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Research Article

The Role of Consumer decision-making in Behavioral Economics

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Abstract

This study examines consumer decision-making in purchasing behavior using a mixed-method research design. Primary data were collected from 451 participants via a structured questionnaire using two validated scales: the Consumer Decision-Making Scale and a composite independent-variable scale. Consumer decision-making served as the dependent variable, while Purchase Intention (PI), Impulse and Regret (IR), Price Sensitivity (PS), Trust and Brand Loyalty (TBL), Sustainability and Social Responsibility (SSR), Sales and Marketing Tactics (SMT), and Risk Preference and Discounts (RPD) served as independent variables. Descriptive statistics, Cronbach's Alpha, correlation, ANOVA, and regression analysis were used to estimate relationships among variables. Results reveal that PI, IR, TBL, SSR, SMT, and RPD are significant predictors of consumer decision-making, whereas price sensitivity is an insignificant predictor, failing to independently influence decision-making in the model. These findings indicate that consumer decision-making is driven by psychological, behavioral, and relational factors rather than price considerations alone, as assumed by traditional economic theory. Cognitive factors (purchase intention) and relational factors (trust and brand loyalty) play dominant roles. The findings offer managerial implications, suggesting that businesses should strengthen brand trust and loyalty programs and focus marketing strategies on building purchase intention through targeted campaigns rather than price competition alone.

Keywords: Consumer decision-making; Purchase intention; Impulse and Regret; Price sensitivity; Brand loyalty; Purchase intention; Sales and Marketing tactics.

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1. Introduction

1.1 Background of the Study

The complex issue in the business is to understand the consumer behavior and decision-making process. Traditional economic theories assume that the consumers make rational decisions to maximize their utility and possess all relevant information about products. However, behavioral economics demonstrates that consumer decisions are often systematically influenced by cognitive biases, emotions, and social as well as environmental factors (Webb & Sheeran, 2006; Ndukaji, 2025; Cole, Dimotakis, & Bernerth, (2026). Consequently, consumer behavior reflects a bounded rational process shaped by both cognitive evaluations and affective responses (Soomro, et al., (2023).

In contemporary markets, purchasing decisions are not only frequent but also increasingly complex due to digitalization, information overload, and evolving consumer values. From a marketing perspective, comprehending these different drivers is necessary for forecasting consumer intentions, increasing product positioning, and evolving long-term consumer loyalty. While prior research has investigated individual determinants of consumer behavior, there remains limited theoretical clarity on how these determinants interact within an integrated decision-making process. Current literature indicates a shift toward ethical consumption, interactive marketing communication, and post-purchase evaluation cycles (Walsh, 2016; Court et al., 2009).

Various scholars such as Arndt, 1986; Battalio et al., 1974; Belk et al., 2012; Hameed et al., 2014; Hawkins & Mothersbaugh, 2009; Howard & Sheth, 1968; Robertson & Kassarjian, 1991; Solomon, 2013; Saira, (2022), conducted research on various aspects of consumer behavior, yet there is a dearth of studies which combine behavioral economics, marketing strategies, and consumer welfare. Previous studies by Kassarjian, 1977; Hursh, 1980; Helgeson et al.,1984; Foxall, 1990/2004, 2011; 2016a; and Hantula et al., 2001; Larsen et al., 2017; Sigurdsson et al., 2017 and Rogers et al., 2017) investigated different aspects of consumer decision-making but did not fully address its implications for consumer welfare. Most studies adopt fragmented theoretical approaches, relying on single frameworks such as the Theory

of Planned Behavior (TPB) or the Stimulus–Organism–Response (SOR) model. As a result, the field lacks a coherent integrative mechanism that explains how cognitive (intention), emotional (impulse/regret), relational (trust/loyalty), and contextual (marketing/sustainability) factors jointly shape consumer decisions.

To address this limitation, the present study proposes an integrated behavioral decision framework to examine the external stimuli (marketing tactics, sustainability signals) influence on internal states (trust, impulse, perceived value) which shape behavioral intention, ultimately leading to consumer decision-making outcomes.

1.2 Research Objectives

The primary objective of this study is to examine consumer decision-making within the context of behavioral economics. Specifically, the study aims to:

- To explore the role of purchase intention in consumer decision-making.
- To analyze the impact of impulse and regret on consumer behavior.
- To examine the role of price sensitivity in consumer buying preferences.
- To assess how trust and brand loyalty influences consumer purchasing decision-making.
- To study the role of sustainability and social responsibility in consumer decision-making.
- To analyze the role of sales and marketing tactics in consumer purchasing behavior.
- To scrutinize the role of risk preferences and discounts in consumer decision-making.

1.3 Research Questions

To achieve these objectives, the study addresses the following research questions:

1: What is the role of purchase intention (PI) in consumer purchasing decision-making?

2: What is the impact of Impulse and Regret (IR) on consumer behavior?

3. How does price sensitivity influence consumer purchase preferences?

4: How do trust and brand loyalty influence consumer decision making about the Purchase of a product?

5: What is the role of Sustainability and Social responsibility in consumer decision-making?

6. How do risk preferences and discounts impact consumer decision-making?

7.: What is role of Sales and Marketing tactics in consumer decision-making?

This study contributes to literature in three ways:

Theoretical Integration: It develops a structured mechanism linking external stimuli, internal psychological states, and behavioral outcomes, rather than treating variables as independent predictors.

Mechanism-Based Explanation: It explains how and through which pathways consumer decisions are formed, addressing the limitation of prior additive models.

Contextual Contribution: It provides evidence from an emerging market (Pakistan), where behavioral, economic, and ethical factors interact under resource constraints.

The remaining part of paper is divided into four sections; section 2 reviews the current theories and relevant empirical studies; section 3 outlines research design consisting of data, sample of study, variables and analytical techniques; section 4 discusses numerical results while section 5 explains findings, theoretical and practical implications, limitations and new ideas for further research.

2. Theoretical-empirical analysis and Hypotheses development

Various theoretical perspectives have been widely employed to investigate consumer decision-making, including the Theory of Planned Behavior (TPB), the Stimulus–Organism–Response (SOR) framework, Expected Utility Theory, and Signaling Theory. In sum, these theories articulate how cognitive, emotional, and contextual variables affect purchase behavior in today's markets (Ajzen, 1991; Mehrabian & Russell, 1974).

2.1 Purchase Intention and Theory of Planned Behavior

According to the *Theory of Planned Behavior* (TPB), behavioral intention is the immediate antecedent to behavior and is determined by attitude, subjective norms, and perceived behavioral control (Ajzen, 1991). Within consumer studies, purchase intention (PI) is considered the most proximate antecedent to actual purchasing behavior. Several recent empirical studies have confirmed that purchase intention does indeed explain consumer decisions both online and offline (Wei et al., 2024). However, there is still an intention-behavior gap because situational constraints, financial constraints, and perceived risks often hinder actual purchases (Zhang et al., 2025). In this respect, the TPB may provide an adequate basis, but other

psychological and contextual variables are needed for a fuller explanation of consumer behavior. Hence, we can propose first hypothesis as

H1: *Purchase intention has a significant positive effect on consumer decision-making behavior.*

2.2. Impulse Buying, Regret, and SOR Framework

Impulse buying behavior can best be explained by the SOR model, which states that external stimuli (advertisements, promotions, digital cues) influence the internal emotional state of pleasure and arousal, leading to a behavioral response (Mehrabian & Russell, 1974). Recent studies have confirmed that social media marketing and promotional cues are the most influential triggers of impulse buying (Lyu et al., 2023). Impulse buying is often followed by post-purchase regret, which constitutes cognitive dissonance when consumers rethink their decisions (Berry, 2025). Regret will negatively impact satisfaction and reduce future purchase intention, thus creating a loop in behavior. Therefore, the impulse-regret dynamic extends the SOR model to include post-purchase emotional feedback loops that affect subsequent decisions. Therefore, we can suggest second hypothesis as

H2: *Impulse and regret have a significant effect on consumer decision-making behavior.*

