

# THE MECHANISMS OF IMPULSIVE BUYING: THE ROLE OF RETAIL STIMULI, LOYALTY SATISFACTION, AND DEMOGRAPHIC CONTINGENCIES

**Ravikesh Kushwaha, Dr. Lal Bahadur Prasad, Dr. Bharti Shukla**

Research Scholar

Management Studies Department, Madan Mohan Malaviya University of Technology, Gorakhpur

kushwaharavikesh@gmail.com

ORCID ID- <https://orcid.org/0009-0000-5272-4359>

Professor Electrical engineering department & Head Management Studies Department

Madan Mohan Malaviya University of Technology, Gorakhpur

lbpee@mmmut.ac.in, erlbprasad@gmail.com

ORCID ID-<https://orcid.org/0000-0002-4032-5294>

Assistant Professor, Management Studies Department

Madan Mohan Malaviya University of Technology, Gorakhpur

bhartimmec@gmail.com, bsmmba@mmmut.ac.in

ORCID ID- <https://orcid.org/0000-0002-6400-265X>

## ABSTRACT

The impulse buying behavior trend is a significant outcome of the contemporary retail strategies, yet the psychological mechanisms of bridging the retail stimulus and the decision to buy impulsively are not integrated in a proper way. This paper is based on the “Stimulus-Organism-Response” model in analyzing the mediatory effects of Loyalty Satisfaction in the connection between Service Performance, Price Perception, Judgmental Motives and Impulse Buying behavior. Also, the demographic factors moderating effect is investigated.

The data were gathered on 432 retail consumers and were analyzed using the “Partial Least Squares Structural Equation” Modeling (PLS-SEM). The results show that Service Performance and Price Perception have a significant positive impact on Loyalty Satisfaction which has a strong positive impact on the Impulsive Buying behavior. The structural model predicts 72.8 percent of the variance in the Loyalty Satisfaction and 35.3 per cent of the variance in the Impulsive Buying. Mediation analysis supports the fact that Loyalty Satisfaction is partially transmitting the impact of retail stimuli and to impulsive buying. Moreover, moderation results show that Gender and Income have considerable impact on the association between Loyalty Satisfaction and Impulsive Buying but Age and Purchase Frequency do not reveal any significant moderating effects.

The introduction of mediation and demographic moderation within the single structural framework contributes to the expansion of the “Stimulus-Organism-Response” paradigm, and provides practical implications to the retail managers who want to stimulate the impulse buying behavior in a strategic manner.

**Keywords:** Impulse Buying, Loyalty Satisfaction, Service Performance, Price Perception, Retail Marketing, PLS-SEM, Moderation.

## 1. INTRODUCTION

The impulse buying behaviour has assumed a leading role in the contemporary retail stores, especially organized retail formats, which are typified by experiential store layouts, promotion intensity, and price rivalry (Rook, 1987; Muruganantham & Bhakat, 2013; Amos et al., 2014). The store atmospherics by retailers are more frequently created to help customers make planned purchases, as well as to encourage unplanned and impulse purchases to increase the size of the basket and its final performance (Grewal et al., 2017).

Impulse buying may be described as instant, unthought purchase choice caused by exposure to some inside or outside stimuli (Rook, 1987; Beatty & Ferrell, 1998). Impulsive buying as opposed to planned buying is highly

influenced by affective arousal, situational stimuli, and environmental stimuli as opposed to careful cognitive appraisal (Rook & Fisher, 1995; Verplanken & Herabadi, 2001). The retailing of the organized type and supermarkets, hypermarkets, branded retail chains have intensified the importance of impulse purchasing with the power of visual displaying, promotion displays and price signs and interactive service environments that affect consumer response in real time (Donovan & Rossiter, 1982; Tendai & Crispin, 2009).

In contrast to previous research that has investigated individual determinants of impulse buying, such as in-store ambience, promotional prices, service-level interaction, and personality, the majority of the available studies have considered impulse buying as a direct result of the influence of retail stimuli without a systematic study of the psychological mechanisms that mediate this consequence (Floh & Madlberger, 2013; Iyer et al., 2020). Lack of the inbuilt mediation system inhibits theoretical development and business understanding.

The present research is based on the conceptualization of retail stimuli as a stimulus of the external environment that triggers internal psychological appraisals which in turn determine behavioral responses (Mehrabian & Russell, 1974; Donovan & Rossiter, 1982). In particular, the variables of Service Performance, Price Perception, and Judgmental Motives are considered as the stimulus variables, Loyalty Satisfaction is the organismic state, and Impulsive Buying is the behavior response (Peng & Kim, 2014; Xu & Huang, 2014).

Psychological states associated with satisfaction are important to mediate retail situations. Satisfaction is a cognitive cumulative valuation of service experiences and perceived value (Ali et al., 2016). Increased satisfaction decreases cognitive resistance and positively affects, which increases the possibility of impulse buying (Bagozzi et al., 1999; Zheng et al., 2019).

Moreover, the demographic factors can mediate the translation of satisfaction to behavior. The purchasing power and the risk tolerance is determined by the income level (Wood, 1998), whereas the shopping orientation and emotional responsiveness are determined by the gender differences (Amos et al., 2014). Nonetheless, demographic moderation in an organized mediation model is not researched.

