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Assessing the Impact of Green Jute-Based Lifestyle Products on Environmental Sustainability and Consumer Purchase Intention

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ABSTRACT

Dhaka is grappling with environmental concerns such as plastic pollution, rampant urbanization, and unsustainable consumption patterns. Jute-based lifestyle goods are a locally relevant and environmentally benign solution. The study employed a quantitative research approach. Data was obtained from 400 respondents through a standardized questionnaire. The sample size was calculated by the formula of Cochran. The acquired data were analyzed using the Statistical Package for Social Sciences (SPSS) such as descriptive statistics, reliability analysis, correlation analysis, regression analysis and hypothesis testing. The result indicates that the consumers of Dhaka City have a positive opinion towards green jute-based lifestyle items, and they appreciate their role in environmental sustainability. The study indicates that green jute lifestyle goods have a great potential to encourage sustainable consumption, reduce dependence on plastic-based items, and assist the traditional jute sector in Bangladesh. The findings have great significance for jute entrepreneurs, marketers, politicians, and environmental organizations to develop the market of sustainable lifestyle products in Bangladesh.

INTRODUCTION

Environmental sustainability has become a crucial legislative, economic and consumer concern in Bangladesh, particularly in quickly urbanizing centers like Dhaka. As the capital and the greatest commercial hub of the country, Dhaka is a concentrated location of consumption, retail activity, plastic use, garbage generation and lifestyle alteration (Jarin *et al.*, 2024; Khondkar & Honey, 2022). The city's growing middle-income population, increased engagement with internet purchasing and heightened awareness of eco-friendly branding have opened up new avenues for sustainable products. Meanwhile, Dhaka confronts intense environmental strain from plastic packaging, disposable consumer products and poor waste-management infrastructure (M. A. Rahman & Rahman, 2024a). The World Bank found that yearly per-capita plastic usage in urban Bangladesh climbed from 3.0 kg in 2005 to 9.0 kg in 2020, with Dhaka having a per-capita plastic consumption of 22.25 kg, more than three times the urban national average. The same source says Dhaka generates around 646 tons of plastic waste every day, but only 37.2% of it is recycled (Khan *et al.*, 2023). In this context, jute-based lifestyle items are a locally relevant and environmentally promising substitute for synthetic and plastic-based products. Jute has been an integral part of Bangladesh's agricultural and industrial character and is sometimes called the "golden fiber" of Bangladesh for its historical contribution to export profits, rural employment, and natural fiber production (M. S. Rahman *et al.*, 2023). Unlike much petroleum-based materials jute is renewable, biodegradable, re-usable and appropriate for varied product creation.

Besides the conventional sacks and packaging, Jute is currently being used more and more for lifestyle products including shopping bags, purses, wallets, home décor, table mats, folders, footwear, gift items and sustainable packaging (Khan *et al.*, 2023). They are useful, but they are also symbolic objects that let consumers to show their environmental duty, support local companies, and participate in sustainable consumption behaviors (Jahan *et al.*, 2022).

The significance of jute-based lifestyle items is particularly relevant in Dhaka, as the city is a large consumer market and also a big supplier of plastic garbage. Dhaka's urban customers are exposed to supermarkets, fashion outlets, university campuses, corporate offices, cafés, e-commerce platforms, and environmental campaigns that can impact their green purchase behavior. But jute alternatives are not a foregone conclusion (Shahinur *et al.*, 2022). While consumers may understand the environmental benefits of jute, they may still not purchase these products due to price, design, durability, availability, brand image, convenience, or lack of awareness. This is a vital research topic. The environmental value of green jute-based lifestyle items can be fully realized only if customers are ready to buy and use them on a regular basis (Korol *et al.*, 2020).

Hence, buying intention of consumers is a crucial factor to determine the market potential of green jute products. In consumer behavior research, purchase intention refers to the likelihood or willingness of a consumer to acquire a product in the future. Behavioral intention is explained by the Theory of Planned Behavior in terms of attitude, subjective standards, and perceived behavioral

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control (Aaron *et al.*, 2022). It has been extensively used in research on green consumerism and the adoption of sustainable products. Purchase intention of jute lifestyle products may be impacted by consumers' environmental concern, perceived green value, perceived product quality, social influence, awareness about sustainability and willingness to pay a premium for eco-friendly products. Recent studies on Bangladeshi consumers also show that attitude, environmental concern, awareness, and perceived value are the governing elements for the green product purchasing intention (Honey & Hossain, 2024; Sengupta, 2023).

This study has been done in the setting of Bangladesh with special focus on Dhaka city. This study attempts to explore the customer perception on environmental contribution of jute-based lifestyle goods and its impact on consumers' purchasing intention. The study uses a quantitative approach to examine the association between perceptions of environmental sustainability and purchase intention among customers residing in Dhaka. This is crucial because sustainable consumption should not be interpreted simply in terms of environmental advantages, but also in terms of consumer attitudes and behavioral incentives, and market realities.

The main objective of this study is to assess the impact of green jute-based lifestyle products on environmental sustainability and consumer purchase intention in the context of Bangladesh, particularly Dhaka city. The study aims to identify consumer's perceptions of environmental sustainability benefits of green jute-based focus through a comprehensive survey. The study is guided by the following questions.

RQ1: What is the level of consumer awareness regarding green jute-based lifestyle products in Dhaka city?

RQ2: How do consumers perceive the environmental sustainability benefits of green jute-based lifestyle products?

