

# “Impulse buying behavior among female shoppers: Exploring the effects of selected store environment elements”

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## ARTICLE INFO

Vinish P., Prakash Pinto, Iqbal Thonse Hawaldar and Slima Pinto (2020). Impulse buying behavior among female shoppers: Exploring the effects of selected store environment elements. *Innovative Marketing*, 16(2), 54-70. doi:[10.21511/im.16\(2\).2020.05](https://doi.org/10.21511/im.16(2).2020.05)

### DOI

[http://dx.doi.org/10.21511/im.16\(2\).2020.05](http://dx.doi.org/10.21511/im.16(2).2020.05)

### RELEASED ON

Thursday, 28 May 2020

### RECEIVED ON

Tuesday, 21 April 2020

### ACCEPTED ON

Wednesday, 27 May 2020

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### JOURNAL

"Innovative Marketing "

### ISSN PRINT

1814-2427

### ISSN ONLINE

1816-6326

### PUBLISHER

LLC “Consulting Publishing Company “Business Perspectives”

### FOUNDER

LLC “Consulting Publishing Company “Business Perspectives”



NUMBER OF REFERENCES

96



NUMBER OF FIGURES

0



NUMBER OF TABLES

20

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## BUSINESS PERSPECTIVES



LLC "CPC "Business Perspectives"  
Hryhorii Skovoroda lane, 10,  
Sunny, 40022, Ukraine  
[www.businessperspectives.org](http://www.businessperspectives.org)

**Received on:** 21<sup>st</sup> of April, 2020

**Accepted on:** 27<sup>th</sup> of May, 2020

**Published on:** 28<sup>th</sup> of May, 2020

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### Conflict of interest statement:

Author(s) reported no conflict of interest

Vinish P (India), Prakash Pinto (India), Iqbal Thonse Hawaldar (Bahrain),  
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# IMPULSE BUYING BEHAVIOR AMONG FEMALE SHOPPERS: EXPLORING THE EFFECTS OF SELECTED STORE ENVIRONMENT ELEMENTS

## Abstract

This paper intends to analyze the impact of store layout, ambient factors, and employees on impulsive decision-making among female customers visiting the apparel outlets. The responses were collected through a single-stage mall intercept survey method using a structured questionnaire from 385 respondents in leading apparel stores in selected Tier I and Tier II cities in the state of Karnataka, India. The responses were analyzed using multiple regression analysis. Constructs such as store layout, ambience and employees were found to be significantly positively correlated with impulse buying behavior. The variables largely explain the variation in impulse buying under store ambience. Except 'attention to the window display' and 'friendly staff' all other twelve variables considered in the study were found to have significant impact on the impulse buying behavior. Though store ambience, well-structured layout, and pleasant shopping experience are essential determinants of customer satisfaction, the study results imply that the number of store staff and sales skills are critical aspects of impulse buying in the apparel business and true assets to the retail organization. Additionally, poor customer interaction, staff shortage, and high employee attrition could discourage the store's revenue generation.

## Keywords

impulse buying, apparel retailing, store layout, store ambience, employees, shopping, India

## JEL Classification

L67, L81, M31

## INTRODUCTION

Impulse buying is a widely acknowledged phenomenon in retail research (Stern, 1962; Bellenger et al., 1978; Hoch & Loewenstein, 1991; Mattila & Wirtz, 2008; Badgaiyan & Verma, 2014; Cakanlar & Nguyen, 2019). A considerable amount of money is spent on marketing activities at retail stores to increase product familiarity, trial, and eventually increase the market share (Zhou & Wong, 2003). Men and women are equally susceptible to impulsive buying, but women are more subjected to post-purchase dissonance (Pandey, 2018). Previous research indicates that women and men distinctly relate to their material possessions (Dittmar, Beattie, & Friese, 1995). Men favor the objects that are of functional importance and denote personal accomplishments, while women tend to articulate social ties and value symbolic possessions (Adler, Csikszentmihalyi, & Rochberg-Halton, 1983; Wallendorf & Arnould, 1988).

The literature on impulse buying demoed the effect of situational factors in various shopping situations (Amos, Holmes, & Keneson, 2014; Badgaiyan & Verma, 2015). Store attributes such as lighting (Summers & Hebert, 2001), music (Dube & Morin, 2001; Chang et al., 2014), and

scent (Mattila & Wirtz, 2001) better display sensory stimuli and positive social influence (Amos et al., 2014), pricing and product characteristics (Kacen, Hess, & Walker, 2012; Muratore, 2016; Hawaldar, Ullal, Birau, & Spulbar, 2019) influence the holistic perception of servicescape and subsequent impulse buying decisions. However, the above studies have concentrated on American and European countries. The research shows that the consumption patterns of society, such as fashion, grooming, food, gifting, are subject to its culture (Schiffman & Wisenblit, 2015; Ullal & Hawaldar, 2018). Few studies have documented the impact of situational factors and intrinsic factors on impulse buying in Central India (Badgaiyan & Verma, 2014, 2015; Atulkar & Kesari, 2017). However, these studies are not gender-specific and addressed shoppers in general visiting supermarkets, hypermarkets, or shopping malls. Mitchell and Potenza (2015) suggested studying the “gender differences in addictions and impulsivity and their interactions”. Moreover, apparel has often been quoted as a product category having product involvement, complexity, and uncertainty (Bloch, 1986; Goldsmith & Emmert, 1991; Kim, 2005; Radder & Huang, 2008).

