



An Empirical Investigation of Sustainable Packaging Purchase Intention in Pakistan.

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Abstract

The concept of sustainability is becoming more widely discussed in daily conversations, and more people are adopting sustainable lifestyles. The main objective of this study is to determine the reason for (motivator), reason against (barrier) influencing consumer values (ascription of responsibility), attitude, and purchase intention toward sustainable packaged products. The study uses the "Behavioural reasoning theory" as underpinning foundations to find the consumers' intention toward sustainable packaged products. The data was collected through a questionnaire from the university students who were enrolled in the MBA program. The survey was conducted online and on paper. There were 850 questionnaires distributed in all; the final sample size, with a 70% response rate, was determined by excluding invalid responses from the 580 questionnaires. PLS-SAM was used for data analysis. The finding of this study discussed that reason for (environmental concern and health consciousness) has a positive impact on consumer attitude and sustainable product purchase intention. Similarly, the results of this study explained that reason against (information barrier and perceived price) has negative impact on consumer attitude and sustainable packaging product purchase intention. Finally, the results of this study showed that the ascription of responsibility positively influenced attitude and reason for toward sustainable packaging products and negatively influenced on reason against toward sustainable packaging product purchase intention. Additionally, marketers can apply these findings both theoretically and practically.

Keywords: Sustainable packaging, Purchase intention, Behavioral Reasoning Theory (BRT), Environmental concern, Health consciousness, Information barrier, Perceived price, Ascription of responsibility.

1. Introduction

Environmental protection has become more popular in recent years as people have become more conscious of the depletion of natural resources (Lan *et al.*, 2023). Consumers are now encouraged to support sustainable development, particularly environmental protection (James & Kurian 2021). Recent environmental studies have demonstrated that customers are ecologically conscious (Kingston & Paulraj 2024; Prakash *et al.*, 2024; Lan *et al.*, 2023; James & Kurian 2021; Gaiser, 2020). Environmental awareness is becoming more and more prevalent in modern marketing, especially in the design of packaging (Nguyen *et al.*, 2021).

Packaging serves many useful functions, such as brand identification, protection, and efficient transportation (Jestratičević *et al.*, 2022). Additionally, it is a crucial instrument for creating value (Lisboa *et al.*, 2022), and in the competitive market, it has become a most effective promotional and advertising tool (Lisboa *et al.*, 2022; Steenis *et al.*, 2018). Packaging disposal after a single usage is a major disadvantage that harms the environment (Lisboa *et al.*, 2022; Gaiser, 2020). Its single-use nature poses an unprecedented threat to the environment Lisboa *et al.*, 2022; Nguyen *et al.*, 2021). Research has indicated that 63 percent of plastic waste consists of packaging materials (Lisboa *et al.*, 2022; Nguyen *et al.*, 2021). Packaging materials are the primary cause of household consumption's up to one-third environmental effect. It has had a significant effect on the packaging industry because the packaging is frequently mentioned as waste-source friendly (Lisboa *et al.*, 2022; Wandosell *et al.*, 2021). Most consumers in every market stated that a package "made from recyclable materials" was its main reason for being ecologically friendly (Lisboa *et al.*, 2022; Wandosell *et al.*, 2021). Furthermore, several studies have suggested the use of biodegradable materials, bio-composites, and biopolymers as natural processes are unable to quickly break down plastics and polymers (Yaputra *et al.*, 2023; Nguyen *et al.*, 2021).

The previous literature shows that young consumers are more environmentally conscious (Kautish & Sharma 209; Lisboa *et al.*, 2022), more aware of ecological difficulties (Wandosell *et al.*, 2021), and more willing to consume environmentally friendly items (George *et al.*, 2023). No earlier observations have investigated the factors impacting motivators and resistors in making sense of consumer purchase intention and behavior toward sustainable packaging products in a cohesive framework. Behavioral Reasoning Theory (BRT) is used in this study to close the gap in knowledge on consumers' purchasing intention regarding sustainable packaging products. BRT is a new theory that examines the relationships between the reasons, reason for (RF) and Reason against (RA), values (beliefs), attitudes, and intentions to employ particular inventions to provide a broad overview of consumer behavior and intentions (Westaby, 2005).

Most of the research has been conducted in developed nations and has examined the factors that lead consumers to choose environmentally friendly packaging for their products (Kingston & Paulraj 2024). In Pakistan, there is no research done on sustainable packaging using BRT. Therefore, the main objective of this study is to determine

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the reason for (motivator), reason against (barrier) influencing consumer values (ascription of responsibility), attitude, and purchase intention towards sustainable packaged products.

