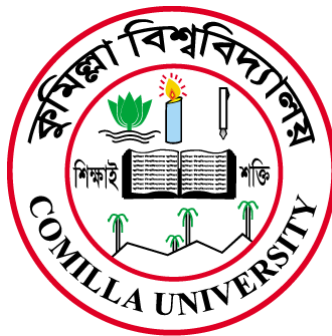


PROJECT REPORT
ON
UNDERSTANDING GREEN CONSUMPTION INTENTION AND
BEHAVIOR THROUGH MULTIDIMENSIONAL ATTITUDES AND
SUBJECTIVE NORMS: EVIDENCE FROM BANGLADESH'S
ORGANIC COSMETICS MARKET

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Session : 2012-2023
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Date of Submission: 29 June, 2025

LETTER OF TRANSMITTAL

29 June, 2025

Professor Dr. Meher Neger

Head of the Department

Department of Marketing

Comilla University

Subject: Submission of the Project Report.

Dear Respected Mam,

I am delighted to present my final project report titled, **"Understanding Green Consumption Intention and Behavior through Multidimensional Attitudes and Subjective Norms: Evidence from Bangladesh's Organic Cosmetics Market"** This submission fulfils the requirements for the successful completion of my MBA program at Comilla University. I wish to extend my heartfelt gratitude for the invaluable support and guidance you provided throughout this research journey.

I, sincerely, hope that this report meets your approval and requirements. Therefore, I am submitting this research report for your kind consideration. Hope that you would be pleased to accept my report and oblige me.

Sincerely Yours,

Arobindo Bikash Dev

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DECLARATION OF THE STUDENT

I, Arobindo Bikash Dev, do hereby solemnly declare that the project report titled, **"Understanding Green Consumption Intention and Behavior through Multidimensional Attitudes and Subjective Norms: Evidence from Bangladesh's Organic Cosmetics Market"** is entirely unique and has been meticulously prepared by me. This paper is being submitted in fulfilment of the requirements for the degree of Master of Business Administration (MBA) from the Department of Marketing, Faculty of Business Studies, Comilla University.

I further affirm that this project paper has been crafted exclusively to fulfil my academic obligations and does not entail any conflicts of interest or external affiliations.

Yours sincerely,

Arobindo Bikash Dev

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Session: 2022-23

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SUPERVISOR'S DECLARATION

This is to certify that the project report "**Understanding Green Consumption Intention and Behavior Through Multidimensional Attitudes and Subjective Norms: Evidence from Bangladesh's Organic Cosmetics Market**" has been prepared by Arobindo Bikash Dev, MBA Program, Exam Roll: 22307012, Registration No: MKT- 22307012, 13th batch, Session: 2022-23 as a part of fulfilment for the requirement of MBA Program, Department of Marketing, Comilla University.

The report has been prepared under my guidance and supervision. He tried his best to maintain my guidance in this journey. He is directed to submit the report of evaluation.

I wish him every success in his future endeavours.

.....
Professor Dr. Meher Neger

Head of the Department

Department of Marketing

Comilla University

ACKNOWLEDGEMENT

I would like to express my profound gratitude to all those who have contributed to the successful completion of this project report, **"Understanding Green Consumption Intention and Behavior Through Multidimensional Attitudes and Subjective Norms: Evidence from Bangladesh's Organic Cosmetics Market"** This endeavour would not have been possible without the support, guidance, and encouragement of numerous individuals and institutions.

First and foremost, I extend my heartfelt appreciation to Professor Dr. Meher Neger, Head of the department, Department of Marketing, Comilla University, my research supervisor, for her unwavering guidance and invaluable insights throughout the research process. Her expertise, mentorship and motivations have been instrumental in shaping the quality and direction of this study.

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In conclusion, this project report is the culmination of collective efforts, and I am deeply appreciative of everyone who has played a role, directly or indirectly, in bringing this project to fruition.

TABLE OF CONTENTS

LETTER OF TRANSMITTAL.....	II
DECLARATION OF THE STUDENT.....	III
SUPERVISOR'S DECLARATION.....	IV
ACKNOWLEDGEMENT.....	V
TABLE OF CONTENTS.....	VI
LIST OF TABLES.....	IX
LIST OF FIGURE.....	X
ABSTRACT.....	1
CHAPTER 1-INTRODUCTION.....	2
1.1 Background of the Study.....	3
1.2 Problem Statement.....	5
1.3 Research Questions.....	6
1.4 Objectives of the Study.....	6
1.5 The Significance of the Study.....	7
1.5.1 Theoretical Significance.....	7
1.5.2 Practical Significance.....	8
1.5.3 Social Significance.....	8
1.6 Scope and Delimitation of the Study.....	9
1.6.1 Scope.....	9
1.6.2 Delimitation.....	9
1.7 Operational Definitions.....	10
1.8 Organization of the Study.....	11
CHAPTER 2-LITERATURE REVIEW.....	12
2.1 Overview of the Literature Review.....	13
2.2 Theoretical Foundation.....	14
2.2.1 Theory of Planned Behavior (TPB).....	14
2.2.2 Attitude–Behavior Gap in Green Consumption.....	15
2.3 Key Constructs and Empirical Review.....	16
2.3.1 Attitude Towards the Environment.....	16
2.3.2 Attitude Towards Green Consumption.....	17
2.3.3 Attitude Towards Organic Cosmetics.....	18
2.3.4 Subjective Norms of Green Consumption.....	19
2.3.5 Green Consumption Intention.....	20
2.3.6 Green Consumption Behavior.....	21
2.4 Research Gap.....	21
2.5 Summary of the Literature Review.....	23
CHAPTER 3-METHODOLOGY.....	24
3.1 Research Framework.....	25
3.1.1 Justification of Variable Relationships.....	25
3.2 Hypothesis Development.....	27

3.2.1 Hypotheses on Attitudes towards the Environment.....	27
3.2.2 Hypotheses on Attitudes towards Green Consumption.....	27
3.2.3 Hypotheses on Attitudes towards Organic Cosmetics.....	28
3.2.4 Hypotheses on Subjective Norms.....	28
3.2.5 Hypotheses on Green Consumption Intention (Mediator).....	28
3.3 Research Design.....	29
3.3.1 Research Setting.....	29
3.3.2 Cross-Sectional Design.....	30
3.4 Research Approach.....	30
3.4.1 Population and Sampling.....	31
3.4.2 Target Population.....	31
3.4.3 Sampling Technique.....	31
3.4.4 Sample Size Determination.....	32
3.5 Questionnaire Development.....	33
3.6 Measurement of Variables/ Instrumentation.....	34
3.7 Data Collection Procedures.....	36
3.8 Techniques of Data Analysis.....	38
3.9 Chapter Summary.....	38
CHAPTER 4-DATA ANALYSIS AND FINDINGS.....	39
4.1 Response Rate.....	40
4.2 Respondents' Profile.....	41
4.3 Descriptive Statistics Analysis.....	42
4.4 Reliability Test.....	42
4.5 Convergent Validity.....	44
4.6 Regression and ANOVA Results.....	44
4.7 Structural Model Assessment for Hypothesis Testing.....	45
4.8 Summary of Findings.....	46
4.9 Chapter Summary.....	48
CHAPTER 5-DISCUSSION AND CONCLUSION.....	49
5.1 Introduction.....	50
5.2 Discussion of Key Findings.....	50
5.2.1 Attitudes Toward the Environment and Green Consumption Intention.....	50
5.2.2 Attitudes Toward Green Consumption and Intention.....	50
5.2.3 Attitudes Toward Organic Cosmetics and Intention.....	50
5.2.4 Subjective Norms and Intention.....	51
5.2.5 Green Consumption Intention and Behavior.....	51

5.3 Theoretical Implications.....	51
5.4 Practical Implications.....	52
5.5 Limitations of the Study.....	52
5.6 Suggestions for Future Research.....	52
5.7 Conclusion.....	53
REFERENCES.....	54
APPENDIX - A.....	60
APPENDIX - B.....	63
Descriptive Studies.....	63
Frequencies.....	63
Frequency Table.....	63
Reliability.....	63
Reliability: All Variables.....	65
Factor Analysis.....	66
Descriptive Statistics Of Variables.....	67
Regression - Model 1.....	68
Regression - Model 2.....	69
APPENDIX - C.....	71

LIST OF TABLES

Table 3.1 Questionnaire Design.....	33
Table: 3.2 Attitude towards the environment.....	34
Table: 3.3 Attitude towards Green Consumption.....	35
Table: 3.4 Attitude towards Organic Cosmetics.....	35
Table: 3.5 Subjective norms towards green consumption.....	35
Table: 3.6 Green consumption intention.....	35
Table: 3.7 Green consumption behaviour.....	36
Table 4.1: Response of questionnaire survey.....	40
Table 4.2: Demography of the Respondents.....	41
Table 4.3: Descriptive Statistics of Variables.....	42
Table 4.4 : Measurement Properties of Constructs.....	43
Table 4.5: Summary of Regression and ANOVA Results for Hypothesis Testing.....	45
Table 4.6 : The Structural Estimates.....	46
Table 4.7 : Summary of Hypotheses Testing Findings.....	47

LIST OF FIGURE

Figure 3.1 shows the framework of this study.....	25
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ABSTRACT

This study investigates the psychological and social determinants of green consumption behavior in Bangladesh's organic cosmetics market by extending the Theory of Planned Behavior (TPB). Using a structured questionnaire, data were collected from 201 urban consumers and analyzed using SPSS. The study finds that attitudes toward the environment, green consumption, and organic cosmetics, along with subjective norms, significantly and positively influence green consumption intention. In turn, intention strongly predicts actual green consumption behavior, explaining 43.4% of its variance. These results confirm the mediating role of intention and highlight the effectiveness of multidimensional attitudes in predicting sustainable consumer actions. The findings contribute to bridging the attitude–behavior gap and offer practical implications for marketers and policymakers aiming to promote environmentally responsible consumption in emerging markets like Bangladesh.

Keywords: Green consumption, Attitude–behavior gap, Organic cosmetics, Theory of Planned Behavior, Bangladesh, Sustainable marketing, Subjective norms, Consumer behavior

CHAPTER 1

INTRODUCTION

1.1 Background of the Study

Environmental degradation and climate change have become one of the most pressing problems facing the world in the 21st century, leading to global transitions towards sustainability in many industries and consumer markets. Increasing awareness of the above environmental issues has spurred the emergence of green consumerism, which refers to consumption choices that mitigate negative environmental consequences and conserve resources for future generations (Wu et al., 2023). The growing awareness of environmental issues among consumers has resulted in heightened demand for products that align with eco-conscious values and sustainability practices.

The global green products market has expanded significantly, consumers are quickly ready to pay premium prices for environmentally friendly alternatives in product categories. According to recent market analysis, the Global Green Technology and Sustainability Market has increased from \$ 13.76 billion to \$ 2029 to \$ 51.09 billion by \$ 2029, reflecting a mixed annual growth rate (CAGR) of 20.6% (Khan & Rahman, 2022). This growth is particularly evident in individual care and cosmetics, where the global organic cosmetics market has experienced outstanding expansion due to increasing consumer awareness on harmful chemicals in traditional products.

In Bangladesh, the market for organic and natural products is still emerging, but growing steadily. The Bangladesh Face Wash market alone is expected to increase by \$ 4.75 million in 2025 to increase from \$ 4.75 million, representing compound annual growth rate (CAGR) at 11.60% (Mordor Intelligence, 2025). This growth is partly inspired by the increasing demand for organic face wash products, especially among young consumers who are more aware of the benefits of natural ingredients and are transferred to products made from natural ingredients. The growing internet penetration among the youth population in Bangladesh and social media use has promoted awareness of organic products, especially the demand for driving in urban areas (Mordor Intelligence, 2025).

The demographic profile of these consumers shows that individuals between the ages of 18-35 are ahead of this change. Studies indicate that this age group shows a high trend against green consumption, influenced by factors such as environmental responsibility and self-efficiency (Haque et al., 2024). In addition, the spread of internet access and social media

platforms has increased awareness and access to organic products, especially in city centers such as Dhaka.

Corporate Social Responsibility (CSR) Initiative of companies also plays an important role in the design of a consumer approach to green products. When consumers are informed of the CSR efforts of a company, their environmental approach and green purchasing behavior (Rahman et al., 2024) have a significant positive effect. This underlines the importance of communicating its stability practice effectively for companies to promote consumer trust and loyalty.

Government policies and regulations also play a crucial role in either facilitating or hindering the growth of green consumerism. Supportive policies, such as subsidies for organic farming and stringent regulations against counterfeit products, can significantly bolster the market. Conversely, a lack of regulatory oversight may allow substandard products to proliferate, damaging overall consumer trust. Understanding the psychological and social drivers behind green consumption in Bangladesh is essential for sustaining market development. The interplay between environmental attitudes, product perceptions, social influences, and actual purchasing behavior necessitates comprehensive examination, particularly in emerging markets where green consumption is a relatively recent phenomenon.

Despite this promising development path, it is important for permanent market development to understand psychological and social drivers for green consumption in Bangladesh. The complex interpretation between environmental approaches, product -specific perceptions, social influences and real buying behavior requires systematic examination, especially in emerging markets where green consumption is a relatively recent event.

Recent studies emphasize that young consumers in Bangladesh are gradually becoming key drivers of the green market, especially in the personal care segment. This demographic group shows increasing interest in environmentally friendly products, influenced by education, peer behavior, and exposure to global sustainability trends (Rahman et al., 2024). However, while awareness is growing, actual market engagement remains limited due to price sensitivity and skepticism regarding product authenticity. These insights indicate the need to explore the nuanced motivations behind green cosmetic consumption in Bangladesh's youth segment to inform strategic marketing and sustainable product positioning.

1.2 Problem Statement

Despite increasing environmental awareness and positive attitude towards green products globally, research continuously identifies the "attitude behavior difference" in green consumption. The phenomenon describes disconnects among consumers expressing a positive attitude to environmentally friendly products and their actual buying behavior (Yang et al., 2022). Although consumers can express the desire to buy green products to reduce environmental decline, these positive attitudes are often unable to translate into concrete actions (Yang et al., 2022). This inconsistency represents an important challenge for green marketing and sustainability initiatives.

The attitude-behaviour gap is specifically clarified in development economies such as Bangladesh, where the market is still developing for green products, including organic cosmetics. While studies have shown this difference in Western contexts, extensive research has been investigated that different behaviors and social norms affecting green consumption in Bangladesh are limited. As noted by Hussain et al. (2021), despite having an ideal agricultural climate area for organic production in Bangladesh, the consumption of organic products is not widespread among Bangladeshis, and biological production is still relatively recent development.

Current research lacks a multidimensional approach to understand the green consumption behavior in the context of Bangladesh. Most studies have focused on isolated factors instead of examining complex differences between different approaches (environment, consumption-oriented and product-specific), subjective criteria, intentions and real behavior. This fragmented approach is unable to provide a broad understanding of psychological and social systems that run green consumption.

Moreover, the rise of social media platforms and digital marketing in Bangladesh has reshaped consumer interaction with green products, especially among younger demographics. Exposure to online influencers and environmental advocacy content has encouraged more people to express pro-environmental attitudes, yet the gap between these attitudes and actual purchasing remains stark (Haque et al., 2024). As digital spaces increasingly shape consumer aspirations, the lack of integrative research examining how digital exposure, peer influence, and perceived behavioral control affect green consumption further complicates our

understanding of the issue. Without addressing these emerging dynamics, both marketers and policymakers may struggle to develop effective strategies to convert positive environmental intentions into tangible action.