RQ3: What factors influence consumers' purchase intention toward green jute-based lifestyle products in Dhaka city?

RQ4: Is there a significant relationship between environmental sustainability perception and consumer purchase intention toward green jute-based lifestyle products?

RQ5: To what extent do product quality, price, design, availability, and environmental concern affect consumers' willingness to purchase green jute-based lifestyle products?

LITERATURE REVIEW

Concept of Green Products and Sustainable Consumption

The term green products are usually defined as items that minimize the environmental impact across the entire life cycle, including resources, production process, usage, reuse, recycling, or disposal (Sengupta, 2023). Green products are related to sustainable consumption in the literature related to consumer behavior since

these products allow customers to satisfy personal requirements while minimizing damage to the natural environment (Hasan *et al.*, 2023). Green items can be things like biodegradable packaging, organic apparel, reusable shopping bags, natural-fiber products, energy-efficient products, and other products that are aimed to cut down on waste and pollution (Ahmed & Sarkar, 2022; Honey, 2019).

Sustainable consumption is a matter of behavior as well as environment. Even if eco-friendly items are accessible, customers will not buy them unless they are helpful, economical, attractive, durable, and socially acceptable. Therefore, the significance of investigating green product purchasing intention is that it helps to know if the consumers are ready to change from conventional products to green products (Bradru *et al.*, 2022).

Jute-Based Lifestyle Products in Bangladesh

Jute has a deep historical, economic, and cultural relationship with Bangladesh. It is sometimes termed the country's "golden fiber" due of its importance to agriculture, export revenues, employment, and rural livelihoods. Sacks, ropes, hessian cloth, carpets, matting and packing goods were the principal uses for jute (Gonzalez *et al.*, 2023). However, recent diversification has increased use of jute for lifestyle products such shopping bags, handbags, purses, wallets, footwear, table mats, home décor, folders, promotional items, and sustainable packaging (Basak *et al.*, 2024). Recent value-chain research says jute is environmentally benign and economically vital for Bangladesh, mentioning its application in products including twine, matting, carpets, sacks, hessian clothes and house-decoration materials (Naik *et al.*, 2022).

Jute based lifestyle items are relevant to environmental sustainability as jute is renewable, biodegradable, reusable and naturally decomposable as against various synthetic and plastic based materials. Jute items might have a functional and symbolic role in Dhaka, where customers are increasingly exposed to fashion, e-commerce, supermarkets, cafes, corporate gifting, and environmentally oriented advertising (Honey & Sultana, 2023; Yusiana & Widodo, 2020). In terms of use, they can substitute for plastic bags, synthetic accessories, and disposable packaging. Symbolically they enable buyers to exhibit awareness of the environment, local identity, and their support for Bangladeshi products (Priya *et al.*, 2024). Jute based lifestyle goods can contribute to environmental sustainability in multiple aspects. Firstly, they can lessen the reliance on single-use plastic products, especially shopping bags and packing materials. Second, jute is biodegradable and thus less waste in the long term than synthetic materials (Islam *et al.*, 2022). Third, jute items are generally reusable, which helps reduce waste and foster a circular economy. Fourth, promotion of jute-based products can promote local green businesses, create jobs, and contribute to sustainable rural-urban value chains (Sanivada *et al.*, 2020).

But the market for jute-based lifestyle products is

fraught with problems. Many people still identify jute with traditional or low-cost products rather than trendy lifestyle products. Consumer acceptance may be affected by product design, finishing quality, durability, pricing, brand image, availability, and convenience (Kalaivani & Bharathi, 2023). Thus, the success of green jute-based products rests not only on their environmental benefits but also on the customer perception of its value in everyday life (Zhang *et al.*, 2023).

Consumer Purchase Intention

Purchase intention is the willingness or plan of a consumer to buy a thing in the future. It is commonly utilized in marketing and consumer-behavior research since intention is generally seen as a strong predictor of actual purchase behavior (Di Sia, 2022). Green purchasing intention in green marketing is an indicator of the consumers' readiness to acquire products that are seen to be ecologically beneficial (Noor, 2022).

The Theory of Planned Behavior is one of the most extensively utilized theories to explain buying intention. Ajzen's framework states that there are three key elements that determine the behavioral intention (Rozenkowska, 2023). These include attitude toward the conduct, subjective norms, and perceived behavioral control. Attitude is a consumer's positive or negative evaluation of the conduct (Wang *et al.*, 2025). Subjective norms such as social pressure or influence from family, friends, classmates, or society. Perceived behavioral control is the ease or difficulty that the customer perceives the behavior to be. Ajzen's theory suggests that intention is a strong predictor of planned conduct (Adams *et al.*, 2022; Honey, 2025).

The purchasing intention of green jute-based lifestyle products may be influenced by the consumers' positive attitude towards eco-friendly goods, social encouragement to buy sustainable products and perceived ease of obtaining and affording jute products (Li *et al.*, 2022). Consumers' perception of jute items as ecologically friendly, trendy, affordable and available in Dhaka would probably boost their purchasing intention. On the other side, if people regard jute products as pricey, unsightly, inconvenient, or bad quality, purchasing intention may fall (Cleophas *et al.*, 2022).

Factors Influencing Green Product Purchase Intention

Previous research has identified numerous elements affecting green purchase intention. These include environmental concern, green perceived value, attitude towards green products, product quality, pricing, readiness to pay, green trust, perceived risk, environmental knowledge, and social impact (Nayak & Malde, 2022).