2. Literature Review

2.1. Behavioral Reasoning Theory (BRT)

Behavioral theories are broadly applied and accepted in the social science field (Sahu *et al.*, 2020). Various social science theories such as the theory of planned behavior (TPB), the theory of reason action (RTA), and the theory of explanation-based decision-making (TEDM) measure different determinants of human behavior (Sahu *et al.*, 2020). TRA and TPB allowed marketing practitioners and scholars to understand the purchasing behavior of consumers in different situations (Sahu *et al.*, 2020). However, TPB and RTA have some limitations and questions by many researchers (Gilal *et al.*, 2019; Sahu *et al.*, 2020). BRT is considered as an advanced and new theory in the marketing field. BRT explains the relationship among values or beliefs, reason against, reason for, global motives (subjective norm, attitudes, and perceived behavioral control), consumer behavior, and intention. BRT has been recently and previously used in multiple situations such as alcohol consumption (Norman *et al.*, 2012; Tandon *et al.*, 2020), leadership decision-making style (Pillai & Sivathanu, 2020; Tandon *et al.*, 2020; Westaby *et al.*, 2010), organic food branding and purchasing (Ryan & Casidy, 2018; Tandon *et al.*, 2020), organic food purchasing decision (N. P. T. Nguyen & Dang, 2022), local food consumption (Kumar *et al.*, 2021), food waste and over ordering using of food delivery apps (Sharma *et al.*, 2021), green consumption attitude (J. Wang *et al.*, 2021), electronic waste collection (Nyeko *et al.*, 2022), adaptation of internet technology in the agriculture field (Pillai & Sivathanu, 2020), entrepreneurial behavior of people in different culture (Aly & Galal-Edeen, 2021; Calza *et al.*, 2020), e-waste recycling and management (Dhir *et al.*, 2021), adoption of online subscription beauty boxes (Sivathanu, 2018), adaptation of mobile banking (Dhir *et al.*, 2021; Gupta & Arora, 2017), and sustainable clothing consumption intention on young generation (Diddi *et al.*, 2019). Therefore, in this study a research model is created based on BRT; we first look at how the ascription of responsibility influences reason against (barriers), the reason for (motivators), and attitude towards sustainable packaged product purchase intention. (See Figure

