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Measuring the impact of green packaging on consumer purchase intention: A study on selected convenience goods in Bangladesh

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Abstract

The fundamental accomplishment of moving towards the green concept is the use of green packaging in a product. With the growing worldwide environmental concerns, green practices like green packaging have become more important for businesses and consumers worldwide. This study was intended to identify the key factors that actually help enhance the buying intention of consumers towards green packaged convenience goods in terms of mini-pack shampoo, chips, and wallet tissue in Bangladesh. Based on previous research and fieldwork, a total of five (5) attributes have been chosen for the study. The survey was conducted using a self-structured questionnaire, with data collected from 150 respondents among the users of green 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 examined that the variables named environment concern, environmental knowledge of green packaging, green trust, and availability have positive impact on consumers' purchase intention towards green packaged convenience items in terms of mini-pack shampoo, chips and wallet tissue. On the other hand, the variable named price has a negative impact on consumers' purchase intention towards green packaged convenience goods in the prospects of mini-pack shampoo, chips, and wallet tissue. The results presented have significance for national policymakers, product and package designers in Bangladesh, and marketers therein for creating compelling and successful marketing strategies for eco-friendly packaging that appeals to consumers' subconscious needs.

Keywords: Green packaging; Environmental knowledge; Convenience goods; Green trust; Purchase intention

1. Introduction

The environmental effects of human behavior and activities are becoming more and more dangerous [1]. Despite this knowledge, individuals attempt to continue acting in the same way, even knowing it will ultimately work against them. The environment's retaliation against human existence encompasses pollution, natural catastrophes, and climate change [2]. Massive amounts of plastic garbage have the potential to destroy the ecosystem, causing climate change, harmful material release, and carbon dioxide emissions, also known as the greenhouse effect [3]. Because this issue is now affecting the entire planet, people need to be more mindful of it and accountable for their actions [4]. Moreover, the majority of individuals nowadays are extremely aware of their surroundings and hygiene [2]. People are becoming more sensitive to the environment in recent times, and they are always looking for methods to improve it [5]. Green packaging generally makes use of reprocessed and biodegradable materials, minimizing the amount of natural resources wasted during manufacture [6]. For the simple reason that consumers today want to purchase goods in environmentally friendly packaging and avoid purchasing goods made of plastic or other synthetic materials that are bad for their health or the environment [7]. Green packaging, sometimes referred to as sustainable packaging, minimizes the negative environmental effects of packaging and employs materials and production processes that require less

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energy [8]. Biodegradable and recyclable materials are frequently used in green packing solutions rather than traditional materials such as plastic and aluminum foil [9]. Furthermore, green manufacturing techniques take action to lower their power production and greenhouse gas emissions [10]. Global environmental preservation has taken on increasing attention in recent years all around the world. Green packaging is therefore crucial to promoting sustainable growth and lessening the effects of contamination and waste [11]. In practical terms, governments are circulating updated regulations, taxes, and other measures to make packaging ecologically friendly and sustainable, which stimulates businesses to support environmentally conscious packaging in addition to the growing priority that customers place on the environment. In this regard, the country-by-country introduction of legal measures on packaging waste disposal is mandated under directives supported by the European Union [12]. Customers play a critical role in green packaging, as modern lifestyles frequently call for extended product shelf lives [3]. In order to maintain their houses, thousands of millions of customers buy goods from grocery stores all around the globe [6]. Numerous items are packaged in single-use containers that are discarded soon after being purchased. Within a single year, the typical American home is expected to use more than 500,000 tons of plastic supermarket packaging [9]. The adoption of green information causes a shift in customer perception, which in turn affects consumer behavior and, ultimately, influences consumer purchasing decisions [5]. The size of the Bangladesh shampoo market is predicted to be USD 146.45 million in 2024 and USD 261.82 million by 2029, with a compound annual growth rate (CAGR) of 12.32% from 2024 to 2029. It's noteworthy to note that due to their greater penetration, the mini pack business is expanding more quickly than the bottled shampoo market [13, 14]. For most people, young or old, potato crackers are the ideal snack. Currently, the Crackers and Chips Market size in Bangladesh is Tk 650 crore, where Bombay sweet is in the leading position with 50 percent of the market share, and Pran is standing in the second position with 20 percent of the market share [15]. Growing awareness of health hygiene and increasing complexity and technology have increased demand for tissue, which in turn has influenced and eventually helped the tissue sector thrive [13]. In just ten years, the tissue goods market in Bangladesh has grown from Tk 720 crore to Tk 800 crore annually. However, its proliferation might result in a catastrophe for the ecosystem. Due to the several layers of film coating behind the plastic used to keep the items intact, mini-packs, wallet tissue, and huge amounts of chip packing materials are essentially non-recyclable. Companies are compelled to create official sustainability strategies in addition to using more green packaging, mostly due to this demand [16].