Environmental concern is one of the most frequently observed determinants of green buying intention. More pollution, climate change, plastic waste and ecological harm friendly consumers are likely to support eco-friendly items (Honey, 2025; Yadav *et al.*, 2022). In Bangladesh,

Chowdhury and Alamgir showed that the green purchase intention of young customers is mostly driven by their attitude, environmental concern, and willingness to pay. The study also revealed the insignificance of perceived moral obligation, indicating that Bangladeshi consumers might be more impacted by practical views and perceived environmental worth rather than moral pressure alone (Pramanik *et al.*, 2024).

Another key consideration is the perceived value of green. It speaks to the consumer's appraisal of the benefit gained from a green product vs the cost spent. Chen and Chang's green purchasing intention, green perceived value, green perceived risk, and green trust is a key to consumers' propensity to acquire green items (Simon & Thomas, 2024). Perceived value of jute-based lifestyle items may be environmental value, functional value, aesthetical value, cultural value, and social value. Consumers may be more inclined to buy jute items if they are perceived as helpful, trendy, durable, meaningful regionally and environmentally friendly (M. A. Rahman & Rahman, 2024b).

The attitudes towards green products also play a vital effect. Green products are perceived as good, reliable, and aligned with their personal ideals, which in turn shapes consumers' favorable attitudes (Chakraborty, 2020). For example, in a study to examine the greenhouse purchasing behavior in Bangladesh, attitude and perceived behavioral control were found to be significant predictors of green buy intention while environmental concern and environmental knowledge affected intention indirectly. That shows awareness is probably not sufficient; buyers also need to have a positive attitude and feel confident that they can buy (Ali *et al.*, 2023).

Price and willingness to pay are also factors in Dhaka's consumer market. Many green products are thought to be more expensive than conventional ones. If the consumers feel that the jute-based lifestyle items are costly, they may not be willing to buy the products even if they support the environmental conservation. However, buyers may be prepared to pay a greater price if the products are perceived as durable, reusable, trendy and socially valuable (Çevik & Diambu, 2024).

Hypothesis Development

This section presents the research assumptions of the study named "Assessing the Impact of Green Jute-Based Lifestyle Products on Environmental Sustainability and Consumer Purchase Intention". The assumptions are created on the basis of the notions of green consumerism, environmental sustainability, consumer buying intention and Theory of Planned Behavior (Wang *et al.*, 2025). The study is focused on Bangladesh specifically Dhaka city, hence the hypotheses are also related to the urban environmental setting of Dhaka and growing importance of jute-based lifestyle items.

Theory of planned behavior discusses the impact of individual ideas on attitudes and intentions. Ajzen (1991) stated that intention can be anticipated by attitude towards

the behavior, subjective norm, and perceived behavioral control (Adams *et al.*, 2022). Increased customer understanding of the environmental benefits of green jute

products can, therefore, lead to more positive sustainability perceptions. The study proposes a conceptual framework with the following hypothesis (Figure 1).

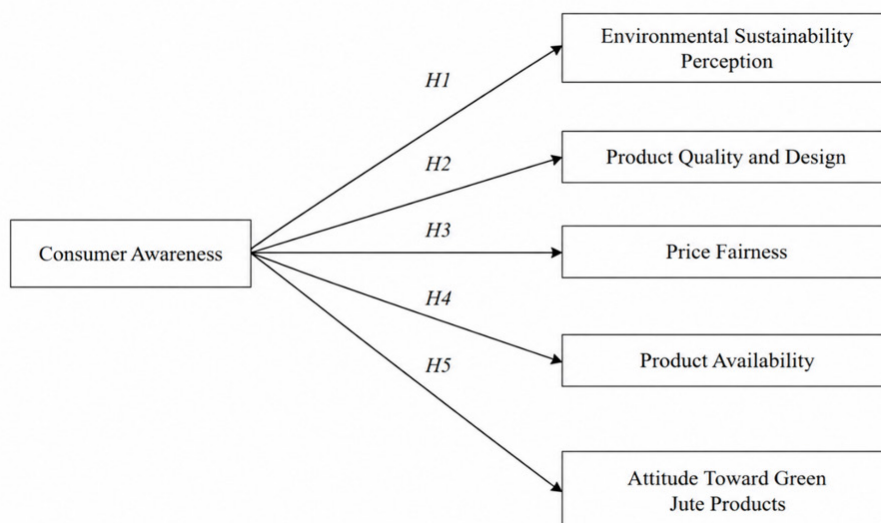


Figure 1: Conceptual framework for hypothesis mapping

H1: Consumer awareness has a positive and significant effect on environmental sustainability perception toward green jute-based lifestyle products

Environmental sustainability perception is the degree to which consumers perceive that a product contributes to environmental protection, waste reduction, resource conservation and sustainability of life. If customers think jute lifestyle items minimize plastic use and encourage ecologically responsible purchasing, they are more likely to create purchase intention towards those products. Research in green marketing has demonstrated that perceived environmental value is a primary predictor of green purchasing intention. Z. Ahmed & Sarkar, (2022) reported that green perceived value and green trust had a favorable effect on green purchasing intention, and green perceived risk had a negative effect on it. This means that if consumers think that a product has true environmental benefit, they are more likely to trust and buy it. On the other hand, if jute-based lifestyle items are seen as environment friendly and reliable alternatives of plastic or synthetic products, then the purchasing intention is likely to increase for Dhaka consumers (Bradru *et al.*, 2022).