Although significant research has been conducted on impulse buying, previous research has done most of the studies based on the individual retail stimuli, satisfaction, and consumer motives. Most of the previous studies are conducted with the aim of direct correlations of environmental cues with impulsive buying behavior without having a single mediation-moderation framework under the same analytical framework. Moreover, little has been done on the issue of conditional demographic processes that can intervene in the translation of satisfaction to impulsive buying behavior. Under the conditions of the appearance of the organized retail space, when the role of the experience format and price competition logic aggravates the responsiveness of consumers, it is necessary to have a complex structural framework that would be able to capture both the effects of stimuli and psychological mediation, as well as demographic contingencies. This gap is filled in the current research through the contribution of constructing and empirically verifying an integrated mediation-moderation model based on the “Stimulus-Organism-Response” paradigm.

Based on the data of 432 retail consumers examined with the help of the “Partial Least Squares Structural Equation” Modeling (Hair et al., 2022; Sarstedt et al., 2021), a detailed mediation-moderation model of understanding the impulse buying behavior in well-organized retail settings is developed and tested in the present study.

Recent researches point to changing stimuli like digital presentation videos and live-streaming communication that affects impulse buying behavior which proves the necessity of introducing new mediators in the traditional retail structures.

## 2. HYPOTHESES AND THEORETICAL BACKGROUND DEVELOPMENT.

### 2.1 Theoretical Background “Stimulus-Organism-Response” Model

The current research is based on the Stimulus Organism Response model, which was first formulated by Mehrabian and Russell (1974), as the way in which the environmental stimuli impact internal psychological conditions, which in turn define the behavioral consequences. This framework has been extensively used in the retail industry to interpret consumer reactions to store atmospherics, pricing signals and interactions with service providers (Donovan & Rossiter, 1982; Peng & Kim, 2014).

S O R paradigm is the fact that external environmental stimuli (Stimulus) trigger internal emotional and mental judgment (Organism) that then produces behavioral reactions (Response). Retail spaces offer various types of stimuli, such as service levels, price indicators, reward programs, promotional exhibits, and interpersonal communicative messages, which cause consumers to enter evaluative states and make buying behaviors (Grewal et al., 2017; Tendai and Crispin, 2009).

Service Performance (SP), Price Perception (PP) and Judgmental Motives (JM) are also conceptualized as stimulus variables in the current study. Loyalty Satisfaction (LS) is the organismic condition which means a cumulative outcome of evaluative and affective reactions. The behavioral response is the Impulsive Buying (IB). The given framework enables analyzing mediation and moderation processes at the same time under the auspices of a common analytical framework.

Recent studies involving the omnichannel retail setting confirm that the integration of convenience and channel is a kind of stimuli influencing spontaneous purchase, which provides support to the “Stimulus-Organism-Response” model.

## 2.2 Loyalty Satisfaction and Performance of service

Service performance is defined as how the consumers perceive responsiveness, reliability and quality of interpersonal interaction at the retail environment. Quality service promotes trust, decreases uncertainty and increases the positive emotional reaction (Ali et al., 2016; Lemon and Verhoef, 2016).

The previous studies show that customer satisfaction and customer loyalty depend greatly on service quality in retailing settings (Donovan and Rossiter, 1982; Grewal et al., 2017). Effective service provision enhances the shopping experience, which leads to increased affective judgments and the establishment of satisfaction.

In SOR view, service performance is a stimulus which influences an organismic state of satisfaction. As such, it is assumed that:

**H1: Service Performance reduces the satisfaction of Loyalty in a positive and significant way.**

## 2.3 Perception of Price and Loyalty Satisfaction

Price Perception indicates how consumers judge price equitability, money worthiness and the promotion appeal (Xu and Huang, 2014). Fairness perceived minimizes cognitive dissonance and increases perceived value, which increases satisfaction (Zhang et al., 2018).

It has been found that consumers who feel that pricing strategies are apparent and fair tend to develop a positive effect and satisfaction (Grewal et al., 2017). Price signals in organized retail setting are strong stimuli that affect inner considerations.

In this connection, the hypothesis presented below is suggested:

**H2: The positive and significant impact of the Price Perception on the Loyalty Satisfaction is positive.**

## 2.4 Fairness of Judgment and Loyalty Fulfilment

Judgmental Motives are internal cognitive processes that determine how consumers evaluate the retail experiences. These reasons are the personal expectations, evaluative standards and goal-oriented evaluations (Verplanken and Herabadi, 2001).

Retail encounters are evaluated by the consumer according to the level of correspondence between personal motivations and expectations. The positive evaluative responses are created when the retailing environments meet the internal motives (Bagozzi et al., 1999).

According to the “Stimulus-Organism-Response” model, the organismic state of satisfaction is affected through judgmental motives to evaluate the stimuluses. Therefore:

**H3: The impact of Judgmental Motives on the Loyalty Satisfaction is a positive significant one.**

## 2.5 Loyalty Satisfaction and Impulse Buying

Loyalty Satisfaction is a cumulative affective and cognition response to retail experiences. Positive emotional states are boosted, and psychological resistance is minimized through satisfaction, which boosts the probability of spontaneous purchasing (Mehrabian and Russell, 1974; Zheng et al., 2019).

Impulse purchase is usually an affective, but not a rational, response to stimulation (Rook and Fisher, 1995). Having become highly satisfied, consumers will pay more attention to unplanned purchases because of the increase of positive affect and decrease in perceived risk (Iyer et al., 2020).