1.1. Significance of the Study

The desire to be "green" or "eco-friendly" has become increasingly popular right now. Many businesses identify their products as environmentally friendly in an attempt to promote them. Consequently, in line with environmental awareness, customers are becoming more demanding about what they buy. In the era of shifting consumer perceptions of behavior and attitudes, being environmentally conscious is a desirable trait to have on a global scale. The study findings will also give insights into customers' agreement and reaction, which will be useful for people who have an interest in green products and want to use them effectively in green marketing. Furthermore, the investigation might be an inspiring reference for individuals who look into the prospect of a new company model in relation to an emerging trend. This research will gather data about consumer intentions for green packaging, including the elements that influence consumers' attitudes toward and desire to buy products made of packaging that is friendly to the environment.

Objective of the Study

Bangladeshi consumers' propensity to purchase environmentally friendly packaging is steadily rising. Green packaging is becoming widespread in the consumer goods sector as a result of the massive green wave that is now developing. This study is conducted to address the following objectives:

- To identify the key factors that actually help enhance consumers' intentions to purchase green packaged convenience products.
- To investigate the relationship between independent variables and dependent variables in terms of environmental concern, green trust, consumer knowledge, price, availability of the intended green packaged convenience product, and consumer purchase intention.

1.2. Research Question

- What are the quality factors that actually affect the consumer's purchase intention in selecting green packaging with regard to convenience products in Bangladesh?
- Are those variables significant or not on the customers' purchase intentions towards green packaged convenience products?

2. Literature Review

Several studies have focused on the impact of green packaging on customer purchase intention in the context of the whole world [17]. Although numerous studies have been carried out around the world, unfortunately, in Bangladesh, very few studies have been conducted on the impact of green packaging on customer purchases with respect to convenience goods [18]. A comprehensive study may be carried out because customers are the primary reason for buying convenience items. The authors, Mollah et al., [19], said that the idea of green packaging is relatively new, but it has gained a lot of attention recently. With adverse consequences for society and the economy, it is undoubtedly a crucial topic to take into account in order to achieve the Sustainable Development Goals in Bangladesh. Several review publications have emphasized that the majority of research on environmentally friendly packaging focuses on the manufacturing process (technical factors) and the composition of the packaging, as followed by Chanda & Koch [20, 17]. Another study was carried out by Wahab et al., [21] and examined some particular areas, including marketing, customer behavior, the logistics impact of packaging, and the concept of the circular economy in this regard. In the past decade, consumers have traditionally used plastic shopping bags that have a great negative impact on the environment because they take countless years to break down and produce toxic fumes and greenhouse gases that are harmful to animals, wildlife, and humankind, as denoted by Baruah & Das [22]. Therefore, consumers are now willing to practice green packaging owing to its environmental friendliness [18].