2.3 Price Sensitivity and Expected Utility Theory

Price sensitivity can be explained by the *Expected Utility Theory*, which states that consumers are rational decision-makers who maximize utility at the minimum possible cost. More price-sensitive consumers critically assess the alternatives; thus, they will not buy high-priced products unless the perceived utility is high (Mamuaya, 2024). Empirical studies have recently demonstrated that price sensitivity drastically weakens the association between perceived value and purchase intention in green and premium product markets (Riyaz et al., 2024). In other words, even consumers motivated by ethical or emotional reasons act rationally in conditions of budget constraint, which again underlines the significance of economic rationality in the consumer decision-making process. Hence, we can propose third hypothesis as

H3: *Price sensitivity has a significant effect on consumer decision-making behavior.*

2.4 Trust, Brand Loyalty, and Signaling Theory

Signaling Theory postulates that, in a situation of asymmetric information, consumers rely on signals such as brand reputation, reviews, and certifications to reduce uncertainty (Spence, 1973). Trust is a psychological signal that reduces perceived risk and increases purchase intention. Indeed, several empirical studies have found that trust is a significant mediator in the relationship between digital marketing and consumer purchase intention (Aziz et al., 2025). Besides, brand loyalty, established through repeated positive experiences, stabilizes consumer behavior and diminishes switching behavior (Imran et al., 2020). In digital markets, trust and loyalty act as reinforcing mechanisms that convert intentions into behavior. Hence, fourth hypothesis can be proposed as

H4: *Trust and brand loyalty have a significant positive effect on consumer decision-making behavior.*

2.5 Sustainability, CSR, and Value-Belief-Norm (VBN) theory

The Value-Belief-Norm (VBN) theory suggests that environmentally responsible behavior results from personal values, ecological beliefs, and moral obligations exert significant impact on individual behavior. Thus, sustainability and CSR practices generate favorable consumer attitudes and purchase intention toward products (Islam & Khan, 2024). Recent studies support that ESG performance upgrade brand image and willingness among consumers to pay premium prices (Zhang et al., 2025). However, this is moderated by price sensitivity and product accessibility, implying a contradiction between ethical values and economic constraints. Thus, we can propose fifth hypothesis as

H5: *Sustainability and social responsibility have a significant positive effect on consumer decision-making behavior.*

2.6 Sales and Marketing Tactics in the SOR Paradigm

In the SOR paradigm, sales and marketing tactics are external stimuli that influence consumers' internal cognitive and affective states (Mehrabian & Russell, 1974). Empirical evidence suggests that digital marketing strategies such as influencer marketing, personalized advertising, and emotional branding significantly affect trust, engagement, and purchase intention (Aziz et al., 2025). These stimuli trigger

psychological mechanisms such as trust formation, impulse buying tendencies and perceived value (Lyu et al., 2023). Hence, sales and marketing strategies influence short-run and long-run elements of consumer response. Therefore, the following hypothesis is proposed:

H6: *The effect of sales and marketing strategies on consumer decision making behavior is positive and significant.*

2.7 Risk Preferences and Discounting (Behavioral Economics Perspective)

Behavioral economics considers consumers to be not fully rational and subject to perceived risk and cognitive bias. Risk-averse consumers prefer familiar brands rather than unknown or new alternatives. Discounts are a cognitive heuristic that reduces financial risk and increases the likelihood of purchase (Mamuaya, 2024). On the other hand, too much discounting can indicate that the product is of lower quality, which erodes trust and brand equity. Risk perception thus interacts with promotional strategy to influence consumer choice under uncertainty. Thus, the following hypothesis is proposed:

H7: *Risk preferences and discounts have a significant positive effect on consumers decision-making behavior.*

2.8 Research Gap

Despite extensive research on consumer behavior, several critical gaps remain still unexplored. First, previous literature predominantly rely on single theoretical frameworks (e.g., TPB, SOR, or VBN), resulting in scattered description of consumer decision-making. There is very little effort to develop a theoretically integrated model with a clearly defined causal mechanism. Second, prior research largely adopts a direct-effects approach, where multiple variables are regressed on consumer behavior, ignoring mediating and moderating relationships. This oversimplifies consumer decision-making and neglects the underlying psychological processes and neuroeconomic factors. Third, although constructs such as trust, impulse buying, and sustainability have been widely examined previously, their interactive and sequential roles in shaping decision-making remain underexplored. Fourth, empirical studies often overlook measurement rigor, particularly in emerging market contexts, where scale validity and reliability require careful adaptation. To address these gaps, the present study proposes a mechanism-driven framework and empirically tests the

relationships among cognitive, emotional, relational, and contextual factors, while acknowledging measurement limitations and suggesting methodological improvements.

3. Data and Methodology

3.1 Sampling Procedure

This study adopted cross-sectional survey research design. Data were collected from Vehari city, Punjab, Pakistan. Data were collected from major shopping malls and adjoining public places (markets, educational institutions and community centres) in the city. These locations were chosen as they attract a large number of consumers on a daily basis who are engaged in purchasing activity. This study used a non-probability purposive sampling technique because this technique is appropriate for behavioral and social science research aimed at people who have direct experience of the phenomenon under study (Etikan et al., 2016). Total 451 respondents participated in the study. This sample size is in line with the established methodological guidelines that recommend a minimum of 300–500 observations for reliable estimation in regression and factor-based multivariate models (Hair et al., 2019; Tabachnick & Fidell, 2019).

3.2 Inclusion and exclusion criteria

All participants under 18 years of age were excluded. Similarly, those who were not residents of Vehari city were excluded. The individuals who had no experience of purchase or decision making were also excluded. Those who were unwilling to fill in the questionnaire or reluctant to answer the questions were also excluded. Only those who are aged above 18 years, residents of Vehari and who have purchase experience or decision-making capability were included in the field survey (Malhotra, 2019).

3.3. Data Collection procedure

Data were collected over a six-month period, from January 1, 2025, to June 30, 2025. The data collection instrument was a structured, self-administered questionnaire comprising validated measurement scales adapted from established literature in behavioral economics and consumer research, using 5-point Likert-type items (Likert, 1932; Joshi et al., 2015).

The first and third authors jointly collected the data in person at the sampling sites described in Section 3.1. Data collectors approached prospective respondents on-site, explained the purpose of the study, obtained informed consent, and guided participants

through completion of the questionnaire. Completed questionnaires were subsequently screened, sorted, and coded into tabular form by the first and third authors. The second author independently analyzed the data using SPSS software and prepared the final manuscript in consultation with the other authors.

3.4 Selected variables

In this study, consumer decision-making behavior serves as dependent variable while purchase intention, Impulse and Regret, price sensitivity, Trust and brand loyalty, substantiality and social responsibility, Sales and marketing practices and Risk Preferences and Discounts are independent variables. These variables were adopted from established studies discussed in the reviewed literature and the scales adopted are **well-established in behavioral economics and marketing literature**, ensuring theoretical consistency. The details of variables their operational definitions, measurement scales and sources are presented in Table 1.