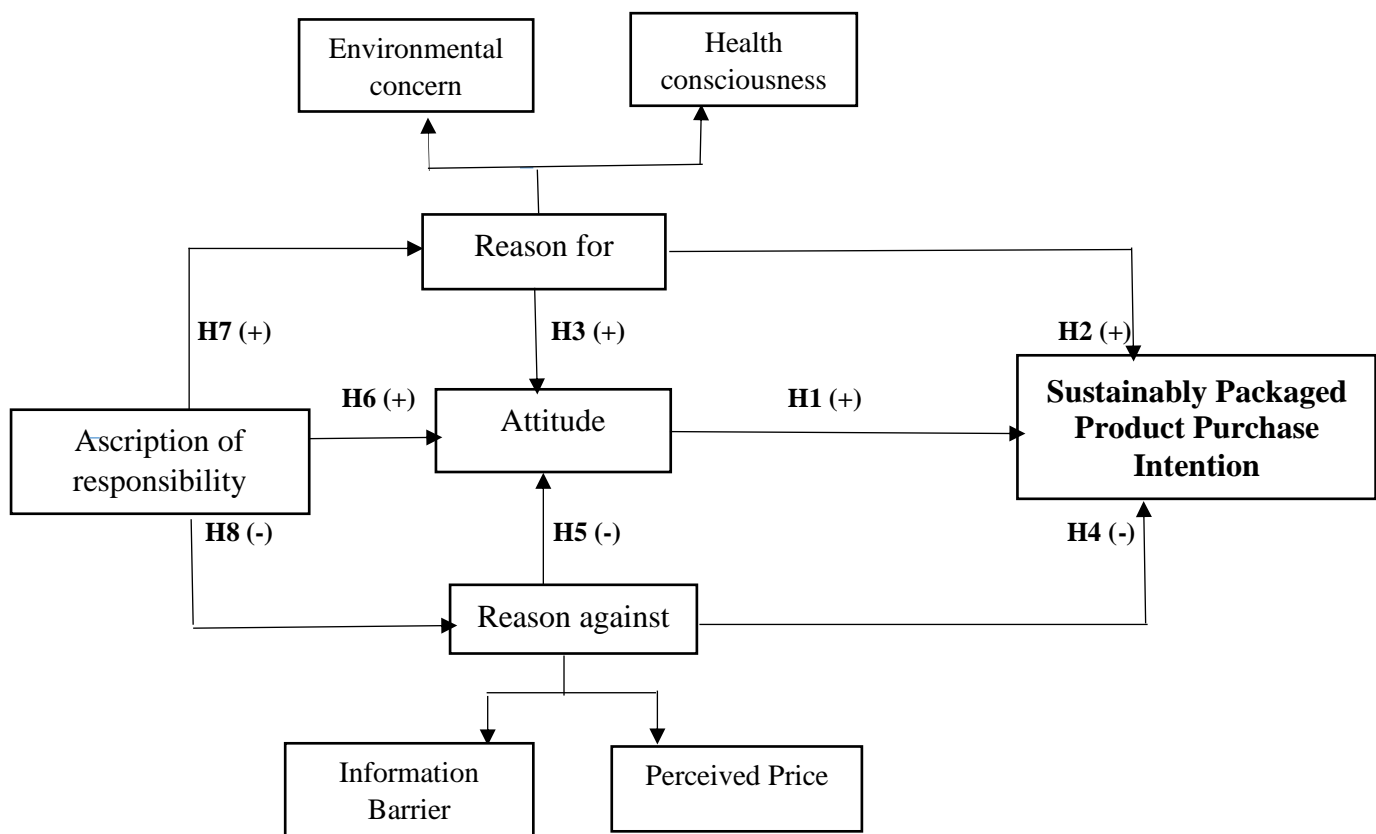


Figure 1: The conceptual model

2.2. Sustainably Packaging and Purchase Intention

“Sustainable packaging is referred to as any packaging that’s designed to have the least impact on the environment” (Meherishi *et al.*, 2019). “Sustainable packaging is the development and use of packaging which results in improved sustainability” (Lisboa *et al.*, 2022). Consumers' choice and purchase of products is influenced by their packaging style. Previous research discusses that purchase intention toward eco-friendly products increased due to sustainable packaging (De Canio *et al.*, 2021; Kingston & Paulraj 2024).

2.3. Attitude

Attitude in this research framework reveals that environmental-related knowledge will encourage consumers to purchase sustainable packaging product purchase intention. The first and strongest predictor of intention and behavior is called attitude (Santos *et al.*, 2021) “Attitude is also defined as the degree to which an individual has favorable and unfavorable feelings regarding concerned behavior” (Tufail *et al.*, 2022). Previous research regarding sustainable packaging buying intention shows that attitude has a positive and significant effect on consumer purchase intention (Meet *et al.*, 2024; Liang *et al.*, 2023; Lisboa *et al.*, 2022; Santos *et al.*, 2021). Thus, the following is the study's first hypothesis:

H1: *Attitude has a positive impact on sustainably packaged products purchase intention.*

2.4. Reason For (RF)

‘Reason for’ refers to a favorable attitude toward specific behavior (Westaby, 2005). “Reason for also represents the motivators or enablers that may prompt the favorable perceptions among consumers” (Tufail *et al.*, 2022). The research framework explains the “Reason For” as a combination of health concern and environmental concern because the research on sustainable packaging has already shown the importance of these two variables (Arcese *et al.*, 2024; Kingston & Paulraj 2024).

Environmental concern denotes “as the degree to which individuals are aware of environmental issues, support to solve the issues and actively contribute to provide solution” (Wong *et al.*, 2018). EC is a major element in the customer decision making process and environmental sustainability research (Ahmed *et al.*, 2021). Previous research explains that the sustainable packaging purchase intention increased due to high level of environmental concern. The previous literature shows that environmental concern positively and significantly effect on attitude and sustainable packaging products purchase intention (Tuwanku *et al.*, 2018; Santos *et al.*, 2021; Kuang *et al.*, 2024).

