

Predicting Eco-friendly Packaging Product Buying Behavior in Bangladeshi Superstores Using S-R Theory

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Abstract: *This study employs the Stimulus-Response theory to predict consumer behavior in Bangladeshi supermarkets, focusing on retail shopping intentions, spending patterns, and environmental responsibility. Data from various superstores, including Shwapno, Agora, Meena Bazar, Prince Bazar Ltd. (Mirpur), and AMA Fresh Food, was collected through online and offline surveys with 196 respondents and analyzed using IBM SPSS 25.0. Results indicate a robust correlation between environmental responsibility and eco-friendly purchasing behavior and a positive link between environment-friendly purchase intention and actual eco-friendly purchase behavior. While responsible buying aligns with heightened intention, some respondents exhibit lower concern for environmental well-being. Limitations include reliance on cross-sectional data for a specific period and potential cultural constraints. Nevertheless, supporting the S-R theory, these findings offer valuable insights for marketers planning to promote eco-friendly packaging products in Bangladesh's superstore retail sector. The study highlights the S-R theory's relevance in predicting eco-friendly purchasing behavior, emphasizing the importance of environmental purchase intention and behavior in this context.*

Keywords: Environmental Responsibility, Environment-Friendly Purchase Intention, Environment-Friendly Purchase Behavior, Environment-Friendly Packaging Product, S-R Theory, Superstore Retailing.

1. Introduction

In Bangladesh, the superstore retail market has expanded dramatically since 2001. Despite this industry's rapid growth, little research has been recorded, particularly on environmentally friendly consumer behavior. Because of the progressive rise over time, Bangladeshi superstores now have to compete fiercely to retain their current customers (Alam & Noor, 2019). When examining customer purchase patterns for products with eco-friendly packaging in the context of Bangladeshi superstore retailing, the S-R (stimulus-response) theory can be applied. According to Yadegaridehkordi et al. (2021), customers book eco-friendly hotels when they believe their preferences can impact the environment. Additionally, customers with environmental assurance expertise transition to using green products and services in their daily lives (Peris et al., 2020).

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Environmental responsibility is crucial to predicting ecologically responsible purchase behavior for packaged goods in supermarket retailing. Along with that, "Intention" often relates to a person's readiness and preparation to engage in the conduct in question (Aseri & Ansari, 2023). As a result, it is possible to use customer support for eco-friendly products to explain their intent to make eco-friendly purchases (Sharma et al., 2023). According to Siddique et al. (2021), people purchase environmentally friendly products for two reasons: to prevent future losses and to feel good about doing their part to protect the environment. Additionally, Wibowo et al. (2019) assert that intention is the best predictor of future action. Bangladesh's retail market is worth \$18 billion and is expanding at a rate of 7.5% a year. However, the total supermarket market, which includes the branded sector, is valued at \$400 million. It is surpassing traditional retail in market share, expanding by almost 12 percent a year (Parvez, 2023). A recent survey found that over 2.5 crore polythene bags are discarded in Dhaka city after being used just once every day (The Business Standard, 2023). As a result, the usage of single-use polythene bags will increase in the future if the superstores of Bangladesh do not take any proper initiative. Almost 646 tons of plastic waste were collected in Dhaka alone in 2020, making up just 10% of the total rubbish. Only 37% of the plastic garbage is recycled, but 48% of this debris ends up in landfills. Approximately 12% of plastic garbage is disposed of carelessly, with the remaining 3% being dumped in minor waterways (Abdullah & Abedin, 2024). Day by day the situation becomes worse. However, several studies mentioned that, besides making a profit, the firms should come forward to protect the environment (Peris et al., 2021). The author of the study used this construct to forecast consumer behavior toward buying packaged items that are ecologically friendly in Bangladesh's superstore retail environment. Several past studies mentioned that there is a link between environmentally friendly purchase intent and behavior (Akhtar et al., 2021; Ghali-Zinoubi, 2020; Hasnain et al., 2020). This concept was applied to Bangladeshi supermarket sales in this study. Consumer tastes have changed as a result of this increased environmental consciousness, with many choosing ecologically friendly and ethically manufactured goods. In order to satisfy this desire, merchants are implementing sustainable marketing techniques, coordinating their plans with the values of their customers to improve market competitiveness and brand loyalty (Fazal et al., 2023). There are still issues, though, such as resolving the higher prices of sustainable items and closing the gap between customer intentions and actual purchase behavior. Businesses hoping to take advantage of Bangladesh's green economy must address these issues (Islam, 2023).