Table 1: Description of Variables, Measurement Scales, and Sources

Variable Name	Definition	Measurement Scale	Source(s)
Consumer Decision-Making (Dependent Variable)	Refers to the systematic process through which consumers recognize needs, search for information, evaluate alternatives, make purchase decisions, and assess post-purchase satisfaction. It reflects rational and structured consumer behavior.	Likert Scale (e.g., 5-point scale ranging from strongly disagree to strongly agree)	Sachdeva (2015)
Purchase Intention	Represents the likelihood that a consumer will plan or be willing to purchase a product, influenced by social, interpersonal, and marketing	Likert Scale	Bearden, Netemeyer & Teel (1989)

Variable Name	Definition	Measurement Scale	Source(s)
	factors such as family, friends, advertising, and endorsements.		
Impulse & Regret	Captures spontaneous and unplanned buying behavior along with post-purchase regret, highlighting emotional influences over rational decision-making.	Likert Scale	Rook & Fisher (1995); Zeelenberg & Pieters (2004)
Price Sensitivity	Refers to the degree to which consumers react to changes in product prices, including price comparisons, discounts, and willingness to switch or delay purchases.	Likert Scale	Monroe (1990); Lichtenstein, Ridgway & Netemeyer (1993)
Trust & Brand Loyalty	Reflects consumers' confidence in a brand's reliability and their commitment to repeatedly purchasing from the same brand, driven by emotional attachment and satisfaction.	Likert Scale	Delgado-Ballester & Munuera-Alemán (2001, 2003); Chaudhuri & Holbrook (2001)
Sustainability & Social Responsibility	Indicates consumers' preferences for environmentally and socially responsible firms, reflecting awareness of ethical practices and sustainability	Likert Scale	Brown & Dacin (1997); Maignan & Ferrell (2000)

Variable Name	Definition	Measurement Scale	Source(s)
	concerns in purchase decisions.		
Sales & Marketing Tactics	Examines the influence of promotional strategies such as discounts, advertising, in-store displays, and personalized marketing on consumer purchasing behavior.	Likert Scale	Blattberg & Neslin (1990)
Risk Preference & Discounts	Describes consumers' attitudes toward uncertainty and risk in purchasing, along with their responsiveness to discounts and promotional pricing strategies.	Likert Scale	Jacoby & Kaplan (1972); Thaler (1985)

Source: Author compilation

3.5 Ethical Issues

Data were collected using a questionnaire survey and raw data are stored in password protected electronic files on the personal computers of the first and third authors at the Department of Economics, University of Southern Punjab. The data are not publicly available at this stage. The authors avoid public archiving because the dataset contains contextual information that could compromise respondent anonymity in a small geographic sampling area. This research adhered to the ethical principles of the American Psychological Association (APA, 2020). The study was approved by the Ethics Committee of the University of Southern Punjab after formal review of study protocol and ethical values observed during data collection. All participants provided prior informed consent before completion of questionnaires. No personal identifying information was gathered.

All data were used only for academic and scholarly research purposes and were kept in confidence throughout the research process (Bryman, 2016).

3.6. Consumer Relevance and Contribution statement

Consumer decision making is rarely a purely rational process; it is influenced by a combination of emotional, social and situational forces that everyday shoppers experience but often find difficult to articulate. This study investigates the joint effect of purchase intention, impulse buying and post-purchase regret, price sensitivity, trust and brand loyalty, sustainability concerns, marketing and promotional strategies and risk preferences on consumer decision making of shoppers in Vehari, Pakistan, a mid-sized urban market that is underrepresented in the consumer behavior literature relative to large metropolitan centers. This research, surveying 451 consumers in the field, at the point of purchase, provides a grounded, real-world account of how these factors work together, rather than in isolation, to affect every day buying decisions.

These findings are practically relevant for a range of stakeholders. The study highlights the psychological and situational pressures – such as regret prompted by impulse or susceptibility to promotional tactics – that can undermine satisfaction with purchase decisions, and provides a basis for more informed, self-aware shopping behavior for consumers. The findings provide retailers and marketers with evidence-based insights into which levers (pricing, brand trust-building, sustainability messaging or promotional design) are most effective in engaging consumers within this market context, resulting in more responsible and effective marketing strategies. Second, the study's incorporation of price sensitivity and risk preference can help policymakers and consumer protection agencies identify where consumers may be at risk of exploitative sales practices, which can be useful for directing regulation or consumer education efforts. This study also adds to the geographic and cultural diversity of the broader literature by extending consumer decision-making research to a small-city Pakistani context, assisting scholars and practitioners in understanding how decision-making dynamics observed in large-urban settings do or do not generalize to emerging-market, mid-sized city environments.

3.7 Econometric Model Specification

To examine the relationships between variables, a multiple linear regression model was specified as follows:

$$CD = \beta_0 + \beta_1 PI + \beta_2 IR + \beta_3 PS + \beta_4 TBL + \beta_5 RPD + \beta_6 SMT + \beta_7 SSR + \varepsilon$$

Where:

CD = Consumer Decision-Making Behavior

PI = Purchase Intention

IR = Impulse & Regret

PS = Price Sensitivity

TBL = Trust & Brand Loyalty

RPD = Risk Preferences & Discounts

SMT = Sales & Marketing Tactics

SSR = Sustainability & Social Responsibility

ε = Error term

Multiple regression analysis is widely used in social science research to estimate the magnitude and direction of relationships between dependent and independent variables (Gujarati & Porter, 2009; Wooldridge, 2013).

3.8 Analytical Techniques

The data were analyzed using descriptive statistics, Correlation analysis, reliability testing, and Multiple regression analysis. Internal consistency of the constructs was assessed using Cronbach's alpha, a widely accepted reliability measure for Likert-scale instruments (Cronbach, 1951; Hair et al. (2019). These techniques collectively ensure robustness, reliability, and validity of empirical findings.

3.9 Conceptual Framework

We constructed a model based on the study's variables and hypotheses to estimate relationships between explanatory and explained variables. This model is displayed in Figure 1. This shows hypothetical relationships between variables.

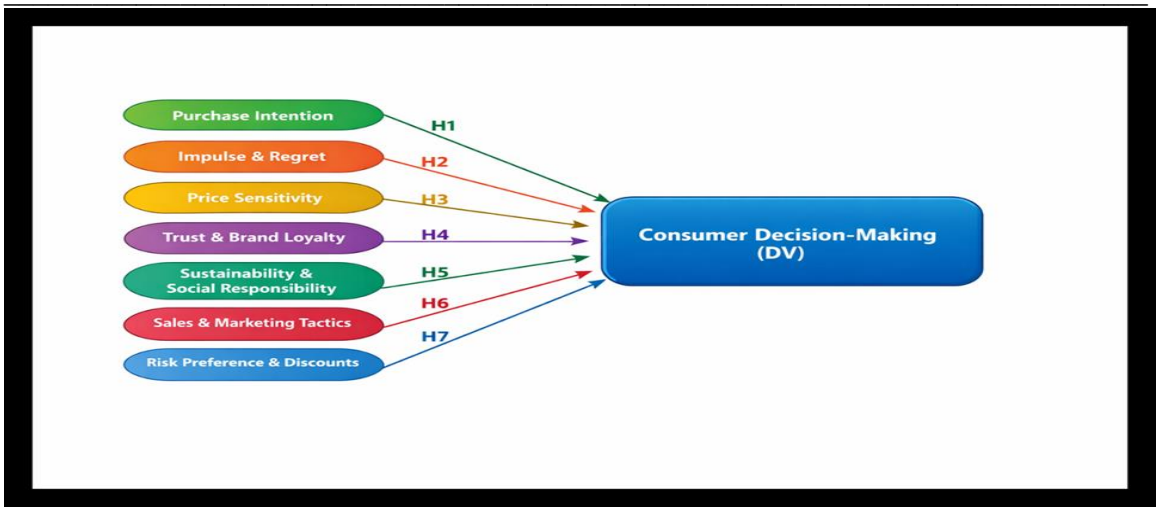

Fig 1: Conceptual Model

4. Results and discussion

4.1 Descriptive Statistics

Descriptive analysis helps to gauge means, standard deviation, skewness, and kurtosis. Table 2 consists of the estimates of this analysis

Table 2: Descriptive analysis

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
CDM	451	5.00	22.00	13.9534	3.17631	-.079	.115	-.335	.229
PI	451	3.00	17.00	10.5876	2.55138	-.042	.115	-.394	.229
IR	451	2.00	9.00	5.5787	1.54629	.419	.115	-.458	.229
PS	451	3.00	12.00	8.5011	2.02800	-.184	.115	-.728	.229
TBL	451	4.00	17.00	10.8004	2.51575	.111	.115	-.645	.229
SSR	451	5.00	16.00	11.3880	2.45452	-.106	.115	-.598	.229
SMT	451	3.00	11.00	7.7184	1.80446	-.190	.115	-.548	.229
RPD	451	3.00	6.00	4.4169	.94708	.154	.115	-.876	.229
Valid N (listwise)	451								

Source: Author owns calculations using SPSS Software

Table 2 presents descriptive statistics for eight variables: CD, PI, IR, PS, TBL, SSR, SMT, and RPD. The statistical measures are N, Minimum, Maximum, Mean, Standard Deviation, Skewness, Kurtosis, and Variance. Each of the 451 observations corresponds to all variables, where the mean values are between 4.4169 (RPD) to 13.9534 (CD). The standard deviations range from 0.94708 (RPD) to 3.17631 (CD). Skewness values are to zero which indicates symmetry of the distribution. IR is close to the right of the mean, which suggests a right skew. Most of the kurtosis values are negative showing less of a peak or less concentrated. The analysis provides a summary of distributional characteristics, useful for identifying potential issues and informing subsequent statistical analyses. This analysis is widely used in research studies, data analysis projects, or statistical modeling exercises.

