



Evaluating the moderating effect of online shopping attitude on online impulsive shopping; A study of Indian emerging market shoppers

Evaluación del efecto moderador de la actitud hacia las compras en línea en las compras impulsivas en línea; un estudio sobre los compradores del mercado emergente indio

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Abstract

In an emerging market, understanding the behaviour of shoppers in the online market is essential to the development of online retail strategies. The aim of this research study is to examine the factors affects of seven factors namely, perceived utilitarian value, hedonic value, trust, materialism, fashion involvement, enjoyment, and attitude on online impulsive shopping in the Indian emerging market. Data is collected from 349 respondents, using purposive and snowball sampling. The data was analyzed using the IBM SPSS and AMOS package using Exploratory Factor Analysis (EFA), Confirmatory factor analysis (CFA) and Structural equation modeling (SEM). The results showed that seven of the research constructs had a positive impact on online impulsive shopping of shoppers; and it is clear that Perceived Utilitarian value, Perceived Trust and online shopping attitude had a major predictor factors. This research would help e-retailers develop new strategies and plans to increase sales volume and create strong relationships with online customers by providing trustworthiness and security in buying practices.

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Keywords: utilitarian value; hedonic value; trust; materialism; fashion involvement; attitude; impulsive shopping

Resumen

En un mercado emergente, comprender el comportamiento de los compradores en el mercado en línea es esencial para el desarrollo de estrategias de venta minorista en línea. El objetivo de este estudio de investigación es examinar los efectos de siete factores, a saber, el valor utilitario percibido, el valor hedónico, la confianza, el materialismo, la implicación en la moda, el disfrute y la actitud hacia las compras impulsivas en línea en el mercado emergente de la India. Los datos se recopilaron de 349 encuestados, utilizando un muestreo intencional y en cadena (snowball). Los datos fueron analizados con el paquete IBM SPSS y AMOS, utilizando Análisis Factorial Exploratorio (AFE), Análisis Factorial Confirmatorio (AFC) y Modelado de Ecuaciones Estructurales (SEM). Los resultados mostraron que siete de los constructos de investigación tuvieron un impacto positivo en las compras impulsivas en línea de los compradores; y es evidente que el valor utilitario percibido, la confianza percibida y la actitud hacia las compras en línea fueron factores predictores principales. Esta investigación ayudaría a los minoristas electrónicos a desarrollar nuevas estrategias y planes para aumentar el volumen de ventas y crear relaciones sólidas con los clientes en línea al proporcionar confianza y seguridad en las prácticas de compra.

Código JEL: D12, D91, L81, M31

Palabras clave: valor utilitario; valor hedónico; confianza; materialismo; implicación en la moda; actitud; compras impulsivas

Introduction

In the past two decades, Indian retail marketing has been one of the fastest-growing markets in the global retail sector. The Indian retail sector has moved from conventional shopping portals to online shopping. Customer behaviour is becoming more complex and nuanced, creating a need to take into account the pattern in consumer purchases in the online environment (Saini, 2005). Online retailers must be creative to attract and retain consumers in competitive marketplace. As per impulse buying literature, there is enough evidence that 60% of transactions account for impulsive shopping (Verma & Singh, 2019; Kumar & Petersen, 2006; Lavuri, 2023). In addition, 90% of USA adults have bought an online impulsive, spending an estimated \$17.78 trillion on an average of \$82 per person (McDermott, 2017). Impulsive activity is a hedonically complex purchasing action of online customers (Lavuri et al., 2022; Lavuri & Park, 2023); and spend more than they had initially planned. However, there is a questionable problem due to more complexity in the analysis of consumer impulsive behaviour (Kaur et al., 2022; Mangiaracina et al., 2019)

The predominance of online impulse sales can be attributed to multiple reasons, such as ease of access to goods, the consistency of the platform and virtual knowledge (Lavuri & Umair, 2023; Lavuri

& Park, 2023; Saini, 2005). Due to the benefits of e-commerce and rapid techno advancements, Internet, greater flexibility, wider product range, quicker transactions and personalisation encouraging sales (Verma & Singh, 2019; Lavuri et al., 2022; Kumar and Petersen, 2006).

In the area of online shopping, many studies conducted using a variety of factors, combinations in different sample sizes, in developed Western countries, whereas inadequate studies found in developing countries, especially in India. There is a significant research gap in this area with respect to Indian online shoppers. Shopper's online shopping attitude is not yet fully examined, especially in impulsive online shopping. This study was conducted to determine the factors which effects on the online shopping attitude on online impulsive shopping of Indian emerging market shoppers. Thus, the researchers tried to examine the effect of perceived utilitarian value, hedonic value, perceived trust, materialism, fashion interest and perceived enjoyment on online shopping attitude towards online impulsive shopping. To address the above gaps, this study aim to explore the predictor factors that encourage impulsive online shopping in the emerging developing country. The research model and hypothesised relationships were empirically tested using the exploratory factor analysis (EFA), Confirmatory factor analysis (CFA) and structural equation modelling (SEM) approach, analysed through IBM SPSS-AMOS software.

The following sections were addressed by this research paper, viz., Introduction, the literature review helps to establish a conceptual framework for the formulation of hypotheses. Along these lines, methodology, research analysis and findings with the results of the measurement model and structural equation model; finally, the research study provides a discussion of the findings, implications and limitations of future research on potential pathways for further study.

Hypothesis framework

The Stimulus-Organism-Response (SOR) framework

The SOR framework refers to the Stimulus-Organism-Response model. The SOR paradigm is a neo-behavioral framework that elucidates how individuals strive to either reward or punish themselves in response to certain stimuli (Jacoby, 2002). This paradigm elucidates the behavioral responses of the organism (R), considering the effects of external stimuli (S) on internal states (O) that facilitate the activation of cognitive or emotional systems. The SOR paradigm was used by researchers to investigate variations in decision-making across several domains, including tourism (Kim et al., 2020), the service market (Gupta et al., 2019), and the acquisition of natural commodities (Lee & Yun, 2015; Konuk, 2019). Prior studies used the Stimulus-Organism-Response (SOR) model to investigate the connections between different factors that influence customers' subsequent responses to their buying behavior. In this research,

the SOR (Stimulus-Organism-Response) technique is used to investigate the impact of antecedent factors on consumer attitude towards online impulsive purchasing, as discussed by Singh and Verma in 2017.

This research has focused on the antecedent aspects, including PUV (Perceived Usefulness of the Website), PHV (Perceived Hedonic Value), PT (Perceived Trust), MAT (Materialism), FI (Fashion interest), and PE (Perceived Enjoyment), that have an impact on customers' attitudes. Researchers examine the impact of customers' attitudes on their impulsive behavior, which in turn affects the condition of their biology. The attitudes of shoppers serve as motivational elements for engaging in impulsive online purchasing behavior. Impulsive purchasing behavior is a response to stimuli. Figure 1 illustrates the operational framework of the seven SOR structures examined in the study investigation.

