

# Online Impulse Buying Behaviour of Indian Small Town Consumers : Scale Development and Validation

Anuradha Agarwal<sup>1</sup>

Bhawna Chahar<sup>2</sup>

Narender Singh Bhati<sup>3</sup>

## Abstract

E-commerce companies have started betting big on small towns to look for business opportunities, having a large customer base, and focusing on making customers to buy online as much as possible. Therefore, the study aimed to explore different dimensions of customers' impulse buying behaviour (IBB) in an online buying environment, and further validating the extracted determinants in small towns of North India. The study included a sample of 304 small town online buyers and used exploratory factor analysis (EFA) to explore the key factors, which resulted into five key determinants of IBB ; Hedonic Online Shopping Motivation, Marketing Stimulus, Impulse Buy, Impulse Buying Tendency, and Situation Stimulus. Further, confirmatory factor analysis (CFA) was performed to evaluate validity and reliability of the identified variables of IBB. The findings revealed good internal consistency among the constructs. Additionally, all measurement model fit indices were found to be under the acceptance range, which indicated no validity concerns in the measurement model. The study provided insights on the complex impulse buying behavior of small town online consumers, which completely differs from the buyers of metro cities. Therefore, the identified determinants of customers' online IBB will benefit e-tailors by providing them a platform to understand the buying behavior of small town consumers for designing their marketing strategies to serve them better and to gain over the competition in the e-marketplace.

**Keywords :** online impulse buying behaviour, small town consumers, exploratory factor analysis, confirmatory factor analysis

Paper Submission Date : May 25, 2020 ; Paper sent back for Revision : April 10, 2021 ; Paper Acceptance Date : April 21, 2021 ; Paper Published Online : June 25, 2021

With the advancement of communication technology, the internet has turned to be an essential requirement of common man thus, making online shopping a pervasive part of daily lives of Indians. According to India Brand Equity Foundation report (2019), driven by rising consumer wealth, expanding smartphone users, and availability of cheap 4G networks, the e-commerce market in India is projected to increase to US\$ 200 billion by 2026 from US\$ 38.5 billion in 2017 and is anticipated to become the second largest e-commerce platform globally by 2034. The report revealed expected growth of internet user base to 829 million (by 2021) from 560.01 million in 2018, resulting in a likely increase of Indian online shoppers to 220 million by 2025.

<sup>1</sup> Assistant Professor, Department of Business Administration, Manipal University Jaipur, Jaipur - Ajmer Express Highway, Dehmi Kalan, Near GVK Toll Plaza, Jaipur - 303 007, Rajasthan. (Email : anuradha.curaj@gmail.com)

<sup>2</sup> Associate Professor (Corresponding Author), Department of Business Administration, Manipal University Jaipur, Jaipur-Ajmer Express Highway, Dehmi Kalan, Near GVK Toll Plaza, Jaipur - 303 007, Rajasthan. (Email : drbhawnachahar@gmail.com)

<sup>3</sup> Assistant Professor, Department of Business Administration, Manipal University Jaipur, Jaipur - Ajmer Express Highway, Dehmi Kalan, Near GVK Toll Plaza, Jaipur - 303 007, Rajasthan. (Email : bhati.narendra7@gmail.com)

DOI : <https://doi.org/10.17010/ijom/2021/v51/i5-7/161647>

The Boston Consulting Group (2018) stated three factors responsible for the growth of internet users in India: inexpensive mobile phones, reasonable data tariffs, and local language mobile content. The report also stated that potential new users would be from small towns, old, and women consumers.

The growing demand for lifestyle products, absence of retail infrastructure (IndianRetailer.com, 2012), secure cashless online transactions, cheap data plans and smartphones, easy research and browsing by young and burgeoning middle-class consumers are important driving forces for the increase of the e-commerce market in tier II and tier III cities (Khwaja, 2018). Now, with different shopping apps, they are exposed to a varied assortment of goods and services on their finger tips that result in impulse buying. This market segment provides a lot of opportunities to online retailers for creating a strong customer base and to maximize the profits. At the same time, it has created a challenging task for them to understand the impulse buying behaviour of small town customers as their digital needs and purchase behaviour is likely to be different from the metropolitan consumers. Therefore, it is required by the online retailers to have a comprehensive knowledge of all intrinsic and extrinsic factors that influence online impulse buying behaviour of shoppers.

A number of research studies exist in relation to impulse shopping from the offline perspective (Badgaiyan et al., 2016 ; Kumar & Narayanan, 2016) but due to an increase in online shopping, researchers now are interested in studying different aspects of online impulse buying. However, the research gap is reflected in terms of availability of very limited studies that have been conducted by marketing academicians on online impulse buying in the Indian context (Muruganantham & Bhakat, 2013a ; Tomar et al., 2018). Lastly, there are many studies on online shopping behaviour of metropolitans, but there is a dearth of literature on online buying practices by small town consumers. Based on the review, no research has been done on online impulse buying of small-town Indian consumers ; thus, creating a need to understand the knowledge gap between online shopping behaviour and factors of online impulse buying of small town shoppers.

The main purpose of this study is to explore the various factors which are significantly related to online impulse buying behaviour and to empirically validate the antecedents of impulse buying of Indian small town online consumers. This study will help the online retailers to have a holistic knowledge about the various factors that may influence the impulse buying of online small town shoppers. At the same time, the study will facilitate online retailers to take the best marketing decisions to satisfy the impulse buying needs of small town consumers.

## **Literature Review**

Impulse buying is considered as a complicated phenomenon, a challenge for market researchers, which results in an increase of the product sales every year (Muruganantham & Bhakat, 2013b). Researchers have given a varied explanation of impulse buying such as unplanned action under the influence of specific stimulus (Piron, 1991), quick decision making (Rook & Gardner, 1993), on the spot decision making (Rook & Fisher, 1995), and irresistible purchasing behaviour (Munusamy et al., 2010). However, two conclusions can be made through the past research on impulse buying. First, it is an unplanned act and secondly, it is a complex response to an extrinsic stimulus (Chen & Zhang, 2015).