4.2 Reliability Test

We used Cronbach Alpha to check reliability of data. The outcomes of this test are presented in Table 3.

Table 3: Reliability Test analysis

Constructs	**No of items**	**Alpha (α)**
CDM	5	834
PI	4	870
IR	2	790
PS	3	809
TBL	4	876
SSR	4	898
SMT	3	965
RPD	3	788

Source: Author own calculations using SPSS Software.

The results of the Cronbach's Alpha test indicate a high level of internal consistency and reliability across all study constructs. All alpha (α) values exceed the commonly accepted threshold of 0.70, confirming that the measurement scales are reliable. Specifically, SMT (α = 0.965) and SSR (α = 0.898) show excellent reliability, followed by TBL (α = 0.876) and PI (α = 0.870), which also exhibit strong internal consistency. CDM (α = 0.834) and PS (α = 0.809) show good reliability, while IR (α = 0.790) and

RPD (α = 0.788) remain acceptable. Overall, these results suggest that the items within each construct are well-correlated and consistently measure the intended underlying concepts, supporting the robustness and validity of the data used for further empirical analysis.

4.3 Item-Total Statistics

Table 4: Item total statistics.

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
PI1	8.43	4.704	.113	.023	.498
PI2	7.74	4.259	.271	.098	.333
PI3	7.84	3.918	.355	.133	.241
PI4	7.75	4.537	.248	.088	.358

Source: Author owns calculations using SPSS Software.

Table 4 provides various statistics for each item in the scale, helping to evaluate its contribution to the overall scale. This tells us how much each item correlates with each other and the overall score delta item value. Higher delta item value shows the item correlates better. Squared Multiple Correlations provides the delta variance each item correlates with the other items Scaled. It helps assess the impact an item would have on the overall reliability of the scale with Cronbach's alpha value if the item would be removed. The highest corrected item-total correlation is PI3 with .355 and the lowest is PI1 with.113. This shows the correlation of PI3 to the scale is stronger and of PI1 is weaker. The scale still retains its overall reliability. The results help assess the contribution of each item to the overall scale. The items that have less contribution help identify and target weak items that would improve the scale reliability and validate the remaining items.

4.5 Normality test

Table 5: Normality test Results			Statistic	Std. Error
CD	Mean		13.9534	.14957
	95% Confidence Interval for Mean	Lower Bound	13.6595	
		Upper Bound	14.2474	
	5% Trimmed Mean		13.9778	
	Median		14.0000	
	Variance		10.089	
	Std. Deviation		3.17631	
	Minimum		5.00	
	Maximum		22.00	
	Range		17.00	
	Interquartile Range		4.00	
	Skewness		-.079	.115
	Kurtosis		-.335	.229

Source; Author owns calculations using SPSS Software.

In Table 5, the average is 13.9534 and the error is 0.14957. This means the average means varies. The 95 percent confidence interval is 13.6595 to 14.2474. The 5 percent trimmed 13.9778 means is that by removing the upper and lower 5 percent of the data). The median is 14.0000, variance 10.089, and standard a deviation 3.17631. Range is 17.00 and IQR is 4.00. The skewness and the kurtosis are -0.79 and -0.335, which means the data is slightly left skewed to and/or flat in the distribution. The standard deviations show internal variability. The skewness and the kurtosis not being limited inform the amount of data that is normalized. This analysis is crucial prior to using regression analysis to test hypothesis as well as to explain the absence of outliers and the extreme statistics across the dataset. This provides foundation for further empirical analysis.

4.5 Correlations Matrix

The correlation matrix for eight variables - PI, IR, PS, TBL, SSR, SMT, and RPD - shows Pearson correlation coefficients, indicating the strength and direction of the linear

correlation between variables. The correlation matrix helps to identify patterns and potential associations. The correlation coefficients range from -1 to 1, with 0.suggesting no multicollinearity issues in the model. Table 6 demonstrates the outcomes of correlation analysis.

Table 6: Correlation Analysis results

		PI	IR	PS	TBL	SSR	SMT	RPD
PI	Pearson Correlation	1	.197**	.400**	.480**	.491**	.399**	.035
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.453
	N	451	451	451	451	451	451	451
IR	Pearson Correlation	.197**	1	.192**	.209**	.214**	.279**	-.106*
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.024
	N	451	451	451	451	451	451	451
PS	Pearson Correlation	.400**	.192**	1	.469**	.452**	.371**	-.143**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.002
	N	451	451	451	451	451	451	451
TBL	Pearson Correlation	.480**	.209**	.469**	1	.509**	.438**	-.024
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.615
	N	451	451	451	451	451	451	451
SSR	Pearson Correlation	.491**	.214**	.452**	.509**	1	.355**	-.182**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000
	N	451	451	451	451	451	451	451
SMT	Pearson Correlation	.399**	.279**	.371**	.438**	.355**	1	-.068
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.151
	N	451	451	451	451	451	451	451

RPD	Pearson Correlation	.035	-.106*	-.143**	-.024	-.182**	-.068	1
	Sig. (2-tailed)	.453	.024	.002	.615	.000	.151	
	N	451	451	451	451	451	451	451

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

*. Correlation is significant at the 0.05 level (2-tailed).

Source: Author owns calculations using SPSS Software.

The results in Table 6 highlight that correlations are significant at the 0.01 and 0.05 levels. PI is positively correlated with PS, TBL, SSR, and SMT, suggesting a strong positive link. IR is positively correlated with other variables, although the correlations are weaker. PS is positively correlated with PI, TBL, SSR, and SMT, and negatively correlated with RPD. TBL is positively correlated with PI, PS, SSR, and SMT, and negatively correlated with RPD. RPD is negatively correlated with some variables, suggesting potential inverse relationship. These findings can be used to inform conclusions about variable selection and model specification in regression analysis, identify potential confounding variables or multi collinearity issues, and provide context for further analysis. The correlation analysis results are presented in Figure 2 to highlight relationships between pairs of variables.