Prior studies have demonstrated that attitudes are an essential mediator between consumers' awareness of and intentions for using eco-friendly packaging and their environmental responsibilities (Jayasinghe, 2022). Another study by Lisboa et al. (2022) examines how Gen Zers' perceptions of sustainable packaging and ergonomics affect their attitudes toward the environment and willingness to purchase goods. Additionally, studies found that environmental lifestyle and retailer environmental reputation directly impact consumer behavior in relation to sustainable packaging (Su et al., 2021). According to Zhang et al. (2022), in most studies, environmental values, environmental knowledge, and environmental concern are all positively correlated with attitude formation. A further study by Tuhin et al. (2022) found that individual norms and levels of religiosity impact customer attitudes about halal shopping. Consumer environmental information significantly and favorably influences their choice to make green purchases (Mahmoud et al., 2022). In a cross-cultural study, the interplay of environmentally friendly factors and the Islamic religion with recycled packaging items should have concentrated on the superstore retail scenario for buying eco-friendly products. In order to ascertain how attitudes, personal

norms, and religion influenced consumers' decisions to purchase halal cosmetic products, a study on Bangladeshi consumers, a nation with a majority of Muslim citizens (Tuhin et al., 2022). Considering the above issues from the country's perspective, eco-friendly packaging can bring a positive change in the environment. This study offers a solution through environmental responsibility and environment-friendly purchase intention.

This study will emphasize the research gap with past research perspectives from various angles. like as-

- 1) It will demonstrate that a connection between environmental responsibility and environment-friendly purchase behavior.
- 2) It will also show a correlation between environment-friendly purchase intention and environment-friendly purchase behavior.

In response to the problem statement, two research questions are developed under the S-R (Stimulus-Response) theory. Such as-

1. What connection exists between environmental responsibility and environment-friendly purchase behavior?
2. What is the relationship between environment-friendly purchase intention and behavior?

The study's objectives are listed below:

1. Identify the factors affecting the relationship between environmental responsibility and environment-friendly purchase behavior.
2. Identify the most appropriate factors affecting the relationship between environment-friendly purchase intention and environment-friendly purchase behavior.

The stimulus-response (S-R) theory emphasized in this research article is the study's theoretical basis since it is the author's choice in the setting of superstore retailing in Bangladesh. This study focused on superstore retailing and consumer purchasing patterns for goods with environmentally friendly packaging. Ultimately, this kind of research setting is a fresh concept for Bangladeshi consumers' shopping preferences and attitudes toward products with environmentally friendly packaging. It will contribute to the corpus of research showing that environmentally conscious consumers are more likely to buy products with ecologically friendly packaging. On the other hand, there is also a positive association between the intention to buy an environmentally friendly product and the actual behavior of buying an environmentally friendly product in a superstore that sells goods with environmentally friendly packaging. The following is the breakdown of the remaining sections of this research paper: Information on the critical literature review and hypothesis formulation is provided in Section 2. After Section 3 discusses approaches, Section 4's discussion of results. The limits, suggestions for additional research, debate, and conclusion are all found in Section 5.

2. Literature Review and Hypothesis Development

2.1. S-R (Stimulus-Response) Theory

The stimulus-response hypothesis is that behavior arises due to the interaction between stimuli and reactions. The concept is that a subject experiences a stimulus, responds to it, and subsequently exhibits "behavior" (the focus of psychology as a field of study). In other words, from this perspective, behavior requires some form of stimulus to occur. Classical conditioning instantly comes to mind when thinking about stimulus-response theory. It demonstrates how a stimulus may rapidly and readily elicit a predictable and consistent response in a subject, classical conditioning efficiently communicates the principle of stimulus and response. Ivan Pavlov was a leading proponent of behaviorism, having invented classical conditioning through his research (Akpan, 2020). This technique is used to examine consumer purchasing trends. Consumer awareness is influencing marketing and environmental factors. In recent years, the stimulus-response (S-R) model has emerged as one of the most widely used frameworks for fusing input and output into a single model. In large part, because it makes it easier to comprehend the causes of unique behavior, this approach addresses problems with human behavior. In Bangladeshi superstore retailing, the study employs the S-R theory to estimate consumer purchase trends for goods using ecologically friendly packaging. The S-R theory states that "S" stands for stimulus and "R" represents response. In this case, the recommended frameworks, like environmental responsibility, comprise the stimulation. Contrarily, the response also considers consumer attitudes toward buying goods with green packaging. Therefore, any consumer who is interested in environmental conservation must take these factors into account. They are motivated by these impulses to consider what goods with environmentally friendly packaging they ought to purchase for themselves. A person will shop at the retail superstore for packaged items that are environmentally friendly if they have a positive outlook. If not, they will not buy the products from the store.