“Health-centered motivation refers to consumers’ specific actions motivated by preventive health measures” (Kushwah *et al.*, 2023). The World Health Organisation and numerous other health-related organizations have drawn attention to improving sustainable packaging that may effectively on consumers' health (Kingston & Paulraj, 2024; Kushwah *et al.*, 2023). Previous literature explains that health consciousness positively and significantly effect on attitude and sustainable packaging product purchase intention (Kingston & Paulraj 2024; Hao, & Chenyue, 2021). Therefore, the research hypothesizes that:

H2: *Reasons for (motivators) positively influencing sustainably packaged products purchase intention.*

H3: *Reasons for (motivators) positively influencing consumer attitude toward sustainably packaged products.*

2.5. Reason Against (RA)

‘Reason against’ refers to a unfavorable attitude toward specific behavior (Westaby, 2005). “Reasons against represented the resistors or barriers that may prompt the negative perceptions among consumers” (Tufail *et al.*, 2022). The research framework explains the “Reason Against” as a combination of perceived price and information barrier because the present literature on sustainable packaging emphasized the importance of these variables (Kushwah *et al.*, 2023; Mani & Chouk 2018).

“The perceived price is associated by the consumer with a monetary sacrifice” (Mani & Chouk 2018). In this research model perceived high price for sustainable packaging may lead to customers’ resistance to purchase sustainable packaging products because consumers thinks that they can afford due to their economic and financial condition. Previous studies discussed that perceived price is a main barrier to adopting the new and smart services (Mani & Chouk 2018; Balta-Ozkan *et al.*, 2013). Similarly, the previous literature discusses that perceived price negatively impacts on attitude and purchase intention because they may be reluctant to spend extra money for sustainable products (Qomariah & Prabawani 2020; Anderson & Hansen 2004).

“The information barrier represents the lack of knowledge regarding the significance of sustainable packaging” (Kushwah *et al.*, 2023; Ma *et al.*, 2020). The lack of information may prevent consumers purchasing sustainable packaging products, which may further reduce the consumer attitude and purchasing behavior (Kushwah *et al.*, 2023; Ma *et al.*, 2020). Previous literature shows that information barrier negatively influencing the consumer attitude and intention (Kushwah *et al.*, 2023; Ma *et al.*, 2020). Therefore, the research hypothesizes that:

H4: *Reasons against (barriers) negatively influencing sustainably packaged products purchase intention.*

H5: *Reasons against (barriers) negatively influencing consumer attitude toward sustainably packaged products.*

2.6. Value

“Value refers to a person’s cognitive patterns resulting in appropriate likely behavior in the future” (Tufail *et al.*, 2022). The current research work shows the values as ascription of responsibility. “Ascription of responsibility represents individuals’ feelings of responsibility towards the negative consequences of non-pro-social behavior” (Kushwah *et al.*, 2023). Previous research discusses that ascription of responsibility positively influences the consumers attitude, intention, and behavior (Hein,2022). Furthermore, previous research in the context of sustainable packaging revealed that ascription of responsibility motivates and makes responsible the consumers toward specific behavior (Song *et al.*, 2023). Hence, the research suggests the following hypotheses.

H6: *Ascription of responsibility positively influencing the attitude toward sustainably packaged products purchase intention.*

H7: Ascription of responsibility positively influencing the reasons for (motivators) towards sustainably packaged products purchase intention.

H8: Ascription of responsibility negatively influencing the reasons against (barriers) towards the sustainably packaged products purchase intention.

3. Research Methods

3.1. Instrument Design

Based on (BRT) and in-depth research sustainable packaging, Table 1 describes the measuring elements. We evaluated the measurement items using a seven-point Likert scale. The measurements were developed using data from earlier research that was relevant to this study's setting. The questionnaire was divided into two parts: the first part was the demographic profile of the respondents with seven variables, age, gender, marital status, education level, occupation, and household monthly income. While the second part contained measurements on theoretical constructs for the recent study. Constructs measurements were adopted or adapted from prior literature. The second part consisted of a survey related to reasons for (HC and EC), reason against (PP, and INFB), values (ARS), ATT, and PI. The questionnaires were distributed in 40 prints to the respondents to verify the validity of the research. The questionnaire was then modified considering the findings.

3.2. Sample Size and Data Collection

The data was collected from May to December 2023. The questionnaires were distributed to the MBA students of Pakistan. According to the previous researchers, MBA students usually form an environmentally conscious and responsible customer segment, and those customers have purchase habits and experiences regarding sustainable packaging products (Amin, & Tarun 2021). The survey was conducted online and on paper. There were 800 questionnaires distributed in all; the final sample size, with a 72.5% response rate, was determined by excluding invalid responses from the 580 questionnaires. Table 2 displays the respondent's demographic information.

Statistical Analysis

PLS-SEM was employed in the current study to evaluate the data analysis and conceptual framework.