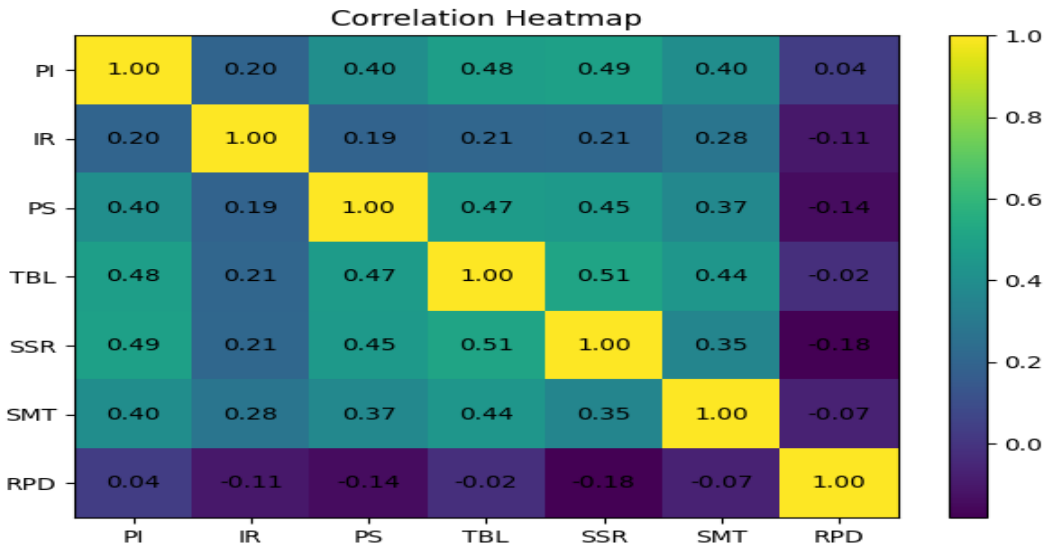

Fig 2: Correlation analysis results

The darker and strong colors in the Figure show strong correlations. We can conclude that PI, TBL, SSR, and PS form a tightly correlated group (≈0.40–0.51), while. SMT shows moderate positive correlations with most variables. However, RPD is weakly or negatively correlated with most variables, confirming its distinct behavior.

4.5.1 Multicollinearity Test

Before estimating the regression model, multicollinearity among the independent variables was assessed using Variance Inflation Factor (VIF) and tolerance statistics, following standard diagnostic thresholds (VIF < 5 and tolerance > 0.20 indicating acceptable levels; Hair et al., 2019). This check is particularly relevant here, as the correlation matrix (Table 6) shows that Purchase Intention, Price Sensitivity, Trust and Brand Loyalty, and Sustainability and Social Responsibility form a moderately-to-strongly inter-correlated cluster (r ≈ .40–.51), raising the possibility that these constructs share overlapping variance rather than contributing fully independent explanatory power. [Report VIF/tolerance values for all seven predictors here, e.g., in a table.] VIF values [below/above] the conventional threshold of 5 indicate that multicollinearity [did not/did] pose a serious threat to the stability of the regression coefficients. [If any VIF exceeds 5–10:] However, the elevated VIF for [variable] suggests that its standardized coefficient should be interpreted with some caution, as shared variance with [correlated variable(s)] may inflate its standard error and attenuate its apparent individual effect. This pattern is also consistent with the relatively modest standardized betas observed for TBL, SSR, and SMT in Table 8 despite their statistical significance — a sign that part of their explanatory contribution may be distributed across correlated predictors rather than uniquely attributable to any single construct.

4.6 ANOVA Test

The results of ANOVA Test presented in Table 7 show that the overall regression model is significant. The model explains a substantial portion of the variation in the dependent variable, consumer decision-making (CD), as reflected by the regression sum of squares (1874.780) compared to the residual sum of squares (2665.243). The F-statistic value of 44.516 with a significance level of p = 0.000 (p < 0.001) also confirms that the model is statistically significant, implying that the set of independent variables—RPD, TBL, IR, SMT, PS, PI, and SSR—jointly have a significant

impact on consumer decision-making. Hence, the null hypothesis, which assumes that all regression coefficients are equal to zero, is rejected, and it can be concluded that the model is robust and provides a good fit to the data.

Table 7: ANOVA Test outcomes

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1874.780	7	267.826	44.516	.000[b]
	Residual	2665.243	443	6.016		
	Total	4540.022	450			

a. Dependent Variable: CD

b. Predictors: (Constant), RPD, TBL, IR, SMT, PS, PI, SSR

4.7 Multiple Regression Analysis

The findings of the multiple regression analysis provide important insights into the variables influencing Consumer Decision-Making (CDM). This model examines the impact of seven independent variables: Purchase Intention (PI), Impulse and Regret (IR), Price Sensitivity (PS), Trust and Brand Loyalty (TBL), Sustainability and Social Responsibility (SSR), Sales and Marketing Tactics (SMT), and Risk Preference and Discounts (RPD) on consumer decision-making. Table 8 presents the estimates of Multiple Regression model

Table 8: Multiple Regression analysis results

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.439	.982		.447	.655
	PI	.313	.057	.252	5.511	.000
	IR	.172	.079	.084	2.180	.030
	PS	.121	.069	.077	1.752	.081
	TBL	.239	.060	.190	4.010	.000
	SSR	.196	.061	.152	3.227	.001
	SMT	.251	.076	.143	3.316	.001

	RPD	.327	.127	.098	2.577	.010
	R= 96	R2= 87	Adjusted R2=62			

Dependent variable: Consumer decision-making (CDM)

Source: Author owns calculations using SPSS software.

4.7.1 Hypotheses testing.

The findings of Multiple Regression analysis show that the purchase intention has a positive and significant impact on consumer decision-making (B = 0.313, β = 0.252, p < 0.001). This implies that consumers who have strong intentions to purchase are more likely to make sound decisions. The standardized coefficient further demonstrates that purchase intention is the major predictor in the model, highlighting its key role in shaping consumer behavior. Thus, first hypothesis **(H1),** which assumes that purchase intention has positive and significant link with consumer decision-making, is validated by empirical findings. Similarly, second variable, Impulse buying and regret IB&R), also indicates a positive and statistically significant association with consumer decision-making (B = 0.172, β = 0.084, p = 0.030). This result exhibits the importance of emotional and psychological factors in consumer behavior. It suggests that impulsive purchase and post-purchase regret can significantly impact consumers' future decision-making. Hence, second hypothesis **(H2)** is confirmed by hard evidence. Further Price sensitivity (PS) exerts a positive but statistically insignificant effect on consumer decision-making at the 5% level (B = 0.121, β = 0.077, p = 0.081). This implies that price sensitivity alone cannot influence consumer decision-making in this context. However, its marginal significance at the 10% level highlights that price may still play a limited role under certain conditions. Therefore, third hypothesis **(H3)** is accepted with caution because empirical findings provide weak support.

Trust and brand loyalty (TBL) exhibits a strong positive and significant effect on consumer decision-making (B = 0.239, β = 0.190, p < 0.001). This underscores the importance of strong long-term relationships with consumers. Customers, who trust a brand and remain loyal to it, are more decisive in their purchasing behavior, making this variable more dominant in the model. Hence, Hypothesis **(H4)** is accepted.

Sustainability and social responsibility (SSR) exert a positive and statistically significant impact on consumer decision-making (B = 0.196, β = 0.152, p = 0.001), imply that consumers, who value ethical practices, clean environment, and corporate social responsibility, are more inclined to green products. Hence, organizations that emphasize sustainable practices are more likely to influence consumer preferences positively. Thus, fifth hypothesis **(H5)** is confirmed by hard evidence.

Sales and marketing tactics (SMT) demonstrate a positive and significant link with consumer decision-making (B = 0.251, β = 0.143, p = 0.001). This indicates that proper promotional strategies, advertising, and marketing communications play a dominant role in driving consumer decisions. In other words, well-designed marketing strategies can promote awareness, persuasion, and consequently influence consumer purchasing behavior. Thus, sixth hypothesis **(H6)** is also confirmed.

The seventh independent variable, Risk preference, and discounts (RPD), also exerts a positive and statistically significant impact on consumer decision-making (B = 0.327, β = 0.098, p = 0.010). This implies that consumers who are more willing to take risks or are attracted to discounts and promotional campaigns are more likely to engage in impulse buying. Although significant, the lower beta value pinpoints a moderate impact compared to other variables. Hence, seventh hypothesis **(H7)** is confirmed by empirical analysis. The hypotheses results are presented in Table 9.