In addition, the organic cosmetics in Bangladesh present unique challenges and opportunities that require targeted research. With the increase in consumers' concern for chemical ingredients in personal care products, it becomes important for the development of the market to understand specific drivers for the consumption of organic cosmetics. Limited empirical research in the region prevents effective marketing strategies and political interventions aimed at promoting permanent consumption in Bangladesh.

1.3 Research Questions

On the basis of the problem statement, following research questions have been developed.

RQ1: How do various attitudes—specifically attitudes toward the environment, green consumption, and organic cosmetics, along with subjective norms, influence green consumption behavior?

RQ2: What is the role of attitudes and subjective norms in shaping green consumption intention in Bangladesh's socio-cultural context?

RQ3: How does green consumption intention mediate the relationship between attitudes, subjective norms, and green consumption behavior?

RQ4: How do multidimensional attitudes, subjective norms, and green consumption intention collectively influence green consumption behavior in Bangladesh's organic cosmetics market?

1.4 Objectives of the Study

The main objective of the study is to investigate how multidimensional attitudes and subjective norms influence green consumption behavior, with green consumption intention as a mediating factor, in the context of Bangladesh's organic cosmetics market.

The specific objectives of this study are:

1. To empirically examine how attitudes toward the environment, green consumption, and organic cosmetics, along with subjective norms, affect green consumption behavior.
2. To explore the influence of multidimensional attitudes and subjective norms on green consumption intention within Bangladesh's socio-cultural context.
3. To assess the mediating role of green consumption intention in the relationship between attitudes, subjective norms, and actual green consumption behavior.
4. To evaluate the collective impact of psychological (attitudes and intention) and social (subjective norms) factors on green consumption behavior in Bangladesh's organic cosmetics market.

1.5 The Significance of the Study

This study bears significance in the theoretical, practical and social aspects which can be described more specifically as follows;

1.5.1 Theoretical Significance

This research contributes significantly to the growing body of literature on green consumer behavior and sustainable marketing by extending the Theory of Planned Behavior to incorporate multiple attitudinal dimensions. While previous research has examined isolated aspects of green consumption, this study offers a comprehensive framework that integrates environmental attitudes, product-specific attitudes, and social norms. The findings advance theoretical understanding of the attitude-behavior gap in green consumption, particularly in the context of developing economies like Bangladesh where research remains limited.

By investigating the mediating role of green consumption intention, this study illuminates the psychological mechanisms through which attitudes and norms translate into behavior. This contributes to resolving theoretical debates regarding the predictive power of intentions in green consumption contexts and addresses the limitations of existing models in explaining the attitude-behavior gap (Nguyen et al., 2023)³. The study's findings may help refine theoretical

frameworks by identifying which attitudinal dimensions most strongly predict intentions and behavior in emerging markets.

1.5.2 Practical Significance

For marketers and manufacturers in Bangladesh's organic cosmetics sector, this research provides valuable insights for developing effective marketing strategies that address the specific attitudes and social influences driving consumer decisions. Understanding the relative importance of environmental concerns versus product-specific attitudes enables more targeted messaging and product development. Companies can leverage these findings to design marketing communications that emphasize the most influential factors affecting purchase decisions.

Policymakers and regulatory bodies will benefit from insights regarding how to promote sustainable consumption practices effectively. By identifying the key drivers of green consumption, this research informs policy interventions aimed at encouraging environmentally friendly purchasing behaviors. This may include educational campaigns targeting specific attitudes or leveraging social norms to promote sustainable consumption.

1.5.3 Social Significance

This research contributes to broader sustainability goals by promoting environmental consciousness and responsible consumption in Bangladesh. By illuminating the factors that drive green purchasing decisions, this study helps create pathways for expanding sustainable consumption practices beyond early adopters to the mainstream market. This has potential long-term implications for reducing the environmental impact of consumption and promoting public health through reduced exposure to harmful chemicals in conventional cosmetics.

Additionally, this research addresses social equity concerns by examining how green consumption can be made more accessible and appealing to diverse consumer segments in Bangladesh, rather than remaining a luxury limited to high-income consumers. Understanding the psychological and social drivers of consumption can help democratize access to organic and natural products.

1.6 Scope and Delimitation of the Study

1.6.1 Scope

This study focuses specifically on consumers of organic cosmetics in Bangladesh, examining their attitudes, subjective norms, intentions, and actual purchasing behavior. The research encompasses urban consumers across different age groups, income levels, and educational backgrounds to provide a comprehensive understanding of the market. The investigation centers on the relationships between key variables including attitudes towards the environment, attitudes towards green consumption, attitudes towards organic cosmetics, subjective norms, green consumption intention (mediator), and green consumption behavior.

The study employs a cross-sectional survey design to collect quantitative data from consumers in major urban centers of Bangladesh, including Dhaka, Chittagong, Cumilla, Rajshahi, Sylhet and other key cities where organic cosmetics are readily available. While the findings may have implications for other developing markets with similar socio-economic characteristics, the primary focus remains on the Bangladeshi context.

1.6.2 Delimitation

This research specifically examines organic cosmetics and excludes other green product categories such as organic food, eco-friendly fashion, or sustainable household goods. While there may be overlapping psychological mechanisms driving green consumption across product categories, this study acknowledges that product-specific factors may influence consumer behavior differently across categories. The study focuses primarily on psychological and social factors influencing green consumption and does not extensively address structural factors such as product availability, distribution channels, or economic constraints. While these factors are acknowledged as important, they are beyond the scope of this research, which centers on attitudinal and normative influences on behavior.

Additionally, this research employs a quantitative approach to test hypothesized relationships between variables and does not include qualitative exploration of consumers' lived experiences with organic cosmetics. While such qualitative insights would be valuable, they are reserved for future research building upon the findings of this study.

1.7 Operational Definitions

For clarity and precision in this research, the following operational definitions are established for key variables:

Attitudes towards the Environment: The degree to which individuals hold favorable or unfavorable evaluations of environmental issues, including concerns about pollution, resource depletion, climate change, and ecosystem preservation. These attitudes reflect general environmental consciousness and cognition that may influence consumption choices (Yang et al., 2022).

Attitudes towards Green Consumption: The overall evaluation and predisposition toward purchasing products designed to minimize environmental impact across their lifecycle. This includes attitudes toward resource conservation, waste reduction, and environmentally responsible consumption practices in general, regardless of specific product categories (Huang et al., 2021).

Attitudes towards Organic Cosmetics: Product-specific evaluations reflecting consumers' beliefs about the benefits, efficacy, safety, and value of cosmetics made from organically grown ingredients without synthetic chemicals or preservatives. These attitudes encompass perceptions of quality, performance, health benefits, and environmental advantages of organic cosmetics compared to conventional alternatives (Kim & Chung, 2022).

Subjective Norms of Green Consumption: The perceived social pressure to engage or not engage in green consumption behavior. This reflects individuals' perceptions of what significant others (family, friends, colleagues) or reference groups think about purchasing organic cosmetics and the individual's motivation to comply with these expectations (Liu et al., 2023).

Green Consumption Intention: The conscious plan or decision to purchase organic cosmetics in the future. This represents the motivational factors that influence behavior—the stronger the intention, the more likely the behavior will be performed. Intention serves as the mediating variable between attitudes/subjective norms and actual behavior (Wang & Zhang, 2021).

Green Consumption Behavior: The actual purchase and use of organic cosmetics products, as measured by self-reported frequency of purchase, amount spent on organic cosmetics, and proportion of organic products within total cosmetics purchases. This represents the ultimate dependent variable that the research aims to explain and predict (Chen & Chan, 2021).

1.8 Organization of the Study

This Current study is divided into five chapters. Chapter two critically analyses and discusses the relevant literature related to the current study. Chapter three highlights the research methodology used in the study. Chapter four demonstrates the research findings of the study and in chapter five, discussion, conclusion and implications for future research are presented.

CHAPTER 2

LITERATURE REVIEW

2.1 Overview of the Literature Review

The purpose of this chapter is to critically examine and synthesize relevant theoretical and empirical literature that forms the foundation of this study. A literature review serves several vital functions in academic research: it establishes the context of the problem, highlights key theoretical frameworks, identifies existing knowledge and gaps, and justifies the necessity for new research (Xiao & Watson, 2019). For this study, the review focuses on the psychological and social antecedents of green consumption behavior within the emerging organic cosmetics market in Bangladesh, guided by the Theory of Planned Behavior (TPB) and the concept of the attitude-behavior gap.

Green consumerism has gained significant global traction due to rising environmental awareness and sustainability imperatives. However, despite widespread positive environmental attitudes, a persistent gap remains between what consumers say and what they actually do—a phenomenon widely documented across consumer behavior literature (Nguyen et al., 2023). This contradiction has prompted scholars to re-examine the underlying mechanisms of consumer decision-making, particularly in contexts such as organic products, where ethical and health-related concerns intersect with practical market barriers.

In Bangladesh, the organic cosmetics market is still in its developmental stages, yet it is showing signs of rapid growth, especially among young, urban consumers who are increasingly exposed to global sustainability trends via digital platforms (Chowdhury et al., 2024). However, empirical evidence exploring the psychological and normative factors that influence their intention and actual purchase behavior remains limited. This gap highlights the need for a multidimensional approach that goes beyond generic environmental attitudes and includes specific constructs such as attitudes toward green consumption and organic cosmetic products, alongside subjective norms.

This chapter is structured as follows: Section 2.2 introduces the theoretical foundation of the study, particularly the Theory of Planned Behavior (Ajzen, 1991), its application in green consumerism research, and the rationale for its extension in this study. It also covers the attitude-behavior gap, a core issue in environmental psychology. Section 2.3 presents a detailed empirical review of the key constructs, including attitudes toward the environment, green consumption, and organic cosmetics; subjective norms; green consumption intention; and green consumption behavior. Section 2.4 synthesizes major related studies, identifies

methodological and conceptual gaps in current literature, and justifies the research focus. Finally, Section 2.5 summarizes the literature and transitions to the methodology chapter.

By organizing the literature around these core constructs and linking them to the broader theoretical framework, this chapter not only informs the development of the conceptual model but also ensures that the research is grounded in the current state of academic knowledge. The goal is to advance theoretical understanding while addressing practical gaps in the context of green consumption behavior in a developing economy.

2.2 Theoretical Foundation

2.2.1 Theory of Planned Behavior (TPB)

The Theory of Planned Behavior (TPB), developed by Icek Ajzen (1991), is one of the most widely adopted theories in consumer behavior research. It posits that an individual's intention to perform a specific behavior is the most immediate predictor of actual behavior. TPB expands on the Theory of Reasoned Action (TRA) by including a third key construct: Perceived Behavioral Control (PBC), which reflects an individual's perceived ease or difficulty in performing a behavior.

The TPB consists of three core antecedents of intention:

1. Attitudes toward the behavior — personal evaluation of performing the behavior.
2. Subjective Norms — perceived social pressure from important others to perform or not perform the behavior.
3. Perceived Behavioral Control — the perceived capability to perform the behavior, similar to self-efficacy.

In the green consumption domain, TPB has been used to explore why consumers adopt or reject environmentally friendly behaviors such as purchasing organic products, recycling, or reducing plastic use (Paul et al., 2016; Sharma & Foroapon, 2023). It is especially effective in contexts where behavior is not habitual and involves deliberation, such as buying relatively new or premium-priced green products.

Several studies have confirmed the robustness of TPB in predicting green purchase intentions. For instance, Liobikienė et al. (2021) found that attitudes and PBC significantly predicted Lithuanian consumers' intention to purchase organic products, while subjective norms were significant only under strong social conformity settings.

However, critics argue that TPB often fails to fully predict actual behavior, particularly in green consumption, where the attitude-behavior gap is well-documented. This limitation stems from TPB's assumption that intention always leads to action, which is often not the case in sustainable behavior due to external constraints (e.g., price, availability) or weak volitional control (Nguyen et al., 2023).

In response to these critiques, scholars have suggested extensions of the TPB by incorporating additional variables—such as personal norms, habits, emotions, trust, and product-specific attitudes—to improve its predictive power (Yadav & Pathak, 2017; Luu, 2023). In the context of this study, we extend the TPB by introducing three distinct attitudinal dimensions: attitudes toward the environment, green consumption, and organic cosmetics. These are expected to offer a more nuanced understanding of how beliefs and motivations translate into intentions and, eventually, behavior.

2.2.2 Attitude–Behavior Gap in Green Consumption

While the Theory of Planned Behavior offers a strong foundation for predicting green behavior, a well-known phenomenon that challenges its assumptions is the attitude–behavior gap. This gap refers to the discrepancy between individuals' expressed pro-environmental attitudes and their actual purchase behavior (Yang et al., 2022). Consumers may genuinely support sustainability and intend to buy green products, but fail to do so when confronted with practical constraints such as price sensitivity, convenience, or product skepticism.

In recent years, this gap has been explored extensively in sustainable consumption research. Studies have identified various barriers that prevent intention from converting into behavior. These include lack of product availability, uncertainty about product claims, higher cost of green products, habitual non-green consumption, and limited perceived consumer effectiveness (Nguyen et al., 2023; Chen et al., 2022).

In Bangladesh and similar emerging economies, the attitude–behavior gap is particularly noticeable. While awareness of environmental issues has risen, actual green purchasing

behaviors lag due to social, economic, and infrastructural limitations (Haque et al., 2024). In their study on green consumption among Bangladeshi university students, Haque et al. (2024) found that although most participants had favorable attitudes toward green products, factors like affordability and perceived product quality remained significant barriers to actual purchases.

Additionally, the cultural context plays a role. In collectivist societies such as Bangladesh, purchasing decisions are influenced heavily by subjective norms—what family, friends, or influential groups think or do (Chowdhury et al., 2024). However, if the social environment does not actively support or model green behavior, even well-formed positive attitudes may not materialize into actions.

To bridge this gap, researchers have emphasized the importance of exploring intention as a mediating variable and extending TPB by including constructs like environmental values, green self-identity, and trust (Luu, 2023; Paul & Bhakar, 2022). This study responds to that call by adopting a multidimensional attitude model, integrating three distinct types of attitudes—toward the environment, green consumption, and organic cosmetics—and subjective norms, with green consumption intention as a mediator.

2.3 Key Constructs and Empirical Review

2.3.1 Attitude Towards the Environment

Attitude towards the environment refers to an individual's favorable or unfavorable evaluation of environmental issues and the perceived importance of ecological conservation. It encompasses beliefs, emotional responses, and behavioral tendencies toward environmental protection, pollution control, resource preservation, and climate change (Liobikienė & Poškus, 2021).

Empirical studies have consistently shown that environmental attitudes are significant predictors of pro-environmental behavior, including green purchasing. For instance, Ahmad and Zhang (2022) found that consumers who held strong environmental values demonstrated a higher intention to purchase eco-labeled products, even at premium prices. Similarly, Sharma and Foropon (2023) concluded that environmental concern directly influences behavioral intention in sustainable consumption contexts.