In such a way, the statement of the hypothesis is as following:

**H4: Impulsive Buying is positively and significantly influenced through Loyalty Satisfaction.**

## 2.6 Direct Retail Stimulus Interactions on Impulsive Purchase

Although the “Stimulus-Organism-Response” model focuses on the indirect effects of organismic states, previous

studies indicate that the retail stimuli can also have direct effects on impulsive purchasing behavior (Rook, 1987; Beatty and Ferrell, 1998). Promotional displays, pricing signals, and service encounters are examples of elements of the environment that can arouse immediate behavioral responses without entirely mediation (Floh & Madlberger, 2013; Parboteeah et al., 2009).

Spontaneous purchases can be directly aroused by service performance, which can cause positive affect in the shopping process (Ali et al., 2016). In the same manner, appealing price perceptions, in particular, the promotional signals can be applied directly to incentivize non-planning purchases (Xu and Huang, 2014; Zhang et al., 2018).

The motives of judgment may also have a direct influence in the impulsive buying behaviour especially where the internal motives are in congruence with the situational cues (Verplanken and Herabadi, 2001).

As such, the hypotheses are as follows:

**H5: The direct influence of Service performance on the Impulsive Buying is positive and significant.**

**H6: Price Perception directly affects Impulsive Buying but in a positive significant manner.**

**H7: Judgmental Motives have a positive and significant direct impact on Impulsive Buying.**

## 2.7 Mediating Effect of Loyalty Satisfaction

“Stimulus-Organism-Response” model assumes that organismic states mediate the correlation between environmental stimuli and behavior (Mehrabian & Russell, 1974; Donovan & Rossiter 1982). Satisfaction is an evaluative mechanism in retail situations, which conveys the impact of stimuli to behavioral consequences (Ali et al., 2016).

Empirical research shows that satisfaction is the key element when it comes to transforming positive retail experiences into purchase behaviors (Zheng et al., 2019). Consumers show more affective congruence and less cognitive resistance when they become highly satisfied with a particular product or service, hence they are prone to making spontaneous purchases (Bagozzi et al., 1999).

Therefore, the conceptualization of Loyalty Satisfaction as a mediating variable in the structural model is presented.

**H8a: Service Performance and Impulsive Buying have a relation which is mediated by Loyalty Satisfaction.**

**H8b: The mediation between Price Perception and Impulsive Buying is one mediated by Loyalty Satisfaction.**

**H8c: Judgmental Motives are connected with Immediate Buying through Loyalty Satisfaction.**

## 2.8 Moderating effects of Demographic variations

The studies of consumer behavior emphasize that consumption inclinations are determined by demographic factors (Wood, 1998). The differences in gender determine shopping orientation and emotive responsiveness (Amos et al., 2014), whereas the purchasing power and risk-taking inclination are dependent on income level (Wood, 1998).

Greater financial flexibility may enable higher-income consumers to translate into actual purchase behavior more easily as a result of heightened satisfaction. Likewise, impulsive responsiveness could be affected by any gender-based disparity in hedonic shopping orientation (Rook and Fisher, 1995).

Impulse buying might also depend on age and the frequency of purchase but the available empirical evidence is inconclusive (Muruganatham and Bhakat, 2013).

In that regard, Loyalty Satisfaction is proposed to have a moderating relationship with the Impulsive Buying due to demographic variables.

**H9a: The correlation between Loyalty Satisfaction and Immediate Buying is mediated by Gender.**

**H9b: Loyalty Satisfaction is moderated by income with regards to Impulsive Buying.**

**H9c: Age has a moderating influence between Loyalty Satisfaction and Impulse Buying.**

**H9d: Purchase Frequency and Loyalty Satisfaction is mediated by the correlation between the Loyalty Satisfaction and the Impulsive Buying.**

## 2.9 Conceptual Framework

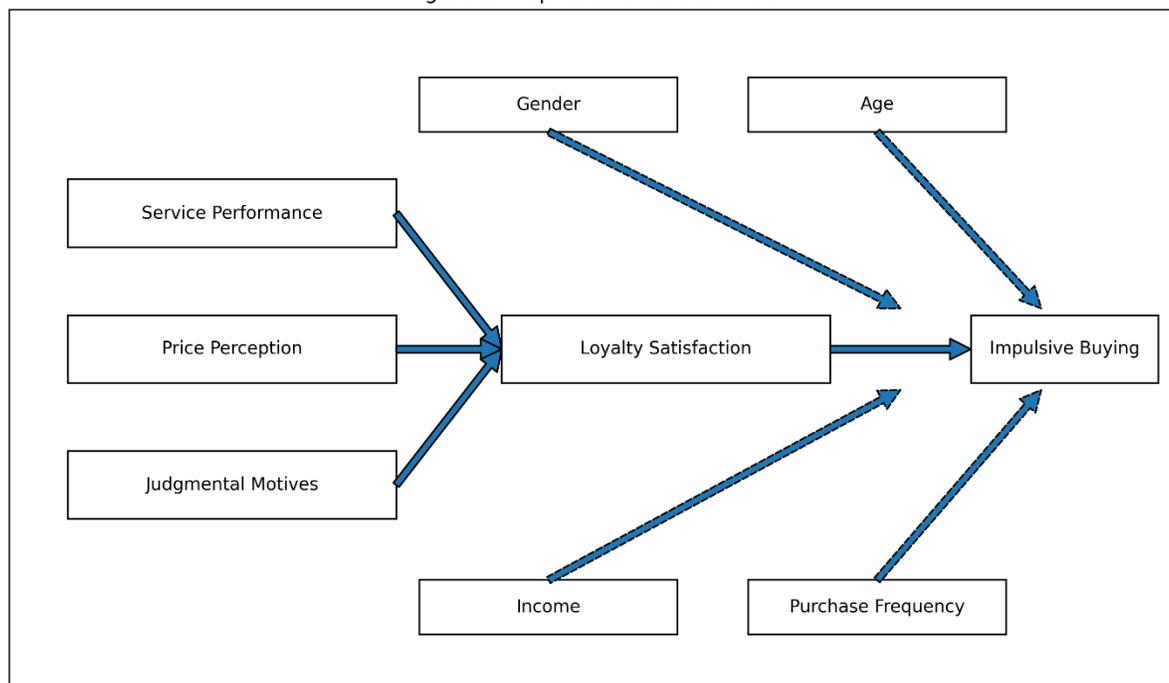
The theoretical model of the proposed research, considering the theoretical arguments and empirical results mentioned above, is the following: the stimulus variables (Service Performance, Price Perception, and Judgmental Motives) and the organismic state (Loyalty Satisfaction) and the behavioral response (Impulsive Buying) are connected with each other in the (SOR) structure (Mehrabian & Russell, 1974).