With a higher number of women being the part of the workforce, and easy access to credit and discretionary income, retailers can't disregard the buying power of Indian women shoppers. Today's women are increasingly well informed about the multitude of brands, retailer services and are more demanding than ever. Hence, this study aims to understand the impulse buying behavior of female shoppers, specifically in the context of apparel retailing. In addition to making a significant contribution to the knowledge base, the study will aid the retailers to modulate the store environment and in-store service by understanding the women consumers' behavior.

## 1. LITERATURE REVIEW

Consumers buy apparel to communicate their value to others and, thus, are connected with the emotions (Kaiser, 1997; Kim, 2005). According to PTI Report (2019b), “The Indian apparel market, pegged at around USD 65 billion, is the second-largest retail market after food & grocery in India”. Varying demographic characteristics, rising disposable income, changing taste of shoppers are compelling reasons for the growth of the organized retail industry (IBEF, 2019). The domestic apparel market is “expected to grow at nearly 11 percent CAGR in 2017–2021 period to reach a value of USD 85 billion by 2021” (PTI, 2019). The store layout, visual merchandising, brand availability, and loyalty points are important determinants for the choice of the apparel store (Prakash, Sahney, Kodati, & Shrivastava, 2017).

Store atmosphere can be explained as “an effort to design buying environments to produce specific emotional effects in the buyer that enhance his purchase probability” (Kotler, 1974). Prior research has examined the effects of in-store factors on the shopping experience and behavioral intentions such as background music (Milliman, 1986; Gopal, 2010; Morrison et al., 2011; Santos & Freire,

2013), lighting (Baker, Levy, & Grewal, 1992; Areni & Kim, 1994; Lin & Yoon, 2015), color (Bellizzi & Hite, 1992; Brengman, 2002), and store layout (Liu, Melara, & Arangarasan, 2007; V. Nirushan & K. Nirushan, 2017). Mattila and Wirtz (2008) deliberated the role of environmental factors in stimulating impulse purchases in a retail setting. Badgaiyan and Verma (2014) detailed the effect of intrinsic factors such as personality, impulse buying tendency, culture, materialism, and shopping enjoyment tendency on impulse buying behavior. Sharma, Sivakumaran, and Marshall (2010) established a positive association between consumer impulsiveness, optimum stimulation level and impulse buying and variety-seeking behavior. Herabadi, Verplanken, and Van Knippenberg (2009) argued in favor of hedonistic considerations of the shoppers offering a cognitive facet driving impulse purchase. A subsequent study by Sharma et al. (2014) indicates consumer impulsiveness as an outcome of the “three-dimensional construct consisting of cognitive, affective, and behavioral dimensions”. Floh and Madlberger (2013) observed the significance of atmospheric cues such as store design, navigation, and content, on shopping enjoyment, and, ultimately, impulse buying behavior in the context of online stores. The study results suggested that attributes such as store de-

sign and navigation have a substantial impact on shopping enjoyment, while the in-store content did not have any effect. Undoubtedly, store atmosphere influences the store image and shoppers' attitude towards it (Chang et al., 2014).

### 1.1. Store layout

Modern consumers are increasingly seeking superior in-store experience as against product experience (Moore, 2006). The store layout boosts a positive shopping environment and consumer behavioral intentions (Lewison, 1994; Ullal & Hawaldar, 2018). Retail shelves, a key aspect of store layout, when designed efficiently, play a pivotal role in higher shopper satisfaction and improved relationships (Hwang, Choi, & Lee, 2005). Personal space acts as an impetus for the shopping experience. Besides, it influences the actual choices made inside the retail store (Bitner, 1992; Turley & Milliman, 2000; Ullal et al., 2020). The space between the objects can affect customer emotions and decisions (Williams & Bargh, 2008; Hawaldar et al. 2019). There is a tendency to approach or avoid the product or store (Singh et al., 2014). Levav and Zhu (2009) showed a positive correlation between perceived space (between the aisle) and their buying choices. Donovan et al. (1994) suggest that the store atmosphere's pleasure entices the shoppers to spend more time and money in the outlet than planned. Further, the result would vary according to the retail store, such as a grocery store and apparel outlet. Apparel stores predominantly follow the freeform layout (Lewison, 1994; Vrechopoulos, O'Keefe, Doukidis, & Siomkos, 2004). Therefore, the study presumes the freeflow store layout to have a constructive effect on impulse buying among female customers. The discussion leads us to the following hypothesis:

*H1: The freeflow store layout encourages impulse buying behavior among female customers in apparel stores.*

### 1.2. Store ambiance

The store environment is made of store design, lighting, color, air quality, music, and decoration (Yoo, Park, & MacInnis, 1998; Cottet, Lichtle, & Plichon, 2010), and the atmosphere persuades positive emotions and in-store customer behavior

(Lai & Chang, 2015; Ju & Ahn, 2016). Music is an easily controllable element of the atmosphere by way of varying the tempo and, hence, is an attractive ambient factor (Ding & Lin, 2012). Customers seemingly make an impulse purchase when fast music is played in the store (Ma, Liu, Li, & Chen, 2017).