According to the study's findings of the Jain & Hudnurkar [23], more quickly than ever before, the environment is transforming around us, but not in a positive manner. Animals are going extinct, ice caps are melting, and the temperature is getting higher. Furthermore, our everyday waste is increasing at an alarming rate in the middle of all of this. It is incredible how many non-biodegradable products we use on a daily basis. We don't have enough room to dispose of our trash at this moment. Therefore, FMCG plays an immense role in our use of plastics and other materials that are not biodegradable, as identified by Tyagi and Paul et al., [24]. According to Chirani et al., [25] green packaging, also referred to as an "ecofriendly package," is characterized as a package made of natural plants that can be utilized again, disposed of for further processing, and support sustainable development throughout the whole life cycle. It is also safe for human health and the health of animals. In other words, green packaging is specifically defined as packaging that contributes to the preservation of the surroundings, can be recycled, repurposed, degraded, or disposed of, does not harm the atmosphere, keeps pollutants out of the environment, and maintains an absence of pollution throughout PLC, as narrated by Tamim & Akter [26]. Research by Chin & Hong [27] defines life cycle analysis as a comprehensive process that considers a product's entire lifespan, from development to disposal. Most buyers seem to focus 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. Lan et al., [28] revealed in their study that businesses are developing fresh product categories for safe, ethical, and green packaging. This clearly demands the purchase of innovative filling lines to handle more sustainable, recyclable, reusable, and ecologically friendly packaging, or the formation of a cooperative relationship with packaging providers. They address many different aspects, such as how organizational, human, and technological capacities support the use of eco-design innovation in packaging. The authors Asim & Seng et al., [29] pointed out that teenagers in Bangkok's consumption habits and their perception of green packaging are influenced by a few key variables. They include, for instance, one's perspective on environmental issues and familiarity with eco-friendly packaging. These elements may influence consumers' perceptions when it comes to buying and using packaged green goods. They choose products more thoughtfully, taking into account packaging that doesn't damage animals or the environment or that can lessen the effects of environmental issues on the planet. Islam et al., and others [30, 12] said that, as items are being stored, transported, and used, packaging becomes critical to their marketing, preservation, and protection. Used packaging will, however, ultimately degrade into plastic garbage and harm the environment severely. There are considerable concerns about the effects of waste creation and treatment have on the environment. Additionally, customers are presumed to have a somewhat active role in resolving environmental issues by recycling and selecting eco-friendly products and lifestyles, as identified by Wandosell [31]. Reynald [32] conducted a study on eco-friendly packaging in the food industry with quantitative analysis and demonstrated that, in the absence of environmental knowledge about information, especially on labels, many customers are unaware of the relationship between the products they purchase and the several environmental effects of their choices. The market's scarcity of environmentally friendly packaging options and customers' incapacity to discern between more and less environmentally friendly package alternatives are two further contributing factors. According to Eti et al., [33], the mindset of green packaging and the purchasing habits of youths in Bangladesh are influenced by a few fundamental variables. The main desires of eco-packaging research have been on the package's communication elements, such as its labeling, effectiveness, color, and size. Based on past research by Nahar and Tamim [34, 26], customers choose eco-friendly packaged commodities over regular ones. They agree that reducing superfluous packaging has the greatest environmental benefit. As a result, availability and attributes of products could turn into new and important indicators