In the context of Bangladesh, Rahman and Sultana (2023) reported that young urban consumers, particularly university students, expressed strong environmental concerns and a desire to make eco-conscious decisions. However, this attitude often fails to translate into behavior due to structural and informational barriers. For instance, lack of availability of credible organic brands, distrust in product claims, and inadequate eco-labeling standards hinder the actualization of environmental attitudes into consumer action.

Furthermore, environmental attitude in collectivist cultures like Bangladesh often interacts with subjective norms. If the larger social group does not prioritize or visibly support green behaviors, individuals—even with strong personal concern—may not act consistently with their attitudes (Nguyen et al., 2023).

Therefore, while attitudes toward the environment are foundational in shaping intention, their behavioral impact is often mediated by other variables such as subjective norms, perceived control, and trust. In this study, environmental attitude is explored as a distinct predictor of green consumption intention, recognizing its indirect role in shaping behavior.

2.3.2 Attitude Towards Green Consumption

Attitude towards green consumption refers to an individual's evaluation and predisposition toward purchasing and using products that are environmentally friendly throughout their life cycle. Unlike general environmental attitudes, which reflect concern for the natural world, green consumption attitudes specifically relate to behaviors such as buying eco-labeled goods, reducing plastic use, or supporting sustainable brands (Chen et al., 2022).

Green consumption attitudes are often influenced by perceived product benefits, environmental values, and knowledge about sustainability. A recent study by Lee et al. (2022) found that positive attitudes toward green consumption were highly predictive of consumers' intention to buy green household items in South Korea, particularly when consumers perceived the environmental benefit as high. Similarly, Zhang et al. (2023) showed that attitude toward green product use directly influenced intention and behavior, even after controlling for price sensitivity and availability.

In the South Asian context, several studies have emphasized the growing relevance of green consumption. For example, Hossain and Hossain (2023) explored the attitudes of young

Bangladeshi consumers toward buying green products and reported that environmental concern, product trust, and health consciousness were key drivers of green consumption attitudes. However, they also observed that despite positive attitudes, actual buying behavior remained low due to price barriers and limited product availability—a common expression of the attitude-behavior gap.

Another critical factor influencing green consumption attitude is consumer skepticism, particularly in emerging markets where regulations on green marketing claims are weak. If consumers doubt the authenticity of green labels or fear greenwashing, their favorable attitudes may not develop into purchase intentions (Nguyen et al., 2023).

In this study, the green consumption attitude is treated as a distinct construct—separate from general environmental concern and product-specific attitudes. It is hypothesized to significantly influence green consumption intention and, indirectly, green behavior.

2.3.3 Attitude Towards Organic Cosmetics

Attitude toward organic cosmetics is a product-specific psychological construct that reflects consumers' evaluation of cosmetics made from natural, chemical-free, or organically grown ingredients. These attitudes encompass beliefs about product safety, health benefits, environmental impact, perceived quality, and ethical value (Kim & Chung, 2022).

Organic cosmetics have gained popularity globally due to rising consumer concerns over skin safety, allergies, and the environmental effects of synthetic ingredients. This has made product-specific attitudes a critical determinant of green product adoption. According to Luu (2023), when consumers view organic personal care items as effective and aligned with their lifestyle values, they are more likely to intend to purchase them, even at premium prices.

In Bangladesh, the organic cosmetics market is emerging but expanding rapidly, especially in urban areas. Haque et al. (2024) found that female university students in Dhaka were increasingly aware of organic cosmetic brands and held favorable attitudes due to perceived health and environmental benefits. However, concerns about product authenticity, lack of certification, and limited awareness about ingredients weakened their intention to purchase.

Moreover, social media and influencer marketing have started shaping product-specific attitudes in Bangladesh. Chowdhury et al. (2024) emphasized that attitudes toward organic

beauty products are influenced not only by personal beliefs but also by exposure to green advertising and peer recommendations, particularly among younger demographics.

Understanding product-specific attitudes is essential because consumers often differentiate between general eco-concern and actual product choices. A consumer may care about the environment broadly but still be skeptical of organic skincare due to perceived ineffectiveness or high cost (Paul & Bhakar, 2022).

In this study, attitude toward organic cosmetics is treated as an independent variable that influences green consumption intention. It complements broader environmental and consumption-related attitudes to form a multidimensional attitudinal framework.

2.3.4 Subjective Norms of Green Consumption

Subjective norms refer to the perceived social pressure to perform or not perform a particular behavior. Within the Theory of Planned Behavior, they represent the influence of others—family, friends, colleagues, or society at large—on an individual’s behavioral decisions (Ajzen, 1991). In the context of green consumption, subjective norms indicate whether individuals feel motivated to adopt sustainable behaviors because others around them approve or disapprove of such actions.

Research consistently finds that subjective norms play a significant role in shaping green purchasing intentions, especially in collectivist cultures like Bangladesh, where social conformity is highly valued. Nguyen et al. (2023) reported that social influence from peers, online communities, and family significantly impacted the green buying intentions of Vietnamese consumers. Similarly, Alam et al. (2022) found that in South Asia, individuals who perceived positive attitudes toward green consumption among their social circles were more likely to exhibit pro-environmental intentions.

In Bangladesh, where interpersonal relationships and familial influence hold considerable weight, studies have shown that subjective norms strongly affect both intention and behavior. Haque et al. (2024) demonstrated that young women in Dhaka were more likely to consider purchasing organic cosmetics when their peers or influencers supported such practices. This indicates that social environments can either strengthen or weaken the translation of attitude into behavior.

Moreover, with the rise of digital platforms, subjective norms are no longer confined to family or friends but include online influencers, eco-conscious communities, and content creators who shape the values and behavior of modern consumers. Chowdhury et al. (2024) found that perceived support for eco-friendly behavior from online sources significantly enhanced green consumption intention in urban Bangladesh.

Thus, subjective norms are treated as a key independent variable in this study, with a direct influence on intention and an indirect influence on behavior through the mediation of intention.

2.3.5 Green Consumption Intention

Green consumption intention refers to an individual's conscious plan or willingness to purchase environmentally friendly products. It represents the motivational factor that precedes actual behavior, and in TPB, it is the strongest predictor of action (Ajzen, 1991).

Intention acts as the psychological link between attitudes, subjective norms, and actual green consumption behavior. Numerous studies support this mediating role. For example, Sharma and Foropon (2023) concluded that intention successfully mediates the relationship between environmental attitude and green behavior in their meta-analysis of TPB-based research. Luu (2023) added that intention is influenced not only by cognitive beliefs but also by emotional attachment to sustainability.

In Bangladesh, green consumption intention has emerged as a strong indicator of future eco-friendly purchasing. However, intention alone often fails to convert into behavior due to structural barriers (e.g., product unavailability, affordability) and individual-level inconsistencies (e.g., habit or forgetfulness). According to Rahman and Sultana (2023), Bangladeshi youth express strong green consumption intentions, especially for personal care products, but cite price and trust issues as limiting factors in behavior.

This study treats green consumption intention as a mediating variable, hypothesizing that it transmits the influence of attitudes and norms to actual behavior. This is especially important in addressing the attitude–behavior gap, where intention acts as the bridge between what consumers believe and what they actually do.

2.3.6 Green Consumption Behavior

Green consumption behavior refers to the actual practice of purchasing, using, and disposing of products in ways that minimize environmental harm. This includes choosing organic, biodegradable, cruelty-free, or eco-labeled products and reducing unnecessary consumption (Chen & Chan, 2021).

Despite increasing awareness and intentions, green consumption behavior remains inconsistent, especially in developing countries. Factors such as price, trust, accessibility, product knowledge, and convenience often prevent consumers from aligning their behavior with their values (Nguyen et al., 2023). For example, in Bangladesh, even consumers with high environmental concern may opt for conventional cosmetics due to the perceived higher cost of organic options or skepticism about product claims.

Empirical research also suggests that behavior is influenced by a combination of psychological, social, and contextual factors. Chowdhury et al. (2024) emphasized that exposure to green marketing, product visibility in retail stores, and peer endorsement significantly enhance actual green behavior. Conversely, the absence of reliable eco-certifications and misinformation acts as deterrents.

Measuring green consumption behavior typically involves assessing frequency of purchase, spending patterns, and self-reported alignment with environmental values. In this study, behavior is treated as the dependent variable, affected directly by intention and indirectly by attitudes and subjective norms.

2.4 Research Gap

Over the past decade, numerous empirical studies have explored green consumption behavior, largely guided by the Theory of Planned Behavior (TPB). These studies span across diverse economies—from developed countries like Germany and Japan to emerging markets such as India, Vietnam, and Bangladesh. Common among many is the investigation of factors influencing green consumption intentions and behavior, including attitudes, social norms, environmental knowledge, perceived consumer effectiveness, and trust in green product claims.

For example, Sharma and Foropon (2023) conducted a meta-analytic review of TPB studies in green consumption, confirming that attitudes, subjective norms, and perceived behavioral control significantly predict intention, which in turn predicts behavior. Their analysis also revealed that these relationships are moderated by cultural and product-specific factors. Similarly, Paul and Bhakar (2022) extended TPB by integrating trust and brand credibility into green product adoption models and found significant improvements in predictive power.

In the South Asian context, Alam et al. (2022) investigated green purchase intentions in Malaysia and found that subjective norms and environmental awareness were stronger predictors of intention than price or brand loyalty. In Bangladesh, several studies have focused on university students and urban youth, such as Haque et al. (2024) and Chowdhury et al. (2024), who explored the roles of green advertising, environmental attitude, and peer influence in shaping green cosmetic consumption.

However, a close examination of this literature reveals some **critical gaps**:

1. **Multidimensional Attitude Frameworks Are Rarely Used**

Most studies analyze general environmental attitudes without differentiating between broader concerns and product-specific attitudes. The combination of attitudes toward the environment, green consumption, and organic cosmetics as separate yet interrelated constructs is largely absent, especially in Bangladeshi research.

2. **Mediating Role of Intention Is Often Under-Theorized**

While many studies acknowledge the intention-behavior link, few empirically test intention as a mediator between multidimensional attitudes, norms, and behavior. This is vital for understanding the attitude–behavior gap.

3. **Product-Specific Behavior in Bangladesh Is Underexplored**

While there are studies on green food or fashion products, organic cosmetics have received limited attention despite their growing market and public health relevance.

4. **Lack of Comprehensive Models in the Bangladeshi Context**

Existing studies in Bangladesh often focus on either attitudes or norms but do not comprehensively explore how these psychological and social variables interact to shape green behavior in a culturally relevant manner.

5. Few Use Urban Digital Consumers as a Focal Group

Bangladesh's digitally connected youth and urban consumers—who are most exposed to green trends—are underrepresented in studies that integrate online influence and modern behavioral shifts.

In light of these gaps, this study contributes by building an extended TPB framework using multidimensional attitudes, subjective norms, and green consumption intention to explain actual green consumption behavior—specifically in the organic cosmetics market of Bangladesh. The study's findings are expected to enrich both theoretical understanding and practical policy development in sustainability marketing.

2.5 Summary of the Literature Review

This chapter reviewed the theoretical and empirical literature relevant to understanding green consumption intention and behavior. It began by establishing the Theory of Planned Behavior (TPB) as the foundational model, emphasizing its relevance in consumer decision-making. It then critically examined the attitude–behavior gap, particularly in green product adoption, which poses a central challenge for marketers and policymakers.

The empirical review explored six key constructs: attitudes toward the environment, green consumption, and organic cosmetics; subjective norms; green consumption intention; and actual green consumption behavior. It highlighted how these factors interact in predicting sustainable purchasing behavior, especially within the socio-cultural and economic dynamics of Bangladesh.

The literature further identified critical gaps in existing research, including the lack of a multidimensional attitude framework, limited study of organic cosmetics, and the insufficient testing of mediating relationships in the TPB model. These limitations justify the current study's objective to construct a comprehensive model incorporating multidimensional attitudes, subjective norms, and intention as predictors of green consumption behavior.

By synthesizing theoretical perspectives and empirical findings, this literature review lays the groundwork for the next chapter, which will discuss the research methodology adopted to empirically test the proposed framework in the context of Bangladesh's emerging organic cosmetics market.

CHAPTER 3

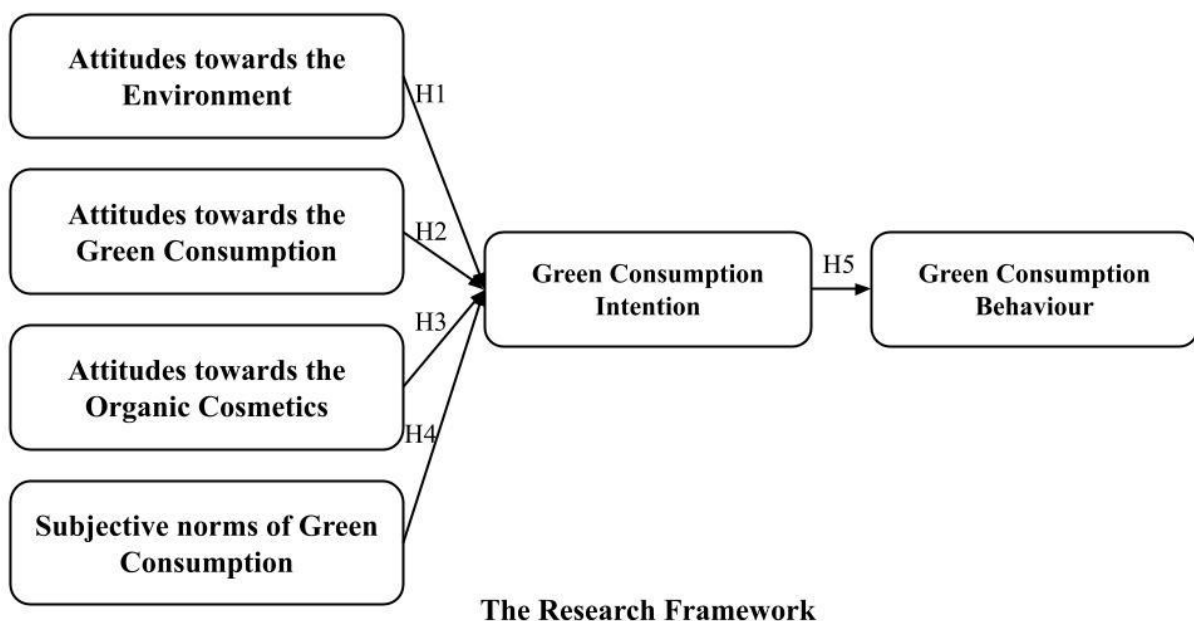
METHODOLOGY

3.1 Research Framework

This study adopts a conceptual framework grounded in the Theory of Planned Behavior (TPB) (Ajzen, 1991) and its extensions, specifically targeting green consumption behavior in the organic cosmetics market in Bangladesh. The framework identifies multidimensional attitudes—attitudes towards the environment, green consumption, and organic cosmetics—as well as subjective norms as critical antecedents to green consumption intention, which subsequently leads to green consumption behavior. This structure reflects the dynamic interplay between psychological determinants and behavioral outcomes in sustainable consumption contexts.