Colors in the store environment have perceptual attributes that affect the customer's perception and attract footfalls towards a retail display (Bellizzi, Crowley, & Hasty, 1983). Further, it can drive purchase intentions and actual behavior (Bellizzi & Hite, 1992). Warmer colors are affiliated with physiological stimulation (Gerard, 1958) and elated mood states (Schaie & Heiss, 1964; Bellizzi & Hite, 1992). Paradoxically, retail stores having warmer colors are usually unpleasant, while cooler colors are perceived as pleasant (Bellizzi & Hite, 1992).

Lighting, visual merchandising, and display fixtures significantly contribute to store atmosphere in Indian retail stores (Singh, Katiyar, & Verma, 2014). Well-planned lighting designs are a boon for store interiors and can help in gaining customer attention to merchandise, sales promotion, and create shopping pleasure (Smith, 1989). Lighting and music jointly induce a pronounced effect on customers' in-store emotions (Yoo et al., 1998). Customers visiting the retail store perceive layout, lighting, music, and staff as a unified world and attribute it to the store environment (Mohan, Sivakumaran, & Sharma, 2013). Further, in-store factors such as lighting, background music, and staff interaction were significantly correlated with the shopping enjoyment tendency, which, in turn, enhanced the impulse buying tendency (Mohamad, 2015; Ullal, Hawaldar, Mendon, & Joesph, 2020). Iberahim, Zureena, Adila, and Quraisyiah, (2018) concluded that "to a certain degree, in a chaotic shopping environment, floor merchandising and lightings are less likely to affect impulse buying behavior", and suggested further investigation on the relevance of antecedents in the "fashion industry, in other locations, and/or types of stores". This leads to the following hypothesis:

*H2: Attractive store ambiance leads to impulse buying behavior among female customers in apparel stores.*

### 1.3. Store employees

Bitner (1990) advocates that employee behavior contributes to shopper evaluations. Crawford and Melewar (2003) contend that the store staff's presence in a store influences impulse buying. Employees provide product guidance, answer the queries by which customer frustration is reduced during the buying process (Parboteeah, 2005; Virvilaite, Saladiene, & Bagdonaite, 2009; Yu & Bastin, 2010; Husnain, Rehman, Syed, & Akhtar, 2019). Customers who received good quality service from the store sales personnel displayed higher impulse buying and revisited the intentions than those who received poor quality service (Pornpitakpan, Yuan, & Han, 2017). The sales conversion rate increased by half when the salesperson initiated contact with the customers who visited apparel stores (Underhill, 2009). Customers' perception of the store crowding and employee friendliness collectively impact the impulse buying decisions (Mattila & Wirtz, 2008). Atulkar and Kesari (2017) noticed higher footfalls in retail stores during weekends and holidays with a larger number of families, thus, prompting impulse buying. Husnain et al. (2019) showed a positive relationship between family influence, time availability, and impulse buying behavior among generation Y consumers. Luo (2005) argued that the presence of peers in the store enhances the desire for impulse buying, while family reduces it. Oliver and Swan (1989) opined that the salesperson's conduct and actions could impact customer satisfaction. Accordingly, the study proposes the following hypothesis:

*H3: Store employees' interaction with female customers positively influences their impulse buying behavior.*

## 2. RESEARCH METHODOLOGY

### 2.1. Sample designing and data collection

According to MSME-Development Institute (2016), Karnataka is "one of the most progressive and industrialized states in the country and a leading state in driving India's economic growth". It is the IT capital of India, with exports more than USD

60 billion and is the 4<sup>th</sup> largest technology cluster in the world (IBEF, 2018). In terms of Human Development Index, the state shares the nineteenth rank (Global Data Lab, 2019) in the country. The NASSCOM-AT Kearney Report (2017) has identified four major cities in Karnataka viz. Bengaluru (leader location), Mangaluru (challenger location), Hubballi-Dharwad, and Mysuru (aspirant location) for its business potential. The study, therefore, considered a sample of 385 female customers (convenience sampling method) visiting the leading apparel stores such as Max, Central, Westside, and Pantaloons in leading Tier I (Bengaluru) and Tier II (Mangaluru, Mysuru, Hubballi-Dharwad) cities in the state of Karnataka, India.

The selected stores have a pan-Indian presence, offering a wide range of branded merchandise for all age groups. Moreover, the stores have a unique layout, choice of music, colors, unique dress code, trained staff and are intended to encourage customers' emotions and purchase behaviour. The study followed a single-stage mall intercept survey method to gather responses, much like earlier studies (e.g., Beatty & Ferrell, 1998; Sharma et al., 2010; Mohan et al., 2013).

### 2.2. Measurement instrument

The study explores the influence of store layout, ambient factors, and human factors on the impulse buying behavior among female customers. Existing scales in the relevant literature were adapted to measure the constructs, store layout (Mihic & Kursan, 2010; Mohan et al., 2013; Badgaiyan & Verma, 2014), store ambiance (Mattila & Wirtz, 2008; Mihic & Kursan, 2010; Mohan et al., 2013; Atulkar & Kesari, 2018), store employees (Mihic & Kursan, 2010; Mohan et al., 2013), urge to buy spontaneously (Beatty & Ferrell, 1998; Pradhan, 2016), and money spent (Beatty & Ferrell, 1998; Pradhan, 2016).