With the tremendous growth of digital economy and the ease of transactions, online consumers are more impulse oriented than brick and mortar shoppers (Ling et al., 2010). Due to its enormous aspects, online impulse buying provides numerous opportunities to the researchers for further research (Sirhindi, 2010). According to Parsad et al. (2017), online shopping provides four advantages to the shoppers in comparison to physical stores such as vast online shopping network, online commodity prices do not significantly differ from offline stores, convenience in relation of time and efforts, and detailed product information. In addition to these benefits, the use of credit cards (Sirhindi, 2010), free or cheap shipping services, wide range of products (Sirhindi, 2010), 7/24 availability of shopping at online stores with home comfort (Dawson & Kim, 2009 ; Ozen & Engizek, 2014), and

more time and money availability (Muruganantham & Bhakat, 2013a) lure the consumers to visit online stores without any shopping plan and thus encourage impulse buying.

Some researchers explored the impact of various extrinsic components such as marketing cues (Mehta & Chugan, 2013), retail environment including website design (Chang et al., 2011 ; Muruganantham & Bhakat, 2013a ; Wells et al., 2011), price (Sharma et al., 2010), commodity (Dholakia, 2000 ; Verhagen & Van Dolen, 2011), income (Dholakia, 2000) while others explored the role of internal components like impulse buying tendency (Foroughi et al., 2013 ; Mohan et al., 2013 ; Parsad et al., 2017), social factors (Dameyasani & Abraham, 2013), hedonic shopping (Muruganantham & Bhakat, 2013a ; Yu & Bastin, 2010), and personality (Chen & Zhang, 2015 ; Herabadi et al., 2009) on impulse buying behaviour.

According to some studies, promotion plays an important role in influencing online impulse shopping (Dawson & Kim, 2010). The major elements under promotions that encourage impulse buying are low prices (Dholakia, 2000 ; Sirhindi, 2010), strategic advertising including sales offers (Sun & Wu, 2011), easy access to a wide variety of goods (Parakh et al., 2016 ; Sirhindi, 2010), and ratings (Parakh et al., 2016).

Badgaiyan et al. (2016) developed a two factor, 8-item Indian scale to measure the impulsive buying tendency of shopping mall consumers in Delhi. The study identified significant relationship between impulsive buying tendency and impulsive buying behaviour. Mittal et al. (2016) also conducted their study to understand the impulsive buying tendency of brick and mortar customers in the capital region. They developed and validated a two factor (affective and cognitive) scale to measure the impulsive buying tendency of Indian shoppers.

Verma and Singh (2018) aimed to determine the factors that stimulated e-impulse buying of Indian shoppers. The study revealed that website quality and product appearance were the important factors that encouraged consumers to shop more impulsively. According to Muruganantham and Bhakat (2013a), hedonic shopping was a key determinant that influenced impulse buying in online book stores.

After analyzing the literature, it is observed that there are many research studies on impulse buying concentrated on identifying its antecedents from the outlook of developed countries. There are only a handful of studies conducted in Asia, predominantly in the Indian framework. The studies conducted in India majorly focused on developing the scale by recognizing the components that induced impulse shopping both online and offline from the perception of metropolitan consumers. There are hardly one or two studies on the online buying behaviour of small town shoppers (Thakur et al., 2017) but nothing is related to their impulse buying behaviour. This undoubtedly exposes the research gap which created the scope to investigate online impulse buying behaviour of tier-II or tier-III consumers.

Therefore, due to the dearth of literature, the objective of the present research is to develop, purify, and validate the online impulse buying scale for Indian small town shoppers.

## **Research Methodology**

This section of the research defines the research design, scale development method, data collection, and sample description. A two-way research design was selected for the current research. An exploratory research was employed to design the research instrument and descriptive study was used to identify the factors of impulse buying behaviour and to confirm the validity of the identified constructs.

The present study adopted the scale development method given by Churchill Jr. (1979) and the studies of researchers (Anderson & Gerbing, 1992 ; Forsythe et al., 2006 ; Peter, 1981). The stages of scale development are described in the following paragraphs.

### ***Item Generation***

Firstly, a vivid review of literature was done to create a comprehensive list of items related to online impulse

buying behaviour (IBB). As a result, an exhaustive set of 70 items related to IBB traits were identified. The study added items from the past scales for measuring online IBB in a different context.

### ***Qualitative Study Conducted with Experts***

The second step towards scale development was to verify content validity of items by submitting the list to one industry expert and three academic experts. A 3 - point measurement scale comprising of clearly representative, more or less representative, and absolutely not representative suggested by Zaichkowsky (1985) and used by Darpy (2002) was adopted. The items that received two minimum favourable judgements were incorporated for further exploratory study. As a result, 30 statements were deleted, and some items rearranged, modified in relation with the manner of expression. The purpose of expert study was to search out the items which were true representative of the scale.

### ***Pilot Testing***

After examining content validity of the scale, the next step was to create the questionnaire and to test the reliability of the same through pilot testing. Its objective for the study was not only the scale purification but also to ensure the comfort level of the respondents with the questionnaire. The pilot instrument comprised of 40 5 - point Likert scale items directed to 60 respondents having an online shopping experience. The convenience sampling method was used to select shoppers who had shopped online in the recent four months. Cronbach's alpha method was implemented for the quantitative assessment of data. It measures internal consistency of the items and reliability of the scale (Chandra & Kumar, 2011). The corrected item-to-total correlation was analyzed for each item and it revealed that 29 items were greater than or equal to the 0.4 threshold limit (Nunnally, 1978) ; thus, 11 items were deleted and not considered for the final questionnaire. According to the feedback received from the respondents, some linguistic changes were made to simplify the questions.

### ***Data Collection and Sample Description***

For the present research, data were collected from January – May 2019. Snowball sampling was applied to gather data from 304 small town online consumers of North India through the online survey method. This method was used for the purpose of including the frequent online buyers in the sample on the basis of references received by the respondents (Muruganantham & Bhakat, 2013a). As a rule, for EFA (exploratory factor analysis), the subject to variable ratio has to be 10 to 1 (Hair et al., 2003) and for CFA (confirmatory factor analysis), the minimum sample size required is 200 (Hinkin, 1995). Therefore, the sample of 304 was suitable for further analysis.