The diagram below illustrates the conceptual model:

Figure 3.1 shows the framework of this study



3.1.1 Justification of Variable Relationships

The conceptual model is built upon both theoretical and empirical rationales. The Theory of Planned Behavior (TPB) posits that intention is the most immediate predictor of behavior, influenced by attitudes, subjective norms, and perceived behavioral control (Ajzen, 1991). However, in the context of green consumption, especially in developing countries like Bangladesh, this framework is often extended to incorporate more nuanced attitudinal

constructs that reflect the complexity of consumer decision-making (Pham et al., 2022; Liang et al., 2023).

H1: Attitudes towards the Environment → Green Consumption Intention

Environmental concern has been widely recognized as a driver of sustainable consumer behavior (Chen, 2023). Consumers with stronger pro-environmental attitudes are more likely to form intentions aligned with green behavior, particularly when the environmental threat is salient and localized (Hassan et al., 2021).

H2: Attitudes towards Green Consumption → Green Consumption Intention

Beyond general environmental concern, attitudes specifically towards green consumption—such as preference for sustainable lifestyles or low-carbon alternatives—are strong predictors of behavioral intention. Recent studies confirm that these attitudes directly influence intention in eco-product markets (Lu et al., 2024; Alam & Nasir, 2022).

H3: Attitudes towards Organic Cosmetics → Green Consumption Intention

Given the product-specific nature of this study, attitudes towards organic cosmetics are treated as an independent construct. Consumers often perceive these products as safer, healthier, and more ethical, which directly shapes their intention to buy (Ali et al., 2023; Goh et al., 2021).

H4: Subjective Norms of Green Consumption → Green Consumption Intention

In collectivist cultures such as Bangladesh, the influence of family, peers, and societal expectations plays a vital role in shaping consumer intentions. Subjective norms can either encourage or discourage green consumption, depending on the prevailing social discourse (Rahman & Noor, 2022; Song et al., 2023).

H5: Green Consumption Intention → Green Consumption Behavior

Intention remains the strongest antecedent of actual behavior, as supported by meta-analytic evidence. However, the well-known intention-behavior gap in sustainable consumption contexts necessitates a closer examination of real-world enablers and barriers (Shao et al., 2022; Kautish & Sharma, 2021). This model assumes a direct positive effect of intention on behavior, consistent with prior empirical findings.

This research framework is designed not only to test theoretical extensions of TPB but also to offer practical insights for marketers, NGOs, and policymakers aiming to boost green consumption in Bangladesh.

3.2 Hypothesis Development

This section outlines the hypotheses that guide the empirical investigation of the proposed research framework. Grounded in the Theory of Planned Behavior (TPB) and supplemented by context-specific and product-specific insights from recent literature, the hypotheses reflect the anticipated relationships among key constructs: multidimensional attitudes, subjective norms, green consumption intention, and green consumption behavior.

3.2.1 Hypotheses on Attitudes towards the Environment

Attitudes towards the environment reflect individuals' concerns, values, and beliefs about environmental protection and sustainability. Scholars have consistently argued that environmentally positive attitudes positively shape behavioral intentions, especially when individuals perceive their actions as impactful (Chen, 2023; Shao et al., 2022).

H1: Attitudes towards the environment have a positive effect on green consumption intention.

Studies have confirmed that stronger environmental concern correlates with higher green product intention, especially in emerging economies where environmental degradation is highly visible (Pham et al., 2022; Rahman & Noor, 2022).

3.2.2 Hypotheses on Attitudes towards Green Consumption

Attitudes towards green consumption pertain to individuals' overall evaluations of environmentally friendly purchasing behavior. This includes their support for reducing ecological footprints, consuming less plastic, or supporting eco-friendly brands.

H2: Attitudes towards green consumption have a positive effect on green consumption intention.

Individuals who believe that green consumption is important for societal well-being are more

likely to express intention to purchase sustainable products. Empirical results support this association across various contexts (Lu et al., 2024; Liang et al., 2023).

3.2.3 Hypotheses on Attitudes towards Organic Cosmetics

This dimension emphasizes the product-specific evaluation of green goods—particularly organic cosmetics—which consumers often associate with purity, safety, and natural ingredients. Positive attitudes toward these products are likely to translate into stronger purchase intentions.

H3: Attitudes towards organic cosmetics have a positive effect on green consumption intention.

When consumers perceive organic cosmetics as safe, effective, and aligned with their values, they are more motivated to purchase, even at premium prices (Ali et al., 2023; Goh et al., 2021). Such attitudes are especially relevant in markets where health awareness is growing.

3.2.4 Hypotheses on Subjective Norms

Subjective norms refer to perceived social pressures to perform or not perform a behavior. In collectivist societies like Bangladesh, normative influence from family, friends, or peers plays a central role in shaping behavioral intention.

H4: Subjective norms of green consumption have a positive effect on green consumption intention.

The influence of peer groups and family members enhances the credibility and perceived importance of green behaviors, especially among younger consumers in developing regions (Song et al., 2023; Rahman & Noor, 2022).

3.2.5 Hypotheses on Green Consumption Intention (Mediator)

Intention is the motivational factor that drives individuals toward a specific behavior. Within the TPB framework, intention mediates the relationship between antecedent factors (attitudes and norms) and behavior.

H5: Green consumption intention has a positive effect on green consumption behavior.

Despite the existence of an intention-behavior gap, intention remains the most consistent predictor of behavior across empirical models. Behavioral intention serves as a bridge between psychological predispositions and real-world actions (Shao et al., 2022; Kautish & Sharma, 2021).

3.3 Research Design

This study adopts an explanatory research design to investigate the causal relationships among multidimensional attitudes, subjective norms, green consumption intention, and green consumption behavior in the context of Bangladesh's organic cosmetics market. An explanatory approach is appropriate when the objective is to examine cause-effect relationships among variables and to test predefined hypotheses derived from existing theories (Saunders et al., 2019). As this study is grounded in the Theory of Planned Behavior (Ajzen, 1991) and extends it by incorporating product-specific and context-specific attitudinal variables, the explanatory design allows for a structured investigation of these relationships.

Explanatory designs are particularly suited for studies aiming to identify underlying mechanisms through which independent variables influence a dependent variable. In this study, the mediating role of green consumption intention is also tested, further supporting the selection of an explanatory framework. According to Pham et al. (2022), explanatory research is crucial in sustainability-related studies as it provides actionable insights by establishing empirically validated causal links among psychological and behavioral constructs.

3.3.1 Research Setting

The study is conducted in urban areas of Bangladesh, focusing on cities such as Dhaka, Chattogram, Cumilla, Rajshahi and Sylhet, where the availability and awareness of organic cosmetic products are higher due to exposure to modern retail formats, digital platforms, and educational opportunities. These urban populations are more likely to be aware of environmental concerns and brand offerings, making them ideal respondents for a study on green consumption behavior.

Additionally, previous research (Chowdhury et al., 2024; Haque et al., 2024) suggests that urban youth in Bangladesh are more responsive to sustainability communication, social media

trends, and peer influence—all critical for analyzing subjective norms and product attitudes in this research.

3.3.2 Cross-Sectional Design

This research employs a cross-sectional design, wherein data are collected at a single point in time rather than over an extended period. The cross-sectional design is appropriate here as the objective is to analyze relationships among variables and test hypotheses using a single, time-bound dataset (Luu, 2023). Although longitudinal designs offer richer insights into behavioral changes over time, they are often more resource-intensive and not essential for the scope of this hypothesis-driven study.

Moreover, cross-sectional surveys are widely used in green consumption studies as they provide timely and relevant data for exploring intention and behavior patterns (Chen & Chan, 2021; Ali et al., 2023).

3.4 Research Approach

This study adopts a quantitative research design because it seeks to measure and test the relationships among consumers' attitudes, subjective norms, and green purchase intentions/behaviors in the organic cosmetics market. A structured survey using a standardized questionnaire will be employed to collect numerical data. As Yener et al. (2023) note in a similar green consumer study, a quantitative approach with a standard questionnaire is effective for empirically testing hypotheses about consumer purchasing behavior. Quantitative methods allow objective measurement using 5 point Likert scales and the application of statistical analyses (e.g. regression, factor analysis) to examine how multidimensional attitudes and social norms predict green consumption intention. In contrast, qualitative methods would not easily yield generalizable results or support hypothesis testing in this context. Moreover, a cross-sectional survey can capture a broad sample of urban consumers at one point in time, which is appropriate for understanding prevailing intentions and behaviors. Overall, the quantitative survey approach is well-suited to answer the research questions and to provide statistically valid conclusions about the determinants of green consumption in Bangladesh's organic cosmetics market.

3.4.1 Population and Sampling

The population for this study comprises the entire group of interest from which we draw conclusions – namely, Bangladeshi consumers who use or are potential users of organic cosmetics in the major cities. Because it is infeasible to survey everyone, we will use sampling to select a subset (the sample) from this population. Sampling is essential to ensure that the survey results can be generalized back to the population. A proper probability sampling method will help make the sample representative and minimize selection bias. In quantitative research, a clearly defined sampling frame and technique ensure that each relevant individual has a known chance of selection. By carefully defining the population and using an appropriate probability sampling approach, we can confidently apply statistical inference to the collected data.

3.4.2 Target Population

The target population of this research is urban consumers in Bangladesh – specifically those living in Dhaka, Chittagong, Cumilla, Rajshahi, Sylhet, and other key cities where organic cosmetics are available. These urban centers have higher retail availability of organic beauty products and a greater concentration of environmentally aware consumers. Urban residents generally have higher income levels and greater exposure to green marketing, making them the primary market for organic cosmetics. The questionnaire will target adults in these cities who have purchased or are aware of organic personal-care products. By focusing on urban centers, the study captures the most relevant demographic for organic cosmetics consumption in Bangladesh. This defined target population ensures that the findings pertain to the segment of consumers who can realistically form intentions to buy organic cosmetics.

3.4.3 Sampling Technique

A simple random sampling (SRS) procedure will be used to select survey respondents. In SRS, every member of the target population has an equal probability of being chosen. This reduces selection bias and supports the representativeness of the sample. SRS is often regarded as the “purest” probability sampling method and is widely recommended in quantitative consumer research for yielding unbiased estimates. For example, Yener et al. (2023) similarly attempted a random sampling approach to make their consumer survey representative of the overall population. In practice, we will obtain a list or sampling frame of consumers (e.g. from retail databases or market organizations, as feasible) and use a random

number generator or lottery method to select individuals to invite for participation. This method is justified because it ensures objectivity and is straightforward to implement across the identified cities. By using SRS, the study maximizes generalizability: each qualified urban consumer has the same chance of inclusion, so the results can be extended to the broader target population without systematic sampling bias.

3.4.4 Sample Size Determination

The survey has collected data from 201 respondents. This sample size is determined through Cochran's formula for large populations, ensuring an acceptable margin of error and confidence level. Cochran's formula is:

$$n_0 = \frac{Z^2 p(1-p)}{e^2}$$

where Z is the z-value for the desired confidence level (1.96 for 95% confidence), p is the estimated proportion (0.5 for maximum variability), and e is the margin of error. Using a 95% confidence level ($Z = 1.96$), $p = 0.5$, and a target margin of error $e = 0.07$ (7%), the calculation is:

1. $Z = 1.96$, $p = 0.5$, $1 - p = 0.5$, $e = 0.07$
2. $n_0 = \frac{1.96^2 0.5(1-0.5)}{0.07^2} = 196$
3. We round up to obtain about 201 respondents.

This sample size is further justified by common guidelines: with a 27-item questionnaire, conventional rules of thumb (e.g. 5–10 respondents per item) suggest a minimum of 135–270 participants; hence 201 is within an acceptable range. In fact, prior studies on green consumer behavior have used samples in the few-hundreds: for example, Yener et al. (2023) collected data from 439 consumers in a similar survey. A sample of ~201 will allow reliable SPSS-based analyses (such as factor analysis, reliability tests, and regression) without undue sampling error. In summary, using Cochran's formula and established heuristics ensures that the chosen sample size is sufficient to achieve statistical validity and power for the proposed analysis.

The methodological choices above are supported by scholarly standards and recent studies. For instance, Yener, Secer, and Ghazalian (2023) illustrate the use of a quantitative survey and random sampling in a green consumer study. Similar guidelines for sample size (e.g.

Cochran’s formula) are well-established in social science research (e.g. Cochran, 1977; Comrey & Lee, 1992). Overall, these references affirm that the quantitative survey approach with SRS and the calculated sample size are appropriate for examining green consumption intentions.

3.5 Questionnaire Development

The research utilized a structured, closed-ended questionnaire as the primary instrument for data collection. The questionnaire was designed by adapting validated scales from prior studies to ensure both reliability and validity in measuring the key constructs: Attitudes towards the Environment, Attitudes towards Green Consumption, Attitudes towards Organic Cosmetics, Subjective Norms, Green Consumption Intention, and Green Consumption Behavior.

Each item was measured using a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree), following best practices for capturing consumer attitudes and intentions (Hair et al., 2021). This scaling approach enables the quantification of the intensity of respondents’ perceptions and behaviors toward green consumption.

The items for Attitudes towards the Environment, Attitudes towards Green Consumption, Subjective Norms, Green Consumption Intention, and Green Consumption Behavior were adapted from Al Mamun et al. (2023), which investigated cause-related marketing and green consumption in the cosmetics sector.

The items for Attitudes towards Organic Cosmetics were adapted from Martínez-López et al. (2022), who studied organic cosmetic consumption based on an extended Theory of Planned Behavior model.

Table 3.1 Questionnaire Design

Items	Variables	Sources	Cronbach’s Alpha
ATE1–ATE5	Attitude towards the Environment	Venciute et al., (2023)	0.745

ATG1–ATG3	Attitude towards Green Consumption	Venciute et al., (2023)	0.865
ATO1–ATO4	Attitude towards Organic Cosmetics	Sarabia-Andreu et al., (2020)	-
SNG1–SNG5	Subjective Norms towards Green Consumption	Venciute et al., (2023)	0.876
GCI1–GCI6	Green Consumption Intention	Venciute et al., (2023)	0.944
GCB1–GCB4	Green Consumption Behavior	Venciute et al., (2023)	0.738

3.6 Measurement of Variables/ Instrumentation

A structured, closed-ended questionnaire was developed to measure the key constructs of this study: Attitudes towards the Environment, Attitudes towards Green Consumption, Attitudes towards Organic Cosmetics, Subjective Norms towards Green Consumption, Green Consumption Intention, and Green Consumption Behavior.