### 2.3. Convergent and discriminant validity

Convergent and discriminant validities are two important facets of construct validity. Convergent validity shows how the new scale is related to other variables and other measures of the same construct. The discriminant validity presents the construct



**Table 1.** Correlation between the variables of store layout

Variables: Store Layout		Well-structured layout	Pleasant store decor	Attractive display	Pay attention to the window display	Creative and systematic arrangement of products	Comfortable and well-maintained trial rooms
Well-structured layout	Pearson correlation	1	0.518**	0.632**	0.521**	0.598**	0.525**
	Sig. (2-tailed)		0.000	0.000	0.000	0.000	0.000
	N	385	385	385	385	385	385
Pleasant store decor	Pearson correlation	0.518**	1	0.466**	0.750**	0.526**	0.576**
	Sig. (2-tailed)	0.000		0.000	0.000	0.000	0.000
	N	385	385	385	385	385	385
Attractive display	Pearson correlation	0.632**	0.466**	1	0.548**	0.670**	0.574**
	Sig. (2-tailed)	0.000	0.000		0.000	0.000	0.000
	N	385	385	385	385	385	385
Pay attention to the window display	Pearson correlation	0.521**	0.750**	0.548**	1	0.473**	0.656**
	Sig. (2-tailed)	0.000	0.000	0.000		0.000	0.000
	N	385	385	385	385	385	385
Creative and systematic arrangement of products	Pearson correlation	0.598**	0.526**	0.670**	0.473**	1	0.504**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000		0.000
	N	385	385	385	385	385	385
Comfortable and well-maintained trial rooms	Pearson correlation	0.525**	0.576**	0.574**	0.656**	0.504**	1
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	
	N	385	385	385	385	385	385

Note: \*\* correlation is significant at 0.01 level (2-tailed).

that not only should correlate with related variables, but it also should not correlate with dissimilar and unrelated ones (de Vet, Terwee, Mokkink, & Knol, 2011; Streiner, Norman, & Cairney, 2015). The study examines the concurrent validity of the respondents' impulse buying behavior with three sets of factors, i.e., store layout, ambiance factor, and employee interaction, with convergent and discriminant analysis.

Table 1 presents the convergent validity of the store layout comprising of six items. Convergent validity examines the strength of the variables.

From Table 1, it is observed that there exists a strong correlation between the variables of store layout, with  $p$ -value  $0.000 < 0.005$  at 1% significance level.

Table 2 presents that the independent variables of store layout are significant at  $0.000 < 0.005$ . Hence, the discriminant dimensions are highly significant and show a strong relationship.

Table 3 interprets the convergent validity of store ambiance comprising of four items. The strength of the variables is measured through convergent validity.

Table 3 shows a strong correlation between store ambiance variables, with  $p$ -value  $0.000 < 0.005$  at 1% significance level.

Table 4 shows that the independent variables of store ambiance are significant at  $0.000 < 0.005$ . Hence, the discriminant dimensions are highly significant and show a strong relationship.

**Table 2.** Discriminant validity of store layout

Store Layout	Wilks' Lambda	F	df1	df2	Sig.
Well-structured layout	0.731	35.003	4	380	0.000
Pleasant store décor	0.858	15.666	4	380	0.000
Attractive display	0.710	38.830	4	380	0.000
Pay attention to the window display	0.798	24.078	4	380	0.000
The creative and systematic arrangement of products	0.780	26.799	4	380	0.000
Comfortable and well-maintained trial rooms	0.739	33.633	4	380	0.000

**Table 3.** Correlation between the variables of store ambience

Variables: Store Ambience		Pleasant music stimulates to buy more	The good scent in the store leads to a longer stay	In-store lighting is pleasing to the eyes	Cleanliness influences to buy more
Pleasant music stimulates to buy more	Pearson correlation	1	0.432**	0.740**	0.493**
	Sig. (2-tailed)		0.000	0.000	0.000
	N	385	385	385	385
The good scent in the store leads to a longer stay	Pearson correlation	0.432**	1	0.422**	0.623**
	Sig. (2-tailed)	0.000		0.000	0.000
	N	385	385	385	385
In-store lighting is pleasing to the eyes	Pearson correlation	0.740**	0.422**	1	0.545**
	Sig. (2-tailed)	0.000	0.000		0.000
	N	385	385	385	385
Cleanliness influences to buy more	Pearson correlation	0.493**	0.623**	0.545**	1
	Sig. (2-tailed)	0.000	0.000	0.000	
	N	385	385	385	385

Note: \*\* correlation is significant at 0.01 level (2-tailed).