Perceived utilitarian value (PUV)

Perceived Utilitarian value is an overall evaluation of functional benefits and disadvantages of the product or service (Lavuri et al., 2023a). It had a positive relationship with intention to purchase/repurchase (Lavuri et al., 2023a). Pura (2005) emphasizes the importance of “getting what customer need in a certain situation”. Extended perceived utilitarian value will reduce the need for an individual to pursue alternatives, but when the perceived value is poor, consumers will turn to other product / service providers (Chang, 2006; Lavuri et al., 2023b; Saini, 2005). Consumers consider utilitarian factors as important when shopping online, because utilitarian components, such as ease of use and usefulness in online shopping, make it easy for consumers to compare products or prices (Lavuri et al., 2023a; Mangiaracina et al., 2019). Perceived usefulness and positive online shopping attitude plays a significant role in increasing both perceived utilitarian and hedonic online shopping value (Kem et al., 2018), and perceived utilitarian benefit impact on the happiness of shoppers is more than perceived hedonic benefit with regard to impulsive shopping (Lavuri & Park, 2023; Kem et al., 2018). Therefore, the suggested hypothesis was

H1: Perceived Utilitarian value has positively associated with online shopping attitude

Perceived hedonic value (PHV)

Utilitarian value derives from receiving the desired item during the shopping tour; hedonic value derives from a high level of engagement, enjoyment experience, perceived independence, emotional enthusiasm, illusion and hedonic elements of the shopping process (Lavuri et al., 2023a, b). For entertainment, the internet is a hedonic aspect of online shopping (Mathwick et al., 2001). For online shopping, entertainment variables were used to attract the attention of the customer and to create a positive impression of the brand

/ goods. Hedonic aspects such as entertainment and pleasure etc., improve online shopper's satisfaction with the virtual networks/websites, and so consumers spend much more time shopping for other products (Kumar & Petersen, 2006; Lavuri & Umair, 2023). Ensuring customer experience improves marketing efficiency and exposes customers to competitive incentives (Lavuri, 2023), and higher consumer hedonic value perceptions can lead to higher customer intentions for shopping (Lavuri et al., 2023a). Perceived Hedonic value has a positive impact on impulsive online shopping behaviour (Kem et al., 2018; and Shahpasandi et al., 2020). Therefore, the suggested hypothesis was

H2: Perceived Hedonic value has positively associated with online shopping attitude

Perceived trust (PT)

Trust as a sense of security and readiness to rely on someone or something (Chung & Kwon, 2009; Lavuri & Park, 2023). It plays an important part in transactions and the lack of faith in online businesses is the key reason why many customers chose not to shop online (Mangiaracina et al., 2019; Wu & Chang, 2006). E-commerce is an online business environment, where the Internet as a platform connects buyers and sellers (Lavuri and Park, 2023; Lavuri et al., 2023a, b). Wu et al. (2016) found that technology usage and trust beliefs were the two significant key drivers of online buying. Fam et al. (2004) proposed that trust, together with customer satisfaction, over a time period contributes beyond the effects of the economic outcome. Research on the perceived trust in impulsive online shopping is minimal. Therefore, the suggested hypothesis was

H3: Perceived Trust has positively associated with online shopping attitude

Materialism (M)

Materialism starts in adolescence and influenced by external factors such as gender, age, economic status, self-esteem, friends and peers (Pinto et al., 2017). While there are various values that people can possess, material values appear especially important to the perception of consumer behaviour (Grougiou & Moschis, 2015; Kumar and Petersen, 2006; Kaur et al., 2022). Materialism refers to the possession and acquisition of material objects in the fulfilment of life goals and desired status (Sabah, 2017). Material values such as success, centrality and happiness are the three dimensions of materialism that affect customer impulsive purchasing (Kaur et al., 2022). From previous research, materialistic propensity is the key trigger for an impulsive purchase (Dittmar, 2005). It has been constantly associated and had a positive effect on impulsive purchases (Kaur et al., 2022; Kaur et al., 2022; Bhatia, 2019). Impulsive buyers have

high materialistic tendencies than non-impulsive buyers (Dittmar et al., 2007). Therefore, the suggested hypothesis was

H4: Materialism has positively associated with online shopping attitude

Fashion interest (FI)

Impulsive buyers are more conscious about how they look and appear in public, especially regarding their attire (Krugger, 1998); and it is positively related to purchase of social status products in order to gain recognition (Peshkova et al., 2016; Bhatia, 2019). The Internet has the advantage of being able to provide the latest fashion information and trends to audiences at any moment (Lavuri, 2023). Fashion interest influences shoppers impulsive purchasing, and has a direct effect on the purchaser's intention to buy online (Weiz et al., 2018; Mangiaracina et al., 2019). Shoppers with fashion attitude are more impulsive buyers than anti-fashion attitude shoppers, who buy non-fashion goods (Lavuri, 2023; Park et al., 2007). Impulsive shoppers often display a great fashion sense, consistent with their intense interest in new clothing styles and products; and the fashion interest and impulsive clothing shopping among young women have a positive correlation (Lavuri & Park, 2023; Lavuri & Umair, 2023; Johnson & Attmann, 2009). Therefore, the suggested hypothesis was

H5: fashion interest has positively associated with online shopping attitude

Perceived enjoyment (PE)

Shopping enjoyment as an individual trait of the customer that represents a propensity to find shopping more pleasurable and more than others (Lavuri, 2023; Saini, 2005). It is a specific, persistent inner tendency of the person to enjoy the purchasing process. Some people have an innate enjoyment in themselves during their shopping trip, and the users who have a higher degree of shopping satisfaction appears to perform web browsing longer and is then likely to have a greater desire to make impulsive purchases and vice-versa (Kaur et al., 2022; Lavuri, 2023). Shoppers who enjoyed more shopping were found to be more impulsive. There by indicating a positive relationship between the construct shopping enjoyment tendency and impulsive buying behaviour (Lavuri & Park, 2023). Therefore, the suggested hypothesis was