2.2. Environmental Responsibility (E.R.) and Environment-Friendly Purchase Behavior (P.B.)

Environmental awareness directly impacts environmental responsibility, defined as a consumer's willingness to preserve and safeguard the environment (García-Salirrosas et al., 2024). The surge in customer demand for goods with eco-friendly packaging is one indication of this consciousness. Customers would feel a strong sense of responsibility when they were aware of how their consumption habits impacted the environment, which could encourage them to buy eco-friendly products. As a result, consumers will inevitably be influenced by their concern for the environment when making eco-friendly product purchases (Costa et al., 2021). Environmental responsibility can show a consumer's moral virtues when addressing environmental issues, such as restraint, righteousness, and perseverance. This argument holds that adopting environmental responsibility and engaging in sustainable consumer behavior is primarily motivated by this aspect (Anser et al., 2021). The current study discovered a substantial correlation between environmental responsibility and the intention to purchase green in the context of green consumer behavior. Environmental responsibility is a crucial aspect of green consumer behavior. Consumers have a moral duty to try to address environmental challenges. According to Wolbring and Gill (2023), while knowledge did not unquestionably increase eco-friendly care behavior, indigenous students' attitudes and sense of personal responsibility greatly influenced their actions. As a result, several researchers

demonstrate that behavioral intentions significantly influence describing behaviors, and they believe behavioral intentions significantly predict action (Nekmahmud et al., 2022; Wang et al., 2020). Moreover, Trivedi et al. (2018) mentioned that consumers who feel very effective in their pro-environmental efforts behave appropriately. As a consequence, customers' willingness to pay more for things promoted as being ecologically friendly or green in this situation is an example of this elevated level of pro-environmentalism (Shimul & Cheah, 2023). The following is, therefore, hypothesized:

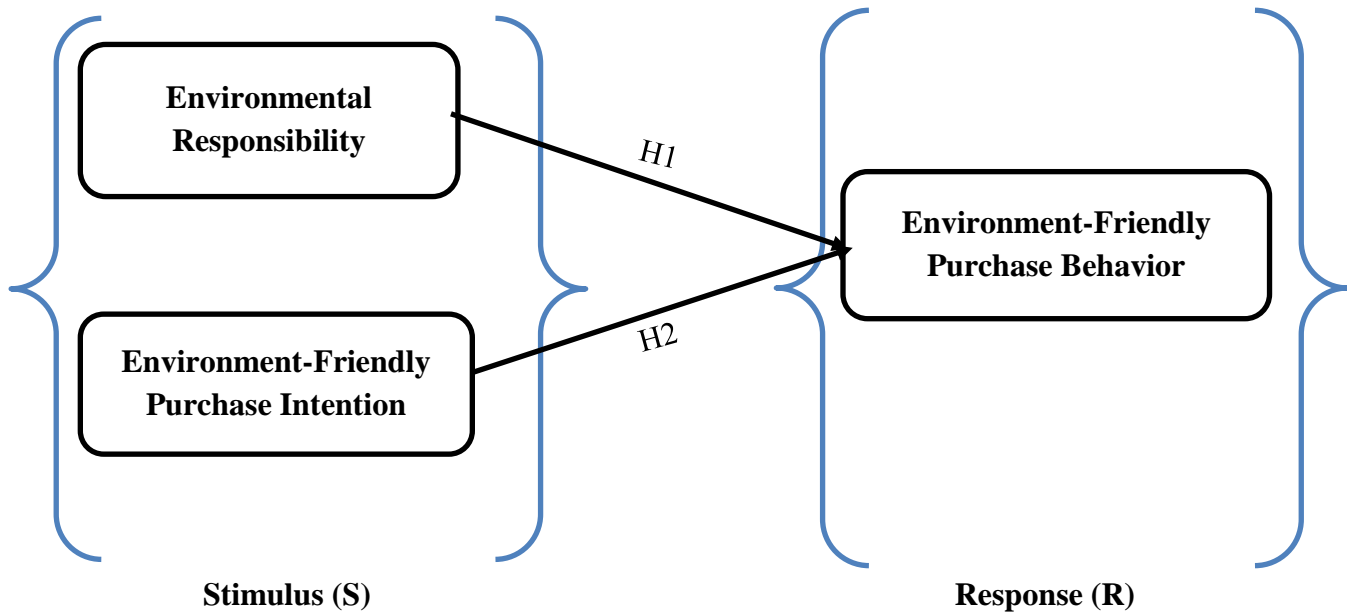
H1: There is a favorable correlation between environmental responsibility (E.R.) and environment-friendly purchase behavior (P.B.).