in influencing purchaser choices. Another study by Alsaggaf et al., [35] focused on some internal and external factors like social obligation, environmental awareness, core beliefs, and willingness to pay that may influence consumer desires in the present time. He also argued that social media tools concerning green markets are introduced to draw in non-green consumers and develop awareness of the environment. Reddy et al., [36] observed that the term "green consumers" is growing in popularity in present society. Green customers belong to those who feel worried about the world's environment. They are inclined to purchase environmentally friendly things. Consumers didn't want green products until durability, quality, reliability, availability, and price were combined. Additionally, improving structural elements, for instance, availability, naming, sufficient information, and cost of ecologically conscious items, and invigorating pro-environment consumer ideas, might lead to the spread of environmental consumerism, followed by Swarnika & Rathnasiri [37]. In their investigations, Haq et al., [38] concluded that personal norms increase the chance of selecting such environmentally friendly packages in the shop. They also note that personal standards are frequently determined by how broadly accepted they are in society and if societal norms are backed by positive or negative punishments that have an impact on consumers' minds. Even so, Oliver et al., [39] explored that personal norms have a favorable impact on customers' buying intentions. This is in line with the results of the present investigation. Attitude is the subsequent most powerful factor in Western Province customers' propensity to purchase eco-friendly packaged consumer goods. The researcher Islam & Sade [40] 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 Ker et al., [41]. Based on the study of French, N, & Truong [42, 28], "green consumers" are those who are aware of and interested in ecological issues. It has been observed that customers purchase eco-friendly products when their main needs performance, superior quality, convenience, and affordability are satisfied and since they comprehend how an eco-friendly product can aid in the solution of an ecological issue. The writers also explored that 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. The scholar Adrita [43] conducted research on the variables underlying Bangladeshi consumers' propensity to buy items with environmentally friendly packaging. The study's findings support the notion that customers' preferences for eco-friendly packaging and environmental concern are closely linked. According to the study's conclusions, those who care more about the environment are more likely to support goods that come in environmentally friendly packaging. Hossain et al., [44] looked at how customers' purchasing decisions were influenced by their choice of green packaging, eagerness to make payments, and environmental understanding. According to their findings, consumers' decisions regarding what to buy in Bangladesh with respect to convenience goods were greatly influenced by environmental awareness and green knowledge. Consumer decision-making about green products and environmentally friendly packaging was examined by Siddiqui et al., [45] in Germany. Although the green product itself had no statistically significant impact, the researchers discovered that consumers' purchasing decisions were highly influenced by green packaging. A quantitative study design and an exploratory technique were adopted in this study. To arrive at a sample size of 300 individuals, a stratified sampling method was used. Furthermore, in order to satisfy the present expectations of the industry, it is imperative that manufacturers, customers, and brands provide green packaging. Green packaging is becoming a need in the food and beverage business, even if its importance isn't immediately apparent, as mentioned by Kaur [46]. Businesses frequently need to use green packaging techniques to reduce their environmental impact because of regulatory constraints, consumer demand, and changing market requirements [47]. Consumer product choices with regard to environmentally friendly packaging were reviewed by Amani [48] in the cosmetic industry. According to the authors, these results are consistent with other studies that showed comparatively minimal relationships between variables, including age, education, and ethical or environmental opinions. This study compared the importance of green packaging to other relevant product attributes in order to investigate how consumers make environmental decisions. Furthermore, in the investigation of Dsouza & Kulal [49], there is a stronger relationship between income class and pro-environmental conduct when people are happy with their financial situation. He also found a link between environmental consciousness, economic satisfaction, and environmental responsibilities. Customers' plans to buy ecologically friendly items are subsequently influenced by these opinions.