Table 1: Constructs and Their Scales

Study Measures	Code: Measurement items	References
Ascription of Responsibility (AR)	AR1: "I feel jointly responsible for green packaging in my daily life". AR2: "I feel jointly responsible for the negative consequences of non-green packaging". AR3: "I feel jointly responsible for the environmental pollution and ecological damage problems caused non green packaging".	Wang <i>et al.</i> , (2019)
Reason for (RF) Environmental Concern (EC)	EC1: "If all of us, individually, contributed to environmental protection, it would have a significant effect". EC2: "Everyone is responsible for protecting the environment in their everyday life". EC3: "Preserving and protecting the environment should be one of our priorities". EC4: "We should take responsibility for environmental issues, as we are the cause of environmental damage".	Welsch and Kühling, (2010).
Health Concern (HC)	HC1: "I often reflect on my health". HC2: "I am very self-conscious about my health." HC3: "I am alerted to changes in my health". HC4: "I am usually aware of my health".	Michaelidou and Hassan, (2008)
Reason Against Information Barrier (IFRB)	IFRB1: "The classification marks and texts of the green packaging in my community are unclear and easy to understand". IFRB2: "Accessing green packaging in the local community is not convenient". IFRB3: "My community's green packaging is not regular".	Xu <i>et al.</i> , (2017)
Perceived Price (PP) Attitude (ATT)	PP1: "I feel that the price of green packaging products in is very high". PP2: "I think green packaging products will be costly." PP3: "The expenses will be high for green packaging". ATT1: "I like the idea of green packaging". ATT2: "My attitude towards green packaging is favorable". ATT3: "Purchasing products in green packaging is a good idea".	Paul <i>et al.</i> , (2016)
Purchase Intention (PI)	PI1: "When I purchase products, I always make a conscious effort to buy those products that are low in pollutants". PI2: "When I have a choice between two equal products, I always purchase the one with sustainable packaging". PI3: "When there is a choice, I always choose the product which contributes to the least amount of pollution".	Paul <i>et al.</i> , (2016)

Table2. Respondents' Demographics

Variable	Category	Frequency	Percentage
Gender	Male	376	64.8
	Female	204	35.3
Age	20-30	288	49.7
	31-40	155	26.7
	41-50	95	16.4
	51-60	32	5.5
	61-70	10	1.7
Marital status	Married	319	55.0
	Single	261	45.8
Education	Intermediate	33	5.7
	Undergraduate	166	28.6
	Graduate	195	33.6
	Postgraduate	149	25.7
Occupation	Professional	37	6.4
	Govt. employee	137	23.6
	Private employee	133	22.9
	Self-employed	121	20.9
Household income	Other	189	32.6
	Less or equivalent to20,000	49	8.4
	20,001–50,000	153	26.4
	50,001–100,000	135	23.3
	100,001–200,000	93	16.0
	Above200,000	150	25.9

3.3. Data Analysis and Results

PLS-SEM was used to evaluate the supposed research framework by smart PLS 4.0 (Backer *et al.*, 2012) Structural equation modeling (SEM) technique is widely used in management related research studies through two techniques: covariance-based SEM (CBSEM) and PLS-SEM. The study preferred PLS-SEM approach to unveil hypothetical levels and complex relationship between latent variables (Sarstedt *et al.*, 2021). In the study, PLS is used with two step analysis approach for assessing the research framework: measurement model for the outer model and structural model for path analysis.

4. Measurement Model

4.1. First Order Reflective constructs

In the two levels approach, indicators level and constructs level were analyzed to assess the attributes of first order reflective constructs. At first level, all indicators in the hypothesized conceptual framework were above threshold value of 0.70 (F. Hair Jr *et al.*, 2014; Khozaei *et al.*, 2012). Table 3, Cronbach's alpha value observed as attitude (0.94), Environmental concern (0.81), health consciousness (0.91), Information Barrier (0.90), Perceived price (0.93), ascription of responsibility (0.88) and Purchase Intention (0.86). Internal consistency of the measures assessed through composite reliability and results showed its value is above threshold 0.70 (Khozaei *et al.*, 2012). Thus, it has acceptability of reliability. In addition, convergent validity was also measured that resulted above standard 0.5 (F. Hair Jr *et al.*, 2014; Khozaei *et al.*, 2012), values fall between 0.61 to 0.89.