**Table 4.** Discriminant validity of store ambience

Store Ambience	Wilks' Lambda	F	df1	df2	Sig.
Pleasant music stimulates to buy more	0.746	32.408	4	380	0.000
The good scent in the store leads to a longer stay	0.671	46.501	4	380	0.000
In-store lighting is pleasing to the eyes	0.709	38.941	4	380	0.000
Cleanliness influences to buy more	0.699	40.991	4	380	0.000

**Table 5.** Correlation between the variables of employee interactions

Variables: Employee Interactions		Sufficient employees to serve customers	Knowledgeable employees to guide the customer	Friendly and helpful employees	Gracious greeting by the employees
Sufficient employees to serve customers	Pearson correlation	1	0.468**	0.690**	0.428**
	Sig. (2-tailed)		0.000	0.000	0.000
	N	385	385	385	385
Knowledgeable employees to guide the customer	Pearson correlation	0.468**	1	0.426**	0.761**
	Sig. (2-tailed)	0.000		0.000	0.000
	N	385	385	385	385
Friendly and helpful employees	Pearson correlation	0.690**	0.426**	1	0.451**
	Sig. (2-tailed)	0.000	0.000		0.000
	N	385	385	385	385
Gracious greeting by the employees	Pearson correlation	0.428**	0.761**	0.451**	1
	Sig. (2-tailed)	0.000	0.000	0.000	
	N	385	385	385	385

Note: \*\* correlation is significant at 0.01 level (2-tailed).

**Table 6.** Discriminant validity for employee interaction

Employee Interaction	Wilks' Lambda	F	df1	df2	Sig.
Sufficient employees to serve customers	0.584	67.752	4	380	0.000
Knowledgeable employees to guide the customer	0.853	16.431	4	380	0.000
Friendly and helpful employees	0.698	41.180	4	380	0.000
Gracious greeting by the employees	0.862	15.176	4	380	0.000

Table 5 interprets the convergent validity of employee interaction comprising of four items. The strength of the variables is measured through convergent validity.

Table 5 shows a strong correlation between the variables of employee interaction, with  $p$ -value  $0.000 < 0.005$  at 1% significance level.

Table 6 shows that the independent variables of employee interaction are significant at  $0.000 < 0.005$ . Hence, the discriminant dimensions are highly significant and show a strong relationship.

### 3. RESULTS AND DISCUSSION

The following section provides an analysis of the data obtained from the survey.

**Table 7.** Demographic profile

Demographics	Classification	Count	Percentage
Age	Below 25 years	140	36.4%
	25-35 years	112	29.1%
	36-45 years	73	19.0%
	Above 46	60	15.6%
	Total	385	100.0%
Occupation	Working woman	149	38.7%
	Student	142	36.9%
	Homemaker	94	24.4%
	Total	385	100.0%
Frequency of visit to the store	Once a month	78	20.3%
	Twice a month	80	20.8%
	More than twice a month	92	23.9%
	Occasionally	135	35.1%
	Total	385	100.0%
Revisit the store in future	Yes	314	81.6%
	No	14	3.6%
	Maybe	57	14.8%
	Total	385	100.0%

Table 7 shows that the sample consists of 36.4% of the respondents belonging to the age group of below 25 years, 29.1% of the respondents from the category 25-35 years, 19% of the respondents belong to 36-45 years, and 15.6% of the respondents are above 46 years. The majority of respondents

are working women (38.7%), 36.9% are students, and 24.4% are homemakers. 35.1% of the respondents occasionally visit the store, 23.9% of the respondents visit the store more than twice a month, 20.8% visit twice a month, and 20.3% of the respondents visit once a month. 81.6% of the respondents revisit the store in future, 14.8% of the respondents may revisit the store, and only 3.6% of the respondents will not revisit the store in future.

#### 3.1. Impact of various factors on impulse buying behavior among female customers

The effect of various factors on impulse buying behavior among the respondents is measured through 14 statements using a five-point Likert scale.

**Table 8.** Reliability statistics

Cronbach's Alpha	Cronbach's Alpha based on standardized items	No. of items
0.943	0.943	14

Table 8 shows the calculated Cronbach's Alpha of 0.943, which indicates a very high level of internal consistency for 14 items defined, which shows that the scale used to measure factors on impulse buying behavior is highly reliable.

#### 3.2. Regression analysis to find the impact of store layout on impulse buying behavior

Pradhan (2016, p. 227) has measured respondent's impulsiveness by considering two variables viz. spending 'more money than intended' and 'buy things spontaneously'. Accordingly, this study has performed multiple regression analysis by considering store layout as the independent variable and the impulse buying behavior "End up spending more money than planned", "Experienced sudden urges to buy unplanned apparels" as the dependent variables. Thus, further, there is hypothesized the store layout with six independent variables with the impulse buying behavior among female customers in apparel stores:

*H1: The freeflow store layout encourages impulse buying behavior among female customers in apparel stores.*



**Table 9.** Regression analysis of the impact of store layout on impulse buying behavior

No.	Independent variables	Unstandardized coefficients		Standardized coefficients	t	Sig.
		B	Std. error	Beta		
	(Constant)	0.839	0.226		3.713	0.000
1	Well-structured layout	-0.116	0.071	-0.090	-1.634	0.103
2	Pleasing store decor	0.317	0.065	0.306	4.846	0.000**
3	Attractive display	0.149	0.067	0.136	2.230	0.026*
4	Pay attention to the window display	0.051	0.069	0.050	0.747	0.456
5	The creative and systematic arrangement of products	0.161	0.063	0.147	2.549	0.011*
6	Comfortable and well-maintained trial rooms	0.227	0.057	0.223	3.958	0.000**

Note: a. Dependent variable: end up spending more money than planned. Significant at \* 0.05, \*\* 0.01 levels.