2.1. Conceptual Framework and Hypothesized Model

Based on the previous literature and studies of Mahmoud et al., [50], Reddy et al., [36], and Vyas et al., [51], the following variables have been taken into account to measure customer buying intentions towards green packaging convenience items. The conceptual framework and hypothesized model that have been shown in figure 1 explicate the purchase intention of consumers towards green packaging in the context of Bangladesh. The conceptual framework of this study has identified some key factors like environmental concern, environmental knowledge, availability, product attribute and green trust that ultimately leads to enhance the propensity of consumers' purchase intention towards green packaging.

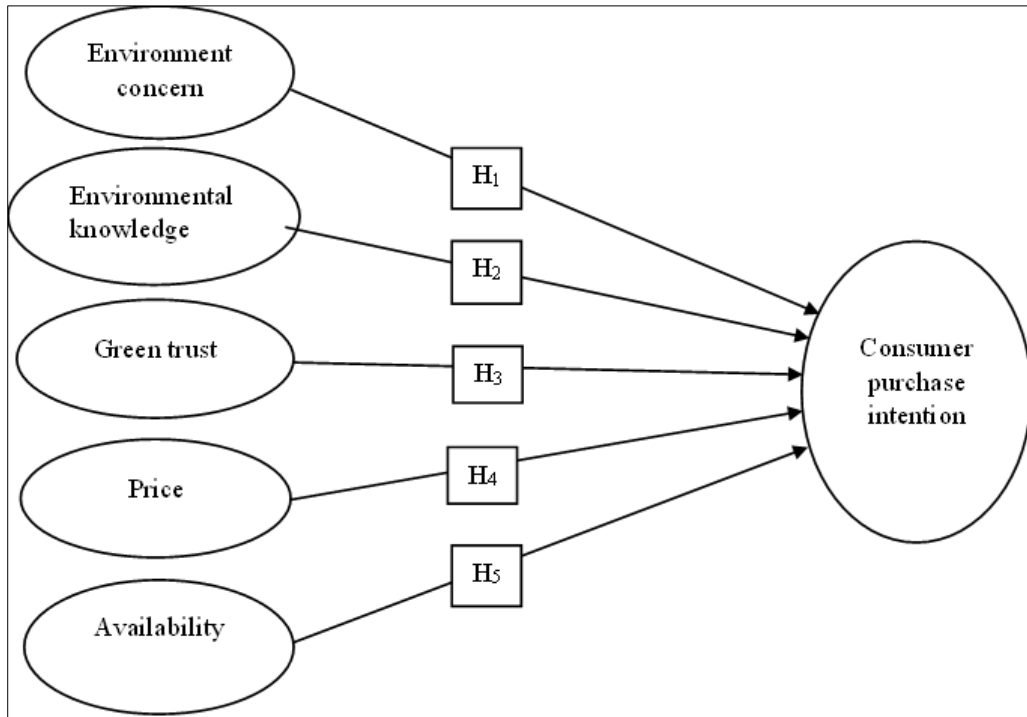


Figure 1 Conceptual framework and hypothesized model

2.2. Environmental Concern

Environmental attitudes are driven by a person's sense of self and their idea of being a vital component of the natural environment [51]. It is reported that environmental attitude is “the collection of beliefs, affect, and behavioral intentions a person holds regarding environmentally related activities or issues [52].” Furthermore, environmental concerns have become known as a key driver of consumer behavior in the past few years [53]. Consequently, the investigator formed the following hypothesis.

H1: There is a positive influence of environmental concern on purchase intention towards green packaged convenience products among consumers in Bangladesh.

2.3. Knowledge of green packaging

Knowledge is marked as an individual faith that is informed and enhances an individual's ability to make meaningful decisions [54]. A key part of marketing is understanding the consumer, which is necessary to shape their reaction [55]. Having more information boosts consumer knowledge, which might influence purchase decisions [56]. It depends on how the information is delivered and how it is interpreted by customers. Thus, H2 is proposed.

H2: Knowledge of green packaging has a significant impact on customer purchase intention with regard to green packaging.

2.4. Green trust

Green trust is defined as “a willingness to depend on a product, service, or brand based on the belief or expectation resulting from its credibility, benevolence, and ability about its environmental performance [57].” Green trust increases the confidence level of consumers that specific goods, services, companies, or brands have the potential to positively influence environmental improvement [58]. As a result, the researcher formed the following hypothesis.

H3: Green trust positively affects the customer's purchase intention towards green packaged convenience products.

2.5. Price

Price is known to consumers as an amount that has to be paid or spent to buy or obtain something [59]. According to Hidayat et al. [60] declared that among the product, price, place and promotion, price is the most influential factor that affects consumers' purchasing decisions in most cases. Today's consumers think that green packaging convenience

goods carries a reasonable cause that has a strong influence on their buying intention [61]. That's why the following hypothesis was developed.

H4: There is a strong and positive relationship between price and green packaged convenience products.

2.6. Availability

The term availability indicates the fact that something is possible to get, buy, or find in an easy way [62]. Availability is thought to be one of the underlying factors that might influence environmentally friendly behavior [59]. According to the study by Akter [63], consumers don't have much time or energy to look for environmentally friendly items. Customers' attitude-behavior gap is impacted when they have trouble accessing green items. The availability of green packaging influences consumers to buy more. So, H5 is proposed.

H5: The availability of a desired green packaged product positively influences the purchase intention of a green packaged convenience product.

2.7. Consumers' purchase intention of green packaged convenience products

The intent of a consumer to purchase a specific good or service is known as purchase intention [64]. The writer El-Sayed et al., [65] explored in their investigation that the desire to buy consumer goods whose packaging poses no risks to the ecosystem and the natural world is known as the purchase intention of green packaged consumer products. Purchase intention is a dependent variable that is influenced by a number of internal and external variables [66]. In this study, the purchase intention of the consumer for green packaging has been measured with the help of five factors: environmental concern, green trust, knowledge of green packaging, price, and availability of the desired green packaged product.

3. Methodology of the Study

3.1. Nature of the Study

Descriptive (quantitative) research has been used for the study to measure the impact of green packaging on customer purchase intention.

3.2. Information Needs

In this research, the type of information required is basically primary in nature, and all of the data were gathered from various primary sources using a structured questionnaire. All the data are quantitative in nature. Conversely, we have used different secondary sources of data to develop a literature analysis that provides us with context about the stated objectives.

3.3. Measurement Instrument

The research has developed five influential factors that actually help enhance consumers' purchase intentions towards green packaging in Bangladesh.

3.4. Scaling Technique

The study used a five-point Likert scale to elicit comments from the participants. The points that the respondents believe to be the most important and reasonable have been highlighted. Respondents are asked to score how much they agree or disagree using a five-point Likert scale that goes from strongly disagree (1) to strongly agree (5). Prior to finalizing the questionnaire, a pretest was conducted on 25 respondents.