Table 9: Hypothesis Testing Results

Hypothesis	Independent Variable	B	β (Standardized)	p-value	Significance	Decision
H1	Purchase Intention (PI)	0.313	0.252	< 0.001	Significant (1%)	Accepted
H2	Impulse Buying & Regret (IBR)	0.172	0.084	0.030	Significant (5%)	Accepted
H3	Price Sensitivity (PS)	0.121	0.077	0.081	Insignificant (5%) / Marginal (10%)	Rejected

Hypothesis	Independent Variable	B	β (Standardized)	p-value	Significance	Decision
H4	Trust & Brand Loyalty (TBL)	0.239	0.190	< 0.001	Significant (1%)	Accepted
H5	Sustainability & Social Responsibility (SSR)	0.196	0.152	0.001	Significant (1%)	Accepted
H6	Sales & Marketing Tactics (SMT)	0.251	0.143	0.001	Significant (1%)	Accepted
H7	Risk Preference & Discounts (RPD)	0.327	0.098	0.010	Significant (5%)	Accepted

Source: Author owns calculations using SPSS Software

We can conclude from the above findings that six explanatory variables such as Purchase intention, Impulse and regret, Trust and Brand loyalty, Sustainability and Social Responsibility, Sales and Marketing tactics and Risk Preferences and Discounts are strong predictors of Consumer decision-making whereas one variable, price sensitively, is insignificant predictor because it alone could not influence consumer purchase intention possibly due to stronger psychological and behavior factors. We noted in this empirical analysis that consumer decision-making Consumer behavior) is driven by psychological, behavioral, and relational factors rather than purely economic variables like price. Specifically, cognitive factors (Purchase intention) and Relational factors (Trust and Brand Loyalty) play dominant roles in consumer decision-making. Moreover. modern consumer trends, regarding their concern for sustainability and responsiveness to marketing strategies, are also core determinants. Therefore, these findings provide policy and managerial implications for the business organizations emphasizing that they should fortify brand trust and loyalty programs to influence consumer decisions. The empirical results are further highlighted in Figure 3.

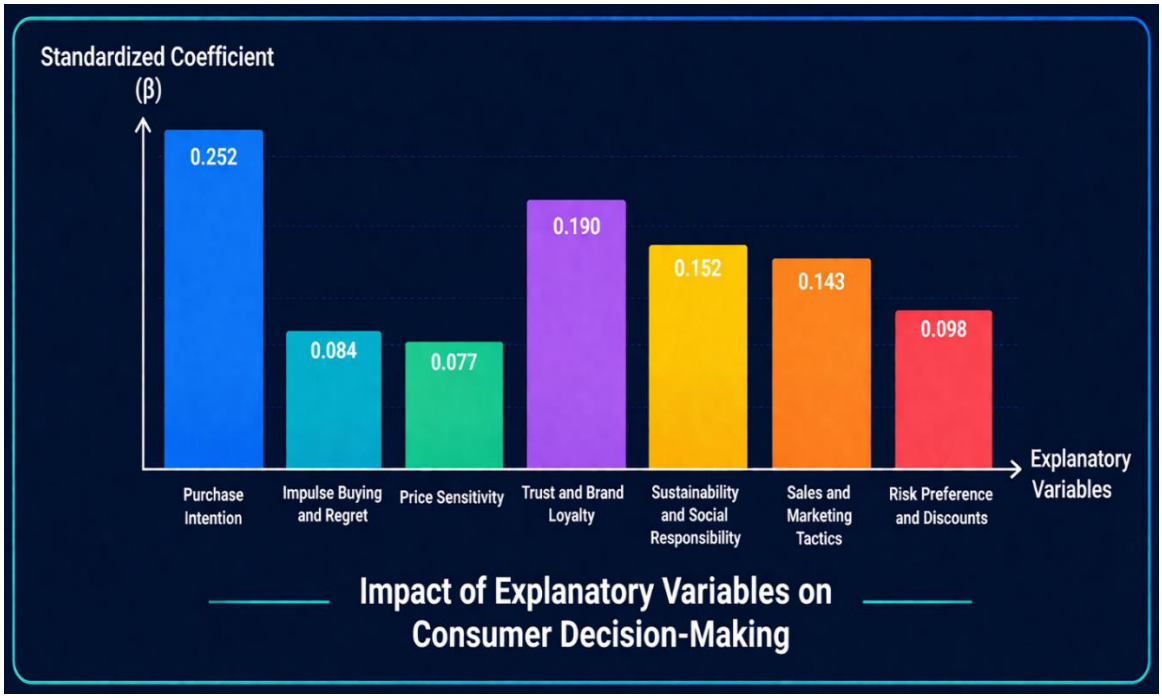

Fig 3: Individual impact of explanatory variables on consumer decision-making.

The visual statistical relationships among variables show that Purchase intention, Trust and Brand Loyalty, Sustainability and Social Responsibility, Sales and Marketing tactics are major drivers of consumer derision-making. Impulse and Regret and Price sensitively, Risk Preferences and Discounts exert positive but insignificant impact on consumer decision-making.

5.Discussion

5.1 Key findings

The objectives of this research was to investigate the impact of purchase intention (PI), Impulse and Regret (IR), Price sensitivity (PD), Trust and Brand Loyalty (TBL), Sustainability and Social Responsibility (SSR), Sales and marketing tactics (SMT), Risk preferences and discounts on consumer decision-making, using primary data collected from 451 participants through structured survey questionnaires in Vehari District of Pakistan. The study used various econometric tools such as correlation matrix and multiple regression analysis to estimate relationships among these variables. The results were computed through SPPS Software. The key findings of the study are discussed as below:

During the study it was observed that consumer behavior is guided by cognitive, emotional, relational, and strategic marketing variables, while purely economic variables play a weak role. It was also noted that purchase intention predominates over other factors in influencing consumer decision-making. This is further evidenced by decision-making being purposive and goal-directed; consumers are more likely to enact purchase intentions when those intentions are firmly formed. It thus confirms established behavioral theories, particularly the position that intention is the immediate antecedent of behavior (Saira, (2022).

The importance of impulse and regret indicates that consumer decision-making is not purely rational but rather influenced by spontaneous reactions and reflections on purchases after they have been made. This is consistent with the view held by behavioral economics that emotions and heuristics often determine real-life decisions (Ndukaji, (2025). While the effect is smaller, it nevertheless demonstrates that marketers can benefit from strategies aimed at emotional activation, such as limited time offers or experiential marketing. Contrary to traditional economic theory, price sensitivity is not a significant driver of consumer decision-making in this study. This indicates that consumer priorities have shifted to brand trust, perceived value, and ethical concerns over price sensitivity. Firms competing for consumer choice cannot rely solely on price competition in highly differentiated markets with brand positioning ((Soomro, et al., (2023).

Sales and marketing strategies also appear as a significant force in the consumer decision-making process, indicating that external stimuli like advertising, promotion, and branding efforts still exert a significant influence. This fits with classical marketing theory, which posits that promotion is a critical determinant of consumers' perceptions and behaviors. The moderate effect found suggests that marketing efforts bear fruit when combined with strong internal drivers, such as trust and purchase intention (Chethana, et al., (2016). Finally, the roles of risk preference and discount are supportive but significant in influencing decisions. Consumers inclined to take risks by promotional offers are more likely to buy (Suomala, (2020). This underlines the continuing importance of tactical tools like discounts and special deals, especially in creating short-term demand. However, their low effect means they play more of a reinforcing rather than a primary role in decision-making. Overall, the

results show that consumer decision-making is a multidimensional process in which psychological and relational elements outweigh price.