H6: Perceived Enjoyment has positively associated with online shopping attitude

Online shopping sttitude (OSA) towards online impulsive shopping

Consumer attitude is an indicator of online buying preferences due to its direct effect on the intention of consumers to use or adopt technology (Lavuri et al., 2022; Lavuri, 2023). Attitude is referred as a comprehensive consumer assessment of goods and services purchased (Kaur et al., 2022; Saini, 200; Lavuri & Aileni, 2021). Shopper's online shopping attitude is referred to as consumer psychological evaluations, such as positive or negative assessments and behavioural propensity to purchasing over the Internet (Chaiu et al., 2005). Individual behavioural attitudes are affected by individual beliefs in behavioural outcomes (Ajzen, 2005). Behavioural intentions under the TAM model are based on three main factors. The first factor of behavioural intention is perceived as usefulness (users believe that the use of the system will improve their efficiency), second factor is perceived as easy to use (users think that system will be easy to understand and use). Final factor is user's attitudes towards the system in behavioural intention. In TAM, the user's attitude to the system mediates the relationship between intention and purpose (Davis et al., 1989). Few researchers have studied the impacts of offline impulse-purchase behaviour. Thus in this study, we intended to establish a millennial online purchasing attitude as a mediating role for impulsive online shopping. Therefore, the suggested hypotheses were:

H7: Online shopping Attitude has positively associated with impulsive shopping

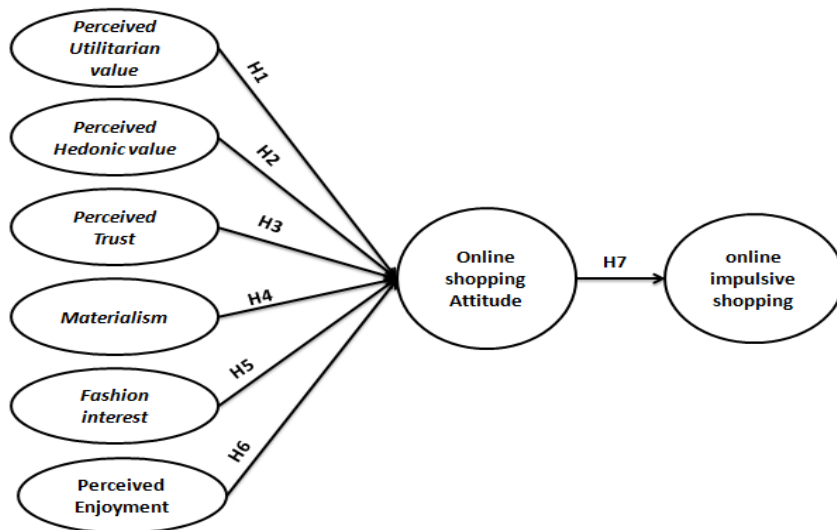


Figure 1. Proposed Research model.

Methodology

Data and simple

This study was conducted to understand the factors which influence on online impulsive shopping. We used a purposive sampling strategy to gather the sample, a technique considered appropriate and supported for this study (Lavuri et al., 2022a). The data from the sample population was collected using a standardized questionnaire administered using a survey approach. We used a series of screening questions to restrict the sample size before granting participants the freedom to respond. A total of 517 questionnaires were distributed. Data analysis was conducted using a total of 349 samples, which corresponds to a response rate of 67.5%. This proportion exceeds the permitted level of 20 percent (Hair et al., 2015). The demographic status of the respondents is shown in Table 1.

Table 1
Demographical status of respondents (N=349)

Variables	Dimensions	F	%	CF
Age	18-25 years	46	13.2	12.5
	25-35 years	135	38.7	54.2
	35-45 years	90	25.8	78.7
	45-55 years	63	18.0	95.9
	55 and above	15	4.3	100.0
Gender	Male	189	54.2	54.2
	Female	160	45.8	100.0
Education	Below Degree	70	20.1	20.1
	Degree	101	28.9	49.0
	pg degree	117	33.5	82.5
	Above PG	61	17.5	100.0
Occupation	Govt employee	107	30.7	30.7
	Private employee	129	37.0	67.6
	Business	42	12.0	79.7
	Home maker	40	11.5	91.1
	Students	31	8.9	100.0
Monthly income (in rupees)	below 3,00,000	30	8.6	8.6
	3,00,001-4,00,000	54	15.5	24.1
	4,00,001 -5,00,000	139	39.8	63.9
	5,00,001-6,00,000	87	24.9	88.8
	6,00,001 and Above	39	11.2	100.0

Measures

Initially, a structured questionnaire was used to test the quantitative analysis to assess the relationship between the proposed models. A questionnaire was evaluated by a pilot study of 81 respondents, after a pre-test, the questionnaire were finalized with few changes to reduce the complexity for the sample population. There were two major parts of the questionnaire viz., the first part had 7 dimensions refers to the demographic profile of respondents and online impulsive purchasing products; and the second part had 8 variables with 24 dimensions. These were designed to assess the factors that affect impulsive online shopping using 5 point Likert scale ranging from 5-strongly disagrees to 1- Strongly agree; which designed to analyse the intention of shoppers towards the online impulsive purchasing. Three items of perceived utilitarian value scale were borrowed from Lee and Wu, (2017); and Kem et al., (2018); three items of perceived hedonic value were taken from Kem et al., (2018). Three items were used to assess the perceived trust of the respondent in respect of impulsive online buying, and scale was adopted from Myung-Ja Kim et al., (2011); Lavuri et al., (2023b); Lin & Chuan, (2013); followed by three items of the materialism scale borrowed from Badgaiyan & Verma, (2014); Kaur et al. (2022) and Bhatia (2019); three items were measured for the fashion interest of consumers, a scale was taken from Wei et al., (2018); Lavuri (2023), Bhatia (2019); and three items for Perceived Enjoyment scales were adopted from Lavuri et al. (2023a), Lavuri (2023), Lee & Wu, (2017); Mayada et al., (2020); Three items of online shopping attitude scale were taken from Mayada et al., (2020); Lavuri et al. (2023a) and four items of impulsive online shopping scale were borrowed from Lavuri (2023), Lavuri et al. (2022), Verma & Singh. (2019).

Data analysis

SPSS 23 version and AMOS 22.0 version software was used to evaluate the proposed research model. Exploratory factor analysis (EFA) was executed for extraction of the factor; SEM (Structural Equation Model) was used as an analysis tool to estimate maximum likelihood in the proposed hypotheses. The SEM had a two-phase approach (Anderson & Gerbing, 1988; Schermelleh-Engel, 2003). Confirmatory factor analysis (CFA) was addressed in the first phase to determine the measurement model's the reliability and validity. In the second phase, a SEM was used to assess the accuracy of the model fitness and the hypothesis test to predict the relationship of dependence between the exogenous variables (predictor variable) and the endogenous variable (dependant variable) in the SEM process (Ho. 2014; Hair et al., 2015; Schermelleh-Engel, 2003).

Results and discussions

Common method bias (CMB)

We used the Harman single factor test to filter the data for CMB. A 32.17% total variance was explained by a single factor, while the single factor variance was under 50%. Data normality was confirmed using Kurtosis and Skewness tests, and our findings were within the suggested range of 1. Predictor factor VIF (Variance inflation factor) values are less than 3, and the data set is not multicollinear; therefore, there is no common method (Lavuri et al., 2022; Schermelleh-Engel, 2003).