2.3. Environment-Friendly Purchase Intention (P.I.) and Environment-Friendly Purchase Behavior (P.B.)

The degree to which people can control their behavior depends on how well they can overcome such challenges (Ajzen, 2020). Zaremohzzabieh et al. (2021) supported the idea that consumers' desire to make green purchases influences their purchasing behavior. Furthermore, Ahmed et al. (2021) discovered that adult customers' purchasing intentions affected their purchase of organic food. Consumers may be willing to pay more for green packaging (Hao et al., 2019). Environmental awareness and recycling intentions significantly reduce the influence of perceived consumer effectiveness and environmental friendliness on green purchasing behavior (Kautish et al., 2019). "Environment-friendly purchase intention" (P.I.) is the term used to describe a person's willingness to start or finish a particular type of behavior, such as making green purchases. The term "environment-friendly buying behavior" (P.B.) refers to purchasing products that are friendly to the environment, recyclable, or considerate of environmental concerns (Siddique et al., 2021; Zaremohzzabieh et al., 2021). In order to ascertain the effects of various factors on Malaysian consumers' inclination to buy environmentally friendly goods (Khan et al., 2020). Customers take into account the environmental impact of their purchases and their concern for environmental quality. According to Al-Kumaim et al. (2021), people are more likely to buy ecologically friendly products if they care about the environment and want to recycle things. The findings demonstrate that environmental concern, green product awareness, government support, perceived ecological value and community green practice have a positive influence on purchase intention. Additionally, the customers are concerned about how their purchases affect the environment and their interest in environmental quality. In varied degrees, earlier studies examined environment-friendly buying intentions and behaviors in the context of energy-saving lamps (Hafez, 2017; Rahman et al., 2020). It has been found in past studies that environmental purchase behavior and environmental purchase intentions are positively related (Al-Kumaim et al., 2021; Rahman et al., 2020; Siddique et al., 2021). Consumers who act purposefully do so with a specific goal in mind. Environmentally friendly buying intention is the goal of customers to utilize products or services that have little impact on the environment. The following is, therefore, hypothesized:

H2: There is a favorable correlation between environment-friendly purchase intention and environment-friendly purchase behavior.

Figure 1: The Research Model with Stimulus-Response (S-R) Theory



Source: Authors' Compilation.

3. Research Methodology

3.1. Research Design

Because two or more samples can quickly be captured only once when utilizing this research design, the study's author used numerous cross-sectional designs under the descriptive research design. Using this research design for the "Predicting Eco-friendly Packaging Product Buying Behavior in Bangladeshi Superstores Using S-R Theory" research paradigm, the author obtained nearly 100% of the data from a questionnaire disseminated in several Facebook and LinkedIn groups (Figure 1).

3.2. Variables and Measurement

The author employed the following measures to assess the modeled constructs in this study. The scale was adapted from Paço and Gouveia Rodrigues (2016) to measure environmental responsibility (ER). Four environmental responsibility (ER) items were used, and one of them said, "Supporting environmental protection helps me feel like an environmentally responsible person. On the other hand, this study adapted the scale from Bian and Forsythe (2012) to measure purchase intention (PI) for environmentally friendly products. Finally, the author examined environmentally friendly purchase behavior (PB) using a four-item questionnaire from (Arnold & Reynolds, 2009). In order to verify the measurements' completeness and to prove validity, five local superstore retailing guides were consulted in April 2023. No issues were found. In mid-March 2023, a pilot

test with 60 superstore retail customers was conducted to ascertain the scales' legitimacy; the results were good enough to continue the data collection. An academic expert on environmental marketing then proofreads the survey.

3.3. Population

The target respondents are Bangladeshi consumers between the ages of 18 and 30 since they are accustomed to superstore retailing and have complete control over their decisions regarding which products to choose from. The top superstore retailing businesses, such as Shwapno Super Shop, Agora Super Shop, Meena Bazar, Prince Bazar Ltd. (Mirpur), AMA Fresh Food, and others, are chosen for data collecting from respondents who already commonly shop at those superstores.

3.4. Sampling Size and Sampling Technique

It is almost impossible and exceedingly challenging to collect the necessary data from every member of a significant group. As a result, among the total population, researchers should only select a small number of representative objects (Lohr, 2021). This study applied non-probability sampling to minimize the cost and save time. Convenience sampling is the only non-probability sampling technique used because it is straightforward, practical, and affordable. Nearly 196 respondents must be able to participate in the study's sample. A respondent must possess the essential knowledge of goods with green packaging to be included in the sample in Bangladesh superstore retailing. Before moving on to the retail center, respondents must confirm that they are familiar with the products that come in green packaging.

3.5. Questionnaire Design, Scaling Technique, and Data Collection

Two sections make up the questionnaire. Respondents were requested to provide demographic data in the survey's first section. In the second stage, the 11 items for the author's four modeled components used 7-point Likert scales. Because there was no sampling frame, the author used purposeful non-probability-based sampling, frequently used in social research, to gather the data (Nanjundeswaraswamy & Divakar, 2021; Shaikh et al., 2023). Between March 26 and April 5, 2023, the study's author conducted an online survey to gather information from respondents who had accessed the author's chosen superstore retailing through social media sites like Facebook, LinkedIn, and Fieldwork, including Shwapno Super Shop, Agora Super Shop, Meena Bazar, Prince Bazar Ltd. (Mirpur), AMA Fresh Food, and others. Respondents were questioned about their favorite superstore retail shopping experiences in Dhaka through an online and in-person poll. For data analysis, 196 valid replies in total were kept.

