

The Effects of Sustainable Packaging on Consumer Buying Intention: Evidence from Bangladesh

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Abstract

This empirical study is conducted to investigate attributes that influence customer buying intention towards sustainable packaging, focused on shopping bags in Bangladesh. The interest in sustainable packaging has initiated to raise in comparison with traditional product packaging. Therefore, it becomes essential to know the consumers' intentions, preferences, feelings, and tastes regarding the new eco-friendly based product packaging materials. This study was intended to identify the key factors that actually help enhance the buying intention of consumers towards sustainable shopping bags as well as analyze the consequences of those aspects on their intention. For the study, a total five (5) attributes have been taken into account based on existing literature and field study. The survey was executed using a self-structured questionnaire, with data collected from 150 respondents among the user of sustainable packaging via the convenience sample approach. This study's reliability, validity, regression and correlation have been tested with the help of SPSS (version 21). The findings of this study explore that availability, durability, quality of sustainable packaging elements, awareness, and cost factors of sustainable shopping bags have direct positive influences on enhancing consumer buying

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intention during purchase. The findings of the investigation are expected to assist marketers better understand their consumers' buying intention properly and design an effective marketing strategy to sustain in the competitive market.

Keywords

Sustainable Packaging, Environmental Impact, Customer Acceptance, Availability, Environmental Consciousness

Introduction

The impact of human kind on the natural world is one of the greatest challenges that facing today and in the decades ahead. In past decades the consumers traditionally use the plastic shopping bags that has a great negative impact on Environment because it takes countless years to break down, it produces toxic fumes and greenhouse gases that are harmful to animals and also wildlife as well as humankind [1]. Therefore, now consumers are willing to take sustainable shopping bags owing to its environmental friendly matters [2]. At present the business environment is rapidly changing and in this competitive environment marketer always striving for maintaining their positions [3]. Therefore, it becomes essential to know the consumers' intentions, preferences, feelings and tastes regarding the new market offerings. This study will try to provide the information about the consumers how they take the sustainable shopping bags in their purchasing. Considering packaging acts as the carrier of the contents for which an offer is made and is typically not the reason why a product is purchased, it is a crucial component of any product offering [4]. A significant number of 21st-century consumerism's habits have not translated well into the present, including using plastic. Convenient consumption goods wrapped in plastic that simplify our lives are now demonstrated to have negative environmental implications (Ellen MacArthur Foundation, 2019; Waste MINZ, 2020) [5]. According to consumer behavior investigators consumers find it difficult to make sustainable purchases. They have researched the attitude-behavior gap in sustainable purchasing. When people have sustainable green views but do not buy sustainable items, this is known as the gap between attitude and behavior [6]. Additionally, the writers draw attention to the fact that the fundamental tenets of sustainability are long-term and grounded in social requirements, which contrast with the direct, personal repercussions of consumerism. [2,3]. Considering the fundamental characteristics of plastic packaging, it would be slightly light to suggest that it is not sustainable, but production of plastic packaging is rising

[7]. Packaging was offered to customers as a means of safeguarding products, simplifying handling, and effectively communicating the contents of the products being purchased [8]. But nowadays, plastic, which is one of the most widely used packaging materials, poses a serious risk to environmental health due to its significant waste production [5]. A growing number of consumers are expressing a desire for environmentally friendly packaging and are gravitating toward reduced-packaging solutions like shampoo bars without packaging [9]. Four important factors come to light when discussing consumer choice of sustainable packaging: (1) consumer knowledge of sustainability; (2) Consumer opinions and beliefs toward sustainability; (3) individual consumer demographic data variation; and (4) the presence or absence of other competing product features that affect purchase [10,11]. Eco tags, or labeling on packages that indicate a product's level of sustainability or recyclable nature, are more likely to be used by customers that possess strong "green" environmental awareness. [12]. However, as several scholars demonstrate through the attitude-behavior gap in sustainable consumer research, choosing more sustainable goods or services is not necessarily influenced by sustainable attitudes [14,5]. Consequently, it is evident that environmental awareness and concerns may have an impact on a consumer's packaging preference, but it's unclear the extent to which of a role this aspect plays in buying a product. The degree of environmental awareness, the attitude toward sustainability, the significance given to other package aspects, and a tendency toward higher wealth and education levels among females in the population [13]. In this discussion these elements guide an investigation of the potential influence of packaging sustainability disclosure on product choice.