The sample comprised of 165 males (54.3%) and 139 females (45.7%) ; 27% online shoppers stood under the age category of 21 – 25 years and the least from the category of above 40 years (2.6%). In response to the level of education, most of the respondents were graduates (32.6%) followed by post graduates (25.7%), professionals (24.7%), and intermediate (17.1%). Furthermore, 43.1% were students, 9.9% were housewives, 30.9% were in service, and 11.5% were self-employed. Additionally, marital status reveals that out of 304 respondents, 154 reported to be unmarried and the rest 150 respondents were married. Further, classifying on the basis of family status, 173 of the total sample size lived in a nuclear family (56.9%) and the rest 131 respondents had a joint family (43.1%).

The demographic characteristics are presented in Table 1.

**Table 1. Demographic Profile of Online Shoppers**

Demographic Profile	Frequency	Percentage (%)
<b>Gender</b>		
Male	165	54.3
Female	139	45.7
Total	304	100.0
<b>Age (in years)</b>		
Under 20	79	26.0
21–25	82	27.0
26–30	45	14.8
31–35	72	23.7
36–40	18	5.9
Above 40	8	2.6
Total	304	100.0
<b>Family Monthly Income (₹)</b>		
less than 10,000	53	17.4
10,001–25,000	51	16.8
25,001–50,000	71	23.4
50,001–75,000	71	23.4
75,001–100,000	29	9.5
Above 100,000	29	9.5
Total	304	100.0
<b>Education</b>		
Intermediate	52	17.1
Graduate	99	32.6
Post Graduate	78	25.7
Professional	75	24.7
Total	304	100.0
<b>Occupation</b>		
Student	131	43.1
Housewife	30	9.9
Service	94	30.9
Business	35	11.5
Other	14	4.6
Total	304	100.0
<b>Marital Status</b>		
Married	150	49.3
Unmarried	154	50.7
Total	304	100.0
<b>Family Status</b>		
Joint Family	131	43.1
Nuclear Family	173	56.9
Total	304	100.0

## Data Analysis and Results

A structured questionnaire was used to gather data from online shoppers and was subjected to EFA to identify the antecedents of IBB of small-town consumers using SPSS 21.0. The validity of the constructs identified by EFA was checked through CFA by using AMOS 21.0.

### Exploratory Factor Analysis

To reveal the primary dimensions of IBB, PCA based EFA combined with Varimax rotation was run on the data set. The Kaiser – Meyer – Olkin indices (0.898) and Bartlett's test of sphericity (Chi-square = 3679 ; sign. = 0.000) produced satisfactory results, indicating the appropriateness of factorizing the data (Hair et al., 2013). An iterative approach with the guidelines of standard scale development was favored for deleting the items and assessment of the dimensions and its representative items. As a result, three items out of 29 items were dropped based on characteristics such as : communality of less than 0.5 and factor loading of less than 0.5 (Churchill, 1979 ; Hair et al., 2010). Six factors having eigen value more than one emerged from EFA (Table 2). The cumulative variance explained by all six factors was 64.842%, which is more than the minimum variance (50%) proposed for social science research studies (Hair et al., 2013).

**Table 2. Consolidated Factor Output**

Factors	Variables Included	Factor Loading	Corrected Item-Total Correlation	Communalities	Cronbach's Alpha
<b>F1 : Hedonic Online Shopping Motivation (HOSM) (6 items)</b>	Online shopping is a way to relieve stress for me. (HOSM1)	0.826	0.763	0.786	0.880
	I do online shopping to make myself feel something special. (HOSM2)	0.775	0.749	0.710	
	Sometimes, just to feel better, I shop online. (HOSM3)	0.762	0.695	0.682	
	To stay updated with latest trends, I do online shopping. (HOSM4)	0.756	0.704	0.664	
	When I see something online which I want to buy, I become excited. (HOSM5)	0.638	0.605	0.543	
	As I browse online sites, I have the urge to buy items besides my shopping list. (HOSM6)	0.557	0.618	0.568	
<b>F2 : Marketing Stimulus (MS) (5 items)</b>	I go through previous shoppers' reviews for online buying. (MS1)	0.796	0.678	0.675	0.837
	It is enjoyable to search for discounts in online shopping. (MS2)	0.772	0.679	0.667	
	Online shopping provides the best price. (MS3)	0.727	0.588	0.599	
	I shop more to reach the free delivery purchasing amount. (MS4)	0.716	0.632	0.599	
	Offers/promotions for restricted period increases my purchasing. (MS5)	0.714	0.616	0.571	



<b>F3 : Impulse Buy (IB) (4 items)</b>	My purchase was unplanned. (IB1)	0.797	0.732	0.744	0.874
	I purchased extra than planned. (IB2)	0.791	0.762	0.757	
	My purchase was spontaneous. (IB3)	0.735	0.725	0.716	
	I spent more than I planned. (IB4)	0.687	0.701	0.700	
<b>F4 : Impulse Buying Tendency (IBT) (4 items)</b>	I can purchase anytime, so I tend to buy impulsively. (IBT1)	0.712	0.614	0.669	0.773
	Without thinking much, I shop online. (IBT2)	0.664	0.474	0.616	
	I sometimes shop, even when my intention is to simply browse websites. (IBT3)	0.640	0.631	0.622	
	Sometimes, just browsing websites for fun results in online buying. (IBT4)	0.590	0.591	0.561	
	Various payment options (credit card, cash on delivery, etc.) would increase my buying. (SS1)	0.765	0.629	0.671	0.785
	Refund policy of e-retailers would result in additional buying. (SS2)	0.712	0.508	0.576	
<b>F5 : Situation Stimulus (SS) (4 items)</b>	I am likely to purchase more online when I have more money. (SS3)	0.687	0.656	0.642	
	I am more likely to increase my online shopping whenever I get more time for browsing. (SS4)	0.629	0.575	0.647	
	The performance of the website fulfilled my expectations. (WS1)	0.790	0.497	0.651	0.668
	The online shopping website is trustworthy and honest. (WS2)	0.779	0.517	0.655	
	In my view, the website presents good quality information of the products. (WS3)	0.738	0.437	0.567	

**Note.** Factor loadings > 0.5 (Hair et al., 2010) ; Alpha values  $\geq$  0.70 (Nunnally, 1978). The factors marked\* were not considered for further analysis ; Item-to-total correlation  $\geq$  0.4 (Nunnally, 1978).