H2: Product quality and design have a positive and significant effect on consumer purchase intention toward green jute-based lifestyle products

Price is one of the most essential elements in consumer choice making and it is especially important in emerging country marketplaces like Bangladesh. Even when there is a positive attitude towards green products, consumers may be reluctant to buy them if they think the products are pricey or not worth the price. As a result, the price fairness and willingness to pay are essential criteria to determine the purchasing intention toward jute-based lifestyle products (Rahaman *et al.*, 2024). In earlier studies

on the young consumers of Bangladesh, it was shown that the effect of willingness to pay on intention to buy green products was considerable. This implies that people in Dhaka may be likely to buy jute-based lifestyle products if they think the price is appropriate in comparison to product's longevity, utility, design, and environmental benefits. But if jute goods are considered expensive compared to plastic or synthetic alternatives, purchasing intention may be reduced (Pathak & Bhatt, 2022).

H3: Perceived price fairness has a positive and significant effect on consumer purchase intention toward green jute-based lifestyle products

Availability is the ease with which people can find and buy a product. A consumer may have positive attitude towards jute-based lifestyle products but may not buy these products if the products are not conveniently available in the super markets, shopping malls, online platforms, university regions, office zones or retail outlets in Dhaka. Hence, availability and ease are crucial practical aspects that affect green purchase intention. The Theory of Planned Behavior handles this with perceived behavioral control (Di Sia, 2022). According to Ajzen, perceived behavioral control is the level at which a person views doing an action as easy or difficult and which also contributes to behavioral intention. This study indicates that consumers' propensity to acquire green jute-based lifestyle items would improve if they felt the products are easy to locate, cost-effective to obtain, and convenient to purchase (Noor, 2022).

H4: Product availability has a positive and significant effect on consumer purchase intention toward green jute-based lifestyle products

Attitude is the overall appraisal consumers make of a product, either favorable or negative. If consumers see

that the green jute-based lifestyle goods are ecologically friendly, regionally meaningful, trendy, durable, and socially responsible, they are more likely to have a positive attitude toward them (Li *et al.*, 2022). On the other hand, negative attitudes might arise if consumers consider jute products as undesirable, outdated, expensive or cumbersome. According to the Theory of Planned Behavior, attitude is one of the main indicators of behavioral intention. Empirical research in Bangladesh also reveals the considerable impact of mindset on green product purchasing intention among young consumers. Therefore, the customers of Dhaka who have a positive attitude towards jute-based lifestyle items are likely to have higher buy intention (Nayak & Malde, 2022).

H5: Attitude toward green jute-based lifestyle products has a positive and significant effect on consumer purchase intention

Green perceived value refers to the overall evaluation by consumers of the benefits of a green product relative to its cost. The perceived value for jute-based lifestyle items may comprise environmental benefits, functional utility, durability, local identity, aesthetic appeal and contribute to sustainable consumption. Consumers with high value perception of jute-based items over plastic or synthetic products are more likely to have intention to purchase (Cleophas *et al.*, 2022). Yadav *et al.* (2022) discovered that green perceived value has a favorable effect on green purchasing intention and green trust partially mediates the relationship between perceived value and purchase intention. It suggests people in the Dhaka market would be more inclined to buy jute-based lifestyle products if they think that the products are really eco-friendly and useful in their everyday life.

MATERIALS AND METHODS

The present research employed the quantitative research approach to investigate the impact of green jute-based lifestyle items on environmental sustainability and customer purchasing intention in Dhaka city, Bangladesh. The study was appropriate for quantitative research as it aimed to quantify the relationships among variables such as consumer awareness, perception of environmental sustainability, environmental concern, product quality, price fairness, availability and purchase intention using numerical data and statistical analysis. A structured questionnaire with close-ended questions was employed as the main instrument for data collection. It was a structured questionnaire with an objective to acquire measurable responses from the customers about their perception and purchasing intention towards green jute-based lifestyle items. The study population comprised customers residing in Dhaka city who are aware or have the capacity to buy jute-based lifestyle products. The total sample size of the study was 400 respondents. The sample

size was calculated using the sample-size formula of Cochran (Cochran, 1942) which is a popular method for big or unknown populations that employs the confidence level, the predicted population proportion, and the margin of error to estimate an acceptable survey sample (equation 1). The minimal sample size was calculated to be 384 at 95% confidence level and 5% margin of error. This was rounded up to 400 to increase the reliability and eliminate the possible non-response limits.

$$n = \frac{Z^2 \cdot p \cdot (1 - p)}{E^2} \quad (1)$$

After data collection, replies were coded, processed, and analyzed using statistical package for social sciences (SPSS). Descriptive statistics were employed to summarize the demographic data of the respondents and key study variables. Reliability analysis, correlation analysis, and regression analysis were utilized to assess the relationships between green jute-based lifestyle products, environmental sustainability perception, and consumer purchase intention. Thus, the methodology allowed the study to systematically measure customer views and statistically test the presented hypotheses in the context of Dhaka city.

RESULTS AND DISCUSSION

This section shows the outcome and discussion of the study based on the data collected of 400 respondents in Dhaka city. The gathered data were processed and analyzed by utilizing Statistical Package for the Social Sciences (SPSS) to assess the consumers' perspectives on green jute-based lifestyle items, environmental sustainability, and purchase intention. The analysis comprises the demographic profile of the respondents, descriptive statistics of the study variables, reliability analysis, correlation analysis and regression analysis. The statistical methodologies identified the association between customer awareness, environmental concern, product quality and design, price fairness, product availability, green perceived value, environmental sustainability perception, and consumer purchase intention.