3.6. Data Analysis Tools

For the data analysis in the study, IBM SPSS 25.0 software is used. The author of this study looked into the respondents' demographic information first. Second, the study's author also carried out the regression analysis, exploratory factor analysis, Pearson's correlation matrix, and reliability and

validity analysis.

4. Data Analysis and Results

Table 1: Respondents Demographic Profile Analysis

Variable	Categories	Frequency	Percentage
Gender	Male	144	73.5
	Female	52	26.5
Age	18-22	89	45.4
	23-26	79	40.3
	27-30	20	10.2
	Above 30 Years	8	4.1
Education	Undergraduate	129	65.8
	Graduate	32	16.3
	Postgraduate	33	16.8
	Others	2	1.0
Occupation	Student	152	77.6
	Jobholder	41	20.9
	Others	3	1.5
Income Level	Low Income	139	70.9
	Moderate Income	51	26.0
	High Income	6	3.1
Heard about Eco-Friendly Packaging Products	Yes	160	81.6
	No	36	18.4

Source: Primary Data.

Table 1's gender breakdown of survey participants shows that more than 73.5% of men (144 people) and 26.5% of women, or 52 people, respectively, responded to the survey. This poll had about 196 participants. The poll respondents were mainly between 18 and 22, according to the

participants' ages. The 23- to 26-year-old respondents had the second-highest percentage of responses. The third-highest percentage of participants were between the ages of 27 and 30. The age range over 30 had the fourth-highest proportion of respondents. According to the respondents' educational backgrounds, undergraduate students comprised the bulk of the sample (65.8%). Then, around 16.8% and 16.3% of respondents had graduate degrees, respectively—approximately 1.0% of survey participants identified as others. Students make up the majority of the study's participants. There were 152 of them, making up 77.6% of the study's participants. Three (1.5%) additional jobholders were polled and placed third, followed by 41 (20.9%) other respondents with jobs. Most of the study's participants are low-income. There were 139 of them, making up 70.9% of the study's participants. Six (3.1%) respondents with high incomes were surveyed and placed third, followed by 51 (26.0%) participants with a moderate income. The fact that the respondents had heard of eco-friendly packaging products indicates that most study participants agreed. There were 160 of them, making up 81.6% of the study's participants. About 36 (18.4%) individuals in this study who were polled and placed second reported hearing about eco-friendly packaging products.

4.1. Reliability and Validity Analysis

4.1.1. Reliability and Validity Analysis for Environmental Responsibility (ER), Environment-Friendly Purchase Intention (PI), and Environment-Friendly Purchase Behavior (PB)

Cronbach's alpha values larger than 0.70 signify a high degree of reliability (Guilford, 1950; Nunnally, 1978). An analysis of the findings and hypotheses followed the reliability test. The findings (Table 2) demonstrate that the values of 0.813, 0.806, and 0.819 for the Cronbach's alpha for the environmental responsibility construct, the environment-friendly purchase intention construct, and the environment-friendly purchase behavior construct, respectively, are suitable for an exploratory study (Hair et al., 1998) (Table 3 & 4).

Table 2: Reliability and Validity Analysis for Environmental Responsibility (ER)

Cronbach's Alpha	N of Items
.813	4

Source: Estimated.

Table 3: Reliability and Validity Analysis for Environment-Friendly Purchase Intention (PI)

Cronbach's Alpha	N of Items
.806	3

Source: Estimated.

Table 4: Reliability and Validity Analysis for Environment-Friendly Purchase Behavior (PB)

Cronbach's Alpha	N of Items
.819	4

Source: Estimated.

4.2. Exploratory Factor Analysis

As shown in Table 5, any dataset can be subjected to factor analysis if the KMO value is more than 0.6 and the BTS (Bartlett's test of sphericity) is significant ($p < 0.05$) (Hair et al., 1998). The KMO value demonstrated the accuracy of the data in this experiment, which was 0.900. On the other hand, because it is less than 0.05, the BTS value in this study, which is 0.000, is noteworthy.

Table 5: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.900
Bartlett's Test of Sphericity	Approx. Chi-Square	946.918
	Df	55
	Sig.	.000

Source: Estimated.