Table 3: Lower order Reliability Analysis

	Cronbach's alpha	CR	AVE
Ascription of Responsibility	0.88	0.88	0.81
Attitude	0.94	0.94	0.89
Environmental Concern	0.81	0.86	0.62
Health Consciousness	0.91	0.91	0.78
Information Barrier	0.90	1.00	0.82
Perceived Price	0.93	0.93	0.88
Purchase Intention	0.86	0.90	0.79

Table 4 shows, content validity of all indicators. outer loadings of all items above 0.60 showed suitability of items for study (Gefen & Straub, 2005).

For the discriminant validity, table 5, Fornell Larcker criterion was assessed, and results showed a greater value of square root of AVE of each construct. So, constructs possessed validity (C. Fornell & D. Larcker, 1981).

Table 4: Outer Loadings of Indicators

	AR	Attitude	EC	HC	IRFB	PP	Intention
AR1	0.90						
AR2	0.91						
AR3	0.89						
ATT2		0.96					
ATT3		0.94					
ATTI		0.93					
EC1			0.80				
EC2			0.86				
EC3			0.75				
EC4			0.73				
HC1				0.86			
HC2				0.90			
HC3				0.91			
HC4				0.88			
IFRB1					0.83		
IFRB2					0.95		
IFRB3					0.93		
PI1							0.77
PI2							0.95
PI3							0.93
PP1						0.93	
PP2						0.94	
PP3						0.94	

Table 5: Fornell-Larcker Criterion, lower order discriminant validity

	AR	Attitude	EC	HC	IRFB	PP	Intention
Ascription of Responsibility	0.90						
Attitude	0.66	0.95					
Environmental Concern	0.22	0.13	0.79				
Health Consciousness	0.44	0.47	0.23	0.89			
Information Barrier	-0.10	-0.22	0.26	0.01	0.91		
Perceived Price	-0.23	-0.32	0.17	-0.07	0.72	0.94	
Purchase Intention	0.65	0.84	0.16	0.45	-0.22	-0.33	0.89

4.2. Second Order Reflective Construct

The elements of second order reflective constructs were also analyzed for measurement analysis. Second order reflective constructs; ascription of responsibility, attitude, purchase intention, reason against and reason for, were assessed for reliability, convergent validity, and discriminant validity. Results showed (table 6) that all constructs possessed acceptable value of Cronbach's alpha and composite reliability, above 0.70 (Sarstedt *et al.*, 2021).

Values of average variance extracted (AVE) is above 0.50 (C. Fornell & D. F. Larcker, 1981), that is satisfactory for convergent validity analysis .

In table 7, discriminant validity analysis through Fornell Larcker criterion showed that square root of AVE is more than its correlations with all other construct (C. Fornell & D. F. Larcker, 1981).

Table 6: Second-order Reliability Analysis

	Cronbach's alpha	CR	AVE
Ascription of Responsibility	0.88	0.88	0.81
Attitude	0.94	0.94	0.89
Purchase Intention	0.86	0.91	0.79
Reasons Against	0.84	0.97	0.86
Reasons For	0.87	0.71	0.59

Table 7: Fornell-Larcker Criterion, higher-order discriminant validity

	Ascription of Responsibility	Attitude	Intention	Reasons Against	Reasons For
Ascription of Responsibility	0.90				
Attitude	0.66	0.95			
Purchase Intention	0.65	0.84	0.89		
Reasons Against	-0.19	-0.30	-0.31	0.93	
Reasons For	0.46	0.46	0.44	0.04	0.77

4.3. Structural Model Analysis

The structural model is evaluated, thoroughly delineating the coefficient of determination (R^2) and the path coefficients (Figure 2 and Table 6 explain the path coefficients for H1–H8). The mediation analysis of detailed specific indirect and total indirect effects represents H9–H10 (see Tables 8 and 9).

The structural model is the second step to analyses after examining measurement model. In this study, PLS-SEM was used to test proposed hypotheses. Bootstrapping technique was executed with 5000 sub-samples and t-statistics to explain correlations among variables. Structural model observes all the hypothetical reliance based on path analysis (Hoyle, 2011; Kline, 2015).

4.4. Model Fit Summary

A model is well fit when SRMR value is less than .10 (Hu& Bentler, 1998; Sarstedt *et al.*, 2014). The table shows estimated model values is 0.081. that is less than standard values. It proves the model's fitness.