Next, a reliability check of the factor output was conducted by calculating Cronbach's alpha to measure the internal consistency of the instrument. As per the reliability analysis, Cronbach's alpha coefficients of the first five factors ranged from 0.773 – 0.880, indicating strong item covariance, but the value of the last factor was below the threshold limit of 0.70 (Nunnally, 1978). Therefore, this factor was neither given any name nor considered for further analysis as stated in Table 2. The scale which comprised of 29 items at the commencement of the process was reduced to 23 items after all the mentioned rejections.

Factor 1 is labelled as Hedonic Online Shopping Motivation as it contains the statements that explain the hedonic shopping motives of online shoppers. The factor loadings of all the variables are above the threshold limit of 0.5 and the Cronbach's alpha value of the factor is 0.880, indicating good internal consistency. The second factor extracted is named Marketing Stimulus as it comprises of the attributes related to the shoppers' reviews, special deals/offers, and discounts and free home delivery services provided by the online retailers to the consumers. The factor loadings of all the variables range from 0.714 – 0.796 depicting satisfactory results. Factor 3 is labelled as Impulse Buy and comprises of four variables that evaluate the outcomes of various other dimensions that influence online impulse shopping. The Cronbach's alpha value of the factor is 0.874. Factor 4 is labelled as Impulse Buying Tendency as all the attributes of the factor represent the shoppers' traits related to their spontaneous purchase while

browsing online shopping sites. The reliability of the Impulse Buying Tendency scale came out to be 0.773 with the factor loadings of the variables ranging from 0.590 – 0.712. Finally, Factor 5 comprises of four variables : payment options, refund policy, availability of time, and availability of money. All these statements are related to situation predictors of online impulse shopping behaviour, and therefore, the factor is named as Situation Stimulus. Loadings of this factor range from 0.629 – 0.765 with communalities of all the attributes above the threshold limit of more than 0.5 as shown in Table 2.

### **Confirmatory Factor Analysis**

Having identified five factors through EFA, the next is to check validity and confirmation of the constructs through estimating the CFA model. The literature reveals two diverse methods for assessing the validity of the measurement model. The first method is a two-step process: first, CFA is conducted for each construct separately, then secondly, all constructs are evaluated together at the same time for getting the final model (Agarwal & Singh, 2018). In the second method, rather than testing individual constructs, all measures are assessed together, and this method is more preferred by the researchers (Cheng, 2001 ; Kumar & Anjaly, 2017). For the current study, the second method is favoured to govern the suitability of the measurement model. The study has considered both the measures of absolute fit (goodness of fit measures and badness of fit) and incremental fit to examine the fitness adequacy of the model.

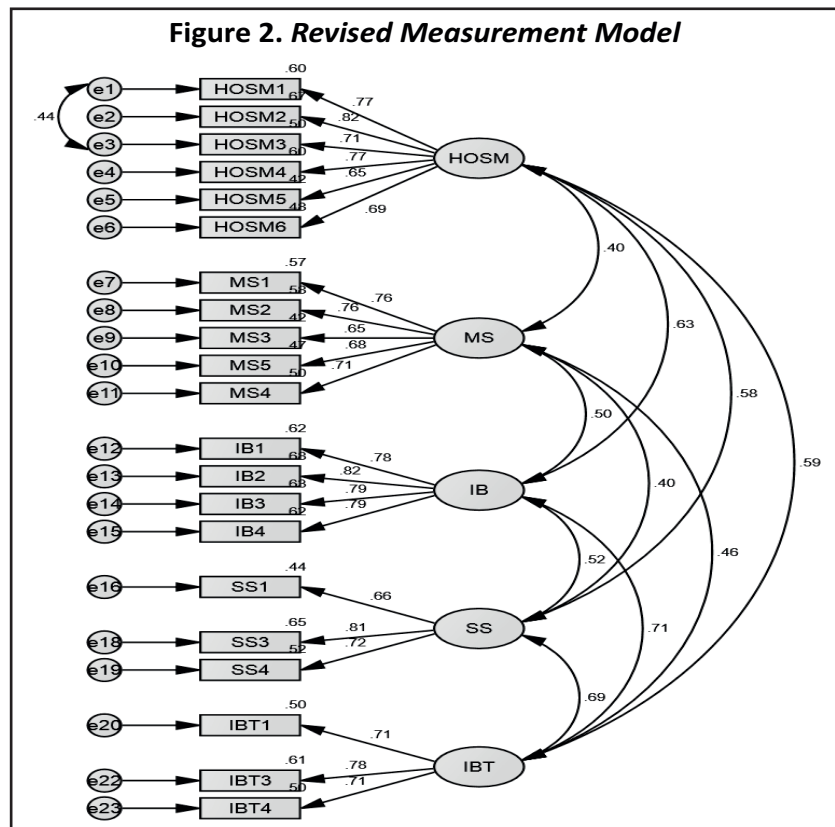
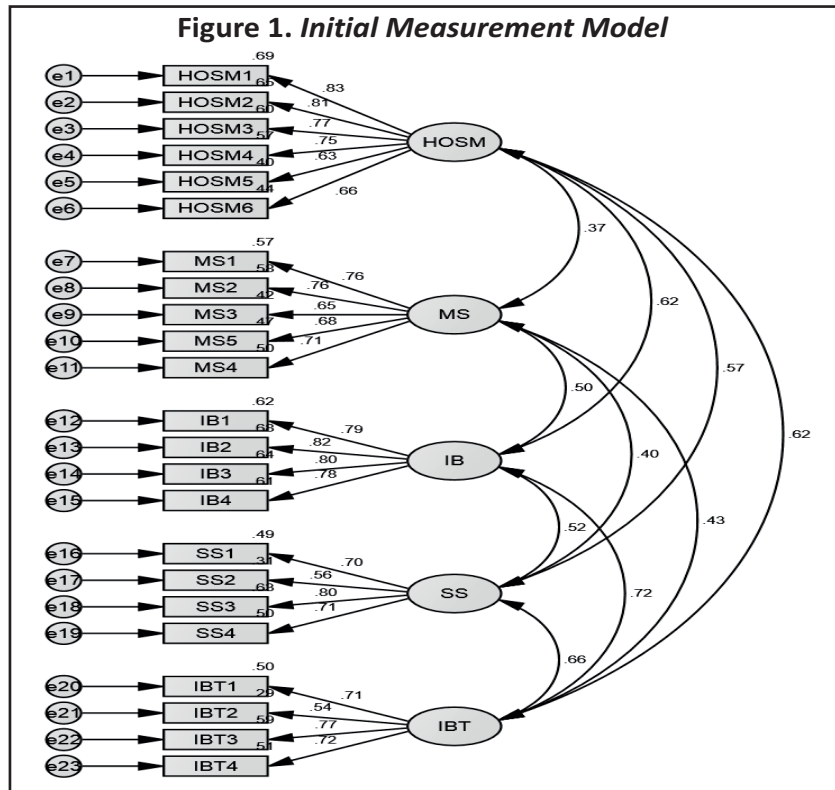
**Table 3. Comparison of Model Fit**