After the appropriateness and significance of the sample were established, the research dataset underwent factor analysis to determine the variables that statistically explain the covariance and variation among the constructs. As a result, factor analysis reduces the number of latent variables with a tolerable amount of shared variation among a large number of measurable or observable variables (Bartholomew et al., 2011). The factors that best explained the variables were extracted in this study using principal component analysis (PCA), one of the various factor analysis extraction techniques. The importance of communalities was investigated since components with low communalities will significantly skew the results, as noted by Fabrigar et al. (1999). Items with low communality should be eliminated because component analysis requires each item to share some variance with other items to accomplish its intended goal (Child, 2006). Some scholars believe communities larger than 0.2 should be appropriate (Boran et al., 2020; Child, 2006; Fabrigar et al., 1999). Even though Ahamat et al. (2018), Costello and Osborne (2019), Fabrigar et al. (1999), Leimeister (2010), and Williams et al. (2010) contend that a communality value above 0.40 should be acceptable, it is more likely that different results will be obtained when the communality value is below 0.40. Each study item's commonality is listed in Table 6, and as every item had a value of more than 0.40, none were eliminated from the analysis.

Table 6: Values of Communalities

Items	Initial	Extraction
ER1	1.000	.681
ER2	1.000	.731
ER3	1.000	.572
ER4	1.000	.677
PI1	1.000	.753
PI2	1.000	.704
PI3	1.000	.727
PB1	1.000	.710
PB2	1.000	.636
PB3	1.000	.678
PB4	1.000	.594

Source: Estimated. Extraction Method: Principal Component Analysis.

4.3. Pearson's Correlation Matrix

A correlation analysis was done to look at the linear relationship between the two constructs. According to Pallant and Manual (2013), if the correlation coefficient between the two variables is more significant than 0.71, it is presumed that the variables have multicollinearity difficulties. At the two-tailed significance level of 0.01, the dataset's Pearson's correlation coefficients ranged from 0.405 to 0.631, and the findings demonstrated that multicollinearity was not a problem. Table 7 shows a satisfactory Pearson's correlation coefficient between ER and PB of 0.631. However, Pearson's correlation coefficients between PI and PB are 0.574 in Table 8, which is acceptable.

Table 7: Pearson's Correlations Matrix between ER and PB

		ER	PB
ER	Pearson Correlation	1	.631**
	Sig. (2-tailed)		.000
	N	196	196
PB	Pearson Correlation	.631**	1
	Sig. (2-tailed)	.000	
	N	196	196

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

Table 8: Pearson's Correlations Matrix between PI and PB

		PI	PB
PI	Pearson Correlation	1	.574**
	Sig. (2-tailed)		.000
	N	196	196
PB	Pearson Correlation	.574**	1
	Sig. (2-tailed)	.000	
	N	196	196

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

4.4. Regression Analysis

In this study, regression analysis was performed to assess the proposed hypotheses and establish a causal link between the dependent and independent variables (Table 9). According to Hair et al. (1998), this methodology is appropriate for studying a study topic when two or more independent variables influence one dependent variable. A high correlation value between 0.36 and 0.81 should

be taken into account (de Matos et al., 2016). The results of the regression model are sufficient for our inquiry. This outcome was deemed sufficient because the model's explanatory power, measured by its R square value of 0.483, was around 48.3% of the total variance.

Table 9: Model Summary

Model Summary				
Model	R	R Square	Adjusted Square	Std. Error of the Estimate
1	.695 ^a	.483	.478	.76851

Source: Estimated. a. Predictors: (Constant), PI, ER

The ANOVA test results demonstrated the model's relevance (Table 10). Because the F-statistics ($F = 90.185$) were significant at the 5% significance level ($p < 0.05$), regression analysis findings showed that the model was sufficient.

Table 10: ANOVA Results

ANOVA^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	106.527	2	53.263	90.185	.000 ^b
	Residual	113.986	193	.591		
	Total	220.513	195			

Source: Estimated. Dependent Variable: PB, Predictors: (Constant), PI, ER.

The ANOVA test results demonstrated the model's significance (Table 11). The regression analysis findings showed that the model was appropriate because the F-statistics ($F = 90.185$) was significant at 5%.