The model also accommodates demographic moderators that affect the satisfaction impulsive buying relationship

hence offering a mediation moderation framework.

**The suggested structural model is shown in figure 1.**

Figure 1. Proposed Structural Model



### 3. METHODOLOGY

#### 3.1 Research Design and Data Collection

The research design to be used is quantitative in nature in order to examine the relationships between retail stimuli and loyalty satisfaction and impulsive buying behavior in the structure of the research design. A cross-sectional survey method was utilized, and it is one of the most common techniques of studying consumer behavior to test theoretical models of mediation and moderating relationships (Hair et al., 2022).

A total of 432 consumers that had recently visited organized retail outlets were sampled to provide primary data. Retail setting Organized retailing was chosen because of structured atmospheres, intensity of promotions, and interactive forms of services that support impulse purchases (Grewal et. al., 2017).

Data was collected through the structured questionnaire on both online and offline in order to be able to provide variety and representativeness to the responses. The respondents were taught to volunteer and their anonymity was guaranteed to minimize the bias of response and improve the reliability of the data (Podsakoff et. al., 2003).

The sample was made up of the respondents of varying demographical backgrounds, in regards to gender, age, level of income, and frequency of purchase. These demographic variables were also included in the model as moderators to study the conditional effects on the impulsive buying behavior.

#### 3.2 Measurement of Constructs

Multi-item scales derived out of the existing literature about retail marketing and consumer behavior studies were used to measure all constructs. Certain contextual changes were minor enough to make them relevant to organized retail environments.

All the items were measured on a five-point Likert scale (1 (strongly disagree) to 5 (strongly agree)) and it is a typical instrument of behavioral research to elicit attitudinal reaction (Hair et al., 2022).

The constructs included:

- Service Performance (SP)
- Price Perception (PP)
- Judgmental Motives (JM)
- Loyalty Satisfaction (LS)
- Impulsive Buying (IB)

The models of reflective measurement were employed since the indicators were conceptualized as reflecting the latent constructs (Sarstedt et al., 2021). Reflective modeling is suitable where the items are the interchangeable measures of a theoretical construct.

### 3.3 Data Analysis Technique

“Partial Least Squares Structural Equation” Modeling was used in analyzing the data. PLS-SEM is specifically appropriate in complicated research design with multiple mediating and moderating relationships and does not have strong normality assumptions (Hair et al., 2022; Sarstedt et al., 2021).

The analysis was done in two phases:

1. Evaluation of the measurement model to assess reliability and validity.
2. Testing of hypothesized relationships through evaluating the structural model.

The resampling-based bootstrapping procedures were used to ascertain the statistical significance of the path coefficients, indirect effects, and interaction terms (Hair et al., 2022).

Evaluation of models was done based on the set criteria such as:

- R-square (R<sup>2</sup>) of explanatory power.
- Effect size (f<sup>2</sup>)
- Model fit Standardized Root Mean Square Residual (SRM)
- Q-square (Q<sup>2</sup>) predictive relevance.

This research methodology will provide the model with strength, predictability, and conceptual justification.

### 3.4 Measurement Model Evaluation

The reliability was measured under the Cronbach Alpha and Composite Reliability. Hair et al. (2022) explain that values of CR over 0.70 show satisfactory internal consistency.

The convergent validity was measured using Average Variance Extracted (AVE) and the value was considered as fair at 0.50 (Fornell & Larcker, 1981).

Outer loadings of significant value ( $p < 0.001$ ) were used to confirm the indicator reliability. Variance Inflation Factor (VIF) was used to test the multicollinearity, and all VIF values were lower than conservative scales, which means that the problem of multicollinearity does not exist (Hair et al., 2022).

Overall, the model of measurement proved to be reliable and valid enough, and the analysis of the structural models was achievable.

