
RETAIL STIMULUS AND IMPULSE PURCHASE BEHAVIOUR: THE MEDIATING ROLE OF THE URGE TO BUY IN ORGANISED RETAILING

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ABSTRACT

Purpose — The research recommendations involve the exploration of the mediating effect of Urge to buy on the relationship between the stimuli of the retail on impulse buying behaviour in organized retail environment.

Design/methodology/approach — The quantitative research design was employed involving the use of survey data collected in the form of survey data conducted among consumers undertaking shopping in the organized retail stores. Structural equation modelling (SEM) was used to test the relationships and mediation effect.

Findings — The findings indicate that the retail stimuli have far reaching consequences on impulse buying behaviour either directly or indirectly via urge to buy. The findings affirm the fact that the desire to purchase mediates the relationship between the stimuli of the retail and impulse buying behaviour to some extent.

Originality/value — The research is applicable in the body of knowledge in impulse buying as it demonstrates empirically the psychological mechanism through which environmental stimulus for retailing is transformed into impulse buying behavior, that is, within the context of planned/organized retailing.

Keywords: Impulse buying behaviour; Retail stimuli; Urge to buy; Organized retailing; Consumer behaviour; FMCG retail

1. Introduction

Impulse buying behaviour has become an important field of search in the modern retail and consumer behaviour studies. As more and more organized retail formats grow, the variety of products and the more aggressive promotion tactics are launched on consumers, they are constantly bombarded with environmental stimuli as a result of which spontaneous purchasing decisions are formed. It has been empirically proven that impulse purchases form a large portion of retail sales, particularly in low-involvement products (fast-Moving consumer goods, FMCG) and fast-Moving consumer goods (Proschauer et al., 2017).

In contrast to planned buying, impulse buying behaviour can be described as immediate, emotionally eliciting and poor in terms of cognitive assessment. In the contemporary retail setting, store layout, visual merchandising, promotion clues and product placement strategies have been strategically used to provoke such behaviour. Current studies are concerned with the effect of retail stimuli in inducing the affective state

of consumers and choice process at the point of purchase (Floh and Madlberger, 2013; Muruganantham and Bhakat, 2013; Iyer et al., 2020).

This phenomenon can be well explained in reference to Stimulus Organism Response (S O R) framework that involves a sound theoretical framework. The model assumes that the internal psychological conditions (O) of the consumers will be conditioned by environmental stimuli (S) and this will be followed by behavioural responses (R). Although it has been determined in previous studies that the retail stimuli and impulse buying behaviour are directly related, the psychological process involved in this relationship is not well understood. Specifically, the urge to buy construct has been conceptually identified as an urgent motivational state that comes before the impulse buying, but the mediating nature of the construct has not been empirically confirmed (Beatty & Ferrell, 1998; Bandyopadhyay, 2016).

The impulse buying process has become more important in the investigation of the new retail market whose organized retailing, percentage of promotions and digital payment systems are becoming increasingly rapid. Such environments directly result in higher exposure of consumers to retail cues and this enhances the chances of spontaneous purchasing behaviour. Nevertheless, there is a dearth of studies that combine the stimuli of the environment and internal motivation states in one empirical context in these settings.

In an attempt to bridge this gap, this paper considers the intermediate role of urge to buy in the conclusion between the stimulus of the retail and impulse buying behaviour. This study through application of the S O R framework by applying the environmental and psychological technique is an attempt to provide an answer to the query in a more detailed way about the relation between the retail management measure and impulsive purchasing behaviour. The findings should give rise to the theoretical advance of the impulse buying research and would also offer practical knowledge to the store managers who want to improve the store environment and advertise their deals.

2. Hypotheses Development and Literature Review.

Impulse buying behaviour has been widely debated as spontaneous and emotional buying that comes up due to situational and environmental news. Rook (1987) developed the impulse buying concept as impulsive and uncontrollable need to purchase now in clothing without much thought. More research has described the fact that impulse buying is not an irrational phenomenon, but it is greatly influenced by both external and internal affective forces (Verplanken and Herabadi, 2001; Amos et al., 2014).

2.1 Impulse Buying Behaviour and Retail Stimuli.

Retail stimuli are elements of environment in a retailing environment that affect consumer perceptions and behaviour. Such stimuli are store ambience, visual merchandising, product positioning, price signs and marketing efforts. The preceding empirical literature proves that positive retail experiences contribute greatly to the impulse buying behaviour of consumers (Floh and Madlberger, 2013; Muruganantham and Bhakat, 2013).