Demographic profile of the respondents

This section discusses the demographic characteristics of respondents who participated in the survey. The gender, age, education, occupation, income level, prior purchasing experience and green product buying habits of the consumers may affect their opinion on green jute-based lifestyle items and their purchase intention, so demographic analysis is vital. The total number of the responder of this survey was 400 from Dhaka city. The demographic information was evaluated by employing descriptive statistics principally frequency and percentage distribution through SPSS.

Table 1: Demographic Profile of the Respondents

Demographic Variable	Category	Frequency	Percentage
Gender	Male	214	53.5%
	Female	176	44.0%
	Prefer not to say	10	2.5%
	Total	400	100%
Age Group	Below 18 years	12	3.0%
	18–25 years	138	34.5%
	26–35 years	154	38.5%
	36–45 years	68	17.0%
	Above 45 years	28	7.0%
	Total	400	100%
Education Level	Secondary level	24	6.0%
	Higher secondary level	62	15.5%
	Undergraduate	188	47.0%
	Postgraduate	108	27.0%
	Other	18	4.5%
	Total	400	100%
Occupation	Student	116	29.0%
	Service holder	142	35.5%
	Businessperson	62	15.5%
	Entrepreneur	38	9.5%
	Homemaker	24	6.0%
	Other	18	4.5%
	Total	400	100%
Monthly Income	Below BDT 20,000	110	27.5%
	BDT 20,001–40,000	118	29.5%
	BDT 40,001–60,000	86	21.5%
	BDT 60,001–80,000	50	12.5%
	Above BDT 80,000	36	9.0%
	Total	400	100%
Previous Purchase of Jute-Based Products	Yes	246	61.5%
	No	154	38.5%
	Total	400	100%
Frequency of Buying Eco-Friendly Products	Never	32	8.0%
	Rarely	92	23.0%
	Sometimes	160	40.0%
	Often	84	21.0%
	Very often	32	8.0%
	Total	400	100%

Table 1 shows that among the 400 respondents, 53.5% were male, 44.0% were female, and 2.5% preferred not to disclose their gender. This indicates that the study included respondents from both male and female consumer groups, with a slightly higher participation rate from male respondents.

Overall, the demographic profile indicates that the respondents were mostly young, educated, urban consumers with moderate income levels and some experience with eco-friendly or jute-based products

(Pramanik *et al.*, 2024). This makes the sample appropriate for examining the relationship between environmental sustainability perception and consumer purchase intention toward green jute-based lifestyle products in Dhaka city (M. A. Rahman & Rahman, 2024b).

Descriptive Statistics of the Study Variables

This section deals with descriptive statistics of the main variables of the study which were used to measure the influence of green jute-based lifestyle goods on

environmental sustainability and consumer purchase intention. Descriptive statistics were conducted to describe the general opinions of respondents on consumer awareness, perception of environmental sustainability, environmental concern, quality and design of the product, pricing fairness, product availability, attitude, green perceived value, and consumer purchase

intention. Responses were measured on a 5-point Likert scale with 1=Strongly Disagree and 5=Strongly Agree. The mean value reflects the average of the respondents' agreement with each of the variables while the standard deviation displays the diversity of the respondents' responses.

Table 2: Descriptive Analysis of Study Variables

Variable	Number of Items	N	Mean	Standard Deviation	Interpretation
Consumer Awareness	5	400	3.82	0.71	High
Environmental Sustainability Perception	5	400	4.05	0.66	High
Environmental Concern	5	400	4.12	0.63	High
Product Quality and Design	5	400	3.76	0.74	High
Price Fairness	5	400	3.58	0.79	Moderate to High
Product Availability	5	400	3.41	0.82	Moderate
Attitude Toward Green Jute-Based Lifestyle Products	5	400	3.95	0.68	High
Green Perceived Value	5	400	3.89	0.70	High
Consumer Purchase Intention	5	400	3.86	0.72	High

Table 2 reveals that the respondents perceived the green jute-based lifestyle items in a positive manner in general. Environmental concern received the highest mean score of all the variables ($M = 4.12$, $SD = 0.63$). This suggests that the respondents were very concerned about environmental issues such as plastic pollution, waste generation and the need for eco-friendly consumption. The comparatively low standard deviation also indicates that there was quite consistent opinion amongst the respondents.

Descriptive statistics suggest that in general, respondents

exhibited significant environmental concern, positive sustainability perception, pleasant attitude, and strong buy intention for green jute-based lifestyle products. But the mean scores for pricing fairness and product availability were relatively lower. This implies that although consumers in Dhaka city are interested in green jute-based lifestyle items, there is a need for businesses and governments to improve product accessibility, price, design quality, and market exposure to increase real buying behavior (Figure 2) (Chakraborty, 2020).