**Table 1. Reliability and Convergent Validity**

Construct	Cronbach's Alpha	Composite Reliability (CR)	AVE
Service Performance	0.842	0.893	0.676
Price Perception	0.684	0.826	0.544
Judgmental Motives	0.712	0.839	0.566
Loyalty Satisfaction	0.881	0.917	0.736
Impulsive Buying	0.698	0.829	0.549

**Note:** CR and AVE of over 0.70 and 0.50, respectively, is reasonably good reliability and convergent validity (Hair et al., 2022).

### 3.5 Structural Evaluation

The structural model was evaluated based on the standardized path coefficients, t-statistic, and p-values generated as a result of bootstrapping processes (Hair et al., 2022).

The model accounts 72.8 percent of the variation in Loyalty Satisfaction ( $R^2 = 0.728$ ), which implies a lot of explanatory power. In the case of Impulsive Buying, the model accounts 35.3 percent variance ( $R^2 = 0.353$ ), which is moderate based on the PLS-SEM standards.

Direct effects demonstrate that Service Performance, Price Perception, and Judgmental Motives have a significant level of influence on Loyalty Satisfaction. Impulsive Buying behavior, on its part, is greatly predicted by Loyalty Satisfaction.

Indirect evidence confirms Loyalty Satisfaction as an intermediary between the retail stimuli and impulsive buying

which affirms the organismic mechanism of “Stimulus-Organism-Response” framework (Mehrabian & Russell, 1974).

The estimate of the interaction term was used to perform the moderation analysis. The findings reveal that there is a significant moderating effect between Loyalty Satisfaction and Impulse Buying by Gender and Income, but no meaningful moderating effect of Age and Purchase Frequency in this group.

Predictive relevance was established by positive Q 2 values and model fit measures like SRMR were at acceptable levels which point to good structural model fit.

**Table 2. Hypothesis Testing Results.**

Hypothesis	Path	Beta ( $\beta$ )	t-value	p-value	Decision
H1	SP → LS	0.447	12.421	<0.001	Supported
H2	PP → LS	0.404	11.003	<0.001	Supported
H3	JM → LS	0.131	3.085	0.002	Supported
H4	LS → IB	0.464	10.765	<0.001	Supported
H5	SP → IB	0.207	5.612	<0.001	Supported
H6	PP → IB	0.187	4.983	<0.001	Supported
H7	JM → IB	0.061	2.286	0.022	Supported

R<sup>2</sup> (Loyalty Satisfaction) = 0.728

R<sup>2</sup> (Impulsive Buying) = 0.353

## 4. RESULTS

### 4.1 Assessment of Measurement of Model

Pre-test of the measurement model was carried out in order to test construct reliability, convergent validity and multi-collinearity of the indicators.

All reflective indicators showed statistically significant outer loadings ( $p < 0.001$ ) and the majority of them had their loadings higher than the recommended threshold of 0.70, which reflects satisfactory reliability of indicators. Some moderately loaded items had been retained because they were theoretically relevant and had good to fair levels of composite reliability.

The internal consistency reliability was determined by use of Cronbach’s Alpha and Composite Reliability (CR). Value of construct reliability of all constructs was higher than the recommended value of 0.70 that indicates high internal consistency. Even though the Alpha values of Cronbach in Price Perception and Impulsive Buying were slightly lower than 0.70, the composite reliability values were acceptable and as such is deemed adequate in PLS-SEM applications.

Average Variance Extracted (AVE) was used to measure convergent validity. Majority of constructs have AVE values that are greater than 0.50, meaning that a large percentage of variance in indicators is accounted to by the latent constructs.

The assessment of multicollinearity was performed by comparing the values of Variance Inflation Factor that were 1.00 to 1.64 which is significantly low in comparison to conservative cut off values hence no issue of multicollinearity.

Overall, the measurement model possesses a good reliability and validity that makes it possible to pass to the assessment of the structural model.

### 4.2 Structural Model Results.

Boot strapping was conducted to establish the significance of relationships of interest.

The model accounts 72.8 per cent of the variance in Loyalty Satisfaction ( $R^2 = 0.728$ ), which is significant in that respect. Considering the case of Impulsive Buying behavior, the model has a moderate level of variance ( $R^2 = 0.353$ ) or 35.3 percent.

### 4.3 Direct Effects

Service Performance has a strong impact on Loyalty Satisfaction ( $= 0.447, p < 0.001$ ).

Loyalty Satisfaction is largely impacted by Price Perception ( $= 0.404, p = 0.001$ ).

Loyalty Satisfaction is strongly subject to judgmental Motives ( $0.131, p = 0.002$ ).

Impulsive Buying behavior is strongly predicted by Loyalty Satisfaction (0.464,  $p < 0.001$ ).

Moreover, there are also direct effects of the retail stimuli on Impulsive Buying:

Impulsive Buying  $\rightarrow$  Service Performance (= 0.207,  $p = 0.001$ )

Price Perception  $\rightarrow$  Impulsive Buying (= 0.187,  $p =$  below 0.001)

Judgmental Motives ( $\rightarrow$ ) Impulsive Buying (= 0.061,  $p = 0.022$ )

These results show evidence of partial mediation as both direct and indirect paths are important.

#### 4.4 Mediation Analysis

Loyalty Satisfaction was tested as a mediating variable by bootstrapped indirect effects.

The Loyalty Satisfaction has an indirectly significant impact on the effect of Service performance on Impulsive Buying ( $\beta = 0.207$ ,  $p < 0.001$ ).