Research Objectives

- ✓ To measure the impact of sustainable packaging on consumer purchase intention in case of sustainable shopping bags
- ✓ To identify the key factors that actually affect the purchase intention of consumers towards retail products purchasing in the light of sustainable shopping bags

Reviews of Theories and Literatures

Although plastic played a major role in the rise of consumerism in the 20th century, it is today recognized as a serious ecological and environmental danger. 40% of the 396 million tons of plastic generated worldwide in 2016 or 53 kg per person were single-use items (WWF, 2019). It is becoming more and more prevalent in the oceans, which is detrimental for marine life. According to the study of Duckworth et al. [15] 77% of British people surveyed in 2018 on

1,000 environmental issues, ocean plastic waste is the world's most pressing issue. In addition, 84% of Australian consumers surveyed in a sample of 2,518 stated that plastics posed a severe environmental risk. Plastic has been recognized as a major challenge for environmental sustainability on a global scale. This is proven by international programs like The Ellen MacArthur Foundation's New Plastic Economy initiative, which was developed in collaboration with the UN with the goal of promoting a shared 2025 vision of a circular economy in which plastic never ends up as garbage. 350 organizations globally have signed this pledge [16]. Studies conducted by Potter & Jebb [17] Sustainable packaging is effective, secure, and hygienic for people all around the world for its whole life. Research by Boesen et al. and others [18, 19] highlighted life cycle analysis as a comprehensive process that considers a product's entire lifespan, from the development to disposal. Most buyers seem to focus on their opinions only on the material that is, the materials used in the packaging such as glass, plastic, paper, etc. rather than considering the product's whole life cycle. This might imply that, depending on life cycle requirements, a more environmentally friendly product, such as recyclable laminated cardboard, would not be considered an environmentally friendly packaging solution. The authors Watts et al. [20] conducted a study on health and climate and revealed that because of the mass of human activity, the ecosystem on Earth is under greater stress in order to continue smooth functioning. Considering the problems posed by climate change and various other environmental problems, sustainability is crucial for the existence of the planet. According to Herédia [21] concerns regarding sustainability and activities are making their way into daily life and are becoming prominent challenges. Climate change is having an impact on investment portfolio decision-making, as demonstrated by the announcement made in January 2020 by BlackRock, which is a global investment company with approximately \$US 7 trillion in assets (BBC, 2020). Numerous governments said in the same month that climate change would be taught at all levels curriculum [22]. Another study of Al Balushi et al. [23] and mentioned that consumer awareness, knowledge and mindset towards sustainable packaging and consumption continues to rise daily. However, Cock et al. and Duckworth et al. [24, 15] point out that sustainability is an ephemeral notion that may signify various things to different people. Different product categories have varying customer standings in terms of sustainability and the environment. For example, items related to skincare have a better eco-friendly status than things like detergents and tires. Still, a product with sustainable characteristics is frequently thought to be less good than a comparable one without as many sustainable features. Oloyede et al. [25] demonstrate that, in light of the circular economy,

packaging is currently subject to close examination in order to ensure environmental friendliness. This stimulates businesses to strategize the product's post-purchase life cycle concerning reuse and disposal. This is in contrast to the planned destruction, or linear life cycle, that was in place throughout the previous century when consumer products and their packaging were made with disposal in mind. This highlights the significance of sustainable packaging's ability to communicate in consumer's mind. Eco-friendly packaging is growing in popularity in the current era of moral consumerism. One of the primary purposes sustainable of packaging, according to Ketelsen et al [26], is to safeguard products in transit while also saving the environment. It also serves as a means of communicating a brand's environmental consciousness, as highlighted by Prakash et al. [9]. The most well-known theory for forecasting consumer behavior, the theory of reasoned action (TRA) served as the theoretical foundation for this investigation. As per the TRA model, an individual's intentions when executing certain acts are influenced by their attitudes and subjective standards which is addressed by Martini et al. [27]. Šagovnović emphasized [28] personal views about engaging in a specific actions shape an individual's attitude. Subjective norms are the social pressures that a person feels from reference points when engaging in a certain conduct. Numerous research that looked at customers' purchasing habits with reference to eco-friendly tourist destination have used this assumption. According to the research of Nguyen [29] attitudes significantly predicted whether or not a person intended to buy environmentally friendly clothing. Despite this, reliable findings show that subjective norms have little impact on customers' inclinations to buy environmentally friendly items. Knowledge and attitudes are not the same. It quietly different from each other. The ability to distinguish between sustainable and non-sustainable packaging requires knowledge and experience. By taking part in activities that enhance their comprehension, the customer gains knowledge [30]. The authors Falke & Hofmann [31] states that the need for sustainable packaging is becoming more widely realized, and this is entirely due to increased knowledge. Customers are more willing to look for sustainable packaging items if they are aware of them. Additionally, a key factor affecting consumers' sustainable behavior is their overall level of environmental awareness as identified by Lignou [32]. Cook [33] conducted a study on consumer interaction with sustainability labelling on food products and illustrate that labels have been established by various groups to try and lead consumers toward marketing offer that have more environmentally friendly features and packaging. Several studies suggest that consumers can more easily identify ecologically friendly items and packaging if eco labels use green and images of nature. The creation of a label has aided in