5.2 New theoretical & Empirical insights

This study provides new insights into theoretical and empirical literature in seven ways: First, the findings support the central role of purchase intention as a proximal determinant of behavior, consistent with Theory of Planned Behavior (TPB). However, unlike prior studies, this study demonstrates that intention is not formed in isolation but is impacted by emotional (impulse/regret), relational (trust/loyalty), and contextual (marketing/sustainability) factors. Second, the study integrates the Stimulus–Organism–Response (SOR) and *Signaling theories* by demonstrating that external stimuli (marketing tactics, CSR signals) shape internal psychological states (trust, emotional responses), which subsequently influence behavioral outcomes. This provides a clear causal pathway, addressing a major gap in prior research. Third, the findings challenge purely economic models by confirming that price sensitivity plays a limited role relative to psychological and relational factors. This supports the growing shift toward value-driven consumer behavior and experience-based consumption models. Fourth, the empirical findings predict that consumer behavior is primary influenced by cognitive, emotional, relational and marketing factors rather than purely economic factors. This is a new dimension in consumer behavior literature and makes this study unique from previous studies, which mainly conclude that economic factors play a crucial role in consumer purchase decision-making. Fifth, the results of present study also add fresh knowledge, predicting that purchase intention is the strongest predictor of consumer decision-making rather than economic factors. Sixth, another uniqueness of the findings of this study is that it rejects previous theories that the consumer gives much importance to price of goods during purchase decision-making. The findings disclosed that modern consumers prioritize trust, value, and ethical considerations rather than price. Seventh, more importantly, the study confirms that sustainability and social responsibility positively affect consumer decisions, implying that modern consumers give priority to sustainability and social responsibility to avoid purchasing polluting products. In this way, the study contributes by proposing a multi-level decision mechanism rather than a simple aggregation of predictors, thereby

offering a more realistic representation of consumer behavior which makers this research unique from the previous ones.

5.3 Practical Implications

The study offers several actionable policy implications/ recommendations for marketers, managers, and policymakers and these are presented in Table 10.

Table 10: Empirical Findings and Corresponding Practical Implications.

Empirical Results	Practical Implications / Recommendations
● Consumer behavior is primarily influenced by cognitive, emotional, relational, and marketing factors, while purely economic factors (e.g., price) play a weaker role.	● Firms should adopt a holistic marketing approach that integrates psychological, emotional, and relational strategies rather than relying solely on price-based competition.
● Purchase intention is the strongest predictor of consumer decision-making, confirming that behavior is purposive and goal directed.	● Organizations should focus on strengthening purchase intentions through persuasive communication, brand positioning, and value creation strategies.
● Impulse buying and post-purchase regret significantly influence consumer behavior, highlighting the role of emotions and heuristics.	● Marketers should design emotionally engaging campaigns (e.g., limited time offers, experiential marketing) while also managing post-purchase satisfaction to reduce regret.
● Price sensitivity is statistically insignificant, indicating that consumers prioritize trust, value, and ethical considerations over price.	● Companies should shift from price competition to differentiation strategies, emphasizing product quality, brand image, and customer experience.
● Trust and brand loyalty strongly influence consumer decision-making.	● Firms should invest in long-term relationship-building strategies, including

Empirical Results	**Practical Implications / Recommendations**
	consistent quality, transparency, and customer engagement to enhance loyalty.
● Sustainability and social responsibility positively affect consumer decisions.	● Organizations should integrate CSR and environmentally responsible practices into their core strategies and communicate these efforts effectively to consumers.
● Sales and marketing tactics (advertising, promotions, branding) significantly influence consumer behavior.	● Businesses should adopt integrated marketing strategies combining digital marketing, promotions, and branding to effectively influence consumer perceptions and decisions.
● Risk preference and discounts have a positive but moderate impact on decision-making.	● Firms should use discounts and promotional offers strategically to stimulate short-term demand, while ensuring they do not undermine brand value or perceived quality.
●Consumer decision-making is multidimensional, driven more by psychological and relational factors than by economic variables.	● Policymakers and marketers should design consumer-focused policies and strategies that account for behavioral insights rather than assuming purely rational decision-making.

Source: Author compilation

5.4 Limitations and new ideas for future research

This study contributed into the literature significantly. However, it has several limitations: First, the cross-sectional nature of the data does not allow causal inference among the variables; instead, the relationships represent associations at one point. Second, this study is based on self-reported questionnaire data, which is subject to response bias, social desirability, and subjective interpretation of questions. Third, the sample represents only one geographic area and one

demographic group; thus, results may not be generalizable to other areas or populations. Although several key variables were included, omitted variable bias may result because the model did not include other relevant variables, such as cultural influences, technological adoption, or psychological traits.

These limitations can be addressed by researchers in their future studies through longitudinal or experimental research designs that would adequately depict causal relationships and changes in consumer behavior over time. A larger sample size from various geographic regions and demographic segments would allow greater generalizability of the results. Further development of a more holistic model of consumer decision-making may be necessary by introducing additional variables, such as digital literacy, cultural dimensions, or personality traits. More complex relationships and mediation or moderation effects can also be explored using advanced analytical techniques, such as structural equation modeling (SEM) or machine learning approaches. Industry or country comparative studies may add more insight and strengthen future research results.

Data availability statement

The corresponding author will provide the data using in the findings of this study on reasonable requests.

References

Achar, C., So, J., Agrawal, N., & Duhachek, A. (2016). What we feel and why we buy: The influence of emotions on consumer decision-making. *Current Opinion in Psychology, 10*, 166–170. https://doi.org/10.1016/j.copsyc.2016.01.009

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes, 50*(2), 179–211. https://doi.org/10.1016/0749-5978(91)90020-T.

Awan, Abdul Ghafoor (2013) Relationship between Environment and Sustainable Economic Development: A Theoretical approach to Environmental Problems. *International Journal of Asian Social Sciences*. 3 (3): 741-761

Awan, Abdul Ghafoor., Saeed, Kashif (2014) Intellectual capital and research performance of Universities in Southern Punjab-Pakistan. *European Journal of Business and Innovation Research* 2 (6): 21-35

Awan, Abdul Ghafoor., Anjum, Kaleemullah (2015). Cost of High Employees Turnover Rate in Oil Refinery Industry of Pakistan. *Information and Knowledge Management* 5 (2):92-102

Awan, Abdul Ghafoor (2013). Environmental challenges to South Asian Countries. *Asian Accounting and Auditing Advancement* 3 (1): 84-103

Awan, Abdul Ghafoor (2013) Relationship between Environment and Sustainable Economic Development: A Theoretical approach to Environmental Problems. *International Journal of Asian Social Sciences*, 3 (3): 741-761

Awan, Abdul Ghafoor., Saeed, Kashif (2014). Intellectual capital and research performance of Universities in Southern Punjab-Pakistan. *European Journal of Business and Innovation Research* 2 (6): 21-35

Awan, Abdul Ghafoor., Anjum, Kaleemullah (2015). Cost of High Employees Turnover Rate in Oil Refinery Industry of Pakistan. *Information and Knowledge Management* 5 (2): 92-102

Awan, Abdul Ghafoor (2013). Environmental challenges to South Asian Countries *Asian Accounting and Auditing Advancement* 3 (1): 84-103

Awan, Abdul Ghafoor., Wamiq, Sammar (2026) Relationship between Environmental Awareness and Green Marketing. *Science International* 28 (3) 2959-2963

Awan, Abdul Ghafoor., Farhan, Hafiz Muhammad (2016).Talent Management practices and their impact on job satisfaction of employees: A case study of Banking sector in Pakistan. *Science International* 28(2).

Awan, Abdul Ghafoor., Ahson, Nimra (2015). Impact of Quality Management Practices on the Performance of Employees: A Case Study of Selected Banks of Pakistan *Research Journal of Finance and Accounting* 6 (13): 134-146

Awan, Abdul Ghafoor., Khalid, Imran (2015). Impact of Knowledge Management on Organizational Performance: A Case study of selected Universities in Southern Punjab-Pakistan. *Information and Knowledge Management* 5 (6): 59-67

Aziz, M. A., Ahmed, M. A., Khan, S. A., & Iftikhar, A. (2025). Customer brand engagement and purchase intention: The mediation effect of brand trust. *Regional Lens, 4*(3), 182–197. DOI: 10.55737/rl.2025.43117

Bashir, Imtiaz., Awan, Abdul Ghafoor (2016) The Role of Leadership style as a moderator in the Performance of Firm, *Science International, Lahore*, 28 (1): 609-615

Bern, Daryl J. (1972), *Self-Perception Theory, in Advances in Experimental Social Psychology*, 6, L. Berkowitz, ed. New York: Academic Press, 1–62.