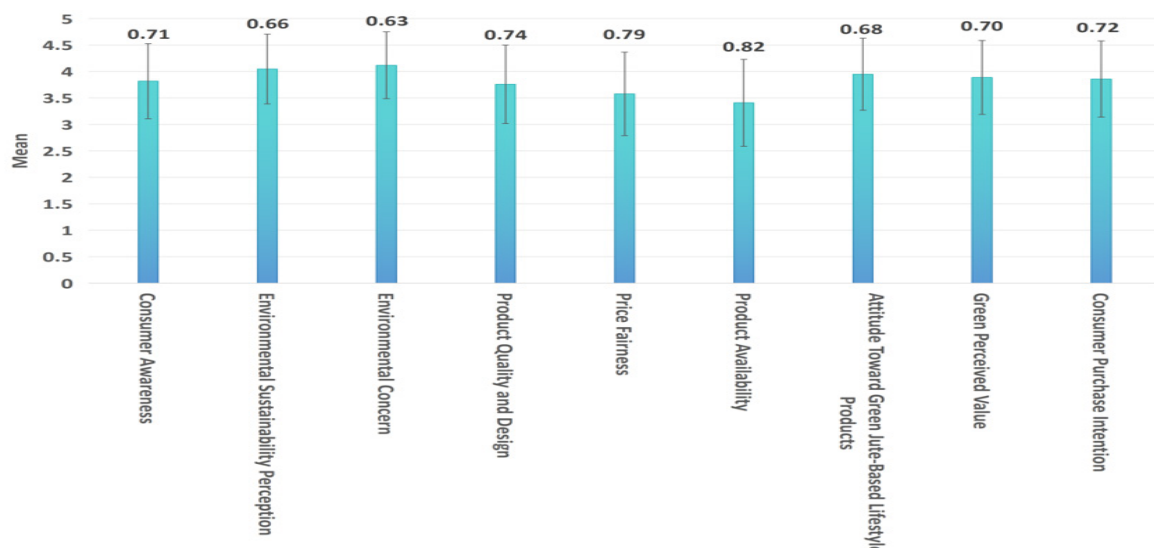


Figure 2: Comparison of Means and Standard Deviation

Reliability Analysis

Reliability analysis was performed to evaluate the internal consistency of the questionnaire items utilized in this

study. Since several items were utilized to measure each construct in this study, Cronbach's Alpha was used to determine whether the items under each variable

are reliable and suitable for further statistical analysis. Cronbach's Alpha is frequently used in quantitative research to measure the consistency of items on Likert

scales. A Cronbach's Alpha score of 0.70 or higher is usually acceptable, whereas values over 0.80 suggest good dependability (Table 2).

Table 3: Reliability Analysis of the Study Variables

Variable	Number of Items	Cronbach's Alpha	Reliability Level
Consumer Awareness	5	0.812	Good
Environmental Sustainability Perception	5	0.846	Good
Environmental Concern	5	0.858	Good
Product Quality and Design	5	0.801	Good
Price Fairness	5	0.774	Acceptable
Product Availability	5	0.762	Acceptable
Attitude Toward Green Jute-Based Lifestyle Products	5	0.835	Good
Green Perceived Value	5	0.824	Good
Consumer Purchase Intention	5	0.867	Good

Correlation Analysis

Correlation analysis was used to determine the strength and direction of the association between the key study variables. As the study was quantitative and the variables were evaluated using a five-point Likert scale, the Pearson's correlation coefficient was used. Correlation analysis is applied to examine the significant association between variables like consumer awareness, perception of environmental sustainability, environmental concern,

quality and design of product, fairness of price, availability of product, attitude, and green perceived value with consumer purchase intention toward green jute-based lifestyle products. The coefficient of correlation might vary between -1 and +1. Positive value means positive relationship between two variables and negative value means inverse relationship. The statistical significance of the associations was assessed at $p < 0.01$ and $p < 0.05$.

Table 4: Pearson Correlation Analysis of the Study Variables

Variables	CA	ESP	EC	PQD	PF	PA	ATT	GPV	CPI
Consumer Awareness	1								
Environmental Sustainability Perception	.612**	1							
Environmental Concern	.548**	.635**	1						
Product Quality and Design	.496**	.527**	.481**	1					
Price Fairness	.421**	.462**	.438**	.519**	1				
Product Availability	.398**	.436**	.401**	.487**	.506**	1			
Attitude	.573**	.621**	.596**	.554**	.472**	.451**	1		
Green Perceived Value	.586**	.648**	.602**	.589**	.531**	.497**	.661**	1	
Consumer Purchase Intention	.552**	.674**	.631**	.608**	.536**	.492**	.689**	.713**	1

It is shown from Table 4 that all the independent factors have positive and substantial link with customer purchase intention towards green jute-based lifestyle items. This indicates that the more the awareness, environmental concern, perception of sustainability, perceived product quality, pricing fairness, availability, attitude, and green perceived value of consumers, the higher the tendency of their buy intention to increase.

Green Perceived Value and customer buy Intention is the strongest link was discovered between green perceived value and customer buy intention ($r = .713$, $p < 0.01$). That is to say, there is a strong positive association. This implies that if customers perceive that green jute-based lifestyle items give them good value for environmental

advantages, utility, quality, local identity, and total value, they are more inclined to buy them.

In general, the correlation analysis demonstrates that all the factors considered are positively and significantly related to the consumer purchase intention. The results show that green perceived value, attitude, environmental sustainability perception and environmental concern are the most critical elements influencing the consumers' propensity to buy green jute-based lifestyle items in Dhaka city (Ali *et al.*, 2023). Hence, the results offer preliminary statistical support for the stated hypotheses and necessitate further regression analysis to explore the predictive power of each variable on consumer purchase intention (Figure 3).