establishing and understanding of environmental knowledge regarding a product or service. Customers with strong "green" environmental awareness are prone to purchase goods with eco labels, or packaging that conveys information regarding a product's sustainability or recyclable nature, as examined by Majer & Fischer [34]. Chin et al. [35] conducted an online survey among undergraduate students in Korea with 4,408 participants and discovered a correlation between respondents' level of concern for sustainability and their willingness to adopt sustainable labeling. Customers are ready to pay even more for environmentally friendly items, with green package design playing a key role in expressing the product's green identifications. Customers that are environmentally friendly strongly try to minimize and recycle their packaging because they worried deeply about the environment. Consumers with a utilitarian mindset evaluate products based on their price, quality, and value for money in addition to the environment, as mentioned by Ho & Lin [36]. Another study by Qin & Song [8] pointed out that consumers' motivation would play a significant role in determining their propensity to interact with any sustainable packaging labels that are available. A significant study of Mehraj & Čabajová [4,37] focusing on demographics differences with respect to sustainable packaging and clarified that demographics have a significant role in the adoption of sustainable packaging. Research of Dewi et al and others [38,39] indicates that women exhibit greater awareness of sustainability compared to males. Higher wealth and educational achievement may also be significant drivers of the intention to purchase sustainable packaging. Another study of Alagarsamy [7] identified that financial stability had an impact on environmental choice while age had no effect. Nevertheless, Zhao & Sun [40] found out in the studies they performed that customer decisions to buy environmentally friendly items were affected by demography and behavioral factors in terms of income, life cycle, level of education and learning. Young people who place a higher value on EFSB will be more environmentally aware than other customers, and they will also be more likely to purchase clothing from merchants who utilize EFS [23]. Making packaging more environmentally friendly has generated increasing attention from all parties involved over the past two decades' years, including the government, citizen action public, companies, and consumers. Paper is regarded as one of the materials which can be least harmful to the environment, as noted by the author Salehi & Pazokinejad [41]. Additionally, the writer Abatan et al. [42] has shown that environmentally conscious customers are more likely to purchase environmentally friendly items and engage in environmentally friendly activities like recycling. The study findings of Mahmoud and Ahmed [43] explored that the design and building of a container that saves a product is the main purpose of packing. Plastic

is excellent at this and has made it possible for marketing offers to move extensive distances and stay on shelves for lengthy periods of time while still being in good enough shape to be sold. Moreover, as customers continue to engage with the product long after they have made a purchase, packaging has evolved into an essential marketing tool for developing a distinctive personality or brand, as observed by Loučanová [44]. Based on the study of Sigurdsson & Fagerstrøm [45], an organization's communication marketing effort may be said to be centered around the label on that packaging. The consumer is essentially informed about what it is, how to use it, and any regulatory restrictions regarding weight, elements, and originator identity. It is the first and most important component in building a public perception and positioning the brand in the light of green marketing [44]. Magnier et al. [46] conducted a research that demonstrate the impact of color on consumers' perceptions and interest towards quality, price, and durability of a marketing offer. Customers' perceptions of prices are influenced by colors in the light of eco-friendly packaging. As per the study of Herrera Burstein [47] focusing on promoting sustainable consumption among university students and stated that colors have distinct meanings for consumers, who associate them with certain ideas and preferences. According to Lan [48] different package colors have symbolic meanings. For example, green conveys a sense of natural, assurance, stability, and ease. The color red is a brightly colored flaming, and passionate representation of human enthusiasm. Orange is a color that symbolizes strength, affordability, and informality. White denotes kindness, purity, cleanliness, elegance, and formality, whereas brown represents the casual and simple. A well-designed product satisfies present-day customer expectations and enhances consumer satisfaction noticed by Shimul & Cheah [3]. Another study of Kazibudzki et al. [49] packaging consists of sub elements that function with marketing strategies in terms of marketing 4P, such as product, price, place, and promotion. The label's color, style of font, and container design all work together to persuade consumers to form a favorable perception of the brand, as reported by Mathew [7]. Based on the analysis of Lee [50] the packing option that consumers choose is solely determined by economic factors. Consumers do, in fact, evaluate the positive aspects, convenience, and price against the estimated costs. Due to the fact that people are busy and time is limited in our modern society, attractive packaging is essential for getting a competitive advantage over rivals that highlighted by Tottman [51]. Additionally, the authors Wang & Morabbi [52] realized that sustainable packaging would be the best option to increase the competitive advantage and the market share.