According to the Stimulus-Organism-Response (SOR) model, these environmental Stimuli directly impact behavioural response in situations that result in consumers being excited emotionally and loosely controlled. The aptitude of impulse purchasing becomes stronger in retailing business that is both sensorial and advertising and contact receptive to the product (Iyer et al., 2020). The research hypothesis is as follows through this:

H1: Impulse buying behaviour is affected significantly by retail stimuli positively.

2.2 Nurture and Desire to Purchase in Retail.

Urge to buy is a psychological impulse to buy which was evoked by the impact of external factors. According to Beatty and Ferrell (1998), environmental cues create internal motivational states, which come prior to real purchasing. Consumers desire is heightened by retail stimuli like discounts, good displays and product view thus enhancing urge to purchase.

Recent studies argue that urge to buy is an organismic response that plays a crucial part in S-O-R paradigm, and relates the stimuli in the environment to behaviour outcomes (Bandyopadhyay, 2016; Iyer et al., 2020). Urge to buy should be positively influenced by the stimuli in the retail in this regard.

H2: Retail stimuli exert considerable positive influence on urge to buy.

2.3 Urge to Buy (UTB) and Impulse Buying Behaviour (IBB).

Urge To buy is considered to be the motivational process that transforms the desire to action. The situations that make cognitive evaluation weak and affective responses more powerful include those in which the consumer has a strong urge, thus leading to decision making (Verplanken and Sato, 2011). The empirical study has revealed that urge to buy is an excellent predictor of impulse buying behaviour in the retailing environments (Beatty and Ferrell, 1998). This view corresponds to the organism-response relationship within the S-O-R model wherein inner psychological states have a direct impact on the results of behaviour.

H3: The urgency to buy is a major contributor to impulse buying behaviour in a positive manner.

2.4 Mediating Role of Urge to Buy.

Although previous studies have revealed that retail stimuli are antecedents of impulse buying, very little empirical studies have examined the mediating factor in the relationship. Urge is the organismic state of the Stimulus-Organism-Response (SOR) model which connects the stimuli present in the environment and the behavioural response.

The consumers make impulse purchases when subjected to positive retail stimulus, which increases their urge to buy and therefore make purchases. The mediation can be put to the test in order to gain a better insight into the process of impulse buying and also enhance the theoretical description.

H4: Retail stimuli have a mediated relationship with impulse buying behaviour via the urge to buy.

3. Research Methodology.

3.1 Research Design

The research design in the current study will be quantitative research which will quantitatively develop the mediating component of urge to buy as a relationship between retail stimulus and impulse buying behaviour. The research methodology used was the cross-sectional survey because it is suitable in testing the theoretical relationship of the latent constructs of the researches on consumer behaviour. The proposed research will be founded on the Stimulus-Organism-Response (SOR) model and will be engaged in direct and indirect impacts on the suggested variables.

3.2 Sample and Data Collection.

The data collection was performed on the premise of an online structured questionnaire that was completed at Google Forms. The survey focused on the consumers with recent shopping experience in organized retail stores, especially the categories of FMCG and daily use products. The questionnaire link was distributed over the internet resources to make it more accessible and broader.

Two hundred and fifty-six responses were obtained. Upon completeness and response consistency screening, the 256 questionnaires had been identified as valid and were retained to do the final analysis. The number of respondents is more than the recommended minimum required size of a structural equation modeling (SEM) as proposed by Hair et al. (2019), thus covering the necessary statistical power to test a hypothesis.

3.3 Measurement of Constructs

Content validity and theoretical consistency All construct measures used previously validated scales based on other existing studies.

- Retail stimuli were gauged through the items concerning store environment, promotion cues and presentation of products.
- Urge to buy Scale items modified to Beatty & Ferrell (1998) remained employed to judge the urge to buy; they consisted of an immediate purchase desire and the motivational intensity.
- The impulse buying behaviour was quantified in terms of items that considered unplanned and spontaneous buying behaviour (Rook, 1987; Verplanken and Herabadi, 2001).

All the questions were rated using a five-point Likert scale in which the possible answers were 1 strongly disagree to 5 strongly agree.

3.4 Technique of Data Analysis

The investigation of the data was done using SPSS and AMOS/SmartPLS. The analysis has been done in two stages which involved measurement model and structural model assessment.