Fit Indices	Recommended Value	A Priori Model	Improved (Final) Model
$\chi^2/df$ (CMIN/DF)	<3	2.170	1.847
GFI	≥0.90	0.877	0.908
TLI	≥0.90	0.911	0.943
CFI	≥0.90	0.923	0.951
RMSEA	<0.08	0.062	0.053

The initial outcome of the measurement model reveals that other than GFI (0.877), all the other fit indices such as TLI (0.911), CFI (0.923), and RMSEA (0.062) are above the recommended value, as shown in Table 3. For improving the model, the standardized regression weights of all the items are checked, and it is found that factor loading of two items (SS2 and IBT2) is below the threshold limit of 0.60 (Thompson et al., 1995) and thus required to be dropped (Figure 1). Furthermore, modification indices of two items of one construct is found to be highly correlated, therefore, covariance is drawn between these items. After making the desired changes, the model is re-run, and the revised measurement model indicates that all indices are within the acceptable tolerance levels. The model shows a significant  $\chi^2$  value of 1.847, which is less than the threshold limit of less than 3 (McIver & Carmines, 1981). Values of GFI (0.908), TLI (0.943), and CFI (0.951) are more than the recommended value of 0.90 (Hair et al., 2010), indicating good model fit. A value of RMSEA (0.053) is less than 0.08 (Hair et al., 2010) that suggests a close model fit. The revised graphical measurement model is shown in Figure 2.

The next step is to evaluate the construct validity by convergent and discriminant validity. Convergent validity is obtained with Cronbach's alpha (CA), composite reliability (CR), and average variance explained (AVE). The results reveal that the CA and CR values for five dimensions are more than the threshold limit of 0.70 (Nunnally & Bernstein, 1967) and AVE is well above the suggested value of 0.50 (Fornell & Larcker, 1981). Thus, the pre-requisites criteria of convergent validity are satisfied by all the five constructs (Hair et al., 2006) mentioned in Table 4.





**Table 4. Reliability and Convergent Validity Measures**

Latent Constructs	Items	Standardized Factor Loadings	Critical Ratio (t-value)	Significance	AVE	MSV	CR	CA
<b>HOSM</b>	<i>HOSM1</i>	0.774	a		0.543	0.401	0.876	0.880
	<i>HOSM2</i>	0.818	14.446	***				
	<i>HOSM3</i>	0.706	16.464	***				
	<i>HOSM4</i>	0.772	13.572	***				
	<i>HOSM5</i>	0.647	11.164	***				
	<i>HOSM6</i>	0.691	12.001	***				
<b>MS</b>	<i>MS1</i>	0.757	a		0.508	0.250	0.837	0.837
	<i>MS2</i>	0.761	12.411	***				
	<i>MS3</i>	0.647	10.585	***				
	<i>MS4</i>	0.710	11.624	***				
	<i>MS5</i>	0.682	11.161	***				
<b>IB</b>	<i>IB1</i>	0.784	a		0.635	0.506	0.875	0.874
	<i>IB2</i>	0.823	15.004	***				
	<i>IB3</i>	.794	14.410	***				
	<i>IB4</i>	.787	14.260	***				
<b>SS</b>	<i>SS1</i>	.665	a		0.540	0.473	0.778	0.773
	<i>SS3</i>	.809	10.671	***				
	<i>SS4</i>	.724	10.117	***				
<b>IBT</b>	<i>IBT1</i>	.709	a		0.538	0.506	0.777	0.785
	<i>IBT3</i>	.782	11.523	***				
	<i>IBT4</i>	.706	10.685	***				

**Note.** 'a' depicts regression weight 1; \*\*\*  $p < 0.001$ .

Next, discriminant validity of the scale is checked. It is attained when the square root of AVE is more than the correlations among constructs (Cooper & Zmud, 1990 ; Hair et al., 1998). The results reveal good discriminant validity of the model (Table 5) and show that the five-dimensional structure is robust and reflects factors responsible for online impulse buying. Alternatively, a comparison between AVE and MSV values for each construct also examines the discriminant validity of the construct, that is, if the MSV value for a construct is less than the AVE value, it ensures the discriminant validity of the construct with the other constructs (Hair et al., 2010). Since MSV for each construct (as shown in Table 4) is less than its corresponding AVE, it clearly fulfils the condition of discriminant validity between the constructs under the study.

**Table 5. Discriminant Validity of the Measurement Model**

Constructs	<i>SS</i>	<i>HOSM</i>	<i>MS</i>	<i>IB</i>	<i>IBT</i>
<b><i>SS</i></b>	<b>0.735</b>				
<b><i>HOSM</i></b>	0.576	<b>0.737</b>			
<b><i>MS</i></b>	0.400	0.402	<b>0.713</b>		
<b><i>IB</i></b>	0.525	0.633	0.500	<b>0.797</b>	
<b><i>IBT</i></b>	0.688	0.589	0.458	0.711	<b>0.733</b>

**Note.** Discriminant validity : The square root of AVE (diagonal items in the bold) should be more than the correlations among constructs (off-diagonal items).