**Table 10.** Summary of adjusted *R*-squared

R	R-squared	Adjusted R-squared	p-value
0.647	0.419	0.409	0.000**

Table 9 provides the standardized beta coefficients and *p*-value for the factors causing impulse buying behavior. The result shows that four factors were statistically significant among six factors, with a *p*-value less than 0.05. They are (1) “pleasing store decor” ( $\beta = 0.306$ ,  $p = 0.000$ ), (2) “attractive display” ( $\beta = 0.136$ ,  $p = 0.026$ ), (3) “creative and systematic arrangement of products” ( $\beta = 0.147$ ,  $p = 0.011$ ), and (4) “comfortable and well maintained trial rooms” ( $\beta = 0.223$ ,  $p = 0.000$ ). Other factors have a low impact on impulse buying behavior. However, they are not statistically significant.

Table 10 gives the adjusted *R*-squared value for impulse buying behavior. The overall impact of these factors on the level of impulse buying was 40.9%.

Table 11 provides the standardized beta coefficients and *p*-value for the factors causing impulse buying behavior. The result shows that five factors were statistically significant among six factors, with a *p*-value less than 0.05. They are (1) “well-structured layout” ( $\beta = 0.247$ ,  $p = 0.000$ ), (2) “pleasing store decor” ( $\beta = 0.132$ ,  $p = 0.046$ ), (3) “attractive display” ( $\beta = 0.129$ ,  $p = 0.045$ ), (4) “creative and systematic arrangement of products”

**Table 11.** Regression analysis of the impact of store layout on impulse buying behavior

No.	Independent variables	Unstandardized coefficients		Standardized coefficients	t	Sig.
		B	Std. error	Beta		
	(Constant)	1.487	0.187		7.937	0.000
1	Well-structured layout	0.25	0.059	0.247	4.248	0.000**
2	Pleasing store decor	-0.108	0.054	0.132	2	0.046*
3	Attractive display	0.111	0.055	0.129	2.015	0.045*
4	Pay attention to the window display	0.07	0.057	0.087	1.235	0.218
5	The creative and systematic arrangement of products	0.123	0.052	0.142	2.352	0.019*
6	Comfortable and well-maintained trial rooms	0.187	0.048	0.232	3.922	0.000**

Note: a. Dependent variable: experienced sudden urges to buy unplanned apparel. Significant at \* 0.05, \*\* 0.01 levels.

**Table 12.** Summary of adjusted *R*-squared

R	R-squared	Adjusted R-squared	p-value
0.600	0.361	0.350	0.000**

( $\beta = 0.142$ ,  $p = 0.019$ ), and (5) “comfortable and well maintained trial rooms” ( $\beta = 0.232$ ,  $p = 0.000$ ), while “pay attention to the window display” has a low impact on impulse buying behavior. However, it is statistically not significant.

Table 12 gives the adjusted  $R$ -squared value for impulse buying behavior. The overall impact of these factors on the level of impulse buying was 35.0%.

The results of Table 10 and 12 show a positive influence of store layout on impulse buying behavior. So, hypothesis  $H1$  is accepted.

### 3.3. Regression analysis to find the impact of ambient factors on impulse buying behavior

Multiple regression analysis was performed by considering five factors about ambient factors as independent variables and impulse buying behavior “end up spending more money than planned” as the dependent variable. Therefore, the hypothesis is framed to examine how store ambience influences impulse buying among female customers:

$H2$ : *Attractive store ambience leads to impulse buying behavior among female customers in apparel stores.*

Table 13 provides the standardized beta coefficients and  $p$ -value for the ambient factors causing impulse buying behavior. The result reveals

that among four factors, all four factors were statistically significant, with a  $p$ -value less than 0.05. They are (1) “pleasant music stimulates to buy more” ( $\beta = 0.304$ ,  $p = 0.000$ ), (2) “good scent in the store leads to longer stay” ( $\beta = 0.128$ ,  $p = 0.007$ ), (3) “in-store lighting is pleasing to the eyes” ( $\beta = 0.301$ ,  $p = 0.000$ ), and (4) “cleanliness influences to buy more” ( $\beta = 0.109$ ,  $p = 0.033$ ).

Table 14 gives the adjusted  $R$ -squared value for impulse buying behavior. The overall impact of these factors on the level of impulse buying was 49.4%.

Table 15 provides the standardized beta coefficients and  $p$ -value for the ambient factors causing impulse buying behavior. The result reveals that among four factors, three factors were statistically significant, with a  $p$ -value less than 0.05. They are (1) “the good scent in the store leads to longer stay” ( $\beta = 0.317$ ,  $p = 0.000$ ), (2) “in-store lighting is pleasing to the eyes” ( $\beta = 0.213$ ,  $p = 0.001$ ), and (3) “cleanliness influences to buy more” ( $\beta = 0.185$ ,  $p = 0.001$ ). Another factor has a low impact on impulse buying behavior. However, it is not statistically significant.

Table 16 gives the adjusted  $R$ -squared value for impulse buying behavior. The overall impact of these factors on the level of impulse buying was 41.2%.

The results of Tables 14 and 16 show a positive influence of store ambience on impulse buying behavior. So, hypothesis  $H2$  is accepted.