Cronbach alpha and composite reliability (CR) were first used to measure reliability. Average variance extracted (AVE) and Fornell Larcker criterion are the two criteria which were used to test convergent and discriminant validity.

Second, structural equation modeling (SEM) was used to develop hypothesized relations between retail stimuli and the urge to buy and impulse buying behaviour. The urge to buy as a mediating variable was estimated in terms of bootstrapping procedures with bias-corrected confidence intervals according to the advice of Hayes (2018). Mediation was defined in case the indirect effect was not insignificant.

A single factor test, which was performed by Harman, was conducted to test the likelihood of common method bias. The results indicated that there was no common cause of the majority of the variance and this meant that there was no strong issue of common method bias in the research (Podsakoff et al., 2003).

3.5 Ethical Considerations

Students were invited to take part in the study at will. The respondents were informed of the scholarly essence of the research study and ensured anonymity and confidentiality. There was no other use of the data collected than the case of research.

4. Results

4.1 Descriptive Statistics

There were 256 responses gathered using the online survey. The number of complete responses was screened to 213 structural equation modelling. The sample size used is enough to meet the minimum required sample size in SEM analysis (Hair et al., 2019), and hence adequate statistical power to accept or reject the hypotheses.

Table 1. Sample Characteristics and Data Screening

Description	Frequency	Percentage
Total Responses Collected	256	100%
Incomplete Responses	43	16.8%
Final Sample for SEM	213	83.2%
Minimum Required Sample (SEM)	≥ 200	Adequate

4.2 Dependability Analysis

The reliability test was done to determine the internal consistency of the measurement scales. The alpha of the total instrument was determined as 0.935 that exceeds the recommended 0.70 (Hair et al., 2019). This implies that there is good internal consistency and that the items to be used in measuring can be used to describe the constructs that they are believed to measure.

Table 2. Reliability Analysis

Construct	No. of Items	Cronbach's Alpha	Recommended Value	Interpretation
Total Instrument	25	0.935	≥ 0.70	Excellent Reliability

4.3 Hypothesis Testing and Structural Model.

The structural equation modelling was used in checking the relationships under consideration. The results indicate that the effect of the retail stimuli on urge to buy is positive ($\beta = 0.678$, $p < 0.001$) therefore the null hypothesis that states the opposite is rejected. H3 is also supported by the want to buy fact since it is a very powerful influence that drives the impulse buying behaviour ($\beta = 0.710$, $p < 0.001$).

Retail stimulus supports H1, and the total effect that it has on impulse buying behaviour is high ($\beta = 0.842$, $p < 0.001$).

Table 3. Hypothesis Testing — Structural Model

Hypothesis	Relationship	Path Coefficient (β)	p-value	Result
H1	Retail Stimuli → Impulse Buying Behaviour	0.842 (Total Effect)	< 0.001	Supported

Hypothesis	Relationship	Path Coefficient (β)	p-value	Result
H2	Retail Stimuli $\rightarrow$ Urge to Buy	0.678	< 0.001	Supported
H3	Urge to Buy $\rightarrow$ Impulse Buying Behaviour	0.710	< 0.001	Supported

The model explains significant impulse buying behaviour ($R^2 = 0.608$ which is 60.8) implying that it has a high degree of explanatory ability.

Table 4. Model Summary

Dependent Variable	R^2	Variance Explained	Interpretation
Impulse Buying Behaviour	0.608	60.8%	High explanatory power

4.4 Mediation Analysis

A significant indirect impact of the retail stimuli on impulse buying behaviour was found using bootstrapping analysis as an urge to buy ($= 0.477$, $p = 0.001$). When the urge to buy was added into the model, the direct impact of the retail stimuli on impulse buying behaviour was reduced (to 0.361; $p < 0.001$), which showed that it was partially mediated.

The findings demonstrate that urge to buy mediates retail stimulus partial between impulse buying behaviour and retail stimuli and consequently support H4.

Table 5. Bootstrapping Results (Mediation Analysis)

Path	Direct Effect (β)	Indirect Effect (β)	p-value	Mediation Type
Retail Stimuli $\rightarrow$ Impulse Buying Behaviour	0.361	0.477	0.001	Partial Mediation

5. Discussion and Suggestions

5.1 Discussion of Findings

The major objective of the study was to determine the mediating role of urge to buy amongst the retail stimuli and impulse buying behaviour in the organized retail context. These findings are a viable empirical validation of the conceptual framework, which is hypothesised, and a better conception of the psychological mechanism of impulse buying.