Research Gap

Most research on sustainable packaging focuses on developed countries where people are more aware of environmental issues. In developing countries like Bangladesh, there is limited research on how sustainable packaging affects consumer buying decisions. Bangladesh has unique challenges, including economic conditions, cultural values, and affordability concerns, which influence consumer choices. Important factors like trust in brands, product quality, product durability and awareness of environmental benefits are often overlooked. There is a need for research in Bangladesh to understand these issues and help businesses and policymakers promote sustainable packaging effectively

Conceptual Framework and Hypothesized Model

Numerous prior investigations have been carried out to comprehend the elements influencing customers' willingness to make a buy on sustainable packaging. The literature suggests that multiple factors influence consumers purchase intentions towards online sustainable packaging including availability, durability, quality of sustainable packaging elements, awareness and cost. Based on the study by Oloyede & Lignou [25], Heredia-Colaco [21], Cook et al., [33], Zhao et al., [40] and Abtan et al., [43] the following theoretical framework is developed for this study.

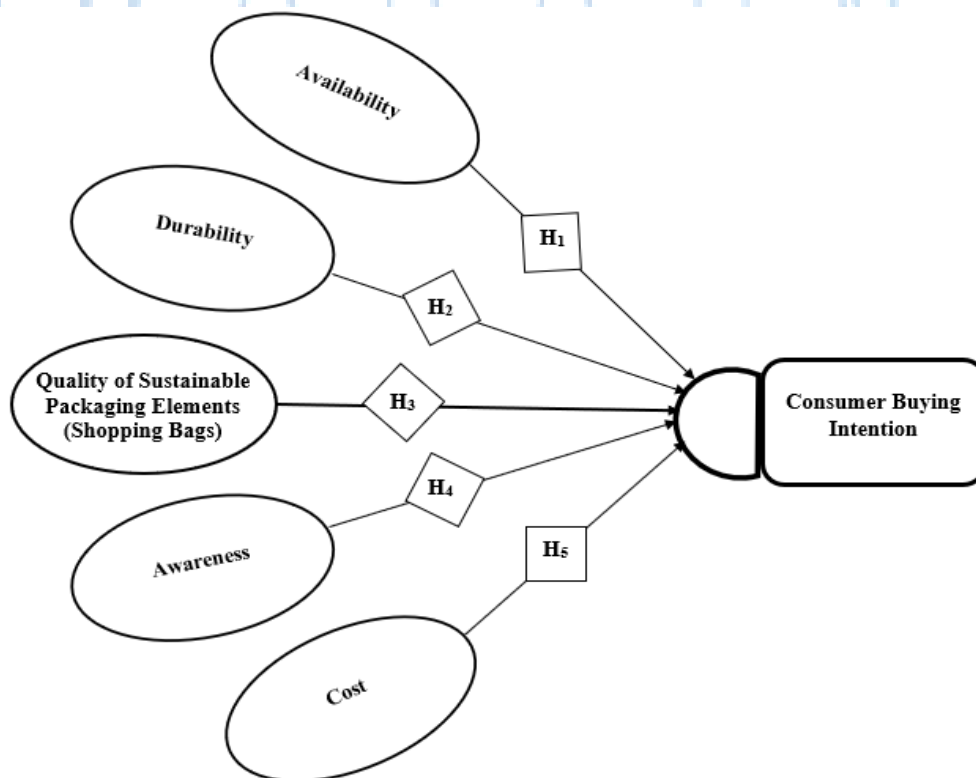


Figure- 01: Conceptual Framework and Hypothesized Model

Consumer Purchase Intentions

Purchase intention indicates how a customer feels about a particular buying habit and how seeking they're willing to pay for it. The desire of a consumer to purchase a specific good or service is known as purchase intention. Purchase intention is a dependent variable that is influenced by a number of internal and external variables. One of the most significant marketing metrics is purchase intentions. Measuring purchase intentions is useful in developing and designing effective marketing communication strategies [28]. Determining the particular kind of material that should be presented in an advertising can be facilitated by understanding the purpose of the consumer [12]. The intentions may provide insight into the consumer's mental states of knowing. And the design of marketing initiatives may be developed based on this measurement. Consumer attitude may be considered as a feeling of favorable or unfavorable that customer has towards an objects. In this study the purchase intention of the consumer for sustainable shopping bags packaging has measured with the help of five factors named availability, durability, quality of sustainable packaging elements, awareness and cost.