**Table 13.** Regression analysis of the impact of store ambience on impulse buying behavior

No.	Independent variables	Unstandardized coefficients		Standardized coefficients	t	Sig.
		B	Std. error	Beta		
	(Constant)	0.662	0.191		3.468	0.001
1	Pleasant music stimulates to buy more	0.295	0.053	0.304	5.514	0.000**
2	The good scent in the store leads to a longer stay	0.138	0.051	0.128	2.714	0.007*
3	In-store lighting is pleasing to the eyes	0.294	0.055	0.301	5.306	0.000**
4	Cleanliness influences to buy more	0.116	0.054	0.109	2.141	0.033*

Note: a. Dependent variable: end up spending more money than planned. Significant at \* 0.05, \*\* 0.01 levels.

**Table 14.** Summary of adjusted  $R$ -squared

R	R-squared	Adjusted R-squared	p-value
0.707	0.499	0.494	0.000**

**Table 15.** Regression analysis of the impact of store ambiance on impulse buying behavior

No.	Independent variables	Unstandardized coefficients		Standardized coefficients	t	Sig.
		B	Std. error	Beta		
	(Constant)	1.389	0.163		8.537	0.000
1	Pleasant music stimulates to buy more	0.060	0.046	0.078	1.310	0.191
2	The good scent in the store leads to a longer stay	0.269	0.043	0.317	6.221	0.000**
3	In-store lighting is pleasing to the eyes	0.164	0.047	0.213	3.475	0.001*
4	Cleanliness influences to buy more	0.156	0.046	0.185	3.382	0.001*

Note: a. Dependent variable: experienced sudden urges to buy unplanned apparel. Significant at \* 0.05, \*\* 0.01 levels.

**Table 16.** Summary of adjusted *R*-squared

R	R-squared	Adjusted R-squared	p-value
0.647	0.418	0.412	0.000**

### 3.4. Regression analysis to find the impact of store employee interaction on impulse buying behavior

Multiple regression analysis was performed by considering five factors about store employee interaction as independent variables and impulse buying behavior “end up spending more money than planned” as the dependent variable. Hence, the hypothesis is formulated to test the effect of employee interaction on the impulse buying behavior of female customers:

*H3: Store employees' interaction with female customers positively influences their impulse buying behavior.*

Table 17 provides the standardized beta coefficients and *p*-value for the factors causing impulse buying behavior. The result shows that among four factors, two factors were statistically significant, with a *p*-value less than 0.05. They are (1) “knowledgeable employees to guide customer” ( $\beta = 0.492$ ,  $p = 0.000$ ) and (2) “gracious greeting by the employees” ( $\beta = 0.259$ ,  $p = 0.000$ ). Other factors have a low impact on impulse buying behavior. However, they are not statistically significant.

Table 18 gives the adjusted *R*-squared value for impulse buying behavior. The overall impact of these factors on the level of impulse buying was 54.3%.

Table 19 provides the standardized beta coefficients and *p*-value for the factors causing impulse buying behavior. The result shows that one factor

**Table 17.** Regression analysis of the impact of store employees' interaction on customers' impulse buying behavior

No.	Independent variables	Unstandardized coefficients		Standardized coefficients	t	Sig.
		B	Std. error	Beta		
	(Constant)	0.612	0.204		2.995	0.003
1	Sufficient employees to serve customers	0.001	0.063	0.001	0.010	0.992
2	Knowledgeable employees to guide the customer	0.496	0.055	0.492	8.974	0.000**
3	Friendly and helpful employees	0.072	0.056	0.063	1.290	0.198
4	Gracious greeting by the employees	0.272	0.057	0.259	4.750	0.000**

Note: a. Dependent variable: end up spending more money than planned. Significant at \* 0.05, \*\* 0.01 levels.

**Table 18.** Summary of adjusted *R*-squared

R	R-squared	Adjusted R-squared	p-value
0.740	0.548	0.543	0.000**

**Table 19.** Regression analysis of the impact of store employees' interaction on customers' impulse buying behavior

No.	Independent variables	Unstandardized coefficients		Standardized coefficients	t	Sig.
		B	Std. error	Beta		
	(Constant)	1.277	0.189		6.771	0.000
1	Sufficient employees to serve customers	0.507	0.058	0.503	8.715	0.000**
2	Knowledgeable employees to guide the customer	0.038	0.051	0.048	0.745	0.457
3	Friendly and helpful employees	0.084	0.051	.094	1.631	0.104
4	Gracious greeting by the employees	0.036	0.053	0.044	0.684	0.494

Note: a. Dependent variable: experienced sudden urges to buy unplanned apparel. Significant at \* 0.05, \*\* 0.01 levels.

**Table 20.** Summary of adjusted *R*-squared

R	<i>R</i> -squared	Adjusted <i>R</i> -squared	<i>p</i> -value
0.619	0.383	0.377	0.000**

is statistically significant among four factors, with a *p*-value less than 0.05. That is “sufficient employees to serve customers” ( $\beta = 0.503$ ,  $p = 0.000$ ). Other factors have a low impact on impulse buying behavior. However, they are not statistically significant.

Table 20 gives the adjusted *R*-squared for impulse buying behavior. The overall impact of these factors on the level of impulse buying was 37.7%.

Tables 18 and 20 show a positive influence on store employees' interaction on customers' impulse buying behavior. So, hypothesis *H3* is accepted.