Table 11: ANOVA Results

ANOVA^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	106.527	2	53.263	90.185	.000 ^b
	Residual	113.986	193	.591		
	Total	220.513	195			

Source: Estimated. Dependent Variable: PB, Predictors: (Constant), PI, ER

Table 12: Coefficients

Coefficients^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.941	.349		2.699	.008		
	ER	.459	.061	.457	7.573	.000	.736	1.359
	PI	.322	.057	.339	5.623	.000	.736	1.359

Source: Estimated. a. Dependent Variable: PB

A tolerance value greater than two and a VIF of ten or more, as per Daoud (2017), demonstrates the issue of multicollinearity, which is described by the variance inflation factor (VIF) and tolerance levels. Multicollinearity is okay with the statistics of the data under consideration, as indicated by the tolerance value and VIF value presented in Table 12. Table 13 displays the regression analysis findings used to evaluate the hypotheses. Due to $p < 0.05$, the link between ER and PB is significant. Similar to PI and PB, which have a strong connection, $p < 0.05$. H1 and H2 are therefore approved. The most significant and influential predictors of environmentally friendly purchase behavior, according to the value of the standardized coefficient beta, are environmental responsibility and environment-friendly purchasing intention. Environmental responsibility comes in second with a beta value of 0.457, followed by the aim to make environmentally friendly

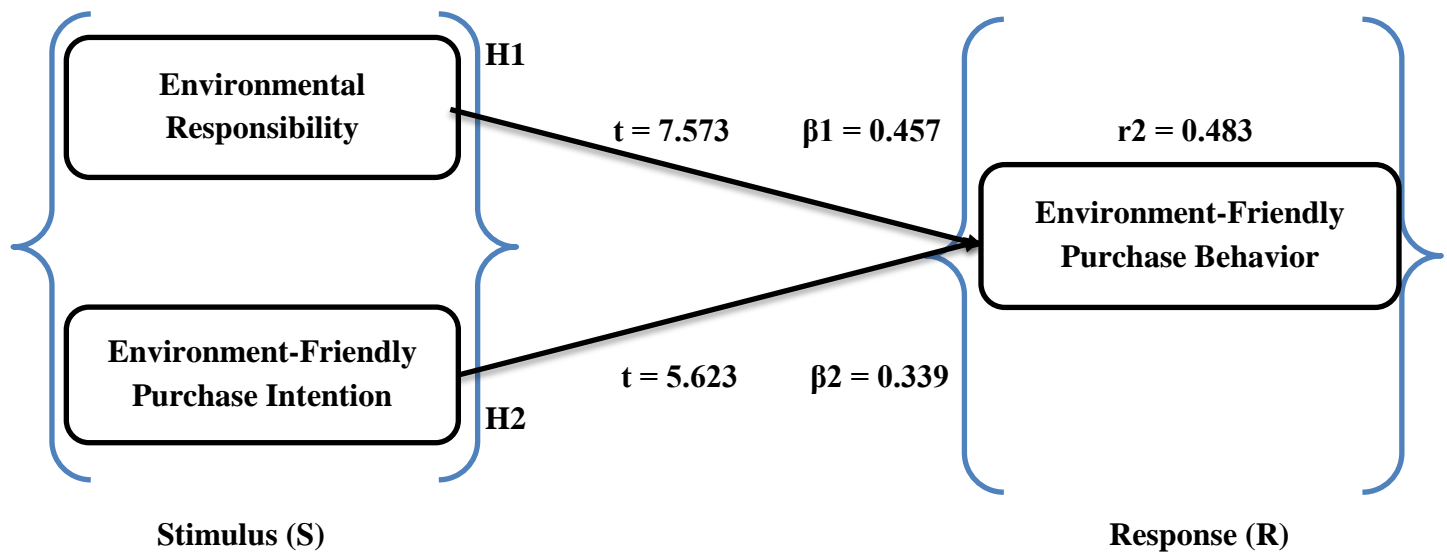
purchases with a beta value of 0.339 (Figure 2).

Table 13: Results of Regression Analysis

No.	Hypothesis Path	β	Std. Error	t-value	P value	Decisions
H1	ER \implies PB	0.457	0.061	7.573	0.000	Accepted
H2	PI \implies PB	0.339	0.057	5.623	0.000	Accepted

Source: Estimated.

Figure 2: The Results of the Research Model with Stimulus-Response (S-R) Theory



Source: Authors' Compilation.

5. Discussion and Conclusion

5.1. Theoretical Implications

This study looked into the relationships between environmental responsibility (ER), environmentally friendly purchase intention (PI), and environmentally friendly purchase behavior (PB). While earlier research on superstore retailing has typically looked at these characteristics separately, a need for more studies to combine these ideas into a single nomological network is why this study was conducted (e.g., Arnold & Reynolds, 2009; Bian & Forsythe, 2012; Paço & Gouveia Rodrigues, 2016; Q. Zhang et al., 2022). The author understands how these superstores' retailing performance metrics interact through modeled interactions. The results of this study demonstrate a strong correlation between environmental responsibility (ER) and ecologically friendly purchase behavior (PB) (e.g., Anselmsson & Johansson, 2007). Overall, the findings show that in the setting of superstore retailing, the environment-friendly purchasing intention (PI) affects the environment-friendly buying behavior (PB) (e.g., Alamsyah et al., 2021). The S-R (Stimulus-

Response) theory, however, makes it possible to examine environmentally friendly packaging and consumer purchasing patterns in the context of Bangladeshi superstore retailing. The results of this study demonstrate how the presence of environmental responsibility (ER), environment-friendly purchase intention (PI), and environment-friendly purchase behavior (PB) may be able to make a novel contribution to the superstore retailing industries in Bangladesh (Alam & Noor, 2019).