Availability

By availability we mean the fact that something is possible to get, buy or find is known as availability. Availability influences the consumers to buy more. If the sustainable shopping bags are available in the shopping outlet the buying intention of consumer will be enhanced. So, H_1 is proposed.

H₁: Availability of sustainable shopping bags has positively affected consumer buying intentions.

Durability

Durability is the ability of a physical product to remain functional, without requiring excessive maintenance or repair, when faced with the challenges of normal operation over its design lifetime [52]. According to Webster, N [53] the meaning of durability indicates the ability to the state or quality of being durable; the capacity to continue perform or for an extended period of time under any circumstances. Products durability in prospects of sustainable shopping bags has a great impact on customer buying intention because consumers are naturally prone to much more durable sustainable shopping bags, as highlighted by Alyousef at el. [54]. So, H_2 is proposed.

H₂: The durability of sustainable shopping bags positively affects consumer buying intentions.

Quality of Sustainable Packaging Elements

Quality can be defined as zero defect. Quality also known to us the ability of a product to fulfill the customer expectation. Quality is the key factor to owning sustainable shopping bags for a customer which is addressed by Sweeney [55]. Modern consumers think sustainable shopping bags has a great impact in customer buying intentions than others as it stimulates natural existence. So, H₃ is proposed.

H₃: The quality of packaging elements in terms of color, design, materials, size, labeling, etc. of sustainable shopping bags positively affects consumer buying intentions.

Awareness

Awareness can be defined as knowledge or perception of a situation or fact. Consumers are very much aware about the using of sustainable packaging. They think that sustainable packaging is so significant to them because it reduces the eco-logical footprint of all the stages in the product life cycle as well as reduces their environmental impact [34]. The positive side is that more individuals are becoming conscious of the immediate and long-term advantages of environmentally friendly packaging. In fact, considerable numbers of companies include biodegradable and environmental packaging as one of their USPs [16]. Raising consumer knowledge of environmentally friendly packaging improves customer retention and increases the likelihood of customers purchasing from a company again and again [32]. So, H₄ is proposed.

H₄: Awareness of sustainable shopping bags has a positive effect on consumer buying intentions.

Cost

By cost we mean that an object or action require the payment of a specified sum of money before it can be obtained. Cost also known to consumers as an amount that has to be paid or spent to buy or obtain something [43]. Today's consumers think that sustainable packaging shopping bags carries reasonable cause that has strong influence in their buying intention. According to Aziz et al. [56] declared that among the product, price, place and promotion, price is the most influential factor that affect consumers' purchasing decision in most cases. Pålsson [57] stated that cost strategy has an immense impact on customers' intention to buy. Besides, several studies carried out by various research organizations have not yet reached a point where environmentally friendly packaging can be produced affordably, as identified by Petkowicz et al. [58]. That's why following hypothesis was developed.

H₅: The cost of sustainable shopping bags positively affects consumer buying intention.

Research Questions

- ✓ What are the impact of sustainable packaging towards consumer purchase intention in case of sustainable shopping bags?
- ✓ What are the factors that actually affect the consumer purchase intention in selecting sustainable shopping bags?

Methodology of the Study

Methodology indicates that the procedure of undertaking research. This study has been conducted in a very systematic procedure starting from the selection of the topics to the final preparation. This study analyzed the buying intention of consumers towards sustainable packaging regarding shopping bags. In this study the purchase intention of the consumer for sustainable shopping bags packaging has measured with the help of five factors named availability, durability, quality of quality of sustainable packaging element, awareness and cost.

Nature of the Study: Descriptive (Quantitative) research has been used for the study.

Sources of Data: For this study both primary and secondary data have been used. Between primary and secondary sources, the majority of the information was gathered from primary sources. To collect the primary data self-structured questionnaire and direct observations have been used. For collecting secondary data, the different journals, books, related publications and websites have been used.

Methods of Data Collection: For data collection self-structured questionnaire has been used and data has been gathered from the consumers who purchase sustainable shopping bags from the retail outlets.

Scaling Techniques: For this study Likert Scale (Non-comparative Scaling Technique) has been used with five response categories (1- Strongly agree, 2- Agree, 3- Neither agree or disagree, 4- Disagree, 5- Strongly disagree) that represented the degree of agreement or disagreement with each of a series of statements.

Target Population: For this study the target population was all of the consumers who purchase sustainable packaging, particularly shopping bags from the retail outlets.

Sampling Technique: The convenience sampling method has been taken for selecting samples.

Sample Size: The sample size was 150. Data has been collected from 150 respondents among consumers who purchase sustainable packaging from retail outlets.

Research Tools: Collected data is analyzed by using MS Excel and Statistical Package for Social Science (SPSS version 21) software.