Descriptive statistics

Descriptive statistics reveals that the mean and standard deviation of the eight variables of 24 dimensions; and results value indicated that all mean all are more than three, it showing good approval to all eight variables of 24 dimensions (Table 2).

Table 2
 Descriptive statistics of measurement scale (N=349)

Construct	No. of Items	Dimensions	Mean	Std. Deviation
Materialism (M)	3	M1	4.23	1.049
		M2	4.00	1.099
		M3	3.72	1.115
Fashion interest (FI)	3	FI1	4.08	1.076
		FI2	4.04	1.023
		FI3	3.93	1.135
Perceived Enjoyment (PE)	3	PE1	3.87	1.051
		PE2	3.99	1.031
		PE3	4.09	1.087
Perceived Utilitarian value (PUV)	3	PUV1	3.78	1.135
		PUV2	3.52	1.100
		PUV3	3.71	1.034
Online shopping Attitude (OSA)	3	OSA1	3.63	1.245
		OSA2	3.70	1.126
		OSA3	3.62	1.273
Perceived Hedonic value (PHV)	3	PHU1	4.30	.914
		PHU2	4.22	1.032
		PHU3	4.19	1.017
Perceived Trust (PT)	3	PT1	3.93	1.271
		PT2	3.78	1.218
		PT3	3.56	1.318
Online impulsive Shopping (OIS)	3	OIS1	3.56	1.381
		OIS2	3.65	1.256
		OIS3	3.60	1.273

Exploratory factor analysis (EFA)

An exploratory factor analysis (EFA) was carried out to evaluate the underlying variables, before the implementation of the measurement model and structural modelling (Anderson & Gerbing, 1988) in the current research study. Principal component analysis (PCA) was performed in order to extract a series of variables. All twenty variables have been reported with their communalities greater than 0.50 (See table 3).

The calculation of the KMO sample is a measure for the adequacy of the factor analysis to be studied. The large (0.5 - 1.0) significance makes the study of the factor acceptable. The KMO value (0.782) was more than 0.05 and Bartlett's test value ($X^2= 3762.489$; $DF= 276$ and $p<0.001$) was statistically significant that the factor analysis was useful (See table 3). The sphericity check by Bartlett shows the strength of the interaction between variables. The degree of significance measured was 0.000. The strength of the relation between the variables was high. Therefore, the data was reasonable to analyze the element.

The varimax pivot was monitored through 24 items relating to eight unique variables, namely PUV, PHV, PT, M, FI, PE, OSA and OIS. All values for items were greater than 0.50 and were appropriate. It was evident that eight latent constructs and items entered with rotation sums of squared loading were shown to have a value greater than 1 and that the constructs accounted for 74.503% of the variance (See table 4).

Table 3
 Rotated Component matrix and communalities

Items	Component								Communalities
	1	2	3	4	5	6	7	8	
M1						.862			.780
M2						.851			.796
M3						.715			.584
FI1					.870				.783
FI2					.814				.717
FI3					.822				.723
PE1								.833	.735
PE2								.775	.681
PE3								.748	.689
PUV1				.844					.766
PUV2				.822					.765
PUV3				.779					.716
OSA1							.895		.834
OSA2							.870		.803
OSA3							.657		.468
PHU1		.852							.828
PHU2		.851							.792
PHU3		.797							.748
PT1			.850						.803
PT2			.849						.794

PT3		.821		.706
OIS1	.870			.778
OIS2	.868			.777
OIS3	.891			.814

KMO: 0.782 (>0.60); Bartlett's Test of Sphericity (Approx. Chi-Square: 3762.489; df: 276) sig: 000

Extraction Method: Principal Component Analysis; Rotation Method: Varimax with Kaiser Normalization; a. Rotation converged in 6 iterations.

Table 4

Total variance explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.599	23.330	23.330	5.599	23.330	23.330	2.382	9.927	9.927
2	2.408	10.032	33.362	2.408	10.032	33.362	2.357	9.820	19.747
3	2.330	9.710	43.072	2.330	9.710	43.072	2.283	9.510	29.257
4	1.724	7.181	50.253	1.724	7.181	50.253	2.265	9.437	38.694
5	1.605	6.687	56.940	1.605	6.687	56.940	2.236	9.318	48.012
6	1.523	6.345	63.285	1.523	6.345	63.285	2.133	8.885	56.898
7	1.387	5.778	69.064	1.387	5.778	69.064	2.128	8.868	65.766
8	1.305	5.439	74.503	1.305	5.439	74.503	2.097	8.737	74.503

Extraction Method: Principal Component Analysis.

The measurement model

An exploratory factor analysis (EFA) was carried out to evaluate the underlying variables, before the implementation of the measurement model and structural modelling (Anderson & Gerbing, 1988) in the current research study. The KMO value (overall sampling adequacy assessment) is 0.846, which is higher than the 0.6 cut-off point with $p < 0.001$ (Hair et al., 2015). CFA is conducted using AMOS to test all the constructs under analysis using the Maximum Likelihood Technique. A reliability, convergent and divergent validity were assessed as regards the measurement model. The measurement model discusses the relationship of dependency between assessed indicators and constructs and the interdependence relationship amongst constructions. In order to determine the fitness of the measurement model, the following fit indices were tested: The ratio of the chi-square to degree of freedom (X^2/df) less than 3; Root mean square error of Approximation (RMSEA) less than 0.8 for good fit and less than 0.5 for excellent fit; Goodness of Fit index (GFI) greater than 0.8 for acceptable and greater than 0.9 for good; Adjusted goodness of fit index (AGFI) greater than 0.8 acceptable and greater than 0.9 for good; Comparative fit index (CFI) greater than 0.9 for god fit and Tucker Lewis index (TLI) greater than 0.9 for god fit (Bentler, 1990; Browne & CuDuck, 1992). The result shows that the value of chi square =1.430;

RMSEA=.035; GFI=0.930; AGFI=0.906; CFI=0.917; TLI=0.973; and the results have shown that all indices have been found to fall within the generally accepted standards (Table 5).

Table 5
 Fit indices for measurement model

Fit Indices	Fit Criteria	Indicators
Chi-square (X^2)		320.321
Degree of freedom (df)		224
Chi-square/ degree of freedom (X^2/ df)	<5 Acceptable; <3 Good	1.430
Root mean square error of Approximation (RMSEA)	<0.08 Good; <0.05 Excellent	.035
Goodness of Fit index (GFI)	>0.8 Acceptable; >0.9 Good	.930
Adjusted goodness of fit index (AGFI)	>0.8 Acceptable; >0.9 Good	.906
Comparative fit index (CFI)	>0.9	.917
Tucker Lewis index (TLI)	>0.9	.973

Fit Criteria adopted from: Bentler, (1990); Brown & Duck, (1992); and Lin & Wu, (2004).