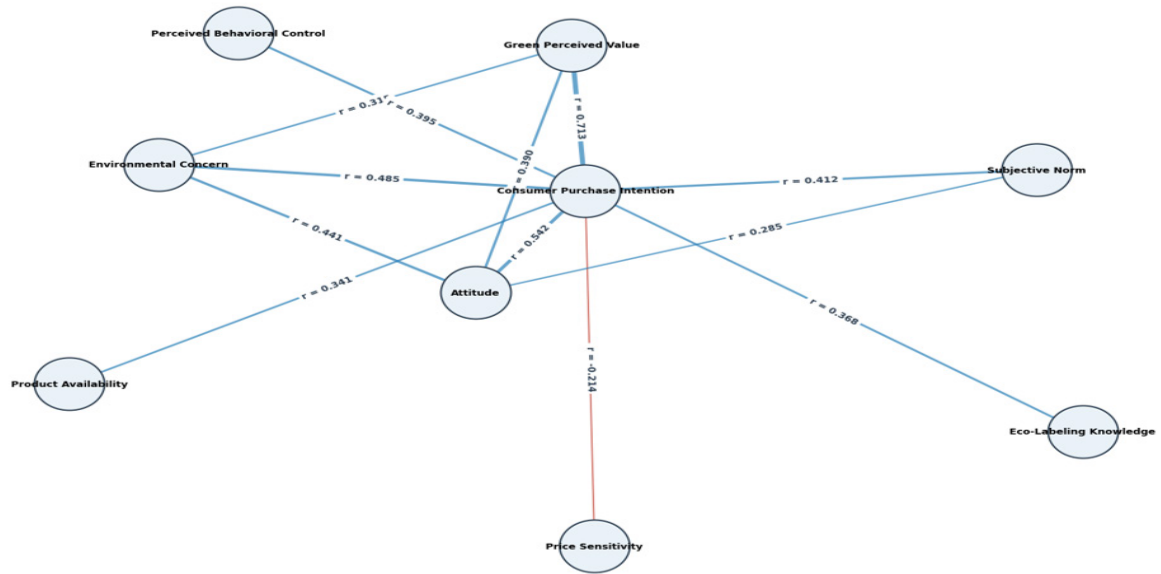


Figure 3: Correlation matrix network graph

Regression Analysis

Regression analysis was used to investigate the predictive impact of the independent factors on the consumer purchase intention to green jute-based lifestyle items. Consumer purchase intention was the dependent variable in this study, while consumer awareness, environmental sustainability perception, environmental concern,

product quality and design, price fairness, product availability, attitude, and green perceived value were the independent variables. The SPSS was used for multiple linear regression analysis to find out the extent to which these characteristics explain the consumer purchase intention of the respondents in Dhaka city.

Table 5: Regression Coefficients

Independent Variables	Unstandardized Beta	Standard Error	Standardized Beta	t-value	Sig.
Constant	.412	.188	—	2.191	.029
Consumer Awareness	.091	.037	.096	2.459	.014
Environmental Sustainability Perception	.154	.043	.168	3.581	.000
Environmental Concern	.128	.041	.141	3.122	.002
Product Quality and Design	.117	.038	.126	3.079	.002
Price Fairness	.083	.034	.091	2.441	.015
Product Availability	.064	.031	.073	2.065	.040
Attitude	.181	.044	.198	4.114	.000
Green Perceived Value	.226	.046	.251	4.913	.000

Table 6: ANOVA Result of Regression Analysis

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	137.842	8	17.230	95.732	.000
Residual	70.358	391	.180		
Total	208.200	399			

Note: Dependent Variable: Consumer Purchase Intention

Predictors

Consumer Awareness, Environmental Sustainability Perception, Environmental Concern, Product Quality and Design, Price Fairness, Product Availability, Attitude, and Green Perceived Value.

Table 6 presents the ANOVA result for the regression model. The result shows that the model is statistically

significant, as the significance value is $p = .000$, which is lower than 0.05. The F-value is 95.732, indicating that the independent variables jointly have a significant effect on consumer purchase intention. Therefore, the regression model is appropriate for predicting consumer purchase intention toward green jute-based lifestyle products.

The regression analysis from Table 4 validates that

the green perceived value, attitude, environmental sustainability perception, environmental concern, product quality and design, customer awareness, price fairness and product availability strongly influence consumer purchase intention. Among these criteria green perceived value, attitude and environmental sustainability perception were the most influential predictors (Çevik & Diambu, 2024). This shows that consumers in Dhaka city are more inclined to buy green jute-based lifestyle products when they feel the products are useful, ecologically friendly, and appropriate for modern lifestyles.

Table 7: Summary of Hypothesis Testing

Hypothesis	Relationship Tested	Beta Value	Sig. Value	Decision
H1	Consumer Awareness → Environmental Sustainability Perception	.612	.000	Accepted
H2	Product Quality and Design → Consumer Purchase Intention	.126	.002	Accepted
H3	Price Fairness → Consumer Purchase Intention	.091	.015	Accepted
H4	Product Availability → Consumer Purchase Intention	.073	.040	Accepted
H5	Attitude Toward Green Jute-Based Lifestyle Products → Consumer Purchase Intention	.198	.000	Accepted

the significant value is less than the allowed value of 0.05. This shows that all the chosen variables had a positive and statistically significant link with either environmental sustainability perception or customer purchase intention. The H1 result reveals that there is a considerable beneficial influence of consumer awareness on environmental sustainability perception ($p = .000$). H1 was accepted. This shows that consumers with more awareness of green jute-based lifestyle items are inclined to regard these products as environmentally sustainable.