3.5. Questionnaire Formulation

To collect primary data, a self-structured questionnaire was used. The questionnaire was divided into three portions. The first portion includes the demographic profile of the respondents. In the second portion, some elementary data about green packaging was used, and in the third portion, we identified five factors that actually help to enhance consumers' purchase intentions towards green packaging.

3.6. Sampling Technique and Sample Size

Non-probability sampling has been applied since it is relatively less costly and less time consuming to create a sampling frame. Among the several techniques of non-probability sampling, we chose the convenience sampling method for selecting samples. For the study, our sample size was around 150 respondents, and our geographical location was Jashore district in Bangladesh.

3.7. Methods of Data Collection:

For data collection, a self-structured questionnaire has been used, and data has been gathered from consumers who purchase green packaged convenience products from stores.

3.8. Data Analysis

Data are obtained from various consumers and encoded in SPSS (version 21) software for analysis. A combination of descriptive statistics, reliability statistics, and multiple regression calculations are used to examine it.

4. Results

4.1. Demographic Profile of the Respondents

Demographic profile of the respondent has been shown in the following table 1. Demographic profile of the respondents shows that most of the respondents are male (52%) and female (48%); among of them mostly are 20-25 years' category (46%) and have completed graduation (48.7%). Among the 150 respondents, income of 66 participants were below 10000, 38 were 10,000-20,000, 19 were 20,000-30,000, 8 were 30000 to 40000 and 19 were above 40,000. Additionally, among the respondents, 107 were students, 5 were businessmen, 4 had private jobs, 9 had government jobs, and 25 were others, respectively.

Table 1 Demographic Profile of the Respondents

SI. No.	Description	Frequency	Percentage (%)	
1	Gender	Male	78	52%
		Female	72	48%
2	Marital Status	Married	38	25.3%
		Unmarried	112	74.7%
3	Age	Below 20 years	2	1.3%
		20 to 25	69	46%
		26 to 30	48	32%
		31 to 35	16	10.7%
		36 to 40 and above	15	10%
4	Education	SSC	16	10.7%
		HSC	18	12%
		Graduation	73	48.7%
		Masters/Post-graduation	38	25.3%
		Others	5	3.3%
5	Occupation	Students	107	71.3%
		Business	5	3.3%
		Private Job	4	2.7%
		Govt. Job	9	6%

		Others	25	16.7%
6	Income Level	Below 10000	66	44%
		10000 to 20000	38	25.3%
		20000 to 30000	19	12.7%
		30000 to 40000	8	5.3%
		Above 40000	19	12.7%

Source: Researcher’s own collection and through the use of Excel Sheet-2010.

4.2. Basic Information about Green Packaging from Elementary Data

This study also has collected some basic information about green packaging from the respondents which are in the following table 2:

Table 2 Basic Information of the Respondents about Green Packaged Convenience Items

Variables	Categories	Frequency	Percentage
Do you know about Green packaging?	Yes	150	100%
	No	----	----
Have you purchased any green packaged convenience products?	Yes	150	100%
	No	----	----
Reasons for purchasing Green Packaged convenience products	Environmental friendliness	102	68%
	Natural elements	11	7.3%
	High quality	37	24.7%
Most frequently purchase category in prospects of mini-pack shampoo category	Dove	45	30%
	Revive	14	9.3%
	Sunsilk	47	31.3%
	Odessy	16	10.7%
	Clinic Plus	28	18.7%
Which chips is your particular favourite?	Potato Cracker	52	34.7%
	Zeros	12	8%
	Cheese puffs	27	18%
	Kurkure	23	15.3%
	Mr. Twist	36	24%
Which wallet tissue did you use more during the previous three months?	Basundhara wallet tissue	107	71.3%
	Fresh wallet tissue	34	22.7%
	Super star wallet tissue	9	6%
How will you be satisfied with using green packaged convenience items?	Highly satisfied	127	84.7%
	Satisfied	23	15.3%
	Neither satisfied nor dissatisfied	--	--

	Dissatisfied	--	--
	Highly Dissatisfied	--	--
How often would you purchase sustainable packaging product?	Daily	21	14%
	Weekly	10	6.7%
	Monthly	--	--
	When Needed	119	79.3%
Would you like to recommend your friends and relatives using green packaged convenience product in future?	Yes	100	100%
	No	----	-----

Source: Researcher’s own collection and through the use of Excel Sheet-2010.