The items for each construct were adapted from previously validated instruments to ensure content validity and measurement reliability. Respondents indicated their level of agreement with each item on a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

The items were adapted primarily from Venciute et al. (2023) for general green attitudes, subjective norms, intention, and behavior, and from Sarabia-Andreu et al. (2020) for attitudes toward organic cosmetics. The full questionnaire is presented below, categorized according to the study's main constructs:

Table: 3.2 Attitude towards the environment

ATE1	I am very concerned about the environment
ATE2	I am willing to reduce my consumption to help protect the environment

ATE3	Major political change is necessary to protect the natural environment
ATE4	Major social change is necessary to protect the natural environment
ATE5	Anti-pollution laws should be enforced more strongly

Table: 3.3 Attitude towards Green Consumption

ATG1	I like the idea of purchasing green
ATG2	Purchasing green product is a good idea
ATG3	I have a favourable attitude towards purchasing green version of cosmetics products

Table: 3.4 Attitude towards Organic Cosmetics

ATO1	Organic cosmetic are healthier
ATO2	Organic cosmetic products have superior quality
ATO3	Organic cosmetic have not harmful effects
ATO4	Organic cosmetic are in fashion

Table: 3.5 Subjective norms towards green consumption

SNG1	I feel proud when I buy/use green products
SNG2	Most people who are important to me think I should purchase green cosmetics products when going for purchasing
SNG3	Most people who are important to me would want me to purchase green cosmetics products when going for purchasing
SNG4	People whose options I value would prefer that I purchase green cosmetics products
SNG5	My friends' positive opinion influences me to purchase green cosmetics products

Table: 3.6 Green consumption intention

GCI1	I consider buying green cosmetics products because they are less polluting in coming times
GCI2	I consider switching to environmentally friendly cosmetics brands for ecological reasons
GCI3	I plan to spend more on environmentally friendly cosmetics products rather than conventional products
GCI4	I expect to purchase green cosmetics products in the future because of their positive environmental contribution
GCI5	I want to purchase green cosmetics products in near future
GCI6	I am likely to choose an organic product the next time I buy cosmetics

Table: 3.7 Green consumption behaviour

GCB1	I make a special effort to buy products in biodegradable packages
GCB2	I have switched from my usual brands and buy environmentally safe cosmetic products, even if I had to give up some product's effectiveness
GCB3	I have switched products for ecological reasons
GCB4	When I have a choice between two equal cosmetics products, I purchase the one less harmful to the environment

The structured questionnaire, developed by adapting items from recent validated studies, captures all the core dimensions of green consumption behavior in the context of Bangladesh's organic cosmetics market. The use of previously tested scales and a standardized Likert format ensures the reliability, validity, and comparability of the collected data for subsequent analysis using SPSS.

3.7 Data Collection Procedures

To collect primary data for this study, a self-administered online survey method was adopted. Due to the accessibility and convenience it provides, the questionnaire was distributed electronically through a Google Form. This method aligns with current research trends that

advocate for digital data collection tools to enhance respondent reach, minimize costs, and maintain data integrity (Luu, 2023; Hair et al., 2021).

The structured questionnaire, developed and validated in previous sections, was uploaded to Google Forms and shared via multiple online platforms, including: Email invitations, Social media platforms (Facebook, LinkedIn), WhatsApp groups, University online groups, Retail customer mailing lists (where accessible).

The target respondents were urban consumers living in Dhaka, Chattogram, Cumilla, Rajshahi, Sylhet, and other major Bangladeshi cities where organic cosmetics are available. Screening questions were included at the beginning of the form to ensure that participants were aged 18 or older and had awareness of organic cosmetic products.

Participation in the survey was entirely voluntary, and participants were informed of the research purpose, confidentiality measures, and their right to withdraw at any point without consequences. An informed consent statement was embedded on the first page of the form, and proceeding with the questionnaire implied consent to participate.

Data collection occurred over a period of four weeks, ensuring sufficient time to reach the desired sample size of 201 respondents. To maximize response rates, reminders were sent through the same digital channels after two weeks.

The online distribution method allowed for:

- Quick, real-time data aggregation,
- Automatic data storage in Google Sheets for preliminary screening,
- Easy download of the dataset in SPSS-compatible formats (CSV, XLSX) for further analysis.

Using an online platform was particularly suitable for this study considering the high internet penetration and digital literacy rates among urban Bangladeshi consumers, especially within the younger demographic segments.

3.8 Techniques of Data Analysis

Following the data collection, the quantitative data will be analyzed using Statistical Package for the Social Sciences (SPSS) version 25.0. SPSS is widely used for empirical research involving hypothesis testing, especially when dealing with survey data measured through Likert scales (Hair et al., 2021).

The data analysis will follow a structured approach comprising several key steps. Initially, preliminary data screening will be conducted to check for missing values, outliers, and erroneous entries, as well as to assess normality, reliability, and basic descriptive statistics such as mean, standard deviation, skewness, and kurtosis. Next, internal consistency reliability of each construct will be evaluated using Cronbach's Alpha, with a threshold of 0.70 deemed acceptable (Nunnally & Bernstein, 1994). Descriptive statistics will then summarize the demographic profile and provide an overview of responses to individual items. Pearson correlation analysis will explore the strength and direction of relationships among key variables (Field, 2022). Following this, multiple regression analysis will determine how independent variables like attitudes and subjective norms predict green consumption intention, while simple regression will assess the link between green consumption intention and actual green consumption behavior. These analytical techniques together will ensure a rigorous and reliable test of the study's hypotheses developed in Chapter 2.

3.9 Chapter Summary

This chapter has outlined the research methodology employed in this study. The study follows a quantitative explanatory design to examine the relationships among multidimensional attitudes, subjective norms, green consumption intention, and green consumption behavior in Bangladesh's organic cosmetics market.

A structured questionnaire was developed based on validated scales and distributed through online platforms using Google Forms. Simple random sampling was used to ensure representativeness, targeting around 200 urban consumers.

Data analysis will be conducted using SPSS through descriptive statistics, reliability testing, correlation analysis, and multiple regression.

CHAPTER 4

DATA ANALYSIS AND FINDINGS

In this chapter, we delve into the examination of data and the discoveries stemming from the current research project. The amassed dataset underwent scrutiny using the SPSS (Statistical Package for the Social Sciences) methodology, probing into the connections between external and internal variables and scrutinising the role of mediation. Subsequently, we meticulously catalogued the outcomes derived from SPSS measurement and structural models analysis. The focal points encompass an evaluation of response rates, an exploration of participants' profiles, a thorough analysis of response frequencies, an examination of statistics depicting data characteristics, and a rigorous assessment of data integrity and validity. Additionally, this chapter encapsulates a concise summary of the results gleaned from hypothesis testing conducted as part of the data analysis.

4.1 Response Rate

Table 4.1 shows that 250 questionnaires were distributed and 215 returned, yielding an overall response rate of 86%. After excluding 14 unusable surveys, 201 questionnaires remained, for a valid response rate of 80.4%. This high valid response rate (201/250) indicates strong participation and enhances the generalizability of the findings. Such a rate exceeds common benchmarks (often around 50–60% in survey research) and suggests that nonresponse bias is minimal.

Table 4.1: Response of questionnaire survey

Description	Response
Number of questionnaires distributed	250
Number of questionnaires returned	215
Number of excluded questionnaires	14
Number of usable questionnaires	201
Questionnaires not returned	35
Response rate	86 %
Valid response rate	80.4 %

4.2 Respondents' Profile

The sample's demographic profile (Table 4.2) is summarized as follows. Gender was nearly balanced: 48.3% male and 51.7% female respondents. The age distribution was skewed toward younger adults, with 38.3% aged 20–25 and 34.3% aged 26–30; only 27.4% were

older than 30. A majority (54.2%) were single, and 45.8% married. In terms of education, 33.8% were university graduates, 14.9% postgraduates, and 14.9% undergraduates; 31.3% fell into an “Others” category (e.g. professional certifications), and 5.0% had completed only higher secondary school. Professionally, the largest group were students (28.9%), followed by business (26.4%), service sector (25.4%), and other occupations (19.4%). Monthly income varied: 38.8% earned Tk. 20,001–30,000, 29.4% less than Tk. 15,000, 22.9% above Tk. 30,000, and 13.9% Tk. 15,001–20,000. These demographics suggest the sample is relatively young and educated, with a slightly higher proportion of females. Such profiles are typical of organic cosmetics consumers, who often tend to be younger and more educated.

Table 4.2: Demography of the Respondents

Demographics	Category	Frequency	Percent
Gender	Male	97	48.3
	Female	104	51.7
Age	20- 25	77	38.3
	26 – 30	69	34.3
	31 - 35	38	18.9
	36 and above	17	8.5
Marital Status	Single	109	54.2
	Married	92	45.8
Education Level	HSC	10	5.0
	Undergraduate	30	14.9
	Graduate	68	33.8
	Post-Graduate	30	14.9
	Others	63	31.3
Profession	Student	58	28.9
	Business	53	26.4
	Service	51	25.4
	Others	39	19.4
Monthly income	Less than Tk.15000	59	29.4
	Tk.15001-Tk.20000	28	13.9
	Tk.20001-Tk.30000	68	38.8
	Above Tk.30000	46	22.9

4.3 Descriptive Statistics Analysis

Table 4.3 presents the means and standard deviations for each key construct. All constructs had high mean scores (near or above 4 on a 5-point scale), indicating generally positive attitudes and intentions toward green consumption. For example, Attitude toward the Environment (ATE) had a mean of 4.144 (SD=0.696), and Green Consumption Intention (GCI) a mean of 4.148 (SD=0.639). Other means were similarly high (Attitude toward Organic Cosmetics 3.993; Subjective Norms 4.074). The relatively small standard deviations (0.64 -- 0.88) indicate that responses clustered closely around these high means. In sum, respondents tended to agree with the positively framed survey items, reflecting favorable attitudes, strong subjective norms, and strong intentions regarding green consumption. These descriptive results provide context: on average, the sample held pro-environmental views and intentions.

Table 4.3: Descriptive Statistics of Variables

Variables	Mean	Standard Deviation	Maximum Value	Minimum Value
Attitude towards the Environment	4.1443	.69633	5	1
Attitude towards Green Consumption	3.9270	.88455	5	1
Attitude towards Organic Cosmetics	3.9925	.70883	5	1
Subjective Norms towards Green Consumption	4.0736	.66374	5	1
Green Consumption Intention	4.1476	.63883	5	1
Green Consumption Behavior	4.0933	.65931	5	1

4.4 Reliability Test

Scale reliability was evaluated using Cronbach's alpha and composite reliability (CR) (Table 4.4). Cronbach's alpha (introduced by Cronbach, 1951, as a measure of internal consistency) ranged from 0.714 to 0.896 across constructs. All alpha values met or exceeded 0.70, the conventional threshold for acceptable reliability (Cronbach, 1951; Tavakol & Dennick, 2011). For instance, Attitudes toward Green Consumption had $\alpha = 0.896$, Green Consumption

Behavior $\alpha = 0.850$, and Subjective Norms $\alpha = 0.714$. These results suggest each multi-item scale has adequate internal consistency. Composite reliability (CR) was also computed; CR is a more general indicator of scale reliability that accounts for factor loadings (Hair et al., 2009). As recommended by Hair et al. (2009), CR values ≥ 0.70 denote good reliability. In this data, CR values ranged from 0.650 to 0.770. Notably, Green Consumption Intention had CR = 0.770, above the 0.70 benchmark. Some constructs were slightly below 0.70 (e.g. Attitudes toward Green Consumption CR = 0.650; Subjective Norms CR = 0.674), though all CRs exceeded 0.60. According to Fornell & Larcker (1981), CR above 0.60 can still be considered adequate if AVE criteria are roughly met. Overall, the reliability analysis indicates that all scales have acceptable internal consistency.

Table 4.4 : Measurement Properties of Constructs

Variables	Items	Loadings	Cronbach alpha	Composite Reliability	Average Variance Extracted (AVE)
Attitudes towards the Environment	ATE1	.410	.754	.749	0.389
	ATE2	.542			
	ATE3	.593			
	ATE4	.713			
	ATE5	.470			
Attitudes towards the Green Consumption	AGC1	.742	.896	.650	0.398
	AGC2	.707			
	AGC3	.382			
Attitudes towards Organic Cosmetics	AOC1	.704	.766	.701	0.375
	AOC2	.673			
	AOC3	.570			
	AOC4	.478			
Subjective Norms of Green Consumption	SNG1	.543	.714	.674	0.297
	SNG2	.543			
	SNG3	.606			
	SNG4	.406			
	SNG5	.603			

Green Consumption Intention	GCI1	.568	.742	.770	0.366
	GCI2	.448			
	GCI3	.545			
	GCI4	.786			
	GCI5	.524			
	GCI6	.698			
Green Consumption Behaviour	GCB1	.620	.850	.675	0.343
	GCB2	.620			
	GCB3	.540			
	GCB4	.560			

4.5 Convergent Validity

Convergent validity was assessed via the Average Variance Extracted (AVE) for each construct (Table 4.4). Fornell and Larcker (1981) recommend $AVE \geq 0.50$, meaning a construct explains at least half the variance of its indicators. In this study, all AVE values fell below 0.50 (ranging from 0.297 for Subjective Norms to 0.398 for Green Consumption Intention). For example, Attitude toward the Environment had $AVE = 0.389$, Attitude toward Green Consumption 0.398, Intention 0.366. These results suggest that less than 50% of indicator variance is captured by the latent construct in each case. By strict criteria, this indicates weak convergent validity. However, Fornell and Larcker note that an AVE slightly below 0.50 may be acceptable if the composite reliability is sufficiently high. In this data, most CRs exceed 0.60, and some exceed 0.65. For instance, Green Consumption Intention had $AVE = 0.366$ with $CR = 0.770$, and Subjective Norms $AVE = 0.297$ with $CR = 0.674$. According to the rule of thumb, these CR values mitigate concerns about the lower AVEs (Fornell and Larcker, 1981). Nevertheless, the consistently sub-0.50 AVE indicates that convergent validity is not fully achieved, and future scale refinement (e.g. dropping poorly loading items) might improve construct validity.

4.6 Regression and ANOVA Results

Table 4.5 summarizes the regression models tested. Model 1 regressed Green Consumption Intention (GCI) on four predictors: Attitude toward the Environment (ATE), Attitude toward Green Consumption (ATG), Attitude toward Organic Cosmetics (ATO), and Subjective Norms (SNG). The model was statistically significant: $F(4,196) = 73.721$, $p < .001$. The

coefficient of determination was $R^2 = 0.601$ (adjusted $R^2 = 0.593$), indicating that 60.1% of the variance in GCI is explained by these predictors. This is a substantial effect size in behavioral research (Cohen, 1988).

Table 4.5: Summary of Regression and ANOVA Results for Hypothesis Testing

Model	Dependent Variable	Predictors	R ²	Adj. R ²	F	Sig. (p)
Model 1	Green Consumption Intention	Environment, GreenConsumption, OrganicCosmetics, SubjectiveNorms	0.601	0.593	73.721	0.000
Model 2	Green Consumption Behavior	Intention	0.434	0.431	152.471	0.000

Model 2 regressed Green Consumption Behavior (GCB) on GCI alone. This model was also significant ($F(1,199) = 152.471$, $p < .001$) with $R^2 = 0.434$ (adjusted $R^2 = 0.431$), so intention explains 43.4% of the variance in behavior. In summary, both regression models are highly significant, demonstrating that (a) attitudes and norms jointly explain a large portion of the variance in green consumption intention, and (b) intention robustly predicts actual green consumption behavior. These findings are in line with the Theory of Planned Behavior (TPB), which posits that attitudes and norms drive intentions and that intentions, in turn, drive behavior (Ajzen, 1991).

4.7 Structural Model Assessment for Hypothesis Testing

Table 4.6 presents the standardized path estimates for the hypothesized model. The results for each hypothesis are as follows:

- H1: Attitudes toward the Environment → Green Consumption Intention. The path coefficient was $\beta = 0.178$ (SE = 0.058), $t = 2.804$, $p = .006$. This positive effect is statistically significant ($p < .01$), supporting H1.