The results also reveal that urge to buy is influenced by retail stimuli to a significant level (0.678). The given observation can be related to the Stimulus-Organism-Response (S-O-R) paradigm, which presupposes that the stimuli are able to induce the internal psychological states of a consumer and cause the outcomes only in terms of behavioural change. Retail stores that have appealing product displays, promotional levels and involving in-store ambience promote the consumers buying impulse.

Moreover, compelling desire to purchase exhibits a good positive influence on impulse purchase behaviour (0.710). This implies that cognitive evaluation is reduced and affective response prevails in the purchasing decisions when consumers develop high motivational desire. This relationship is quite strong to affirm that urge to buy is a very important psychological motivator of spontaneous purchasing behaviour.

There is also a significant overall impact of retail stimuli on impulse buying behaviour ($= 0.842$). The direct effect however when urge to buy is introduced into the model decreases to 0.361, which denotes partial mediation. The impressive indirect influence (0.477) proves the fact that urge to buy is a crucial mediating variable.

Besides, the model describes 60.8 percent of the variance in impulse buying behaviour ($R^2 = 0.608$) which indicates a great deal of explanatory power. The findings build on previous impulse buying studies which had proposed the psychological mechanism by which environmental factors in a retail store were converted into impulse buying behaviors, but had not empirically tested their hypothesis.

5.2 Theoretic Implications

The area that this paper will contribute to the existing body of knowledge on consumer behaviour is to broaden the empirical basis of Stimulus-Organism-Response (SOR) paradigm in understanding impulse buying behaviour. The current research demonstrates that the external motivational states are of crucial mediation in the process although the previous study carried out primarily concentrated on the immediate stimulus responses relationships.

The empirical basis of urge to buy as a partial mediator in this research explains the effects that the retail stimuli have on impulsive buying. The findings fill the gaps of both the environmental and the psychological approach and more detailed description of the impulse buying behaviour.

Besides, the model shows a strong explanatory power ($R^2 = 0.608$) that implies the viability of external retail cues/internal affective constructs combination in the study of behaviour.

5.3 Managerial Implications

The results offer a number of practical implications among retail managers.

First, the influence of retail stimuli is huge, the store layout, visual display and promotion techniques should be planned so as to arouse the psychological involvement of the consumer. The retailers need to work to develop an engaging shopping experience that is more sensory and emotional.

Second, as there is a mediating relationship between urge to buy and the promotions, managers must aim not only to provide promotions based on price, but also on promoting the development of immediate desire and excitement. Purchase motivation can be increased through limited-time offers, promotion of products as a bundle and placement of products that are impulse-prone strategically.

Third, due to the good explanatory power of the model retailers can use the data-based marketing techniques to determine high impulse-prone consumer groups and focus the promotion activity within these areas.

On balance, the article indicates that such retail executives that are successful at balancing environmental design with psychological responses might achieve high impulse purchasing performance.

5.4 Restrictions and References to Upcoming Research.

Nonetheless, this study has its drawbacks despite the contribution it makes. On the one hand, cross-sectional data can never allow causality to be causal in the long run. Longitudinal or experimental research can also be used to undertake future research on the dynamism of the impulse buying behaviour.

Second, the research targets organized retail location and FMCG products. To explore the concept of online and omnichannel retailing (shopping), future studies can expand the model to this domain and investigate the digital stimuli to buying impulsiveness.

Thirdly, demographic moderators like gender, age and income could also be included which could give a better understanding of individual differences in impulse buying behaviour.

5.5 Conclusion

The paper has discussed the mediation component of the purchase desire in the correlation between the stimuli of retail and impulse buying behaviour. The results are that the retail stimulus plays a significant role in the impulse buying either directly or indirectly through the urge to buy.

The research integrates the environmental stimuli with the mental drive in the S-O-R constructs to give a comprehensive explanation of the impulse buying behaviour in the systemic retailing. The findings reveal that the internal motivational states knowledge is important to make retail strategies that can be implemented to increase consumer engagement and spontaneous buying behaviour.