The result for H2 demonstrates that the product quality and design had a substantial positive effect on consumer purchase intention. The beta value is $\beta = .126$ and the significance value is $p = .002$. Thus, H2 was supported. This means that buyers consider the durability, finishing, beauty, and modern design in their decision to buy jute-based lifestyle items.

The result for H3 demonstrates that pricing fairness had a substantial positive influence on consumer purchase intention with beta value $\beta = .091$ and significance value $p = .015$. Therefore, H3 was supported. Therefore, consumers tend to buy green jute-based lifestyle items at a more affordable price in comparison to the quality and benefits of the product.

The result for H4 reveals that the availability of the product has a significant positive effect on the intention of the consumer to acquire it with a beta value of $\beta = .073$ and a significance value of $p = .040$. So H4 was adopted. This variable had the weakest effect of all the predictors, but the outcome shows that convenient availability in retail shops, exhibitions, supermarkets, and online platforms can improve purchase intention.

The impact of attitude towards green jute-based lifestyle items on customer purchase intention is significant

Hypothesis Testing Summary

The summary of hypothesis testing based on the outcome of regression analysis is described in this section. To know the impact of selected independent factors on the perception of environmental sustainability and customer purchase intention towards green jute-based lifestyle items in Dhaka city, the hypotheses were examined. The hypotheses were accepted or rejected depending on the significance value. The level of significance for accepting the hypothesis in this study was $p < 0.05$.

As per the table 6 all the eight hypotheses were accepted as

and favorable in the case of H5 with beta value of $\beta = .198$ and significance value of $p = .000$. Then H5 was approved. This means that a buyer with a positive attitude towards jute-based lifestyle items is likely to buy it.

Overall, the findings of the hypothesis testing validate the notion that the customer buy intention towards green jute-based lifestyle product is subjected to many circumstances. Among them, green perceived value, attitude, and perception of environment sustainability were the most significant determinants (Niloy, 2021). Thus, the results support the contention that Dhaka city customers are more inclined to acquire jute-based lifestyle products, if they are perceived to be environmentally sustainable, valued, appealing, reasonably priced, and readily accessible (Ruba & Talucder, 2023).

Limitations

As is the case with every academic study, this research has inherent limitations. The survey was conducted only in Dhaka city; so, the results may not be totally representative of the consumers in other parts of Bangladesh, especially in rural or smaller cities where the awareness, income level, product availability and buying habit may be different. Second, the study employed quantitative research approach and collected data via structured questionnaire. This may not provide deeper personal viewpoints, emotions or specific justifications behind consumers' buying decisions. Thirdly, the sample size was limited to 400 respondents which is statistically acceptable but may not reflect the views of the whole consumer community of Dhaka. Fourth, the study relied on the self-reported answers of the respondents. This may have caused some bias as the respondents could have provided socially desired answers on environmental

concern and usage of green products. Fifth, the research has concentrated on specific variables such as consumer awareness, environmental concern, product quality, price fairness, availability, attitude, green perceived value, perception of environmental sustainability, and purchase intention, but other aspects like brand trust, social media influence, culture values, lifestyle trends, and actual purchasing behavior were not studied in depth. Finally, the study measured purchase intention instead of actual purchase behavior. Thus, future studies may use qualitative interviews, longitudinal research, or broader samples from different cities of Bangladesh to gain a more complete understanding of consumer behavior toward green jute-based lifestyle products.

CONCLUSION

The purpose of this research was to explore the impact of green jute-based lifestyle items on environmental sustainability and consumer purchasing intention in the setting of Bangladesh especially Dhaka city. The findings show that consumers of Dhaka city have good attitude towards eco-friendly jute-based lifestyle items and appreciate the need of using these products for environmental sustainability. Dhaka is facing major environmental difficulties such as plastic pollution, waste generation, and unsustainable consumption patterns. Hence, jute-based lifestyle items can be a good eco-friendly alternative to plastic and synthetic products. The research shows consumer knowledge, environmental concern, environmental sustainability perception, product quality and design, price fairness, product availability, attitude and green perceived value play a significant role to influence customer purchase intention.

The results also suggest that green perceived value, attitude, and environmental sustainability perception are among the biggest factors influencing consumers' propensity to purchase green jute-based lifestyle items. Thus, it can be said that consumers are more likely to purchase jute-based items when they are perceived as environmentally responsible, practical, attractive, durable, fairly priced and fit for usage in the modern lifestyle. However, the study shows that a positive environmental concern is not sufficient to enhance purchase behavior. Consumers also evaluate practical considerations such as quality, design, cost, and availability when making buying selections.

The study finds that there is a huge possibility for the development of green jute-based lifestyle products in the urban consumer market of Dhaka. These products can contribute to the environment by reducing reliance on plastic products, promoting biodegradable options, supporting local businesses, and encouraging responsible consumption. Recommendations for enhancing customer buy intention are manufacturers and marketers could improve product design, maintain reasonable costs, boost availability, and strengthen green branding. Policymakers should also promote jute products as part of Bangladesh's larger sustainability plan and encourage jute-based SMEs.

Hence, green jute-based lifestyle items can serve as a vital link between Bangladesh's traditional jute legacy and current consumers' demand for sustainable lifestyle consumption.

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