Constructs reliability and validity

Table 6 reveals the results of measurement model used to assess the validity and reliability of the latent constructs. Factor loading of standardized items (FL), composite reliability (CR), and average variance extracted (AVE) and Cronbach alpha (CA) scores are used to test validity and reliability. The Cronbach Alpha test was conducted to track the internal consistency of the component in the sample to award the amount of reliability. The Cronbach Alpha values of all the study construct ranges from 0.816 to 0.943; these values are above the threshold of 0.70 (Hair et al., 2015) and had good internal consistency of all dimensions. Convergent and discriminant validity are the integrity of the constructs. Composite reliability (CR), factor loading, and average variance extracted (AVE) are used to determine convergent validity. All the constructs dimensions of the standardized loading factor ranged from 0.667 to 0.911. Composite reliability values of the entire construct ranged from 0.817 to 0.943 and values are above the threshold value of 0.6; The values of AVE ranges from 0.599 to 0.806, which is estimated to be greater than 0.50 (Hair et al., 2015).

Table 6
 Reliability and validity of the study

Dimensions	FL	CR(>0.6)	AVE(>0.5)	CA (>0.7)
Materialism (M): 3 items				

I enjoy owning things that make people feel amazing.(M1)	.787			
I admire people who own luxury homes, vehicles and apparel. (M2)	.898	.83	.623	.787
In my life I like much luxury.(M3)	.668			
Fashion Involvement (FI): 3 items				
I always like to follow new trends in fashion. (FI1)	.816			
I will pay attention to fashion trends in order to portray myself as a trend.(FI2)	.761	.817	.599	.815
I will strive to show myself as a new trend follower.(FI3)	.744			
Perceived Enjoyment (PE): 3 items				
Shopping online is a way I would like to spend some of my free time.(PE1)	.704			
Shopping online is enjoyable for me.(PE2)	.720	.771	.528	.772
One of my preferred activity is online shopping.(PE1)	.756			
Perceived Utilitarian value (PUV): 3 items				
This website offers a more relaxed and easy shopping experience.(PUV1)	.762			
This website offers easy access to large amounts of product and service information. (PUV2)	.804	.826	.614	.826
This website offers a more diversified range of items at a lower cost.(PUV3)	.785			
Online shopping attitude (OSA)				
I have a positive view on online shopping.	.895			
When I shop online, I am very pleased.	.869			
I am shopping online and will continue to buy online in the future.	.768	.882	.715	.768
Perceived Hedonic value (PHV): 3 items				
I am delighted to shop on this website online.(PHV1)	.880			
When I shop online on this website, I really enjoy searching for bargains.(PHV2)	.812	.865	.681	.862
On this website, I like shopping by keeping up with the latest fashion trends.(PHV3)	.782			
Perceived Trust (PT): 3 items				
Online transactions are usually risk-free.(PT1)	.856			
My privacy is assured online.(PT2)	.860	.838	.637	.833
My personal data security may be trusted by online shopping companies.(PT3)	.663			
Impulsive Online Shopping (IOS): 3 items				
It is difficult to avoid purchases when shopping online: (IOS 1)	.800			
Online shopping sometimes leads to unplanned shopping: (IOS 2)	.796	.861	.675	.860
Sometimes, you make purchases that you don't need now while shopping online: (IOS 3)	.867			

Correlation and square root of AVE

The Pearson correlation (r) is used to determine the strength of the relationship between the variables and the coefficient sign indicates the direction of the relationship. Several methods have been used for this purpose, but the most common method is the Pearson correlation coefficient (r). Table 7 displays the results of the square root of the AVE and the values present in the brackets. In all cases, the square root of the AVE values is higher than the variable correlation value, suggesting that the discriminant validity

was supported in all cases. Along these lines, all the constructs in the study demonstrated the appropriateness of discriminant validity, as it was found that the square root of the Average Variance Extracted of each of the constructs in the analysis is greater than the squared correlation of the constructs (Hair et al., 2015).

Table 7
 Discriminant Validity of Measurement Model

Variables	M	FI	PE	PUV	OIS	PT	PHV	OSA
M	(.789)							
FI	.129*	(.77)						
PE	.345**	.329**	(.726)					
PUV	.328**	.271**	.385**	(.783)				
OIS	.161**	.418*	.215*	.181**	(.821)			
PT	.246*	.114*	.365**	.346**	.82**	(.798)		
PHV	.373**	.365**	.483**	.425**	.18**	.243**	(.825)	
OSA	.176**	.9*	.214**	.35**	.115*	.315**	.197**	(.845)

Note; **: p<0.01 (2 tailed); *: p<0.05 (2 tailed).

Structural model

The Structural Model was based on the estimation of the measurement model. The outcome of the structural equation model (SEM) reveals the values of chi-square = 1.455; RMSEA =.036; GFI =.927; AGFI =.905; NFI = .913; CFI = .971; TLI =.965 and IFI =.971; and RFI=.896, all the data results were found to be reasonably fit as per recommended level by Hair *et al.* (2015) (Table 8). The findings of the SEM were included in the test hypothesis. The total explained variance of shopper's impulsive online purchasing behaviour outcomes is 78.465 per cent.

Table 8
 Fit indices for measurement model

Fit Indices	Fit Criteria	Indicators
Chi-square (X^2)		334.704
Degree of freedom (df)		230
Chi-square/ degree of freedom (X^2/ df)	<5 Acceptable; <3 Good	1.455
Root mean square error of Approximation (RMSEA)	<0.08 Good; <0.05 Excellent	.036
Goodness of Fit index (GFI)	>0.8 Acceptable; >0.9 Good	.927
Adjusted goodness of fit index (AGFI)	>0.8 Acceptable; >0.9 Good	.905
Normal Fit index (NFI)	>0.9 Acceptable	.913
Comparative fit index (CFI)	>0.9	.971
Tucker Lewis index (TLI)	>0.9	.965
Relative Fit index (RFI)	>0.9	.896
Incremental Fit Index (IFI)	>0.9	.971

Fit Criteria adopted from: Bentler, (1990); Brown & Duck, (1992); and Lin & Wu, (2004).

Table 9
Standardized Regression weights and P-values

Hypotheses	Path	Estimate	Effect	Results
H1	PUV-----> OSA	.283**	+	Supported
H2	PHV -----> OSA	.089**	+	Supported
H3	PT -----> OSA	.271**	+	Supported
H4	M -----> OSA	.052***	+	Supported
H5	FI -----> OSA	.154**	+	Supported
H6	PE -----> OSA	.076*	+	Supported
H7	OSA -----> OIS	.121*	+	Supported

Note: ***: P<0.001; **: p<0.01; *: p<0.05.