Price Perception has an important indirect impact on Impulsive Buying through Loyalty Satisfaction (  $-0.187$ ,  $p < 0.001$ ).

There is also the indirect influence of Judgmental Motives on Impulsive Buying through Loyalty Satisfaction (0.061, 0.022).

These findings verify that Loyalty Satisfaction is a major transmission channel between retail stimulus and impulsive purchase behavior. The fact that there are both significant direct and indirect effects implies a partial mediation.

**Table 3. Indirect Effects through Loyalty Satisfaction**

Path	Indirect Effect ( $\beta$ )	t-value	p-value	Mediation Type
SP $\rightarrow$ LS $\rightarrow$ IB	0.207	5.842	<0.001	Partial
PP $\rightarrow$ LS $\rightarrow$ IB	0.187	5.201	<0.001	Partial
JM $\rightarrow$ LS $\rightarrow$ IB	0.061	2.344	0.022	Partial

**Note:** The presence of substantial direct and indirect impact is a sign of partial mediation.

#### 4.5 Moderation Analysis

Interaction term estimation was used to test the moderation effects.

The relationship between Gender and Loyalty Satisfaction is significant (= 0.268,  $p = 0.006$ ), which implies that gender supplements this correlation between satisfaction and impulsive buying.

The relationship is also highly moderated by income (0.101 = 0.039,  $p = 0$ ) indicating that consumers who possess greater purchasing power tend to make more conversion and gain more satisfaction in purchasing behaviour.

But Age ( $p = 0.056$ ) and Purchase Frequency ( $p = 0.848$ ) have no statistically significant moderating effects.

These results show that demographic features precondition the selective influence of impulse buying with respect to their responses.

**Table 4. Results of Moderation analysis**

Hypothesis	Interaction Term	Beta ( $\beta$ )	t-value	p-value	Decision
H9a	Gender $\times$ LS	0.268	2.746	0.006	Supported
H9b	Income $\times$ LS	0.101	2.063	0.039	Supported
H9c	Age $\times$ LS	—	—	0.056	Not Supported
H9d	Purchase Frequency $\times$ LS	—	—	0.848	Not Supported

#### 4.6 The fit and predictive relevance of the model.

Measured of model fit was the Standardized root mean square Residual (SRMR) and the value was 0.075 which was fairly within the acceptable parameter hence, the model was fitted well.

Q-square (Q<sup>2</sup>) statistics were used to assess the predictive relevance. Both the Loyalty Satisfaction and the Impulsive Buying have positive Q<sup>2</sup> values that confirm that there is sufficient predictive ability of the model.

The PLS predicting models also suggest that the model is more effective as compared to benchmark linear models in predicting endogenous constructs.

In general, the structural model shows a high explanatory strength, large mediation variables, strong demographic moderations, and sufficient predictive value.

## 5. DISCUSSION.

The key aim of the given research was to investigate the structural inter-relations between retail stimuli, loyalty satisfaction and impulsive buying behavior in the frame of Stimulus-Response/Organism (“Stimulus-Organism-Response”) concept. The empirical results are very much in support of the proposed mediation, moderation model and also give valuable theoretical and practical implications.

First, the findings affirm that the Service Performance is a significant means of improving Loyalty Satisfaction. The observation conforms to the previous studies that indicate the pivotal role of service quality in consumer judgment and emotional reaction in the retail setting (Ali et al., 2016; Lemon and Verhoef, 2016). Service interactions act as environmental stimuli and are consistent with the SOR paradigm (Mehrabian & Russell, 1974); they affect the internal affective states. The current study supports satisfaction formation in structured retailing environments by the fact that the desirable relationship was established with the effectiveness of efficient, responsive and customer-oriented service.

Second, there is a positive effect of Price Perception on Loyalty Satisfaction. This finding correlates with previous research that demonstrated the role of the evaluation of perceived fairness and value for money in influencing customer ratings (Xu and Huang, 2014; Zhang et al., 2018). Pricing mechanisms are effective as a cognitive guidance in a retail context, which affects both critical analysis and affective reaction. The results indicate that value-based and transparent pricing mechanisms are extremely beneficial to the level of satisfaction.

Third, the influence of Judgmental Motives on Loyalty Satisfaction is rather interesting, and the internal cognitive forces are significant in deciding the outcomes of the judgment process. This result is in line with studies indicating that impulse-related tendencies have some ground in personal motivational orientations and standards of evaluation (Verplanken and Herabadi, 2001; Bagozzi et al., 1999). Satisfaction levels are high when the expectations and motives of the consumers are matched with the retail experiences.

One of the contributions made in this study is the validation of the mediating role of Loyalty Satisfaction. The findings prove that Satisfaction moderates the relationships between Service Performance, Price Perception and Judgmental Motives to Impact Impulsive Buying behavior. This observation gives empirical evidence to the organismic mechanism as advanced by the S-O-R model (Donovan and Rossiter, 1982). The same results are reported in recent meta-analytic studies, which also highlight the fact that affective and evaluative states are core drivers of impulsive purchasing (Iyer et al., 2020).

The fact that several major direct and indirect effects are present implies partial mediation. It implies that, although the satisfaction is an important transmission factor, some retail stimuli can also provoke spontaneous buying that is performed due to instantaneous affective activation (Rook and Fisher, 1995; Floh and Madlberger, 2013). This two-way process has been used to augment the knowledge of the impulse buying behaviors within the structured shopping context.