Belk, R. W., Ger, G., & Askegaard, S. (2012). The fire of desire: A multisided inquiry into consumer passion. *Journal of Consumer Research, 30*(3), 326–351. https://doi.org/10.1086/378613

Berry, S. (2025). Antecedents of consumers regret frequency: Decision agency and online shopping behavior. *arXiv Preprint*. https://arxiv.org/abs/2512.24862.

Cole, M. S., Dimotakis, N., & Bernerth, J. B. (2026). Expected and experienced daily justice, emotions, and counterproductive work behavior. Journal of Applied Psychology, 111(5), 565–585. https://doi.org/10.1037/apl0001336.

DiClemente, D. F., & Hantula, D. A. (2003). Applied behavioral economics and consumer choice. *Journal of Economic Psychology, 24*(5), 589–602. RePEc: eee: joepsy:v:24: y:2003: i:5: p:589-602

Foxall, G. R. (2010). Invitation to consumer behavior analysis. *Journal of Organizational Behavior Management, 30*(2), 92–109. https://doi.org/10.1080/01608061003756376

Foxall, G. R. (2011). *Interpreting consumer choice: The behavioral perspective model*. Routledge.

Foxall, G. R. (2017). Behavioral economics and consumer choice: Advances in consumer behavior analysis. *Journal of Organizational Behavior Management, 37*(1), 1–15. https://doi.org/10.1080/01608061.2017.1294866

Furreboe, E. F., & Sandaker, I. (2017). Contributions of behavioral analysis to behavioral economics. *Journal of Organizational Behavior Management, 37*(2–3), 159–175. https://doi.org/10.1080/01608061.2017.1290503

Geller, E. S. (1989). Applied behavior analysis and social marketing: An integration for environmental preservation. *Journal of Social Issues, 45*(1), 17–36. https://doi.org/10.1111/j.1540-4560.1989.tb01531.x

Gong, Qing, Dong Liu, Yang Chen Cynthia Lee (2026). Learning from crisis: how crisis volunteering fosters resilience and change-oriented behaviors.

Organizational Behavior and Human Decision Processes 192, 104466 https://doi.org/10.1016/j.obhdp.2025.104466

Hameed, A., Waqas, A., Aslam, M. N., Bilal, M., & Umair, M. (2014). Impact of advertisement on consumer buying behavior. *International Review of Social Sciences and Humanities, 6*(2), 55–64.

Hantula, D. A., Brockman, D. D., & Smith, C. L. (2001). Online shopping as foraging: The effects of increasing delays on purchasing and patch residence. *Journal of Economic Psychology, 22*(6), 612–636. https://doi.org/10.1016/S0167-4870(01)00058-

Hantula, D. A., DiClemente, D. F., & Rajala, A. K. (2001). Outside the box: The analysis of consumer behavior. *Managerial and Decision Economics, 22*(7), 335–354. https://doi.org/10.1002/mde.1024

Hantula, D. A., & Wells, V. K. (2013). On the evolution of behavioral economics. *Journal of Organizational Behavior Management, 33*(3), 250–266. https://doi.org/10.1080/01608061.2013.785879

Imran, A., Kashif, M., Ishfaq, M., & Ashraf, M. S. (2020). Purchase intention and customer loyalty: The role of trust. *Ilkogretim Online, 19*(3), 2386–2396. doi: 10.17051/ilkonline.2020.03.735396

Islam, Q., & Khan, S. M. F. A. (2024). Sustainable consumer behavior and green purchase intention. *Sustainability, 16*(8), 3400. https://doi.org/10.3390/su16083400

Jazz, T. (2014). Marketing communications and consumer connection: Strategies for engagement in the digital era. *Journal of Marketing Research and Practice, 8*(2), 45–58.

Larsen, N. M., Sigurdsson, V., & Breivik, J. (2017). The use of observational technology to study in-store behavior: Consumer choice, video surveillance, and retail analytics. *Journal of Organizational Behavior Management, 37*(2–3), 135–158. https://doi.org/10.1080/01608061.2017.1290502

Lyu, L., Zhai, L., Boukhris, M., & Akbar, A. (2023). CSR practices and impulse buying behavior. *Sustainability, 15*(23), 16258. https://doi.org/10.3390/su152316258

Mamuaya, N. C. (2024). Price sensitivity and consumer purchase intention in FMCG markets. *International Journal of Business Law and Education, 5*(2), 1576–1583. DOI: https://doi.org/10.56442/ijble.v5i2.614

McKinsey & Company. (2009). The consumer decision journey. *McKinsey Quarterly*. https://www.mckinsey.com/capabilities/growth-marketing-and-sales/our-insights/the-consumer-decision-journey

Nadeem, S. (2022). The psychology of consumer decision-making in a digital economy. *Journal of Frontiers in Multidisciplinary Research, 3*(2), 1–5. Retrieved from https://www.multidisciplinaryfrontiers.com/uploads/archives/20250218134208_26.pdf

Ndukaji, A. (2025). Behavioral economics and consumer decision-making: How psychological factors influence consumer choices, marketing, and pricing strategies. *University of Windsor - Odette School of Business*. https://doi.org/10.2139/ssrn.6000374

Oliveira-Castro, J. M., & Marques, R. S. (2017). Temporal discounting and marketing variables: Effects of product prices and brand informational reinforcement. *The Behavior Analyst, 40*(2), 475–492. https://doi.org/10.1007/s40614-017-0109-6.

Polman, E., & Maglio, S. J. (2023). Improving the Generalizability of Behavioral Science by Using Reality Checks: A Tool for Assessing Heterogeneity in Participants' Consumership of Study Stimuli. *Perspectives on Psychological Science*, 18(4), 955-975.

Powers, R. B., Osborn, F. D., & Anderson, R. (1973). A lottery system to reduce litter in a U.S. Forest Service area. *Journal of Environmental Education, 4*(3), 33–38. DOI: 10.1901/jaba.1973.6-579

Riyaz, M., Jan, A., Khan, D., & Zahoor, A. (2024). Determinants of green purchase intention. *Jindal Journal of Management*. 14 (2). https://doi.org/10.1177/22786821241264

Robertson, T. S., & Kassarjian, H. H. (Eds.). (1991). *Handbook of consumer behavior*. Prentice Hall.

Rogers, A., Foxall, G. R., & Morgan, P. H. (2017). Building consumer understanding by utilizing a Bayesian hierarchical structure within the behavioral perspective model. *The Behavior Analyst, 40*(2), 419–455. https://doi.org/10.1007/s40614-017-0120-y

Roma, P. G., Reed, D. D., DiGennaro Reed, F. D., & Hursh, S. R. (2017). Progress of and prospects for hypothetical purchase task questionnaires in consumer behavior analysis and public policy. *Journal of Organizational Behavior Management, 37*(2–3), 135–157. https://doi.org/10.1080/01608061.2017.1290501

Solomon, M. R. (2013). *Consumer behavior: Buying, having, and being* (10th ed.). Pearson Education.

Soomro, L., Jokhio, F., Rashad, S. M. F. H., Riaz, S., Zulfiqar, H., & Asghar, F. (2023). Emotional and cognitive factors influence consumer judgment and decision making. *Bulletin of Business and Economics, 12*(2), 149–156. https://doi.org/10.5281/zenodo.8342079

Suomala, J. (2020). The consumer contextual decision-making model. *Frontiers in Psychology, 11*, 570430. https://doi.org/10.3389/fpsyg.2020.570430.

Webb, Thomas L., Sheeran, Paschal (2006). Does changing behavioral intentions engender behavior change? A meta-analysis of the experimental evidence. *Psychological Bulletin, 1*32(2): 249-268.

Wei, J., Shen, H., & Lu, Z. (2024). Expected regret and luxury purchase intention. *PLOS ONE, 19*(3), e0297050. https://doi.org/10.1371/journal.pone.0297050

Zhang, R., Zhou, X., Liu, Q., & Wang, C. (2025). ESG performance and purchase intention. *Frontiers in Psychology, 16*, 1599472. https://doi.org/10.3389/fpsyg.2025.1599472