Table No. 2 demonstrates the respondents' basic information in the light of green packaged convenience items like mini pack shampoo, chips, and wallet tissue. In the case of green packaging, 100% of respondents were known, and all purchased green packaged convenience goods. The highest number of customers (68%) bought green packaged convenience items as a result of environmental friendliness issues whereas the lowest was 7.3% due to natural elements. Dove and Sunsilk mini-pack shampoo brands were the most popular among respondents, accounting for 30% and 31.3% of purchases, respectively. The remaining three brands Clinic Plus, Odessy, and Revive, had popular 18.7%, 10.7% and 9.3% respectively during the study period. In this study, 34.7% of the respondents bought potato crackers, followed by cheese puffs (18%), kurkure (15.3%), zeros (8%), and Mr. Twist (24%). Among the 150 respondents, basundhara wallet tissue, fresh wallet tissue, and super star wallet tissue were used more by the respondents during the previous three months by 71.3%, 22.7%, and 6%, respectively. Furthermore, the elementary data of the participants demonstrates that (84.7%) of the respondents are highly satisfied and (15.3%) are satisfied with their experience of using green packaged convenience items. In this survey, 6.7% of participants said they would like to buy on a weekly basis, followed by 14% on a daily basis, and the rest, 79.3%, commented that they would only buy when necessary. Every participant in this survey expressed a desire to encourage their friends and family to adopt environmentally friendly packaged convenience goods in the future.

4.3. From Variable Analysis

4.3.1. Reliability Analysis of Green packaged convenience items

Cronbach’s Alpha is tested for the study of 20 items and overall reliability for the measure was .826 which is matched with the standard value 0.60, as suggested by Kennedy [67] and it is indicate that above .60 value of reliability is an acceptable level of reliability. So the questionnaire used was reliable for information collection.

Table 3 Reliability Analysis

Cronbach's Alpha	Number of Items
0.826	20

4.3.2. KMO (KAISER-MEYER-OLKIN)

Kaiser-Meyer-Olkin (KMO) test is a measure of how suited your data is for factor analysis. The KMO values was 0.836 indicating that the sample size was adequate to consider the data normally distributed as the KMO value above 0.70 are considered as normality of data.

Table 4 KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.836
Bartlett's Test of Sphericity	Approx. Chi-Square	2091.349
	df	210
	Sig.	0.000

Sources Data calculation

4.3.3. Result of Hypotheses Testing

In testing hypothesis structural model is used by which the researchers can take decision on the proposed hypotheses. It also helps to understand the relationship between dependent and independent variables. Structural equation modelling is used to test various hypothesized causal relationship among the consumer purchase intention of green Packaging.

Table 5 Multiple Regression Analysis

Hypothesis	Independent Variable	Unstandardized Coefficients		Standardized Coefficients	T	P	Decision
		Beta	Std. Error	Beta			
	Constant	0.007	0.191		0.038	0.970	
H1	Environment Concern	0.281	0.066	0.239	4.238	0.000	Supported
H2	Environmental Knowledge of green packaging	0.310	0.052	0.366	5.974	0.000	Supported
H3	Green trust	0.326	0.056	0.353	5.871	0.000	Supported
H4	Price	-0.032	0.032	-0.048	-1.002	0.318	Rejected
H5	Availability	0.106	0.043	0.124	2.446	0.016	Supported