Findings-1: Demographic Profile of the Respondents

The following table 01 exhibits the respondents' demographic profile. Demographic profile of the respondents shows that majority of the participants are male (66.7%) and female (33.3%); among of them mostly are 20-25 years and 26-30 years' category (82%) and have completed graduation (48.7%).

Table-01: Demographic Profile of the Respondents

Variables	Categories	Frequency	Percentage
Gender	Male	109	72.7%
	Female	41	27.3%
Marital Status	Married	18	12%
	Single	132	88%
Age	Below 20 years	7	4.7%
	20-25 years	68	45.3%
	26-30 years	64	42.7%
	31-35 years	7	4.7%
	36-40 years and above	4	2.7%
Education Level	SSC (Secondary School Certificate)	15	10%
	HSC (Higher Secondary Certificate)	18	12%
	Graduation	73	48.7%
	Masters/Post-graduation	41	27.3%
	Others	3	2%
Occupation	Student	74	49.3%
	Business	16	10.7%
	Private Job	9	6%
	Govt. Job	6	4%
	Others	45	30%
Income Level	Below 15,000	87	58%
	15,000 to 25,000	39	26%
	25,000 to 35,0000	21	14%

	30,000 to 40,000	2	1.3%
	Above 40,00	1	.7%

Findings- 2: Elementary Data from the Respondents

Furthermore, the respondents to this survey provided some basic information regarding their purchasing attitudes, which are shown in the following Table-02:

Table-02: Basic Information about sustainable shopping bags from the Respondents

Variables	Categories	Frequency	Percentage
Do you know about sustainable packaging?	Yes	150	100%
	No	--	--
Have you purchased any sustainable packaging products?	Yes	150	100%
	No	--	--
Why would you like to purchase sustainable packaging product?	Good Quality	--	--
	Health Consciousness	48	32%
	Environmental Consciousness	94	62.7%
	others	8	5.3%
How often would you purchase sustainable packaging product?	Daily	21	14%
	Weekly	--	--
	Monthly	--	--
	When Needed	129	86%
What types of sustainable shopping bags you like when you purchase?	Paper Bags	--	--
	Clothing Bags	--	--
	Thread Net Bags	--	--
	Which One Is Suitable	150	100%
Reasons for choosing sustainable shopping bags?	Reasonable Cost	--	--
	Quality of Packaging Materials	102	68%
	Availability	20	13%
	Durability	--	--
	Awareness	28	18.7%
Satisfaction of purchasing sustainable packaging product:	Highly Satisfied	127	84.7%
	Satisfied	23	15.3%
	Neutral	--	--
	Dissatisfied	--	--
	Highly Dissatisfied	--	--

Findings- 3: Variable Analysis

Reliability Analysis

Cronbach's alpha was tested for the study of 21 items, and the overall reliability of the measure was 0.926, which is matched with the standard value of 0.60 [59], and it indicates that an above 0.60 value of reliability is an acceptable level of reliability. So the questionnaire used was reliable for information collection.

Table-03: Reliability Analysis

Cronbach's Alpha	Number of items
0.926	21

KMO (Kaiser-Meyer-Olkin)

In order to determine if the sample was sufficient to take into account the data that is; whether the data was normally distributed or not the sample adequacy test was performed to the characteristics of the consumer buying intention towards sustainable shopping bags. The KMO values was 0.879 indicating that the sample size was adequate to consider the data normally distributed as the KMO value above 0.7 are considered as normality of data.

Table- 04: KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.879
Bartlett's Test of Sphericity	Approx. Chi-Square	2091.349
	df	210
	Sig.	.000

Sources: Data calculation

Correlation analysis: Investigating the relationship between availability, durability, quality of sustainable packaging elements, awareness and cost and consumer buying intention towards sustainable shopping bags.

H₁: The availability of sustainable shopping bags and customer purchasing intentions are significantly correlated.

Table- 05. Correlation analysis between availability and consumer buying intention

Correlations			
		Availability	Consumer Buying Intention
Availability	Pearson Correlation	1	.618**
	Sig. (2-tailed)		.000
	N	150	150
Consumer Buying Intention	Pearson Correlation	.618**	1
	Sig. (2-tailed)	.000	
	N	150	150

** . Correlation is significant at the 0.01 level (2-tailed).

Reporting Pearson correlation: Pearson product correlation of availability and consumer buying intention was noticed to be moderately positive and statistically significant ($r = .618$, $p < .001$). Thus, H_1 was supported. This also indicates an increase in availability of sustainable shopping bags would lead to a higher consumer buying intention in the followers.

H₂: There is a significant relationship between durability and consumer buying intention in prospects of the sustainable shopping bags.