- H2: Attitudes toward Green Consumption → Green Consumption Intention. $\beta = 0.162$ (SE = 0.042), $t = 2.758$, $p = .006$. This effect is also significant ($p < .01$), supporting H2.
- H3: Attitudes toward Organic Cosmetics → Green Consumption Intention. $\beta = 0.108$ (SE = 0.054), $t = 1.798$, $p = .074$. This effect is not statistically significant ($p > .05$), so H3 is not supported.
- H4: Subjective Norms → Green Consumption Intention. $\beta = 0.471$ (SE = 0.058), $t = 7.819$, $p < .001$. This strong positive effect is highly significant, supporting H4.
- H5: Green Consumption Intention → Green Consumption Behavior. $\beta = 0.659$ (SE = 0.055), $t = 12.340$, $p < .001$. This effect is very significant, supporting H5.

Table 4.6 : The Structural Estimates

Hypothesised path	Hypothesis	Beta Coefficients	Standard Error	T Value	P Value	Level of Significance
ATE → GCI	H1	0.178	0.058	2.804	.006	***
ATG → GCI	H2	0.162	0.042	2.758	.006	***
ATO → GCI	H3	0.108	0.054	1.798	.074	-
SNG → GCI	H4	0.471	0.058	7.819	.000	***
GCI → GCB	H5	0.659	0.055	12.340	.000	***

Note: ** $P < 0.05$; *** $P < 0.01$.

In sum, attitudes toward the environment and toward green consumption, as well as subjective norms, had significant positive effects on intention, whereas attitudes toward organic cosmetics did not. Intention in turn had a strong positive effect on behavior. These findings generally confirm the TPB framework: favorable attitudes (especially environmental and general green attitudes) and strong subjective norms increase a person's intention to act, and higher intention leads to increased actual behavior (Ajzen, 1991). Table 4.7 summarizes hypothesis tests: H1, H2, H4, and H5 are accepted; only H3 is rejected.

4.8 Summary of Findings

- **Response Rate:** The survey achieved a high valid response rate (80.4%), indicating reliable data.
- **Sample Profile:** The sample was relatively young and educated (72% aged 20–30; ~63% with undergraduate or higher education) and slightly more female than male.
- **Descriptive Statistics:** Mean scores for all constructs were high (≈ 4.0 on a 5-point scale), reflecting positive attitudes and intentions. Standard deviations were low, suggesting consensus around these attitudes.
- **Reliability:** All scales showed acceptable internal consistency (Cronbach's α between .714 and .896). Composite reliabilities were mostly $\geq .70$, with a few slightly lower (0.650–0.674). Overall reliability met standard benchmarks (Hair et al., 2009; Tavakol & Dennick, 2011).
- **Convergent Validity:** AVE values for all constructs were below .50, indicating that less than half of the indicator variance was explained by each construct (Fornell & Larcker, 1981). According to Fornell & Larcker (1981), AVE should be $\geq .50$ to confirm convergent validity. In this case, AVEs ranged 0.297–0.398, so convergent validity was not fully achieved. However, since composite reliabilities exceed 0.60 for all constructs, the convergent validity may be considered marginally adequate (Fornell & Larcker, 1981).
- **Regression/ANOVA:** The model predicting intention was significant ($R^2=0.601$, $p<.001$), as was the model predicting behavior ($R^2=0.434$, $p<.001$). This indicates that attitudes and norms collectively account for a substantial portion of intention variance, and intention strongly predicts behavior.
- **Hypothesis Tests:** Attitude toward the environment (H1) and attitude toward green consumption (H2) both had significant positive effects on intention, supporting these hypotheses. Attitude toward organic cosmetics (H3) did *not* have a significant effect (hypothesis rejected). Subjective norms (H4) had a strong positive effect on intention. Intention predicted behavior (H5) with a large standardized coefficient ($\beta=0.659$, $p<.001$). These outcomes largely support the TPB: attitudes and norms influence intention, which in turn drives behavior (Ajzen, 1991).

Table 4.7 : Summary of Hypotheses Testing Findings

Hypotheses	Description	Comments
H1	Attitudes towards the environment have a positive effect on green consumption intention.	Accepted
H2	Attitudes towards green consumption have a positive effect on green consumption intention.	Accepted
H3	Attitudes towards organic cosmetics have a positive effect on green consumption intention.	Not - Accepted
H4	Subjective norms of green consumption have a positive effect on green consumption intention.	Accepted
H5	Green consumption intention has a positive effect on green consumption behavior.	Accepted

4.9 Chapter Summary

This chapter presented the empirical results from the SPSS analyses. The study obtained a robust valid response rate and a sample of predominantly young, well-educated consumers. Descriptive analysis showed that respondents generally held positive green attitudes and intentions. Reliability tests confirmed that each multi-item construct was measured consistently, although convergent validity was weaker (AVE values were below recommended thresholds (Fornell and Larcker, 1981). Regression and structural modeling revealed that most of the hypothesized relationships were supported: attitudes toward the environment and green consumption, as well as subjective norms, significantly predicted green consumption intention, and intention strongly predicted green consumption behavior (while attitude toward organic cosmetics did not have a significant effect). These findings align with the Theory of Planned Behavior, demonstrating that favorable attitudes and social norms translate into higher intentions and subsequent green consumption behavior (Ajzen, 1991). In the next chapter, these results will be discussed in relation to existing literature on TPB and green consumer behavior.

CHAPTER 5

DISCUSSION AND CONCLUSION

5.1 Introduction

This chapter interprets the empirical findings presented in Chapter 4 in light of the theoretical framework—namely, the Theory of Planned Behavior (TPB)—and prior literature. The discussion is structured around the key hypotheses, followed by theoretical and practical implications, limitations of the study, and suggestions for future research. The chapter concludes with a summary of the main insights into green consumption behavior in the context of Bangladesh's organic cosmetics market.

5.2 Discussion of Key Findings

5.2.1 Attitudes Toward the Environment and Green Consumption Intention

The study found a significant positive relationship between environmental attitudes and green consumption intention (H1 supported). This aligns with previous studies highlighting the importance of environmental concern in motivating pro-environmental behavior (Paul et al., 2016; Nguyen et al., 2023). Consumers who perceive environmental problems as urgent are more likely to support sustainable consumption practices. In Bangladesh, increased awareness of pollution and climate risks has contributed to the growth of green sentiment among urban youth (Hasan et al., 2021). These findings support TPB's assertion that favorable attitudes increase behavioral intention (Ajzen, 1991).

5.2.2 Attitudes Toward Green Consumption and Intention

H2 was also supported, indicating that general attitudes toward green consumption significantly influence the intention to engage in sustainable behavior. This confirms the findings of Liobikienė et al. (2021), who emphasized the role of lifestyle-driven green values in shaping consumer choices. Positive attitudes toward eco-friendly living often correlate with intentions to purchase green products, even if specific product attitudes are weaker. The consistency of this result reinforces the multidimensional nature of attitudes and the relevance of green lifestyle orientation in Bangladesh's urban settings.

5.2.3 Attitudes Toward Organic Cosmetics and Intention

Contrary to expectations, H3 was not supported, suggesting that attitudes toward organic cosmetics did not significantly influence green consumption intention. This could reflect consumer skepticism regarding product authenticity, labeling, or price premiums—common issues in emerging markets (Panda et al., 2020). Previous studies have also shown that

specific product attitudes may not translate into action when perceived behavioral control or trust is low (Thøgersen, 2017). In Bangladesh, the lack of strict labeling and certification standards may weaken confidence in organic claims, limiting the effect of product-level attitudes on broader green consumption intention.

5.2.4 Subjective Norms and Intention

The study found a strong, significant effect of subjective norms on green consumption intention (H4 supported), consistent with the TPB framework and previous research in collectivist cultures (Yadav & Pathak, 2017). In Bangladesh, social conformity, peer influence, and digital communities play a central role in shaping consumption choices, particularly among younger consumers. As digital platforms and influencer marketing grow, subjective norms exert even greater influence on perceived behavioral expectations (Lee, 2020). This reinforces the importance of normative pressure in green consumer decision-making.

5.2.5 Green Consumption Intention and Behavior

Green consumption intention was a strong and significant predictor of behavior (H5 supported). This aligns with TPB's core proposition that intention is the most proximal determinant of action (Ajzen, 1991). While previous research has highlighted a persistent intention–behavior gap (Nguyen et al., 2022), this study found that 43.4% of behavior variance was explained by intention alone, suggesting a relatively strong link. This result may be due to the increased accessibility of organic cosmetics and the rising visibility of environmental narratives in mainstream discourse.

5.3 Theoretical Implications

This study contributes to TPB literature by validating the framework in a new context: green cosmetics consumption in an emerging economy. The findings demonstrate that the multidimensional approach to attitudes—dividing general environmental concern, green lifestyle attitudes, and product-specific attitudes—provides a nuanced understanding of intention formation. While environmental and green lifestyle attitudes significantly influenced intention, product-specific attitudes did not, supporting the view that broader values may be more predictive than individual product perceptions in low-trust markets

(Joshi & Rahman, 2019). Additionally, the strong influence of subjective norms confirms the importance of sociocultural context in TPB applications.

5.4 Practical Implications

For Marketers

Marketers should emphasize collective environmental responsibility and leverage peer influence in campaigns. Positioning organic cosmetics as lifestyle enablers rather than mere personal care products can help tap into consumers' green values. Collaboration with influencers, eco-conscious celebrities, and social media communities can also amplify subjective norms.

For Policymakers

Government agencies should introduce and enforce stricter green labeling standards and third-party certification mechanisms. Regulatory assurance can reduce consumer skepticism and enhance trust in organic claims. Environmental awareness campaigns targeting university students and young professionals can further stimulate green intent.

For NGOs and Educators

NGOs working in sustainability can use these insights to design community-level behavior change programs. Educational institutions should integrate green values into curricula and promote student-led environmental initiatives. Subjective norms can be harnessed effectively through social proof and community activism.

5.5 Limitations of the Study

Several limitations must be acknowledged. First, the sample was urban and primarily composed of young, educated consumers, limiting generalizability to rural or older populations. Second, the cross-sectional design prevents causal inferences. Third, all data were self-reported, which may be influenced by social desirability bias. Finally, AVE values for the constructs were below 0.50, indicating potential weaknesses in convergent validity.

5.6 Suggestions for Future Research

Future studies should employ longitudinal or experimental designs to assess the stability and causality of green behaviors over time. Exploring the role of perceived behavioral control—a

core TPB component omitted here—may offer further insights. Researchers should also examine the impact of trust in labeling, eco-brand credibility, and perceived product efficacy. Comparative studies across different green product categories or cultural regions in Bangladesh would also be valuable.

5.7 Conclusion

This study examined how multidimensional attitudes and subjective norms influence green consumption intention and behavior in Bangladesh's organic cosmetics market. The results supported the Theory of Planned Behavior, with environmental attitudes, green lifestyle values, and subjective norms predicting intention, which in turn influenced behavior. However, product-specific attitudes were not significant predictors, highlighting the need for stronger certification and consumer trust. Overall, the findings offer theoretical contributions and actionable guidance for marketers, policymakers, and educators aiming to promote sustainable consumption in Bangladesh.

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APPENDIX - A

Questionnaire

Dear participant,

I am an MBA student of the Marketing Department in Comilla University. As a part of my research work, I am conducting a survey, the purpose of which is to Understanding Green Consumption Intention and Behavior through Multidimensional Attitudes and Subjective Norms: Evidence from Bangladesh's Organic Cosmetics Market. I am asking you to participate in the survey because of your close connection with these relevant issues, as a conscious consumer. Your identity will be kept confidential. There are no anticipated risks, compensation or other benefits to you as a participant in the survey. Your feedback is valuable and will help me to improve my Understanding of Green Consumption Behavior through Multidimensional Attitudes and Subjective Norms: Evidence from Bangladesh's Organic Cosmetics Market. By filling out the provided survey, you give me the permission to report your responses anonymously in the final manuscript to be submitted to my faculty supervisor as part of my work.

Sincerely,

Arobindo Bikash Dev

Department of Marketing

Comilla University.

QUESTIONNAIRE

This survey will take at best 5-7 minutes to complete. Please give the tick mark (✓) in the box that best matches with you.

Part A - Demography of the Respondents.

- | | | |
|--------------------|--|--|
| 1. Gender | ☐ Male | ☐ Female |
| 2. Age | ☐ 20- 25 | ☐ 26 - 30 |
| | ☐ 31- 35 | ☐ 36 and above |
| 3. Marital status | ☐ Single | ☐ Married |
| 4. Education Level | ☐ HSC | ☐ Undergraduate |
| | ☐ Graduate | ☐ Post Graduate |
| 5. Profession | ☐ Student | ☐ Business |
| | ☐ Service | ☐ Others |
| 6. Monthly Income | ☐ Below Tk.15000 | ☐ Tk.15001-20000 |
| | ☐ Tk. 20001-30000 | ☐ Tk. 30001 and above |

Part B

Using the 5 point likert scale please respond to the following statements to indicate the extent to which you agree or disagree. Please circle the option that best matches with you.

Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	2	3	4	5

Attitude towards the environment

ATE1	I am very concerned about the environment	1	2	3	4	5
ATE2	I am willing to reduce my consumption to help protect the environment	1	2	3	4	5
ATE3	Major political change is necessary to protect the natural environment	1	2	3	4	5
ATE4	Major social change is necessary to protect the natural environment	1	2	3	4	5
ATE5	Anti-pollution laws should be enforced more strongly	1	2	3	4	5

Attitude towards Green Consumption

AGC1	I like the idea of purchasing green	1	2	3	4	5
AGC2	Purchasing green product is a good idea	1	2	3	4	5
AGC3	I have a favourable attitude towards purchasing green version of cosmetics products	1	2	3	4	5

Attitude towards Organic Cosmetics

AOC1	Organic cosmetic are healthier	1	2	3	4	5
AOC2	Organic cosmetic products have superior quality	1	2	3	4	5
AOC3	Organic cosmetic have not harmful effects	1	2	3	4	5
AOC4	Organic cosmetic are in fashion	1	2	3	4	5

Subjective norms towards green consumption

SNG1	I feel proud when I buy/use green products	1	2	3	4	5
SNG2	Most people who are important to me think I should purchase green cosmetics products when going for purchasing	1	2	3	4	5

SNG3	Most people who are important to me would want me to purchase green cosmetics products when going for purchasing	1	2	3	4	5
SNG4	People whose options I value would prefer that I purchase green cosmetics products	1	2	3	4	5
SNG5	My friends' positive opinion influences me to purchase green cosmetics products	1	2	3	4	5

Green consumption intention

GCI1	I consider buying green cosmetics products because they are less polluting in coming times	1	2	3	4	5
GCI2	I consider switching to environmentally friendly cosmetics brands for ecological reasons	1	2	3	4	5
GCI3	I plan to spend more on environmentally friendly cosmetics products rather than conventional products	1	2	3	4	5
GCI4	I expect to purchase green cosmetics products in the future because of their positive environmental contribution	1	2	3	4	5
GCI5	I want to purchase green cosmetics products in near future	1	2	3	4	5
GCI6	I am likely to choose an organic product the next time I buy cosmetics	1	2	3	4	5

Green consumption behaviour

GCB1	I make a special effort to buy products in biodegradable packages	1	2	3	4	5
GCB2	I have switched from my usual brands and buy environmentally safe cosmetic products, even if I had to give up some product's effectiveness	1	2	3	4	5
GCB3	I have switched products for ecological reasons	1	2	3	4	5
GCB4	When I have a choice between two equal cosmetics products, I purchase the one less harmful to the environment	1	2	3	4	5

APPENDIX - B

Descriptive Studies Frequencies

		Statistics					
		Gender	Age	Maritalstatus	EducationLevel	Profession	MonthlyIncome
N	Valid	201	201	201	201	201	201
	Missing	0	0	0	0	0	0
Mean		1.52	1.98	1.46	3.53	2.35	2.50
Std. Error of Mean		.035	.067	.035	.086	.077	.080
Median		2.00	2.00	1.00	3.00	2.00	3.00
Mode		2	1	1	3	1	3
Std. Deviation		.501	.956	.499	1.217	1.095	1.141
Variance		.251	.914	.249	1.480	1.200	1.301
Skewness		-.070	.639	.171	-.207	.161	-.139
Std. Error of Skewness		.172	.172	.172	.172	.172	.172
Kurtosis		-2.015	-.597	-1.991	-.990	-1.287	-1.409
Std. Error of Kurtosis		.341	.341	.341	.341	.341	.341
Range		1	3	1	4	3	3
Minimum		1	1	1	1	1	1
Maximum		2	4	2	5	4	4
Sum		305	397	293	709	473	503

Frequency Table

		Gender			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	97	48.3	48.3	48.3
	2	104	51.7	51.7	100.0
	Total	201	100.0	100.0	

		Age			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	77	38.3	38.3	38.3
	2	69	34.3	34.3	72.6
	3	38	18.9	18.9	91.5
	4	17	8.5	8.5	100.0
	Total	201	100.0	100.0	

		Maritalstatus			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	109	54.2	54.2	54.2
	2	92	45.8	45.8	100.0
	Total	201	100.0	100.0	

		MonthlyIncome			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	59	29.4	29.4	29.4
	2	28	13.9	13.9	43.3
	3	68	33.8	33.8	77.1
	4	46	22.9	22.9	100.0
	Total	201	100.0	100.0	

		EducationLevel			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	10	5.0	5.0	5.0
	2	30	14.9	14.9	19.9
	3	68	33.8	33.8	53.7
	4	30	14.9	14.9	68.7
	5	63	31.3	31.3	100.0
	Total	201	100.0	100.0	

		Profession			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	58	28.9	28.9	28.9
	2	53	26.4	26.4	55.2
	3	51	25.4	25.4	80.6
	4	39	19.4	19.4	100.0
	Total	201	100.0	100.0	

Reliability

Reliability Statistics

Cronbach's Alpha	N of Items
.754	5

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
20.72	12.122	3.482	5

Item Statistics

	Mean	Std. Deviation	N
ATE1	4.25	.829	201
ATE2	4.28	.861	201
ATE3	3.92	1.041	201
ATE4	4.10	1.063	201
ATE5	4.17	1.079	201

Reliability Statistics

Cronbach's Alpha	N of Items
.896	3

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
11.78	7.042	2.654	3

Reliability Statistics

Cronbach's Alpha	N of Items
.766	4

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
19.97	11.039	3.135	4

Reliability Statistics

Cronbach's Alpha	N of Items
.714	5

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
20.37	11.014	3.319	5

Reliability Statistics

Cronbach's Alpha	N of Items
.742	6

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
24.89	14.692	3.833	6

Reliability Statistics

Cronbach's Alpha	N of Items
.850	4

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
26.37	16.955	3.637	4

Item Statistics

	Mean	Std. Deviation	N
AGC1	3.92	1.124	201
AGC2	3.91	1.132	201
AGC3	3.95	1.108	201

Item Statistics

	Mean	Std. Deviation	N
AOC1	3.98	1.000	201
AOC2	3.94	1.023	201
AOC3	4.03	1.031	201
AOC4	4.01	.982	201

Item Statistics

	Mean	Std. Deviation	N
SNG1	3.94	1.038	201
SNG2	4.00	.990	201
SNG3	4.10	.961	201
SNG4	4.13	.971	201
SNG5	4.19	.893	201

Item Statistics

	Mean	Std. Deviation	N
GCI1	4.30	.901	201
GCI2	4.22	.863	201
GCI3	4.01	.967	201
GCI4	4.16	1.017	201
GCI5	4.10	1.020	201
GCI6	4.08	1.019	201

Item Statistics

	Mean	Std. Deviation	N
GCB1	3.91	1.101	201
GCB2	4.06	.965	201
GCB3	4.15	.931	201
GCB4	4.25	.958	201

Reliability: All Variables

Reliability Statistics

Cronbach's Alpha	N of Items
.918	27

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
110.10	231.640	15.220	27

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
ATE1	105.85	215.968	.615	.914
ATE2	105.82	218.858	.472	.916
ATE3	106.18	216.258	.467	.916
ATE4	106.00	213.980	.532	.915
ATE5	105.93	211.679	.599	.914
AGC1	106.18	213.438	.516	.915
AGC2	106.19	211.564	.571	.914
AGC3	106.15	213.268	.530	.915
AOC1	106.12	216.366	.485	.915
AOC2	106.16	214.695	.530	.915
AOC3	106.06	217.171	.441	.916
AOC4	106.08	216.308	.497	.915
SNG1	106.16	213.285	.570	.914
SNG2	106.10	214.200	.568	.914
SNG3	106.00	216.555	.501	.915
SNG4	105.97	215.889	.519	.915
SNG5	105.91	218.166	.481	.916
GCI1	105.80	215.783	.568	.914
GCI2	105.88	217.719	.517	.915
GCI3	106.08	216.018	.517	.915
GCI4	105.94	216.906	.457	.916
GCI5	106.00	212.570	.606	.913
GCI6	106.01	215.655	.500	.915
GCB1	106.19	213.224	.535	.915
GCB2	106.03	215.334	.543	.915
GCB3	105.95	218.568	.443	.916
GCB4	105.85	218.488	.432	.916

Item Statistics

	Mean	Std. Deviation	N
ATE1	4.25	.829	201
ATE2	4.28	.861	201
ATE3	3.92	1.041	201
ATE4	4.10	1.063	201
ATE5	4.17	1.079	201
AGC1	3.92	1.124	201
AGC2	3.91	1.132	201
AGC3	3.95	1.108	201
AOC1	3.98	1.000	201
AOC2	3.94	1.023	201
AOC3	4.03	1.031	201
AOC4	4.01	.982	201
SNG1	3.94	1.038	201
SNG2	4.00	.990	201
SNG3	4.10	.961	201
SNG4	4.13	.971	201
SNG5	4.19	.893	201
GCI1	4.30	.901	201
GCI2	4.22	.863	201
GCI3	4.01	.967	201
GCI4	4.16	1.017	201
GCI5	4.10	1.020	201
GCI6	4.08	1.019	201
GCB1	3.91	1.101	201
GCB2	4.06	.965	201
GCB3	4.15	.931	201
GCB4	4.25	.958	201

Factor Analysis

Communalities

	Initial	Extraction
ATE1	1.000	.511
ATE2	1.000	.463
ATE3	1.000	.488
ATE4	1.000	.660
ATE5	1.000	.526
AGC1	1.000	.713
AGC2	1.000	.682
AGC3	1.000	.484
AOC1	1.000	.665
AOC2	1.000	.610
AOC3	1.000	.491
AOC4	1.000	.486
SNG1	1.000	.588
SNG2	1.000	.541
SNG3	1.000	.504
SNG4	1.000	.464
SNG5	1.000	.517
GCI1	1.000	.508
GCI2	1.000	.537
GCI3	1.000	.581
GCI4	1.000	.680
GCI5	1.000	.632
GCI6	1.000	.653
GCB1	1.000	.586
GCB2	1.000	.551
GCB3	1.000	.556
GCB4	1.000	.458

Extraction Method: Principal Component Analysis.

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	8.708	32.251	32.251	8.708	32.251	32.251
2	1.600	5.926	38.177	1.600	5.926	38.177
3	1.323	4.900	43.077	1.323	4.900	43.077
4	1.236	4.578	47.655	1.236	4.578	47.655
5	1.157	4.285	51.940	1.157	4.285	51.940
6	1.111	4.115	56.055	1.111	4.115	56.055
7	.937	3.470	59.525			
8	.893	3.306	62.831			
9	.861	3.188	66.019			
10	.822	3.046	69.065			
11	.773	2.862	71.927			
12	.700	2.594	74.521			
13	.684	2.534	77.056			
14	.634	2.349	79.405			
15	.621	2.299	81.703			
16	.599	2.219	83.922			
17	.534	1.976	85.899			
18	.506	1.873	87.771			
19	.470	1.742	89.513			
20	.426	1.576	91.089			
21	.403	1.493	92.582			
22	.385	1.425	94.008			
23	.367	1.358	95.366			
24	.360	1.335	96.700			
25	.326	1.209	97.909			
26	.306	1.133	99.042			
27	.259	.958	100.000			

Extraction Method: Principal Component Analysis.

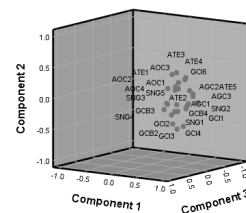
Component Matrix^a

	Component					
	1	2	3	4	5	6
ATE1	.660	.203	.169	.019	.034	-.064
ATE2	.517	.145	.048	.032	.403	.096
ATE3	.511	.419	-.002	-.105	.192	-.054
ATE4	.575	.323	-.167	-.124	.173	.390
ATE5	.646	.118	-.173	-.179	.017	.179
AGC1	.567	-.113	-.253	-.163	-.023	-.536
AGC2	.615	.003	-.312	-.354	-.027	-.283
AGC3	.573	.028	-.370	-.048	.110	.059
AOC1	.529	.256	-.032	.388	.117	-.392
AOC2	.574	.170	.039	.364	-.098	-.330
AOC3	.486	.402	.087	.189	.080	.208
AOC4	.545	.209	.289	-.086	.233	.001
SNG1	.622	-.176	.122	-.282	-.230	-.152
SNG2	.614	-.170	-.121	-.087	-.302	.148
SNG3	.548	-.085	.046	.040	-.419	.129
SNG4	.567	-.225	.219	.207	.028	.025
SNG5	.529	-.047	.278	-.376	.119	-.044
GCI1	.619	-.167	.200	-.158	.177	-.025
GCI2	.567	-.375	.183	.187	.053	-.060
GCI3	.567	-.476	.067	-.067	.147	.043
GCI4	.507	-.476	-.195	.175	.113	.339
GCI5	.648	-.106	-.388	.222	-.045	-.018
GCI6	.542	.284	-.189	.166	-.430	.176
GCB1	.586	.220	.133	-.117	-.396	.075
GCB2	.592	-.011	.387	-.189	-.091	.081
GCB3	.494	-.131	.320	.436	-.047	.016
GCB4	.474	-.177	-.338	.106	.267	.065

Extraction Method: Principal Component Analysis.

a. 6 components extracted.

Component Plot



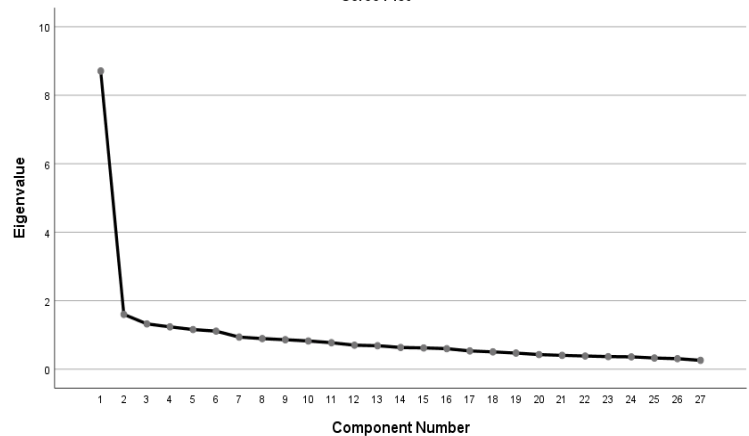
Rotated Component Matrix^a

	Component					
	1	2	3	4	5	6
ATE1	.368	.410			.346	
ATE2		.542				
ATE3		.593				
ATE4		.713				
ATE5		.470		.342		
AGC1						.742
AGC2						.707
AGC3		.383	.392			.372
AOC1					.704	
AOC2					.673	
AOC3		.570				
AOC4	.452	.478				
SNG1	.543			.371		.365
SNG2			.351	.543		
SNG3				.606		
SNG4	.406		.367		.355	
SNG5	.630					
GCI1	.568					
GCI2	.444		.448		.352	
GCI3	.500		.545			
GCI4			.786			
GCI5			.524	.323	.302	.346
GCI6				.698		
GCB1	.311			.620		
GCB2	.620			.315		
GCB3	.313				.540	
GCB4			.560			

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.^a

a. Rotation converged in 38 iterations.

Scree Plot**Component Transformation Matrix**

Component	1	2	3	4	5	6
1	.473	.449	.406	.420	.352	.332
2	-.310	.672	-.641	.138	.151	-.017
3	.704	-.086	-.382	-.083	.217	-.545
4	-.415	-.096	.288	.004	.744	-.427
5	.087	.466	.266	-.839	.000	-.019
6	-.072	.337	.353	.307	-.502	-.640

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

Descriptive Statistics Of Variables

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Environment	201	1.00	5.00	4.1443	.69633
GreenConsumption	201	1.00	5.00	3.9270	.88455
OrganicCosmetics	201	1.00	5.00	3.9925	.70883
SNormsG	201	1.00	5.00	4.0736	.66374
Intention	201	1.00	5.00	4.1476	.63883
Behaviour	201	1.00	5.00	4.0933	.65931
Valid N (listwise)	201				

Regression - Model 1

Variables Entered/Removed^a

Descriptive Statistics

	Mean	Std. Deviation	N
Intention	4.1476	.63883	201
Environment	4.1443	.69633	201
GreenConsumption	3.9270	.88455	201
OrganicCosmetics	3.9925	.70883	201
SNormsG	4.0736	.66374	201

Model	Variables Entered	Variables Removed	Method
1	SNormsG, OrganicCosmetics, GreenConsumption, Environment ^b	.	Enter

a. Dependent Variable: Intention

b. All requested variables entered.