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

5. Discussion on Findings

The present study exhibits a strong association between the degree of environmental consciousness among consumers in Bangladesh and their propensity to buy convenience packaged items made of sustainable materials. Environmental concern, green trust, knowledge of green packaging, price, and availability of the desired green packaged product are the five traits provided by the hypothesis in this study. These five components are directed to in this study as independent variables. Additionally, the factor named consumer purchase intentions has been taken as a dependent variable in this study. When the value of significance is greater than 0.05, the hypothesis will be rejected, which means the hypothesis will negatively affect the consumer's purchase intention. So, here the value of environmental concern, environmental knowledge of green packaging, green trust, and availability of significance is below 0.05, which means hypotheses are supported. And the significance value of price is upper than 0.05, so price is rejected, which indicates price negatively impacts consumers purchase intention. Based on the multiple regression analysis findings reported in Table No. 5, it also shows that lack of environmental concern ($\beta = 0.239$, $P = 0.000$), environmental knowledge of green packaging ($\beta = 0.366$, $P = 0.000$), green trust ($\beta = 0.353$, $P = 0.000$), and availability ($\beta = 0.124$, $P = 0.016$) have a positive impact on enhancing the purchase intentions of green packaged convenience goods among consumers in Bangladesh. This indicates a strong relationship between these four variables in light of green packaged convenience items and consumer purchase intentions. On the contrary, the price of green packaging with respect to selected convenience goods ($\beta = -.048$, $P = 0.318$) has a negative impact on enhancing the buying intentions of green packaged convenience goods among consumers in Bangladesh. Furthermore, it indicates that there is relatively no relationship between the price of green packaged convenience items and consumer purchase intentions, and it is insignificantly linked to the overall hindrance to becoming a green consumer in Bangladesh. Eventually, consumers who have a favorable environmental concern, green trust, and know more about green packaging are inclined to buy convenience goods that are covered in green materials.

Recommendation of the Study

According to the model of studies, numerous essential factors are impacting consumer purchase intentions towards green packaging in the current market. Environment concern, environmental knowledge of green packaging, green trust, and availability have a positive impact on customer buying intention. The results show a favorable relationship between customers' intentions to purchase green packaging and the availability of green-packaged items. The green marketer can take variety of promotional techniques in more to make available the product. Customers will be more likely to purchase as a consequence. Furthermore, businesses must inform customers about environmentally responsible product packaging. Given the significant environmental advantages, marketers would be well advised to

focus on customer willingness to pay and personal norms with the goal of encouraging Bangladeshi customers to make green purchases. To achieve this, they must design some captivating marketing campaigns that emphasize the advantages of environmentally friendly packaging. This will ultimately result in changes in consumer behavior toward green consumption. In addition, the government might add environmental and preservation content to all levels of curriculum and talk about these findings with the appropriate authorities. Customer views, preferences, and sustainability issues might all be improved by such a measure. Then, FMCG industry consumers, both current and future, will be equipped to protect the environment. Added to that, one of the urgent issues pertaining to customers is price sensitivity with regard to green packaging convenience goods. Therefore, companies must be cautious about whether or not customers have the willingness to pay the stated price for a green item. This could enhance Bangladesh's status updates globally in terms of greater use of green packaged FMCGs that are environmentally friendly. In the context of a growing country like Bangladesh, a more socially and environmentally responsible economy is attainable if companies and legislators work together to promote green packaging practices.

6. Conclusion and Future Research Directions

Customers have become more ecologically concerned about their buying choices as a result of the globalization of green marketing. This study was conducted to determine the impact of green packaging on customer purchase intention on selected convenience goods in Bangladesh. Currently, it is evident that Bangladesh's fast-moving consumer goods industry employs recyclable and environmentally friendly packaging and even alters items to reduce or eliminate environmental pollution. Consumers in the country are still focused on purchasing eco-friendly packaged convenience goods. The study's major outcomes were that marketers take into account environmental concern, trust and knowledge, availability, and product attributes that impact buying intentions towards environmentally friendly packaging, and it is essential for FMCG companies in Bangladesh to focus on improving these elements. The investigation additionally demonstrated that the selected model is a useful guide for figuring out Bangladeshi consumers' intents for green packaged convenience goods. Together, these elements have a significant influence on the overall complications that Bangladeshi consumers must focus on to become green consumers. In order to meet consumer expectations and create an efficient marketing plan, this study will assist in identifying the requirements and desires of consumers who seek to buy convenience products packaged in environmentally friendly materials. The study may assist green marketers in customizing their marketing program, enhancing the user experience, evaluating rivals, and making well-informed judgments on regional growth by determining the elements that impact purchase intention. However, there are a number of limitations to this study with regard to sample significance and potential outcomes from the data collected. The sample size's lack of representativeness of the global population is the main and most significant restriction. There were 150 participants in the survey, and particularly the Jashore district of Bangladesh was examined geographically. Even though the study only looks at a small number of variables, another set of variables could have an impact on the buying intentions of the public. Therefore, additional studies might be conducted in Bangladesh using a larger sample size and in other areas to find more factors that influence consumers' purchasing decisions about green packaged convenience foods.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

Statement of informed consent

Informed consent was obtained from all individual participants included in the study.

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