Table- 06. Correlation analysis between durability and consumer buying intention

Correlations			
		Durability	Consumer Buying Intention
Durability	Pearson Correlation	1	.736**
	Sig. (2-tailed)		.000
	N	150	150
Consumer Buying Intention	Pearson Correlation	.736**	1
	Sig. (2-tailed)	.000	
	N	150	150

** . Correlation is significant at the 0.01 level (2-tailed).

Reporting Pearson correlation

Pearson product correlation of durability and consumer buying intention was found to be moderately positive and statistically significant ($r = .736$, $p < .001$). Hence, H_2 was supported. This shows that an increase in durability of sustainable shopping bags would lead to a higher consumer buying intention in the followers.

H₃: There is a significant relationship between quality of sustainable packaging elements and consumer buying intention towards sustainable shopping bags.

Table- 07. Correlation analysis between quality of sustainable packaging elements (color, design, materials, size, labeling) and consumer buying intention

Correlations			
		Quality of sustainable packaging elements	Consumer buying intention
Quality of sustainable packaging elements	Pearson Correlation	1	.720**
	Sig. (2-tailed)		.000
	N	150	150
Consumer Buying Intention	Pearson Correlation	.720**	1
	Sig. (2-tailed)	.000	
	N	150	150
**. Correlation is significant at the 0.01 level (2-tailed).			

Reporting Pearson correlation

Pearson product correlation of quality of sustainable packaging elements (color, design, materials, size labeling) and consumer buying intention was found to be moderately positive and statistically significant ($r = .720$, $p < .001$). Hence, H₃ was supported. This shows that an increase in quality of sustainable packaging elements (color, design, materials, size labeling) of sustainable shopping bags would lead to a higher consumer buying intention in the followers.

H₄: There is a significant relationship between awareness and consumer buying intention towards sustainable shopping bags.

Table- 08. Correlation analysis between awareness and consumer buying intention

Correlations			
		Awareness	Consumer Buying Intention
Awareness	Pearson Correlation	1	.850**
	Sig. (2-tailed)		.000
	N	150	150

Consumer Buying Intention	Pearson Correlation	.850**	1
	Sig. (2-tailed)	.000	
	N	150	150
**. Correlation is significant at the 0.01 level (2-tailed).			

Reporting Pearson correlation

Pearson product correlation of awareness and consumer buying intention was found to be moderately positive and statistically significant ($r = .850$, $p < .001$). Hence, H_4 was supported. This shows that an increase in awareness would lead to a higher consumer buying intention in the followers.

H₅: There is a significant relationship between cost and consumer buying intention in terms of sustainable shopping bags.

Table- 09. Correlation analysis between cost and consumer buying intention

Correlations			
		Cost	Consumer Buying Intention
Cost	Pearson Correlation	1	.439**
	Sig. (2-tailed)		.000
	N	150	150
Consumer Buying Intention	Pearson Correlation	.439**	1
	Sig. (2-tailed)	.000	
	N	150	150
**. Correlation is significant at the 0.01 level (2-tailed).			

Reporting Pearson Correlation

Pearson product correlation of cost and consumer buying intention was found to be moderately positive and statistically significant ($r = .439$, $p < .001$). Hence, H_5 was supported. This shows that an increase in reasonable cost would lead to a higher consumer buying intention in the followers.

Hypotheses Testing: In hypothesis testing, a structural model is used to help researchers making decisions about the offered hypotheses. It also assists in understanding the link between the dependent and independent variables. Structural equation modeling is used to test various

hypothesized causal relationship among the buying intention of consumers in case of sustainable shopping bags.in Bangladesh.

Table-10: Multiple Regression Analysis

Hypothesis	Independent Variable	Unstandardized Coefficients		Standardized Coefficients	T	P	Decision
		Beta	Std. Error	Beta			
	(Constant)	-.385	.138		-2.793	.006	
H1	Availability	.259	.065	.190	3.976	.000	Supported
H2	Durability	.167	.060	.170	2.780	.006	Supported
H3	Quality of Sustainable Packaging Elements	.155	.068	.145	2.286	.024	Supported
H4	Awareness	.452	.084	.444	5.356	.000	Supported
H5	Cost	.179	.054	.143	3.328	.001	Supported

Dependent Variable: Consumer Buying Intention

[Note: H= Hypothesis, Std. Error= Standard Error, T= Hypothesis Test Statistic, P=Probability]

The multiple regression analysis model exhibits that availability of sustainable shopping bags has positive influence on enhancing the consumer buying intention ($\beta = .259$, $P = .000$). Tables 4 also shows that durability ($\beta = .167$, $P = .006$), quality of sustainable packaging elements (shopping bags) ($\beta = .155$, $P = .024$), awareness ($\beta = .452$, $P = .000$), cost ($\beta = .179$, $P = .001$) of sustainable shopping bags has positive impact on enhancing the buying intention of consumers.