Table 8: SRMR Value

Model Fit Summary	Estimated model
SRMR	0.081

4.5. Coefficient of Determination (R^2)

The structural model was examined by estimation of Coefficient of determination (R^2) and path coefficient (P). R^2 values describes the change in dependent variable explained by independent variable (Falk & Miller, 1992) , its value should not be greater than 0.10. (Chin, 1998) Chin has determined it as 0.67 significant, 0.33 moderate and 0.19 weak.

Table 9: R^2 values

	R-square	Prediction
Attitude	0.51	Significant
Purchase Intention	0.71	Significant
Reasons Against	0.04	Weak
Reasons For	0.31	Moderate

4.6. Effect Size Estimation- F^2

F^2 reveals the change in R^2 value of dependent variable in the absence of an independent variable. In the study F^2 values were calculated as per guidelines by (Cohen, 1988) . It says that F^2 value is an effect size and its value range is “(≥ 0.02 is small; ≥ 0.15 is medium; ≥ 0.35 is large)”. Table 10 showed the values of the study.

Table 10: F^2 value

	f-square	Effect Size
Ascription of Responsibility -> Attitude	0.41	Large
Ascription of Responsibility -> Reasons Against	0.04	Medium
Ascription of Responsibility -> Reasons For	0.26	Medium
Attitude -> Purchase Intention	1.43	Large
Reasons Against -> Attitude	0.09	Medium
Reasons Against -> Purchase Intention	0.02	small
Reasons For -> Attitude	0.08	Medium
Reasons For -> Purchase Intention	0.02	small

5. Structural Model Relationship

The structural model was tested through PLS-SEM technique. For this purpose, PLS software was used, and bootstrapping technique was tracked for results.

5.1. Direct Effects

Direct effects of independent variables on dependent variables were monitored. The results explained the relationship of variables and acceptability of the proposed hypothesis. Table 11 shows the results of H1 to H5;

path coefficient, T statistics, p value and results are shown whereas values are also mentioned in in below figure. H1 showed that attitude has positive and significant impact on purchase intention ($\beta=0.77$, $STDEV= 0.02$, T statistics= 32.59 & P value is 0), hypothesis was accepted. According to standard $p < 0.05$ (Hu& Bentler, 1998; Sarstedt *et al.*, 2014).

All other hypotheses were also accepted as possessed p value 0.00 as per standard and β (path coefficient) was H2 (0.77), H3 (0.23), H4 (-0.08) and H5 (-0.21) respectively, which showed positive relation between Reason For and purchase intention, reason for and attitude and negative relation between reason against and purchase intention, reason against and attitude. The direct effect was found to be significantly positive for H6, ascription of responsibility and attitude had path coefficient $\beta=0.4$, Standard deviation 0.04, T-statistics 11.26 and P value 0. Moreover, study revealed that direct effect of ascription of responsibility on reason for and reason against have H7 (p value=0.00), and H8 (P value=0.01). Thus, the H7 and H8 also accepted.

Table 11: Direct effects

Hypothesis	Relationship	Path Coefficients	Std. Errors	t-Value	P values	Results
H1	Attitude -> Purchase Intention	0.77	0.02	32.59	0.00	Accepted
H2	Reasons For -> Purchase Intention	0.09	0.03	3.53	0.00	Accepted
H3	Reasons For -> Attitude	0.23	0.04	6.35	0.00	Accepted
H4	Reasons Against -> Purchase Intention	-0.08	0.02	3.85	0.00	Accepted
H5	Reasons Against -> Attitude	-0.21	0.03	7.33	0.00	Accepted
H6	Ascription of Responsibility -> Attitude	0.40	0.04	11.26	0.00	Accepted
H7	Ascription of Responsibility -> Reasons For	0.04	0.01	3.06	0.00	Accepted
H8	Ascription of Responsibility -> Reasons Against	-0.02	0.01	2.55	0.01	Accepted