## Discussion and Conclusion

The aim of the study is to explore and summarize the critical factors or determinants of IBB of online small town consumers. The model testing and validation is done on the basis of customers' data on their IBB. To serve the aim of this research, initially, EFA is used to extract major dimensions of Impulse Buying Behaviour (IBB), that is, Hedonic Online Shopping Motivation (HOSM), Marketing Stimulus (MS), Impulse Buy (IB), Impulse Buying Tendency (IBT), and Situation Stimulus (SS). Further, with an aim to validate the dimensions extracted using EFA, a measurement model is proposed to be tested empirically to determine whether it fits good and is acceptable with the output based on validity and model fit indices output. With the purpose of examining the measurement model's validity, convergent and discriminant validity are tested and satisfy the minimum criterion for measurement model validity. Finally, the output reveals significant chi-square value with the other fit indices (GFI, CFI, TLI, and RMSEA) under the satisfactory level. Therefore, the measurement model's validity and reliability is significantly accepted. Hence, it is conferred that shoppers' impulse buying behaviour for online shopping consists of five major determinants, that is, Hedonic Online Shopping Motivation, Marketing Stimulus, Impulse Buy, Impulse Buying Tendency, and Situation Stimulus.

## Theoretical and Managerial Implications

The current study adds to the literature by taking customers of small towns and develops a scale to measure consumers' online IBB. The developed scale will assist and encourage researchers to conduct more similar studies to bring more insights towards different psychographic profiles of small town shoppers.

The study presents a strong significance in the managerial decision making process and establishes a solid evidence for online retailers to explore the consumers' psychographic dimensions affecting their online purchase decisions. With an advancement in the field of technology and digitalization, online buyers have increasingly been inclined towards impulse buying as compared to the offline impulse buyers. Therefore, it is significant for e-retailers to recognize the importance of impulse shopping behaviour on their revenue generation and to survive in a competitive environment. The study will facilitate online retailers to understand the relevance of various antecedents of consumers' online impulse buying behaviour, which will help them in improving customer satisfaction, loyalty, purchase intention, etc. Therefore, to provide superior services to the customers, online retailers should focus on the dimensions extracted and validated in the study to serve their customers better. Furthermore, the study will support online retailers to explore the varieties in consumers' behaviour based on their demographics, and to understand the shoppers' different impulse buying behaviour outcomes based on it, which results in their decision to buy or not. Practically, the study will assist online retailers to identify their strengths and weaknesses and to form the strategies to become more competitive in the e-marketplace.

## Limitations of the Study and Scope for Future Research

Due to the constraints in resources and approachability to respondents, the study was carried out in small towns of North India only. Therefore, the variations in outcomes are bound to take place due to the cultural and demographic differences in other regions of the country or across the globe. Consequently, the results of the study cannot be generalized. Further, due to some practical difficulties, the study has been limited to studying the customers' online impulse shopping behaviour only.

The study leaves the scope for future research, where customers' impulse buying behaviour could be studied in the offline mode, and further comparison between online and offline impulse buying behaviour can be made in order to be more specific on consumers' behavioural dynamics. The study could further be extended to the other

areas of the country for more generalizability of the results. Further, some longitudinal research can be conducted periodically to examine the changes in customers' impulse buying behaviour along with exploring the causes behind it so that online retailers can incorporate those changes in their offerings to their customers. At last, the study includes only five major antecedents of customers' impulse buying behaviour (IBB) ; whereas, some more determinants can further be explored or studied to understand the customers better.

## Authors' Contribution

Dr. Anuradha Agarwal conceived the idea of this research after undertaking extensive literature review. Dr. Bhawana Chahar designed the questionnaire and collected the data. Dr. Narender Singh Bhati analyzed the data using statistical softwares : SPSS and AMOS 21. Furthermore, Dr. Anuradha Agarwal wrote the manuscript with mutual consultation with the other authors.

## Conflict of Interest

The authors certify that they have no affiliations with or involvement in any organization or entity with any financial interest, or non-financial interest in the subject matter, or materials discussed in this manuscript.

## Funding Acknowledgment

The authors received no financial support for the research, authorship, and/or for the publication of this paper.

## References

- Agarwal, A., & Singh, M. R. (2018). The relationship between retail experience, customer satisfaction, and behavioral intention : Exploring the consumer shopping behavior in unorganized retail settings. *Indian Journal of Marketing*, 48(1), 9–27. <https://doi.org/10.17010/ijom/2018/v48/i1/120733>
- Anderson, J. C., & Gerbing, D. W. (1992). Assumptions and comparative strengths of the two-step approach : Comment on Fornell and Yi. *Sociological Methods & Research*, 20(3), 321–333. <https://doi.org/10.1177/0049124192020003002>
- Badgaiyan, A. J., Verma, A., & Dixit, S. (2016). Impulsive buying tendency : Measuring important relationships with a new perspective and an indigenous scale. *IIMB Management Review*, 28(4), 186–199. <https://doi.org/10.1016/j.iimb.2016.08.009>
- Boston Consulting Group (BCG). (2018). *Digital consumers spending in India: A \$ 100 bn opportunity*. <https://media-publications.bcg.com/pdf/BCG-Google-Digital-Consumer-Spending-India-Feb-2018.pdf>
- Chandra, A., & Kumar, R. (2011). *Determinants of individual investor behaviour : An orthogonal linear transformation approach* (MPRA Paper No. 29722). Munich Personal RePEc Archive. <http://mpra.ub.uni-muenchen.de/29722>
- Chang, H. - J., Eckman, M., & Yan, R. - N. (2011). Application of the Stimulus-Organism-Response model to the retail environment : The role of hedonic motivation in impulse buying behavior. *The International Review of Retail, Distribution and Consumer Research*, 21(3), 233–249. <https://doi.org/10.1080/09593969.2011.578798>