## 4. DISCUSSION

This study extends the understanding of impulse buying, specifically among female customers, in India's rapidly evolving apparel industry. The study found that female shoppers make impulse purchases predominantly during their visit to the stores. The sample had the highest share of working women (38.7%), implying the increased purchasing power due to additional income. It also shows that the stores surveyed are innovative, visually appealing and stimulating the impulse buying intention. Among the three constructs considered for the study, ‘store ambiance’ emerged to be the leading factor influencing the impulse buying behavior. The impact of ambiance on impulse buying behavior was measured consistently above 40% for both the indicators of impulse buying, i.e., “end up spending more mon-

ey than planned” and “experienced sudden urges to buy unplanned apparels”. Pradhan (2016) claimed that “the impulsive buying behavior displayed by consumers in supermarkets may not be applicable in each and every environment” and, thus, store environment is a key determinant leading to impulse buying behavior in apparel stores.

The window displays in the stores surveyed are perceived as not eye-catching and, hence, shows no impact on impulse buying, while all other elements under the store layout have contributed to impulse buying with store decor as the leading factor followed by the layout.

The result also shows that among all the underlying factors, ‘sufficient employees in the store’ had the highest effect on the impulse buying intention, followed by knowledgeable employee guidance. This shows that the number of sales staff and their retail skills are critical aspects to impulse buying decisions made by female shoppers in apparel stores. Moreover, Ansari (2013) opined that “the personal attributes and character formulation of the staff member suffer from rigidity” in Indian apparel stores. This is reflected in the study with employees' friendly and helping nature, having no impact on impulse buying.

## 5. MANAGERIAL IMPLICATIONS

The study offers significant insights into the impact of atmospheric and social stimuli on impulse

buying behavior among female shoppers in the Indian apparel retail context. The outcomes of this research are consistent with the previous researches (Mohan et al., 2013; Atulkar & Kesari, 2018) on impulse buying in organized retail outlets in India.

Shoppers who perceive the store atmosphere more positively are expected to spend more time in the store and make impulse purchases. The window display followed in the stores surveyed was not effective in driving impulse purchases. This could be due to customers' familiarity with similar display patterns across the apparel stores or female shoppers who are high sensation seekers when it comes to fashion products. Hence, store managers should invest in window displays that stand out from the crowd, make a great first impression, and drive foot traffic.

The survey also indicates that female shoppers are significantly influenced by the number of store associates and personal interaction. This implies that women are more vulnerable to im-

pulse buying during apparel shopping. Findings of Tulungen (2013) support this argument. However, the Indian retail sector is facing one of the biggest challenges in the form of attrition rate, which is around 40-45% (Maheshwari & Verma, 2016). Thus, store managers should focus on retaining the best talents for building customer satisfaction and store loyalty.

The store scent under the ambiance construct turned out to be a key determinant of the impulse purchase. This indicates that the right choice of scent in the store can enhance the perception of merchandise quality and, thus, could influence the shoppers to prolong their stay in the store leading to impulse purchase. The store managers need to reflect upon the fragrances the customers prefer at large since the above stores offer merchandise to all ages and across genders. Store managers could preferably use traditional aromas near the entrance and common area and use combinations to evoke the brand identity.

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## CONCLUSION

The productiveness of in-store stimuli in generating additional sales is of significance to the retailers since it helps to differentiate their store from the competitors' offerings (Abratt & Goodey, 1990). The study strengthens the literature by analyzing the impulse buying behavior among Indian shoppers from Southern India. The study presents important findings concerning the role of three constructs, such as store layout, store ambiance, and store employees on the customers' buying intentions. The result of the study indicates that all three constructs significantly positively influence impulse buying behavior. Further, twelve out of fourteen factors examined in the study are found to influence impulse buying behavior. In contrast, factors such as paying attention to the window display, friendly and helpful employees did not show any association with a sudden urge to buy or spend more money than planned and, thus, impulse buying behavior. During the survey, the staffing in the stores was limited, which could be the reason for the lack of association with impulse purchases.

The modern Indian women are well educated, enlightened and tech-savvy. They are keen on shopping especially, the apparels and often make emotional spending through impulse purchases. The trend is encouraging in the years ahead, considering their increased spending on apparels. The study concludes that female shoppers are impulsive towards apparel products and their impulsivity can be elevated by felicitous employee intervention and judicious spending on the store interior designs, especially the choice of ambient scents which can induce a feeling of inquisitiveness.

## Limitations and future scope

While the study has important contributions, it also has some shortcomings. The study concluded the impulse buying behavior of respondents in the store based on two important indicators of impulse buying, i.e., the urge to buy spontaneously and spend more money than planned. Furthermore, the study



ignored the influence of in-store promotion, point of purchase (POP) deals, impulse buying tendency of shoppers, and peer influence on impulse purchase behavior.

It is important to realize the traffic flow and navigation patterns of both men and women in apparel stores to optimize their shopping experience and strategize store layout. Also, comfortable trial rooms are found to be crucial to impulse sales. Aspects such as trial room space, ventilation, waiting area for shoppers accompanying the buyer are important areas to be considered. Future studies on store layout should investigate the relevance of trial rooms in driving shopper satisfaction and increased sales in the context of apparel retailing.

## AUTHOR CONTRIBUTIONS

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