6. Discussions

Now a days sustainability and environmental concerns problems have significant importance. The need for change has been demonstrated by resource overconsumption, pollution, and environmental disasters (Lisboa *et al.*, 2022). The consumers who are environmental concern can participate to reduce of these issues. Table displays a summary of the study's approved and rejected hypotheses. The main objective of this study is to determine the reason for (motivator), reason against (barrier) influencing consumer values (ascription of responsibility), attitude, and purchase intention towards sustainable packaged products. This study's conceptual model was created using BRT. The finding of this research explain that attitude has positive impact on sustainable packaging products purchase intention. Therefore, H1 is approved. The finding of H1 is like the previous studies (Liang *et al.*, 2023; Lisboa *et al.*, 2022). Similarly, the findings showed that reason for positively influenced on attitude and sustainable packaging products purchase intention. Thus, H2 and H3 are accepted. The results of H2 and H3 are line with previous studies (Kushwah *et al.*, 2023; Kuang *et al.*, 2024). Furthermore, the results explained that reason against negatively influenced on attitude and sustainable packaging products purchase intention. Hence, H4 and H5 are accepted. The results of hypothesis H4 and H5 are consistent with prior studies (Qomariah & Prabawani 2020; Ma *et al.*, 2020; Kushwah *et al.*, 2023). Additionally, the results showed that ascription of responsibility positively influenced attitude and reason for toward sustainable packaging products and negatively influence on reason against towards sustainable packaging products. So, H6, H7, and H8 are accepted. These results are in line with the previous studies (Kushwah *et al.*, 2023; Song *et al.*, 2023).

Table 12. Hypothesis Results

Hypothesis	Content	Results
H1	“Attitude has a positive impact on sustainably packaged products purchase intention”.	Accepted
H2	“Reasons for (motivators) positively influencing sustainably packaged products purchase intention”.	Accepted
H3	“Reasons for (motivators) positively influencing consumer attitude toward sustainably packaged products”.	Accepted
H4	“Reasons against (barriers) negatively influencing sustainably packaged products purchase intention”.	Accepted
H5	“Reasons against (barriers) negatively influencing consumer attitude toward sustainably packaged products”.	Accepted

H6	“Ascription of responsibility positively influencing the attitude toward sustainably packaged products purchase intention”.	Accepted
H7	“Ascription of responsibility positively influencing the reasons for (motivators) towards sustainably packaged products purchase intention”.	Accepted
H8	“Ascription of responsibility negatively influencing the reasons against (barriers) towards the sustainably packaged products purchase intention”.	Accepted

7. Conclusion

The main objective of this study is to determine the reason for (motivator), reason against (barrier) influencing consumer values (ascription of responsibility), attitude, and purchase intention towards sustainable packaged products. The objective of this study is used to BRT model to explain the consumer's purchase intention toward sustainable packaged products. This current study explained that the BRT works effectively and efficiently to predict the barriers and motivators factors regarding sustainable packaged products. The conclusion of this study discussed that reason for (environmental concern and health consciousness) have positive impact on consumer attitude and sustainable products purchase intention. Similarly, results of this study explained that reason against (information barrier and perceived price) have negative impact on consumer attitude and sustainable packaging products purchase intention. Finally, the results showed that ascription of responsibility positively influenced attitude and reason for toward sustainable packaging products and negatively influence on reason against towards sustainable packaging products purchase intention.

8. Implications

The current study addressed issues and concepts that were not fully defined or understood in the existing literature, making it extremely relevant from both academic and managerial standpoints. It also analysed a situation that is relevant today and has an impact on the decisions that companies are making today. The sustainable idea is popular right now in terms of its managerial implications. News about new product launches with eco-friendly packaging is released daily, and businesses are changing their business plans to reflect the state of the planet today. Individuals are also beginning to use sustainable solutions more frequently. This makes the current research topic highly topical and maybe applicable to the companies' present strategic choices. The results would be quite interesting and beneficial for the companies if this study was conducted on a larger size and in a particular country. Regarding the academic implications this research covers the literature gap that was not address before, such as motivation and resisting factors to purchase sustainable packaging products. The information of this research is very important for the consumers who are environmentally concerned and health consciousness. They always prefer to consume eco-friendly products. Finally, this model explains the relationship between barriers and motivation factor with the ascription of responsibility in a unified framework which was not analyzed before.

9. Future Research and Limitations

The study has some limitations that propose future recommendations for research. First, the Pakistani consumers are the focal point to predict the sustainable packaging purchase intention. Future research can be shown in India, Afghanistan, Indonesia, and Bangladesh. Future research may potentially involve cross-cultural analysis (comparison of several nations). Second, this study has no mediation and moderation effect. Future studies may also include some meditation and moderator variables like consumer sociodemographic characteristics. Third, this current study focuses on ascription of responsibility as a consumer value. Future research should focus on different values such as utilitarian and hedonic values. Fourth, this research has a quantitative approach. Future research can be experimental and qualitative in nature. Fifth, cross-sectional data were used to determine the study's conclusions. Longitudinal data can be the foundation for upcoming studies. Sixth, this study is just predicting the consumer intention toward sustainable packaging. Future research may predict the purchasing behavior toward sustainable packaging.

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