- Chen, Y., & Zhang, L. (2015). Influential factors for online impulse buying in China : A model and its empirical analysis. *International Management Review*, 11(2), 57–60.
- Cheng, E. W. (2001). SEM being more effective than multiple regression in parsimonious model testing for management development research. *Journal of Management Development*, 20(7), 650–667. <https://doi.org/10.1108/02621710110400564>
- Churchill Jr., G. A. (1979). A paradigm for developing better measures of marketing constructs. *Journal of Marketing Research*, 16(1), 64–73. <https://doi.org/10.2307/3150876>
- Cooper, R. B., & Zmud, R. W. (1990). Information technology implementation research : A technological diffusion approach. *Management Science*, 36(2), 123–139. <https://doi.org/10.1287/mnsc.36.2.123>
- Dameyasani, A. W., & Abraham, J. (2013). Impulsive buying, cultural values dimensions, and symbolic meaning of money: A study on college students in Indonesia's capital city and its surrounding. *International Journal of Research Studies in Psychology*, 2(3), 35–52. <https://doi.org/10.5861/ijrsp.2013.374>
- Darpy, D. (2002). Le report d'achat expliqué par le trait de procrastination et le potentiel de procrastination (Postponement of purchase explained by the procrastination trait and the potential for procrastination). *Recherche et Applications en Marketing (French Edition)*, 17(2), 1–21. <https://doi.org/10.1177/076737010201700201>
- Dawson, S., & Kim, M. (2009). External and internal trigger cues of impulse buying online. *Direct Marketing : An International Journal*, 3(1), 20–34. <https://doi.org/10.1108/17505930910945714>
- Dawson, S., & Kim, M. (2010). Cues on apparel web sites that trigger impulse purchases. *Journal of Fashion Marketing and Management: An International Journal*, 14(2), 230–246. <https://doi.org/10.1108/13612021011046084>
- Dholakia, U. M. (2000). Temptation and resistance : An integrated model of consumption impulse formation and enactment. *Psychology & Marketing*, 17(11), 955–982. [https://doi.org/10.1002/1520-6793\(200011\)17:11<955::AID-MAR3>3.0.CO;2-J](https://doi.org/10.1002/1520-6793(200011)17:11<955::AID-MAR3>3.0.CO;2-J)
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50. <https://doi.org/10.1177/002224378101800104>
- Foroughi, A., Buang, N. A., Senik, Z. C., & Hajmisadeghi, R. S. (2013). Impulse buying behavior and moderating role of gender among Iranian shoppers. *Journal of Basic and Applied Scientific Research*, 3(4), 760–769.
- Forsythe, S., Liu, C., Shannon, D., & Gardner, L. C. (2006). Development of a scale to measure the perceived benefits and risks of online shopping. *Journal of Interactive Marketing*, 20(2), 55–75. <https://doi.org/10.1002/dir.20061>
- Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). *Multivariate data analysis* (5th ed.). Prentice-Hall.
- Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (2003). *Multivariate data analysis* (5th ed.). Pearson Education, India.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2013). *Multivariate data analysis. Pearson New International Edition*. Pearson Higher Education.

- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis* (6th ed.). Prentice Hall.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R.E. (2010). *Multivariate data analysis : A global perspective*. Prentice-Hall.
- Herabadi, A. G., Verplanken, B., & Van Knippenberg, A. (2009). Consumption experience of impulse buying in Indonesia : Emotional arousal and hedonistic considerations. *Asian Journal of Social Psychology*, 12(1), 20–31. <https://doi.org/10.1111/j.1467-839X.2008.01266.x>
- Hinkin, T. R. (1995). A review of scale development practices in the study of organizations. *Journal of Management*, 21(5), 967–988. <https://doi.org/10.1177/014920639502100509>
- India Brand Equity Foundation. (IBEF). (2019, June). *Indian e-commerce industry report*. <https://www.ibef.org/industry/ecommerce-presentation>
- IndianRetailer.com. (2012). *Top 20 e-retailers*. <https://www.indianretailer.com/magazine/2012/august/Top-20-E-retailers.m58-1-1>
- Khwaja, A. (2018, May 31). Tier II, III cities drive e-commerce in India. *Deccan Herald*. <https://www.deccanherald.com/opinion/panorama/tier-ii-iii-cities-drive-e-commerce-india-672765.html>
- Kumar, A., & Anjaly, B. (2017). How to measure post-purchase customer experience in online retailing ? A scale development study. *International Journal of Retail & Distribution Management*, 45(12), 1277–1297. <https://doi.org/10.1108/IJRDM-01-2017-0002>
- Kumar, M. R., & Narayanan, A. G. V. (2016). Effect of impulse buying on socioeconomic factors and retail categories. *Indian Journal of Marketing*, 46(9), 24–34. <https://doi.org/10.17010/ijom/2016/v46/i9/101039>
- Ling, K. C., Chai, L. T., & Piew, T. H. (2010). The effects of shopping orientations, online trust and prior online purchase experience toward customers' online purchase intention. *International Business Research*, 3(3), 63–76. <https://doi.org/10.5539/ibr.v3n3p63>
- McIver, J. P., & Carmines, E. G. (1981). *Unidimensional scaling* (Vol. 24). Sage Publications.
- Mehta, N., & Chugan, P. K. (2013). The impact of visual merchandising on impulse buying behavior of consumer : A case from Central Mall of Ahmedabad India. *Universal Journal of Management*, 1(2), 76 – 82. <https://doi.org/10.13189/ujm.2013.010206>
- Mittal, S., Chawla, D., & Sondhi, N. (2016). Impulse buying tendencies among Indian consumers : Scale development and validation. *Journal of Indian Business Research*, 8(3), 205 – 226. <https://doi.org/10.1108/JIBR-09-2015-0101>
- Mohan, G., Sivakumaran, B., & Sharma, P. (2013). Impact of store environment on impulse buying behavior. *European Journal of Marketing*, 47(10), 1711–1732. <https://doi.org/10.1108/EJM-03-2011-0110>
- Munusamy, J., Lau, B., & Shankar, C. (2010). *Impulse buying behavior in shopping malls : A Malaysian perspective*. Lambert Academic Publishing.
- Muruganantham, G., & Bhakat, R. S. (2013a.). An empirical study of impulse buying behavior in online bookstores. *International Journal of Online Marketing*, 3(3), 1 – 17. <https://doi.org/10.4018/ijom.2013070101>