References

- Amos, C., Holmes, G.R., & Keneson, W.C. (2014). A meta-analysis of consumer impulse buying. *Journal of Retailing and Consumer Services*, 21(2), 86–97.
- Bandyopadhyay, N. (2016). The role of retail atmosphere in impulse buying behaviour. *International Journal of Retail & Distribution Management*, 44(5), 497–517.
- Beatty, S.E., & Ferrell, M.E. (1998). Impulse buying: Modeling its precursors. *Journal of Retailing*, 74(2), 169–191.
- Donovan, R.J., & Rossiter, J.R. (1982). Store atmosphere: An environmental psychology approach. *Journal of Retailing*, 58(1), 34–57.
- Floh, A., & Madlberger, M. (2013). The role of atmospheric cues in online impulse buying behaviour. *Electronic Commerce Research and Applications*, 12(6), 425–439.
- Hair, J.F., Hult, G.T.M., Ringle, C.M., & Sarstedt, M. (2019). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)* (2nd ed). Sage Publications, Thousand Oaks, CA.
- Hayes, A.F. (2018). *Introduction to Mediation, Moderation, and Conditional Process Analysis* (2nd ed). Guilford Press, New York.
- Iyer, G.R., Blut, M., Xiao, S.H., & Grewal, D. (2020). Impulse buying: A meta-analytic review. *Journal of the Academy of Marketing Science*, 48(3), 384–404.
- Kotler, P., & Keller, K.L. (2016). *Marketing Management* (15th ed). Pearson Education, London.
- Kacen, J.J., & Lee, J.A. (2002). The influence of culture on consumer impulse buying behaviour. *Journal of Consumer Psychology*, 12(2), 163–176.
- Muruganantham, G., & Bhakat, R.S. (2013). A review of impulse buying behaviour. *International Journal of Marketing Studies*, 5(3), 149–160.
- Parboteeah, D.V., Valacich, J.S., & Wells, J.D. (2009). The influence of website characteristics on a consumer's urge to buy impulsively. *Information Systems Research*, 20(1), 60–78.

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- Rook, D.W. (1987). The buying impulse. *Journal of Consumer Research*, 14(2), 189–199.
- Rook, D.W., & Fisher, R.J. (1995). Normative influences on impulsive buying behaviour. *Journal of Consumer Research*, 22(3), 305–313.
- Rook, D.W., & Gardner, M.P. (1993). In the mood: Impulse buying's affective antecedents. *Research in Consumer Behavior*, 6, 1–28.
- Sarstedt, M., Ringle, C.M., & Hair, J.F. (2017). Partial least squares structural equation modeling. *Handbook of Market Research*, pp. 1–40.
- Stern, H. (1962). The significance of impulse buying today. *Journal of Marketing*, 26(2), 59–62.
- Verplanken, B., & Herabadi, A. (2001). Individual differences in impulse buying tendency. *European Journal of Personality*, 15(S1), S71–S83.
- Verplanken, B., & Sato, A. (2011). The psychology of impulse buying. *Psychology & Marketing*, 28(9), 872–886.
- Youn, S., & Faber, R.J. (2000). Impulse buying: Its relation to personality traits. *Advances in Consumer Research*, 27, 179–185.
- Zhou, L., & Wong, A. (2004). Consumer impulse buying and in-store stimuli in Chinese supermarkets. *Journal of International Consumer Marketing*, 16(2), 37–53.
- Mehrabian, A., & Russell, J.A. (1974). *An Approach to Environmental Psychology*. MIT Press, Cambridge, MA.
- Bagozzi, R.P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, 16(1), 74–94.
- Podsakoff, P.M., MacKenzie, S.B., Lee, J.Y., & Podsakoff, N.P. (2003). Common method biases in behavioral research. *Journal of Applied Psychology*, 88(5), 879–903.
- Foroughi, A., Buang, N.A., & Sadeghi, R.H. (2012). Exploring the influence of situational factors on impulse buying. *African Journal of Business Management*, 6(21), 6638–6647.
- Park, E.J., Kim, E.Y., & Forney, J.C. (2006). A structural model of fashion-oriented impulse buying behaviour. *Journal of Fashion Marketing and Management*, 10(4), 433–446.
- Liu, Y., Li, H., & Hu, F. (2013). Website attributes in urging online impulse purchase. *Decision Support Systems*, 55(3), 829–837.
- Mattila, A.S., & Wirtz, J. (2008). The role of store environmental stimulation and social factors on impulse purchasing. *Journal of Services Marketing*, 22(7), 562–567.
- Baker, J., Parasuraman, A., Grewal, D., & Voss, G.B. (2002). The influence of multiple store environment cues on perceived merchandise value and patronage intentions. *Journal of Marketing*, 66(2), 120–141.