The path analysis findings shown in Table 9 with the aid of coefficients and p-values showed that the hypotheses (H1 to H7) were accepted at p<0.05; p<0.01; and p<0.001, in the integrative model of current online impulsive shopping research. The study reported that PUV ($\beta = 0.283$, p<0.01), PHV ($\beta = 0.089$, p<0.01), PT ($\beta = 0.271$; p<0.001), M ($\beta = 0.052$; p<0.001), FI ($\beta = 0.154$; p<0.01), PE ($\beta = 0.076$; p<0.05) had a positively associated with online shopping attitude (OSA); and OSA($\beta = 0.121$, p<0.05) had a statistically impact on online impulsive buying behaviour of shoppers; The study also reveals that Perceived Utilitarian value, Perceived Trust, enjoyment and online shopping attitude had a major predictor and impact strongly on online impulsive behaviour of shoppers.

Conclusions

Impulsive buying explores the price that has been rising every day and has become an undertaking for e-retailers due to the increasing competition of the state of affairs. The research study highlights how the selected factors that encourage online impulsive buying behaviour of Indian shoppers. Results have shown that Perceived utility and hedonic value had impact on online impulsive shopping behaviour. Perceived utility and hedonic value positively influence consumers on impulsive buying and enhancing the positive online shopping conduct of shoppers (Shahpasandi et al., 2020); and perceived utilitarian benefit impact on the satisfaction of shoppers is greater than perceived hedonic benefit in terms of impulsive shopping (Lavuri et al., 2023a, b; Lavuri and Park, 2023); and which raises the incentive to shop impulsively and inevitably contributes to online behavioural urges. Online purchases, privacy, personal data and the protection of interactive features have an impact on perceived trust; the findings of the study indicate that perceived trust had a significant impact on impulsive online shopping (Lavuri et al., 2023b); and materialism and trustiness had a constructive and significant relationship to impulsive online shopping.

Fashion interest and involvement is one of the major factors which influences shoppers impulsive purchasing, and has a direct effect on the purchaser's intention to buy online (Wei Z et al., 2018). Shoppers who enjoyed more shopping have shown themselves to be more impulsive to purchases, and as a result, enjoyment had a huge influence on impulsive online behaviour. Individual choices have a larger effect on previous transactions by the other assessments. Positive and negative assessments have shown a substantial effect on the purchasing mode of shoppers, that's why perceived enjoyment have a major predictor that affects impulsive online transactions. The findings of the study showed that individual subjective expectations had a noticeable impact on impulsive online purchases (Lavuri et al., 2022).

Implications

Theoretical implications

This study addresses a significant gap in the existing literature by presenting several theoretical advancements and their practical implications for retail purchase behavior. This study examines how stimulation variables influence the attitude towards online impulsive purchasing in developing economies. Hence, the present study enhances the S-O-R theoretical framework by including the PUV, PHV, PT, MAT, FI, and PE elements as stimuli, and the online shopping attitude as the organism that influences online impulsive buying behavior (Response). The study offers a unique approach for scholars and marketing experts to understand the impact of PUV, PHV, PT, MAT, FI, and PE changes on consumers' impulsive buying behavior. Public utility vehicles (PUV), private hire vehicles (PHV), public transportation (PT), mobile app-based transportation (MAT), food delivery services (FI), and personal electric vehicles (PE) have a substantial influence on the attitude of shoppers. These findings provide a fresh perspective on consumer buying patterns by integrating cognitive and social interaction factors. The findings of this experiment may be used in the field of consumer psychology to get a deeper understanding of buyers' preferences. Furthermore, the attitude of the consumer acted as a determining factor and showed a strong link between the stimulus and response variables. It greatly influenced the behavior of impulsive internet purchasing. The results suggest a substantial correlation between the organism and the factors that affect its response. This study expands on previous studies by offering more insights into the possible correlation between a shopper's mindset and their behavior while purchasing online.

Managerial implication

In future, the number of e-commerce stores will increase with heavy competition. The ability of customers to fulfil their needs is limited only based on their web browser usage. Moreover, comparison websites and e-commerce aggregators allow users to compare the range of online stores from one place with ease. As a result, the company has very often only small and limited room to attract the potential customer. As online shopping became the new normal of people's lives, optimization of e-commerce stores is crucial in order to provide the experience expected by website visitors (potential customers). The positive experience might result in higher revenues, the negative one might result in permanent loss of customers. Online impulse buying is evolving as one of the crucial areas for market researchers due to significant increase in use of internet, smart phones and other internet enabled devices (Lavuri, 2023). E-impulse buying is able to attract many marketing strategists, as a proficient way to create a bulk of sales volume and to generate huge amounts of revenue (Lavuri et al., 2023a).

The hedonic value constructs are feelings of entertainment, enjoyment and smartness among the consumers. The utilitarian value constructs are based on functional utility of online shopping i.e. time saving and ease of purchase (Lavuri et al., 2022). Online shopping provides an optimal environment for customers by providing fast and low cost of searching and comparison opportunities. Thus, customers gained the ability of access to required (relevant) and accurate info and protection from information asymmetry. The utilities of online shopping that provides cost advantage for customer mostly will not be enough for a purchase or repurchase (Lavuri et al., 2023a). For businesses establishing good relations with customers in long-term depends on the hedonic experiences in addition to their better product and low price offers. The analysis showed that the consumers hedonic values are more significant than utility of online purchasing. The contribution of online shopping decision is more than the functional utility and hedonic customers just browse and play around in the website without any real buying intentions (Lavuri et al., 2023b). Hence, the online sellers need to create more entertaining and communicative websites to engage the youngsters that will increase the frequency of visits and tendency of buying online more frequently resulting to increase of sales (Kaur et al., 2022; Babin et al., 1994).

The research intends to determine the relationship between fashion interest and online impulsive buying behaviour. Impulsive buyers are more conscious about how they look and appear in public, especially regarding their attire (Kruger, 1998). They are positively related to purchase of products which project social status (Roberts & Martinez, 1997); and shoppers of fashion goods have a higher degree of Impulsive buying behaviour than those who buy non-fashion goods; Impulsive shoppers often display a great fashion sense, consistent with their intense interest in new clothing styles and products (Lavuri & Park, 2023).

Consumers are more likely to buy items on impulse when they receive more pleasure from the online pages or online reviews they are visiting. This is due to the increased pleasure cause them to spend

more time on said pages and improve their chances of purchase. In other words, as a result of more enjoyment, consumers demonstrate exploratory browsing, which increases impulse buying (Koufaris 2002). Often the consumer might not have a particular purchase plan and respond to emotional stimuli, which encourage him or her to buy a product (Rietveld et al., 2020). E-commerce has made it easier for consumers to make quick purchases as a response to their momentary feelings and impulses (Kim & Johnson 2016), and e-shopping features have facilitated E-commerce even further. Online impulsive purchasing increases revenue and draws new consumers. If customers are unhappy or not trusted with their online purchases, they can express with a negative e-WOM that is not a positive omen for the retailers in the current digital domain and that should impact on individual subjective norms. Therefore, a higher degree of customer satisfaction can be reached by correctly optimising e-impulse purchasing, and transform them to be loyal custodians (Lavuri et al., 2022).