The depth of explanations of model is also enhanced by the moderation analysis. The relationship between Loyalty Satisfaction and Impulse Buying has a significant moderate of Gender and Income. This finding is related to the former research that theorized that demographic factors may influence the impulse buying dispositions (Amos et. al., 2014; Wood, 1998). Consumers with greater income have a higher chance of turning the satisfaction into spontaneous buying because of the financial limitations. In the same way, impulsive responsiveness could be influenced by gender-related variations in shopping orientation.

Nonetheless, Age and Purchase Frequency do not show significant moderating effects, which means that impulsive buying behavior can not differ significantly among age groups or the levels of shopping frequencies within the current sample. The result is part of the current debate over the issue of demographic variability in impulse buying studies (Muruganantham & Bhakat, 2013).

The model has a strong explanatory power as to Loyalty Satisfaction ( $R^2 = 0.728$ ) and moderate explanatory power as to Impulsive Buying ( $R^2 = 0.353$ ) which indicates that the integrated mediation-moderation framework can successfully explain the impulse buying behavior in organized retail settings.

Generally, the results bring impulse buying literature to the fore as it empirically confirms a coherent structure of interrelations between retail stimuli, formation of satisfaction and spontaneous purchase behavior in an overall analytical paradigm.

The current results are a continuation of the literature that also deems digital and trust-based mediators significant in the context of impulse buying when dealing with digitally native consumers, especially with Generation Z.

Complex psychological and technological factors have been systematically known to affect the impulse buying behavior, and indicate the need to consider mediation-moderation modeling.

## 6. THEORETICAL IMPLICATIONS.

The current research work adds to the literature in impulse buying and retail marketing in a number of ways.

First, the paper contributes to the Stimulus- Organism- Response model by empirically confirming the existence of a structured mediation process in structured retail environments. Although past studies have recognized the role of environmental stimulus in impulsive buying behavior (Donovan & Rossiter, 1982; Floh and Madlberger, 2013), little focus has been on the satisfaction based organismic process through which these impacts are passed. The study enhances the elucidative nature of “Stimulus-Organism-Response” paradigm by showing that Loyalty Satisfaction is a mediator between the retail stimuli and impulsive purchasing (Mehrabian and Russell, 1974).

Second, the research incorporates the Service Performance, Price Perception, and Judgmental Motives into a single structural framework. Most studies have previously investigated them separately (Ali et al., 2016; Xu and Huang, 2014; Verplanken and Herabadi, 2001). Through their joint modeling, the current study shows that external environmental stimuli, as well as internal cognitive motivators, are the combined effects of these factors on the satisfaction and behavioral outcomes. This combined approach increases conceptual consistency to impulse buying studies.

Third, the results go beyond the impulse buying theory, by refocusing the emphasis on impulse buying as an outcome of behaviour to the layered psychological processes involved in its antecedent. The significance of the mediating role of Loyalty Satisfaction is supported through the empirical validation of its, as the mediating construct in the progress of spontaneous purchasing (Bagozzi et al., 1999; Iyer et al., 2020). This point of view goes past the simple stimulus theories and emphasizes the interplay between the environment and the states of the mind.

Fourth, the presence of the demographic moderation makes the theoretical development more nuanced, as it shows that the impulse buying tendencies do not occur evenly among consumer groups, but conditionally. Gender and Income are significant moderating factors that prove that the nature of the connection between fulfilment and behavior is dependent on the demographic factors (Amos et al., 2014; Wood, 1998). This condition modelling will help in enriching the impulse buying theory of consumer responses in the sense that it introduces heterogeneity in consumer responses.

Fifth, the research is methodologically valuable because it uses the “Partial Least Squares Structural Equation” Modeling to investigate direct effects, mediation, and moderation, all in one structural model (Hair et al., 2022; Sarstedt et al., 2021). Empirical rigor and the strength of findings are also reinforced by the application of predictive relevance measures (Q<sup>2</sup>) and model fit measures.

Lastly, the study offers an overall account on the impulse buying behavior in arranged retail setting by incorporating environmental stimuli, psychological satisfaction mechanism, and demographic contingencies as a single analysis. This is a multidimensional model that provides a systematic theoretical development of single-variable studies that are broken.

## 7. MANAGERIAL IMPLICATIONS

The findings of the present study have several practical implications to retail managers who are trying to get more customers engaged, to be able to reinstate impulsive purchase behavior via a strategic approach.

To start with, the factor of Service Performance becomes one of the defining specifics of both Loyalty Satisfaction and Impulsive Buying. The retail managers are supposed to invest in the structured employee training programs which are based on responsiveness, empathy, and product knowledge. Efficient and customer-oriented service exchanges lead to favourable affective attitudes that boost customer satisfaction and heighten chances of making impulse purchases. Retailers thus should not consider service delivery as just an operation support tool but as a strategic stimulus that affects consumer psychology.

Second, the Price Perception is also a key factor that determines satisfaction and impulse buying behaviour. Evaluative responses of consumers can be enhanced through the use of transparent prices, fair value perception and promotion offers which are strategically framed. The retail managers are advised to use value-based pricing and limited-time offers that can make customers feel fairness but not cause any cognitive dissonance. Impulse buying behavior may be directly and indirectly influenced by effective price communication.