- Muruganantham, G., & Bhakat, R. S. (2013b.). A review of impulse buying behavior. *International Journal of Marketing Studies*, 5(3), 149 – 160. <https://doi.org/10.5539/ijms.v5n3p149>
- Nunnally, J. C. (1978). *Psychometric theory* (2nd ed.). McGraw-Hill.
- Nunnally, J. C., & Bernstein, I. H. (1967). *McGraw-Hill series in psychology. Psychometric theory*. McGraw-Hill.
- Ozen, H., & Engizek, N. (2014). Shopping online without thinking : Being emotional or rational ? *Asia Pacific Journal of Marketing and Logistics*, 26(1), 78 – 93. <https://doi.org/10.1108/APJML-06-2013-0066>
- Parakh, A., Bindal, S., & Saldanha, A. (2016). Impulse buying behavior in adolescents. *Imperial Journal of Interdisciplinary Research*, 2(4), 273 – 279.
- Parsad, C., Prashar, S., & Tata, V. S. (2017). Understanding nature of store ambiance and individual impulse buying tendency on impulsive purchasing behaviour : An emerging market perspective. *Decision*, 44(4), 297 – 311. <https://doi.org/10.1007/s40622-017-0168-2>
- Peter, J. P. (1981). Construct validity : A review of basic issues and marketing practices. *Journal of Marketing Research*, 18(2), 133 – 145. <https://doi.org/10.1177/002224378101800201>
- Piron, F. (1991). Defining impulse purchasing. In, R. H. Holman & M. R. Solomon (eds.), *NA - Advances in consumer research* (Vol. 18, pp. 509 – 514). Provo, UT : Association for Consumer Research.
- Rook, D. W., & Fisher, R. J. (1995). Normative influences on impulsive buying behavior. *Journal of Consumer Research*, 22(3), 305 – 313. <https://doi.org/10.1086/209452>
- Rook, D. W., & Gardner, M. P. (1993). In the mood : Impulse buying's affective antecedents. *Research in Consumer Behavior*, 6(1), 1 – 28.
- Sharma, P., Sivakumaran, B., & Marshall, R. (2010). Impulse buying and variety seeking : A trait-correlates perspective. *Journal of Business Research*, 63(3), 276 – 283. <https://doi.org/10.1016/j.jbusres.2009.03.013>
- Sirhindi, A. S. (2010). *Critical review of in-store and online impulse purchase behavior* (Doctoral dissertation). Oklahoma State University, Oklahoma.
- Sun, T., & Wu, G. (2011). Trait predictors of online impulsive buying tendency : A hierarchical approach. *Journal of Marketing Theory and Practice*, 19(3), 337 – 346. <https://doi.org/10.2753/MTP1069-6679190307>
- Thakur, A., Shabnam, & Kaur, R. (2017). An empirical study on consumer trust in online shopping in Punjab. *Indian Journal of Marketing*, 47(2), 47 – 59. <https://doi.org/10.17010/ijom/2017/v47/i2/110027>
- Thompson, R., Barclay, D. W., & Higgins, C. A. (1995). The partial least squares approach to causal modeling : Personal computer adoption and use as an illustration. *Technology Studies: Special Issue on Research Methodology*, 2(2), 284 – 324.
- Tomar, V. S., Sharma, A., & Pandey, N. (2018). Perceived benefits of online shopping: Scale modification and validation. *Indian Journal of Marketing*, 48(12), 7 – 22. <https://doi.org/10.17010/ijom/2018/v48/i12/139553>
- Verhagen, T., & Van Dolen, W. (2011). The influence of online store beliefs on consumer online impulse buying: A model and empirical application. *Information & Management*, 48(8), 320 – 327. <https://doi.org/10.1016/j.im.2011.08.001>

- Verma, H., & Singh, S. (2018). Interpretive structural modelling for e-impulse buying : An Indian study. *International Journal of Electronic Marketing and Retailing*, 9(3), 288–306. <https://doi.org/10.1504/IJEMR.2018.092698>
- Wells, J. D., Parboteeah, V., & Valacich, J. S. (2011). Online impulse buying : Understanding the interplay between consumer impulsiveness and website quality. *Journal of the Association for Information Systems*, 12(1), 32–56. <https://doi.org/10.17705/1jais.00254>
- Yu, C., & Bastin, M. (2010). Hedonic shopping value and impulse buying behavior in transitional economies : A symbiosis in the Mainland China marketplace. *Journal of Brand Management*, 18(2), 105 – 114. <https://doi.org/10.1057/bm.2010.32>
- Zaichkowsky, J. L. (1985). Measuring the involvement construct. *Journal of Consumer Research*, 12(3), 341 – 352. <https://doi.org/10.1086/208520>

### About the Authors

**Dr. Anuradha Agarwal** is an Assistant Professor in the area of marketing in School of Business and Commerce, Manipal University Jaipur. Her fields of interest include marketing management, service marketing, and consumer behaviour. She holds a PhD from Central University of Rajasthan in the area of management. Her articles have been published in ABDC, Scopus, and UGC listed journals. She has received the 'Best Paper' awards for her research.

**Dr. Bhawna Chahar** is an Associate Professor at School of Business and Commerce, Manipal University Jaipur. She has rich experience in corporate and in academics. She has publications in ABDC, Web of Science, Scopus, and UGC listed journals. She is a Certified Peer Reviewer of Elsevier as well as Scopus indexed journals and UGC listed international journals. She has chaired sessions as Concurrent Chairperson and as Keynote/Invited Speaker in several international and national conferences in India and abroad. She has Government of India sanctioned projects in her account.

**Dr. Narender Singh Bhati** is an Assistant Professor in School of Business and Commerce, Manipal University Jaipur. He has about 13 years of experience in the field of academics. His areas of interest cover marketing, service quality, and e-commerce.