Limitation and future directions

The geographical area of study was limited to only India. Consequently, the findings and conclusions of the study had their limits. The research used the information continuum with a purposive approach that does not necessarily generalize the findings of the analysis. This work looked at factors stimulating the impulsive online shopping pattern of Indian shoppers in an emerging market. Future work needs to be carried out on personality factors, psychological factors, socio-visual merchandising factors, a particular form of the product should be studied to understand the impulsive online buying behaviour of shoppers and there is an extension to consider the online impulsive and compulsive purchasing propensity of different demographic shoppers. Along these lines, future studies can be carried out on the various social and cultural factors, psychological factors, altruism, perceived risk, altruism and awareness on impulsive online shopping can be studied. Cross-cultural studies and longitudinal metrics may be useful for a deeper understanding across generations. The present research focused on India shoppers in general, future studies could be on specific generations X, Y and Z, and comparison among them. As the research was from India and the results were not generalizable, hence replicate the study in other countries and could add ethnography or cultural dimensions to it. The current scope of the study was limited to online impulsive shopping; however in terms of effects on shoppers impulsive purchasing decisions, online impulsive shopping could be studied in the sense of social media sites such as Telegram, Facebook, WhatsApp, Instagram and Twitter.

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Conflicts of interest

The Authors announce/declare that they do not have a conflict of interest.

References

- Ajzen, I. (1991). Theories of cognitive self-regulation the theory of planned behaviour. *Organizational Behaviour and Human Decision Processes*, 50 (1), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Ajzen, I. (2005). *Attitudes, personality, and behavior*. McGraw-Hill Education (UK).
- Anderson, J.C., & Gerbing, D.W. (1988). Structural equation modelling in practices: A review and recommended two-step approach. *Psychological Bulletin*, 103 (3), 411- 423. <https://doi.org/10.1037/0033-2909.103.3.411>
- Badgaiyan J A, Verma A, (2014). Intrinsic factors affecting impulsive buying behaviour: Evidence from India. *Journal of Retailing and Consumer Services*, 21, pp.537–549. <http://dx.doi.org/10.1016/j.jretconser.2014.04.003>
- Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin*, 107(2), 238–246. <https://doi.org/10.1037/0033-2909.107.2.238>.
- Browne, M. W., & Cudeck, R. (1992). Alternative Ways of Assessing Model Fit. *Sociological Methods & Research*, 21(2), 230–258. <https://doi.org/10.1177/0049124192021002005>
- Chang, H. H. (2006). Technical and management perceptions of enterprise information systems importance, an exploration of its antecedents and consequences', *Journal of Retailing*, 78(1), pp.41–50. <https://doi.org/10.1111/j.1365-2575.2006.00217.x>
- Chung, N., & Kwon, S. J. (2009). Effect of trust level on mobile banking satisfaction: a multi-group analysis of information system success instruments. *Behaviour & Information Technology*, 28(6), 549–562. <https://doi.org/10.1080/01449290802506562>

- Davis, Fred & Bagozzi, Richard & Warshaw, Paul. (1989). User Acceptance of Computer Technology: A Comparison of Two Theoretical Models. *Management Science*, 35, 982-1003. [10.1287/mnsc.35.8.982](https://doi.org/10.1287/mnsc.35.8.982).
- Dittmar, H. (2005). Compulsive buying—A growing concern? An examination of gender, age, and endorsement of materialistic values as predictors. *British Journal of Psychology*, 96(4), 467–491. <https://doi.org/10.1348/000712605X53533>
- Dittmar, H., Long, K., & Bond, R. (2007). When a better self is only a button click away: Associations between materialistic values, emotional and identity- related buying motives, and compulsive buying tendency online. *Journal of Social and Clinical Psychology*, 26(3), 334–361. <https://doi.org/10.1521/jscp.2007.26.3.334>
- Du, S., Bartels, J., Reinders, M., & Sen, S. (2017). Organic consumption behavior: A social identification perspective. *Food Quality and Preference*, 62(1), 190-198. <https://doi.org/10.1016/j.foodqual.2017.07.009>
- Fam, K. S., Foscht, T., & Collins, R. D. (2004). Trust and the online relationship-an exploratory study from New Zealand. *Tourism Management*, 25(2), 195–207. [https://doi.org/10.1016/S0261-5177\(03\)00084-0](https://doi.org/10.1016/S0261-5177(03)00084-0)
- Forough Shahpasandi, Azim Zarei & Mohsen Shafiei Nikabadi. (2020). Consumers' Impulse Buying Behavior on Instagram: Examining the Influence of Flow Experiences and Hedonic Browsing on Impulse Buying, *Journal of Internet Commerce*, 19:4, 437-465, DOI: 10.1080/15332861.2020.1816324
- Grougiou, V. , & Moschis, G. P. (2015). Antecedents of young adults' materialistic values. *Journal of Consumer Behaviour*, 14(2), 115–126. <https://doi.org/10.1002/cb.1505>.
- Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E., Tatham, R.L., (2015). *Multivariate Data Analysis* (7th Edition).
- Han, H.; Hsu, L.-T.J.; Sheu, C. (2010). Application of the theory of planned behavior to green hotel choice: Testing the effect of environmental friendly activities. *Tourism Management*, 31(1), 325–334. DOI: 10.1016/j.tourman.2009.03.013
- Hansen, T., Sørensen, M. I., & Eriksen, M. L. R. (2018). How the interplay between consumer motivations and values influences organic food identity and behavior?. *Food Policy*, 74(1), 39-52. <https://doi.org/10.1016/j.foodpol.2017.11.003>
- Hee, S. (2000). Relationships among attitudes and subjective norm: Testing the theory of reasoned action cultures," *Communication Studies*, 51(1), 162–175. <https://doi.org/10.1080/10510970009388516>
- Ho, R., (2014). *Handbook of Univariate and Multivariate Data Analysis with IBM SPSS*. CRC press.