Third, there is the role of Judgmental Motives, which implies that retailers need to comprehend the inner motivation forces of consumers. Individualized marketing messages, personalized promotions, and positioning of products can match the retail product with the anticipations and intrinsic motivations of consumers. Customer analytics and segmentation can help retailers to align stimuli and consumer motives.

Fourth, the mediated presence of Loyalty Satisfaction suggests that overall shopping satisfaction is the key to

arousing impulse buying. The retail settings are supposed to be designed in such a way such that it gives an experience of seamlessness and emotional experiential by optimization of layout, ambient design, hassle free checkout procedures, and experiential merchandising. The retail strategy that emphasizes satisfaction can possibly be a way of alleviating psychological resistance and persuading people to buy on impulse.

Fifth, the results of the moderation point to the significance of the demographic segmentation. As Gender and Income contribute to the satisfaction relationship with impulsive buying to a substantial extent, retailer ought to employ differentiated marketing approaches. Gender-sensitive merchandising and communication strategies can make the higher-income segments more responsive to experiential enhancements, whereas the impulse responsiveness can be enhanced through the appeal to higher-income segments.

Lastly, the high impact of the structural model is indicative of a combined retail approach, i.e., service excellence, pricing effectiveness and motivational alignment, as having the capacity to produce systematic changes in impulsive buying performance. The retail managers must not have isolated marketing intervention but rather they should adopt a holistic approach of aligning the environmental signals to the psychological motivations and demographic profiles.

Through a combination of operational and psychological understanding, retailers can be able to strategically increase customer satisfaction and elicit ethically responsible impulsive buying behavior in competitive retail markets.

## **8. CONCLUSION**

The current paper focused on the structural connections between retail stimuli, loyalty satisfaction and impulse buying behavior, in the “Stimulus-Organism-Response” model. The study offers a holistic account of the translation of the retail variables into spontaneous buying behavior by incorporating mediation and demographic moderation into a structural model.

The results of the empirical findings are that Service Performance, Price Perception, and Judgmental Motives are important in influencing Loyalty Satisfaction. Loyalty Satisfaction, in its turn, proves to be an excellent predictor of Impulsive Buying behavior. The mediation analysis shows that satisfaction partially conveys effects of retail stimuli to impulsive buying and hence this empirically proves the organismic mechanism in “Stimulus-Organism-Response” paradigm (Mehrabian & Russell, 1974; Donovan and Rossiter, 1982).

Moreover, “It can be seen that the moderation analysis shows that the relationship between Loyalty Satisfaction and Impulsive Buying is significantly conditioned by Gender and Income but does not have significant moderating effects on Age and Purchase Frequency. To these results, retail experience is not the only factor that defines the triggering of impulsive buying behavior and that it depends on demographic contingencies.

The structural model shows that Loyalty Satisfaction is explained by a significant percentage and that the percentage of Impulsive Buying is explained by a significant percentage, which proves the effectiveness of the suggested mediation-moderation model. On the whole, the paper will be useful to the literature on retail marketing as it will be able to provide a multidimensional account of the impulse buying behavior that combines environmental stimuli, psychological satisfaction processes, and demographic factors.

## **9. FUTURE RESEARCH AND LIMITATIONS**

Although it has contributions, the study is vulnerable to some limitations that create the way forward to future research.

Also, despite the implementation of procedural remedies to mitigate the primary threat of response bias, the study can be still susceptible to common method bias in the form of the usage of self-reported data that were gathered on one source only. Single factor test by Harman was done to ascertain whether there were the common method variance and results indicated that no single factor would describe the majority of the variance meaning that there would be no significant impact of common method bias to the results. However, future studies can use multi-source data collection or longitudinal to reduce the possible method bias as much as possible.

Moreover, the research employed non-probability sampling method, which can concern the generalized results of the study when the population sampled does not necessarily represent the whole population. Despite the attempts to achieve demographic diversity, the lack of probability-based sampling limits the possibility to state that it is fully represented. Future researchers can enhance the study employing the stratified or random sampling technique to enhance the external validity and generalizability of the results.

Toward begin with, the study is cross-sectional in nature that restricts the possibility of creating time causal

inferences. The longitudinal designs would be applicable in the future to explore how the satisfaction and impulsive buying alter under the repeated shopping experience.

Second, the organized retail consumers in a certain geographic setting were used to gather the data. It can be opined that future research can further the exploration to other areas or other cultural environment to increase the generalizability and theoretical strength.

Third, the research is based on self-reported data, possibly creating a bias or the social desirability factor (Podsakoff et al., 2003). The future studies can include the experimental design, data on behavioral tracking, or real-time purchase analytics to confirm the results.

Fourth, the model incorporates the most critical retail stimuli, as well as demographic moderators; however, other psychological constructs, including emotional arousal, self-control, or hedonic shopping value, could contribute more to the explanatory power (Iyer et al., 2020). Further research can be conducted using extended structural models that involve more moderators and mediators.

Fifth, as the omnichannel and online retail systems are rapidly expanding, future studies could contrast the offline and online impulse buying processes to investigate structural dissimilarities of retail formats (Chan et. al., 2017; Zheng et. al., 2019).

With the resolution of these deficiencies, future studies can develop theoretical and empirical knowledge on the research of impulsive buying behavior in more dynamic retailing settings.

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