Correlations

		Intention	Environment	GreenConsumption	OrganicCosmetics	SNormsG
Pearson Correlation	Intention	1.000	.602	.580	.546	.721
	Environment	.602	1.000	.551	.619	.568
	GreenConsumption	.580	.551	1.000	.488	.566
	OrganicCosmetics	.546	.619	.488	1.000	.526
	SNormsG	.721	.568	.566	.526	1.000
Sig. (1-tailed)	Intention	.	.000	.000	.000	.000
	Environment	.000	.	.000	.000	.000
	GreenConsumption	.000	.000	.	.000	.000
	OrganicCosmetics	.000	.000	.000	.	.000
	SNormsG	.000	.000	.000	.000	.
N	Intention	201	201	201	201	201
	Environment	201	201	201	201	201
	GreenConsumption	201	201	201	201	201
	OrganicCosmetics	201	201	201	201	201
	SNormsG	201	201	201	201	201

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.775 ^a	.601	.593	.40777	.601	73.721	4	196	.000	2.100

a. Predictors: (Constant), SNormsG, OrganicCosmetics, GreenConsumption, Environment

b. Dependent Variable: Intention

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	49.032	4	12.258	73.721	.000 ^b
	Residual	32.590	196	.166		
	Total	81.621	200			

a. Dependent Variable: Intention

b. Predictors: (Constant), SNormsG, OrganicCosmetics, GreenConsumption, Environment

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.771	.205		3.771	.000
	Environment	.164	.058	.178	2.804	.006
	GreenConsumption	.117	.042	.162	2.758	.006
	OrganicCosmetics	.098	.054	.108	1.798	.074
	SNormsG	.454	.058	.471	7.819	.000

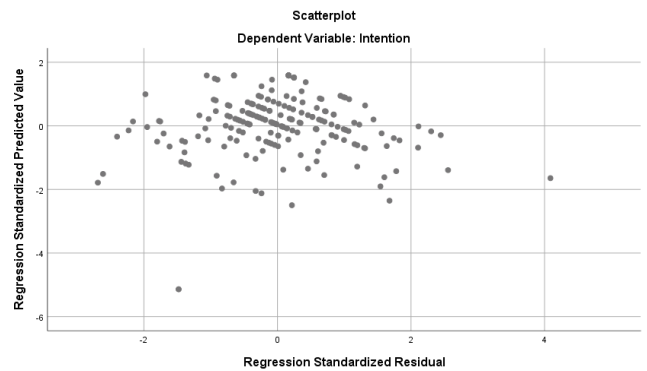
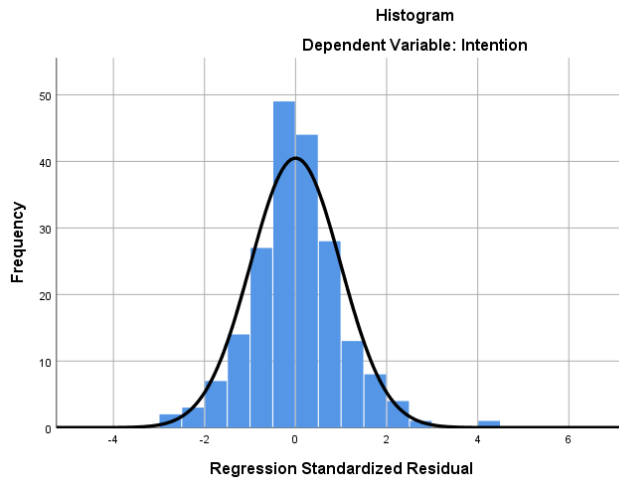
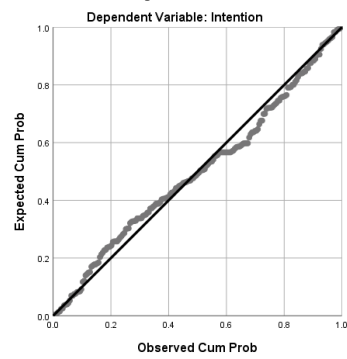
a. Dependent Variable: Intention

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.6034	4.9320	4.1476	.49513	201
Residual	-1.09662	1.66680	.00000	.40367	201
Std. Predicted Value	-5.138	1.584	.000	1.000	201
Std. Residual	-2.689	4.088	.000	.990	201

a. Dependent Variable: Intention

Normal P-P Plot of Regression Standardized Residual



Regression - Model 2

Descriptive Statistics

	Mean	Std. Deviation	N
Behaviour	4.0933	.65931	201
Intention	4.1476	.63883	201

Correlations

		Behaviour	Intention
Pearson Correlation	Behaviour	1.000	.659
	Intention	.659	1.000
Sig. (1-tailed)	Behaviour	.	.000
	Intention	.000	.
N	Behaviour	201	201
	Intention	201	201

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	Intention ^b	.	Enter

a. Dependent Variable: Behaviour

b. All requested variables entered.

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.659 ^a	.434	.431	.49735	.434	152.471	1	199	.000	2.194

a. Predictors: (Constant), Intention

b. Dependent Variable: Behaviour

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	37.715	1	37.715	152.471	.000 ^b
	Residual	49.224	199	.247		
	Total	86.938	200			

a. Dependent Variable: Behaviour

b. Predictors: (Constant), Intention

Coefficients^a

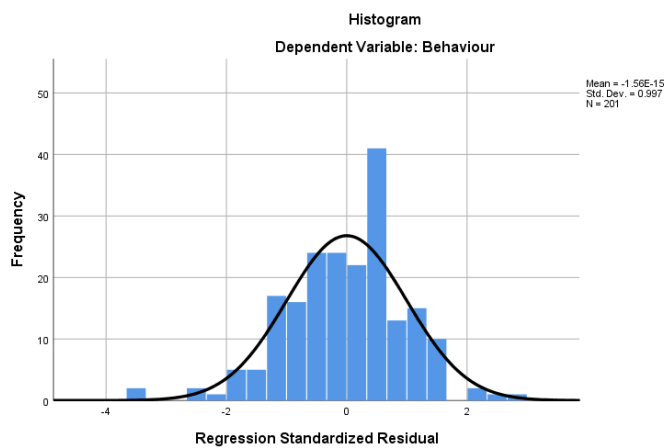
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.274	.231		5.515	.000
	Intention	.680	.055	.659	12.348	.000

a. Dependent Variable: Behaviour

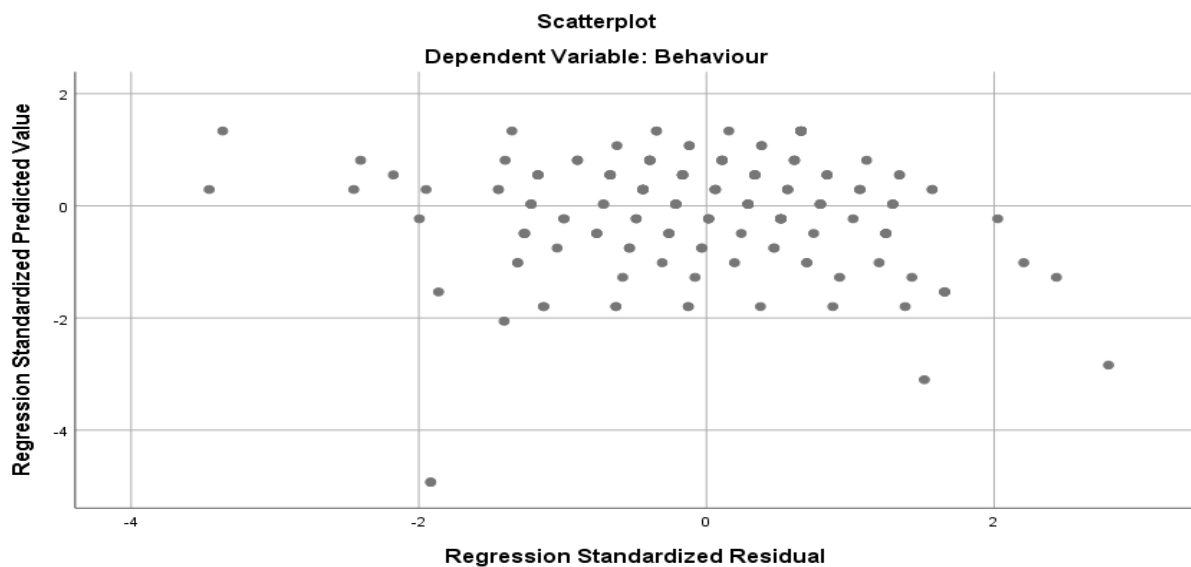
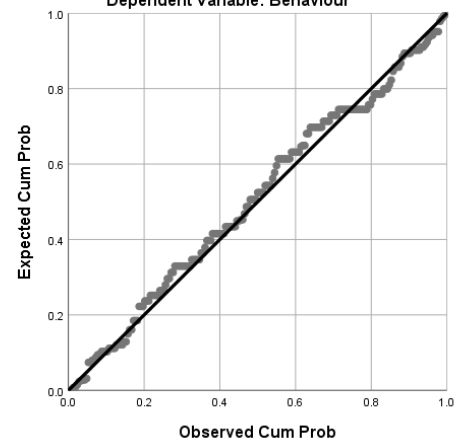
Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.9537	4.6727	4.0933	.43425	201
Residual	-1.71954	1.38997	.00000	.49610	201
Std. Predicted Value	-4.927	1.334	.000	1.000	201
Std. Residual	-3.457	2.795	.000	.997	201

a. Dependent Variable: Behaviour



Normal P-P Plot of Regression Standardized Residual
Dependent Variable: Behaviour



APPENDIX - C

Previous Research Summary on Organic Cosmetics and Green Consumption Behavior

Title	Author(s) & Year	Model and Theory	DV & IV	Sampling & Sample Size	Data Analysis Method	Relevant Findings
The Effect of Cause-Related Marketing on the Green Consumption Attitude–Behaviour Gap in the Cosmetics Industry	Dominyka Venciute et al. (2023)	Theory of Planned Behavior (TPB)	DV: Green Consumption Behavior; IV: Attitude towards Environment, Subjective Norms, Green Consumption Intention	241 respondents (Lithuania)	Regression Analysis	Cause-related marketing influences consumers with strong pro-green attitudes but does not fully close the attitude-behavior gap.
Green Purchase Behavior: Examining the Influence of Green Environmental Attitude, Perceived Consumer Effectiveness	Tan Booi Chen (2022)	Theory of Planned Behavior (TPB)	DV: Green Purchase Behavior; IV: Environmental Attitude, Perceived Effectiveness, Social Norms	500 respondents (Malaysia)	Structural Equation Modeling (SEM)	Green environmental attitude significantly influences purchase intentions, but barriers like price and product availability persist.
Examining Green Consumerism Motivational Drivers: Does Premium Price and Demographics Matter?	Brahim Chekima (2021)	Value-Belief-Norm Theory	DV: Green Purchase Intention; IV: Demographics, Price Sensitivity, Social Values	350 consumers (Malaysia)	Multiple Regression	Premium pricing negatively affects green purchase intentions; environmental values play a significant role.

Green Consumer Behavior in the Cosmetics Market	Fogarassy Csaba (2021)	Consumer Behavior Theory	DV: Organic Cosmetic Purchase; IV: Green Awareness, Brand Trust, Product Ingredients	400 respondents (Europe)	Factor Analysis & Regression	Green awareness and trust in brand ethics significantly impact organic cosmetics purchase behavior.
An Innovation Resistance Theory Perspective on Purchase of Eco-Friendly Cosmetics	Mohd Sadiq et al. (2022)	Innovation Resistance Theory	DV: Resistance to Green Cosmetics; IV: Perceived Risk, Price Sensitivity, Product Performance	300 respondents (India)	SEM	Consumers resist green cosmetics due to high price and skepticism about product efficacy.
Who Are Organic Food Consumers? A Compilation and Review	RS Hughner et al. (2021)	Health Belief Model (HBM)	DV: Organic Purchase Behavior; IV: Health Concerns, Lifestyle Choices, Availability	Literature Review (Multiple studies)	Meta-analysis	Health concerns and perceived safety drive organic product purchases.
Impact of Green Marketing on Green Purchase Intention and Green Consumption Behavior	AS Asif Iqbal et al. (2023)	Green Marketing Theory	DV: Green Consumption Behavior; IV: Green Marketing Strategies, Green Perception, Eco-labeling	600 respondents (Pakistan)	PLS-SEM	Green marketing positively influences purchase behavior, but eco-label trust varies.
Green Consumption : Life-Politics, Risk, and	J Connolly et al. (2022)	Ethical Consumption Framework	DV: Sustainable Consumption; IV: Lifestyle, Social Norms,	Literature Review	Thematic Analysis	Social norms and personal values shape green consumption choices.

Contradictions			Political Views			
Sustainable Consumption Behavior: A Conceptual Model	F Quoquab et al. (2023)	Theory of Reasoned Action (TRA)	DV: Green Consumption; IV: Eco-labeling, Sustainability Awareness, Ethical Concerns	450 respondents (Malaysia)	Structural Equation Modeling (SEM)	Eco-labeling increases trust in organic products and influences green behavior.
Organic Food Consumption Among Urban Consumers	Nor Hashima Hashim (2021)	Behavioral Economics	DV: Organic Purchase Frequency; IV: Income, Knowledge, Accessibility	500 urban consumers (Malaysia)	Regression Analysis	Higher income and awareness significantly impact organic product consumption.
A Study on the Impact of Green Branding on Consumer Buying Behavior with Respect to the Purchase of Apparel	W Acosta-Ponce et al. (2021)	Branding Theory	DV: Purchase Intention; IV: Brand Image, Green Packaging, Perceived Value	400 respondents (USA)	Factor Analysis & Regression	Green branding improves consumer trust and likelihood of purchase.
Green Consumption : Behavior and Norms	Ken Peattie (2021)	Social Norm Theory	DV: Green Purchasing; IV: Peer Influence, Cultural Values, Advertising Exposure	Literature Review	Thematic Analysis	Social norms and peer influence significantly impact green purchasing.

Going Green for Self or for Others? Gender and Identity Salience Effects on Sustainable Consumption	Diego Costa Pinto et al. (2022)	Identity Theory	DV: Green Buying Behavior; IV: Gender, Identity Salience, Perceived Benefits	350 respondents (UK)	SEM	Women engage more in green consumption due to stronger identity association with sustainability.
Being Green: From Attitude to Actual Consumption	Giulia Miniero et al. (2021)	Theory of Planned Behavior (TPB)	DV: Green Consumption; IV: Attitude, Availability, Environmental Awareness	500 respondents (Italy)	Regression Analysis	Product availability significantly influences purchase behavior.
Derivers of Green Buying Behavior for Organic Skincare Products	Tan Booi Chen et al. (2023)	Consumer Decision Model	DV: Green Purchase Intention; IV: Advertisement, Brand Loyalty, Eco-consciousness	450 respondents (China)	SEM	Green advertising enhances brand perception and purchase likelihood.
Green Factors Stimulating the Purchase Intention of Luxury Organic Beauty Products	Brahim Chekima et al. (2022)	Luxury Marketing Framework	DV: Purchase Intention; IV: Brand Perception, Social Status, Sustainability Perception	400 respondents (Malaysia)	Factor Analysis	Luxury branding strengthens perceived value of green beauty products.
A Conscious Way to Shop for Beauty	Reshma Patnam et al. (2023)	Consumer Psychology	DV: Organic Beauty Purchases; IV: Awareness, Social Influence, Personal Values	600 respondents (India)	Multiple Regression	Social influence strongly impacts organic beauty purchases.

Clean Beauty: How Irish Companies Are Leading the Way	Sarah O'Connell (2022)	Business Sustainability Theory	DV: Organic Cosmetics Adoption; IV: Market Trends, Eco-certifications, Transparency	Literature Review	Thematic Analysis	Certification builds consumer trust and market acceptance of organic cosmetics.
How Apple Peel Found Its Way Onto Our Bathroom Shelves	Sophia Turner (2022)	Innovation Diffusion Theory	DV: Consumer Acceptance; IV: Product Innovation, Natural Ingredients, Brand Trust	500 respondents (Europe)	SEM	Product innovation enhances consumer trust in organic cosmetics.