5.2. Practical Implications

In this study, the author suggested a model to anticipate consumers' preferences for environmentally friendly packaging products using the S-R (Stimulus-Response) theory in the context of Bangladeshi superstore retailing. From this model, the author recognized the following practical implications:

In Bangladesh, increased promotion of green marketing concepts is required to alter consumers' perceptions of these tactics. These concepts must be connected to promoting green marketing strategies in Bangladeshi superstore retailing. The eight green marketing tactics consumers care about most include green product packaging, education, eco-friendly products, eco-friendly manufacturing practices, an eco-friendly supply chain, green labeling, and eco-friendly communication methods. Despite coming from different sectors, these techniques help to reduce environmental harm (Cherian & Jacob, 2012; Polonsky, 2011; Testa et al., 2020). By emphasizing their environmental responsibilities and concerns, businesses can affect consumers' willingness to pay for environmentally friendly products. Businesses can use a green marketing communication strategy to teach customers about a specific environmental concern, the product's positive environmental benefits, and the adverse environmental effects of alternatives to allay their concerns. Green marketers can emphasize to consumers the likelihood that environmental harm will be reduced as a result of purchasing eco-friendly products using incentives and single-issue labels, such as the energy rating label for refrigerators and washing machines, as well as packaging and advertising (Pernice et al., 2023). Eco-friendly items could be marketed through social media and the Internet (W. Zhang et al., 2021). The power of the Internet may help companies and people make better decisions to conserve the environment through a social network, product descriptions, feedback, recommendations, and other aspects. In contrast, businesses might consider educating their clients to increase their awareness of environmental issues. Education is one of the most effective strategies to propagate positive ideas and concepts for superstore retailing, including introducing goods with environmentally friendly packaging. In order to lessen the effects of the products consumers purchase and change consumers' attitudes toward goods with environmentally friendly packaging, green marketers must modify the products being sold in Bangladesh superstores (De Canio, 2023). Consumers must be aware of the effects of the products they purchase.

5.3. Limitations and Further Research Directions

Due to time and cost restrictions, this study used a cross-sectional approach to collect data, limiting its ability to conclude causality. Therefore, it is advised that future researchers employ the longitudinal approach to ascertain cause-and-effect correlations in studies of a similar nature. According to Caruana et al. (2015), the longitudinal strategy uses ongoing assessments to track the targeted respondents across time. A longitudinal approach is more suitable for comprehending the causal relationship between purchase intention and behavior in the setting of superstore retailing. The second flaw is the study's adoption of a single theory to assess Bangladeshi clients' shopping

patterns and intentions. In order to increase the conceptual framework's potential for explanation, it is advised that future studies broaden it to incorporate additional elements such as environmental concern, value, knowledge, lifestyle, and reputation. Future researchers should combine TPB with other theories, such as the Theory of Consumption Values and the Theory of Reasoned Action (TRA), to gain fresh perspectives on this particular issue. A survey questionnaire used for this study's data gathering has the additional flaw of being vulnerable to bias (Chrysochou, 2017). There were biases present, such as response bias, which made it more probable that respondents would provide false information in response to the questions. It is also probable that there was researcher bias, which refers to academics' propensity to incorporate personal judgments when doing research and evaluating data. Chrysochou (2017) did not advise using survey questions to analyze behavior. Researchers are recommended to use various study methodologies, such as an in-depth interview, to obtain information on the respondent's behavior.

5.4. Conclusion

This study had both theoretical and managerial implications. This study supports the S-R model using three constructs: environmental responsibility, environmentally friendly purchasing intention, and environmentally friendly purchasing behavior. The findings of this study have increased Bangladeshi consumers' understanding of purchasing products from supermarket stores in environmentally friendly packaging. The Bangladeshi government and businesspeople should consider the study's findings to increase consumer acceptance and consumption of products with environmentally friendly packaging in superstore retailing and ultimately reduce environmental pollution in Bangladesh. Bangladeshi business people must develop strategies and plans that will take these qualities into account because they can give companies an advantage in the superstore retailing sector of Bangladesh. In this way, the study significantly adds to the current information about environmentally friendly packaging options. The results also support a new line of research studying Bangladeshi supermarkets' purchasing patterns for products with environmentally friendly packaging. As a result, the research methodology used in this study is a valuable tool for other researchers who wish to investigate consumer preferences for ecologically friendly packaging in the context of Bangladeshi superstore retailing.

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