Discussion on Findings

Findings of the study reveals that the availability, durability, quality of sustainable packaging elements (color, design, materials, size, labeling of shopping bags), awareness and cost of sustainable shopping bags has direct strong influence on enhancing the consumer buying intention. The factor, availability of sustainable shopping bags has great influence on consumer buying intention ($\beta = .259$, $P = .000$). This indicates that if sustainable shopping bags is available at outlets, consumer will favor to buy products with sustainable shopping bags.

Durability has positive impact on enhancing the consumer buying intention ($\beta = .167, P = .006$). It suggests that if sustainable shopping bags is durable like plastic and polythene shopping bags for usage, consumer will favor to buy products with sustainable shopping bags. Quality of sustainable packaging elements (shopping bags) has positive impact on enhancing the consumer buying intention ($\beta = .155, P = .024$). If the packaging elements such as color, design, materials, size and labeling of sustainable shopping bags is attracted to consumer, consumer will put emphasize to buy products with sustainable shopping bags. Awareness on sustainable shopping bags has great influence on consumer buying intention ($\beta = .452, P = .000$). If the consumer is aware on sustainable shopping bags usage, they will emphasize the environmental prevention by purchasing products with sustainable shopping bags. Cost on sustainable shopping bags has great influence on consumer buying intention ($\beta = .179, P = .001$). Consumers evaluate the cost of buying single sustainable shopping bags as positive, they put more concentration on future environmental damage and consider it as logical expenditure.

Recommendations

According to the findings the availability of sustainable shopping bag has positive impact on consumer buying intention in different region but it is not available all over the country. So, marketer can take different types of promotional and distributional strategy to make available the sustainable packaging shopping bags. Products durability in prospects of sustainable shopping bags has a great impact on customer buying intention because consumers are naturally prone to much more durable sustainable shopping bags. It means that today's consumers think that sustainable shopping bags more durable than traditional packaging shopping bags. So, marketer can retain the level of durability to enhance the sales. In accordance with the findings of the study mostly, consumers take or buy sustainable packaging especially shopping bags owing to high level of quality packaging elements like color, design, materials, size, labeling etc. Moreover, modern consumers think sustainable shopping bags have a greater impact on customer buying intentions than others, as they stimulate natural existence. So marketer should pay more attention towards the quality of Sustainable packaging elements to sustain in this competitive market. Awareness has positive impact on consumer buying intention regarding the sustainable packaging shopping bags. Consumers are very aware of the use of sustainable packaging in shopping bags because they think that sustainable packaging is environmentally friendly and reduces the environmental impact. So, marketers should adjust to the digital marketing platform to create more awareness among consumers.

Also, the cost of sustainable packaging for shopping bags has a positive impact on consumer buying intentions. Consumers of today believe that sustainable packaging shopping bags carry a lower cost than traditional packaging materials. So marketers can retain the level of cost so as to enhance sales.

Conclusion and Future Research Directions

Understanding the consumers is the most vital thing in the success and failure of any kinds of business entity because all the business activities are designed to fulfill the needs and demands of a customers. After the analysis of statistical data and findings arrived, it can be concluded that all of the variables like availability, durability, quality of packaging elements, awareness and cost attributes have positive impact on consumers purchase intention in case of selecting sustainable packaging shopping bags. It means availability, durability, quality of packaging elements (color, design, materials, size labeling), awareness and cost attributes have strong influence on the consumers buying intentions. This paper will help to identify the needs and demands of the consumers who wants to purchase sustainable packaging shopping bags in lieu of traditional shopping bags. Today's marketers can use these findings for designing an effective marketing strategy and satisfy the maximum expectation level of the consumers. To keep pace with the changing marketplace, marketers have been facing hard competition from every angle of the market to sustain in the competitive market. The findings of the study would help to the marketers to create a lasting impression in customer mind in selecting sustainable packaging. Therefore, the findings of the study may help the marketers to understand the consumers properly, to design an effective marketing strategy as well as to gain competitive advantage in todays' competitive market. However, the study had certain drawbacks. This study has a limited sample size (150 respondents only) and it was geographically focused (only Kushtia and Jhenaidah district in Bangladesh). The study may focus on a limited set of variables, but some other variables may affect consumers' purchase intentions in the light of sustainable shopping bags. So further research can be carried out with large sample size and to the various locations identifying more factors to enhance customer buying intentions towards sustainable packaging in Bangladesh.

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