- Jeffrey W. Overby and Eun-Ju Lee (2006). The effects of utilitarian and hedonic online shopping value on consumer preference and intentions, *Journal of Business Research* 59, 1160–1166. <https://doi.org/10.1016/j.jbusres.2006.03.008>
- Johnson, T., & Attmann, J. (2009). Compulsive buying in a product specific context: Clothing. *Journal of Fashion Marketing and Management: an International Journal*, 13(3), 394–405. <https://doi.org/10.1108/13612020910974519>
- Kaur, J., Parida, R., Ghosh, S., & Lavuri, R. (2022). Impact of Materialism on Purchase Intention of Sustainable Luxury Goods: An Empirical Study in India. *Society and Business Review*, 17(1), 22-44. <https://doi.org/10.1108/SBR-10-2020-0130>
- Kem Z.K. Zhang, Haiqin Xu, Sesia Zhao, Yugang Yu, (2018). Online reviews and impulse buying behavior: the role of browsing and impulsiveness. *Internet Research*, 28(3), 522-543. <https://doi.org/10.1108/IntR-12-2016-0377>
- Kline, R.B., (2015). *Principles and Practice of Structural Equation Modeling*. Guilford publications.
- Kruger, D. (1998). On compulsive shopping and spending: A psychodynamic inquiry. *American Journal of Psychotherapy*, 42(4), 574–584. <https://doi.org/10.1176/appi.psychotherapy.1988.42.4.574>
- Kumar, B., Manrai, A. K., & Manrai, L. A. (2017). Purchasing behaviour for environmentally sustainable products: A conceptual framework and empirical study. *Journal of Retailing and Consumer Services*, 34(C), 1-9. DOI: 10.1016/j.jretconser.2016.09.004.
- Kumar, S., & Petersen, P. (2006). Impact of e-commerce in lowering operational costs and raising customer satisfaction. *Journal of Manufacturing Technology Management*, 17(3), 283–302. <https://doi.org/10.1108/17410380610648263>
- Lavuri, R & Park, T. (2023). Do extrinsic factors encourage shoppers' compulsive buying?: Store environment and product characteristics. *Marketing Intelligence and Planning*. 41(6), 722-740. <https://doi.org/10.1108/MIP-03-2023-0097>
- Lavuri, R & Umair, A. (2023). Role of Virtual Reality Authentic Experience on Affective Responses: Moderating Role Virtual Reality Attachment. *Journal of ecotourism*, 1-19. <https://doi.org/10.1080/14724049.2023.2237704>
- Lavuri, R. (2023). Intrinsic factors affecting online impulsive shopping during the Covid-19 in emerging markets. *International Journal of Emerging Markets*, 18(4), 958-977. <https://doi.org/10.1108/IJOEM-12-2020-1530>.
- Lavuri, R., & Aileni, V. R. (2021). TV Advertisements: Assessing the moderating effect of Children's Pester Power on Parents Purchase Decision. *Journal of Promotion Management*, 28(5), 625-649. DOI: 10.1080/10496491.2021.2009613.

- Lavuri, R., Jaiswal, D. and Thaichon, P. (2023a). Extrinsic and intrinsic motives: panic buying and impulsive buying during a pandemic", *International Journal of Retail & Distribution Management*, 51(2), 190-204. <https://doi.org/10.1108/IJRDM-01-2022-0010>.
- Lavuri, R., Jindal, A., & Umair, A. (2022). How Perceived Utilitarian and Hedonic value influence online impulse shopping in India? Moderating role of Perceived Trust and Perceived Risk. *International Journal of Quality and Service Sciences*. 14(4), 615-634. <https://doi.org/10.1108/IJQSS-11-2021-0169>.
- Lavuri, R., Kaur, J., Park, T. (2023b). Intrinsic Motivations Affecting Millennial Impulsive Mobile Shopping in Emerging Markets during the COVID-19 pandemic. *Asia Pacific Journal of Marketing and Logistics*. Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/APJML-06-2022-0517>.
- Lee, C.H., & Wu, J. J. (2017). Consumer online flow experience. *Industrial Management & Data Systems*, 117(10), 2452–2467. doi:10.1108/imds-11-2016-0500
- Lee, P.M. (2002). Behavioural model of online purchasers in e-commerce environment. *Electronic Commerce Research*, 2(1), 75–85. <https://doi.org/10.1023/A:1013340118965>
- Lin, J., & Chuan, C. H. (2013). A Study on Youth Online Impulsive Purchase: The Relationship between Individual Difference, Shopping Environment, Emotion Response and Purchase. *Journal of Creative Communications*, 8(2–3), 209–229. <https://doi.org/10.1177/0973258613512571>
- Mangiaracina, R., Perego, A., Seghezzi, A., & Tumino, A. (2019). Innovative solutions to increase last-mile delivery efficiency in B2C e-commerce: a literature review. *International Journal of Physical Distribution & Logistics Management*, 49(9), 901–920. <https://doi.org/10.1108/IJPDLM-02-2019-0048>
- McDermott, J. (2017). The Problem with Impulse Buying, 15 August [online] <https://www.finder.com/impulse-buying-stats> (accessed 7 November).
- Myung-Ja Kim, Namho Chung, Choong-Ki Lee (2011). The effect of perceived trust on electronic commerce: Shopping online for tourism products and services in South Korea, *Tourism Management* 32, 256–265. <https://doi.org/10.1016/j.tourman.2010.01.011>
- Park HJ, Burns LD and Rabolt NJ. (2007). Fashion innovativeness, materialism, and attitude toward purchasing foreign fashion goods online across national borders. *J Fash Market Manage*. 11(2), 201–214. <https://doi.org/10.1108/IntR-12-2016-0377>
- Peshkova, A., Urkmez, T., & Wagner, R. (2016). Intimacy of the Russian upper middle class with luxury fashion. *Journal of Global Scholars of Marketing Science*, 26(2), 152–173. <https://doi.org/10.1080/21639159.2016.1143152>

- Pinto, M. R., Mota, A. O., Leite, R. S., Alves, R. C. (2017). Investigating the influencers of materialism in adolescence. *Tourism & Management Studies*, 13(1), 66-74, 230–246. DOI: 10.18089/tms.2017.13109
- Pura, Minna. (2005). Linking perceived value and loyalty in location-based mobile services. *Managing Service Quality*. 15. 509-538. 10.1108/09604520510634005.
- Rietveld, R., W. van Dolen, M. Mazloom, and M. Worryng. (2020). What you feel, is what you like influence of message appeals on customer engagement on Instagram. *Journal of Interactive Marketing* 49, pp.20–53. doi: 10.1016/j.intmar.2019.06.003.
- Sabah, S. (2017). The impact of self-construal and self-concept clarity on socially motivated consumption: The moderating role of materialism. *Journal of Global Scholars of Marketing Science*, 27(1), 31–45. <https://doi.org/10.1080/21639159.2016.1265321>
- Saini, A. (2005). Organizational Capabilities in E-Commerce: An Empirical Investigation of E-Brokerage Service Providers. *Journal of the Academy of Marketing Science*, 33(3), 360–375. <https://doi.org/10.1177/0092070305276150>
- Schermelleh-Engel, K., Moosbrugger, H., & Müller, H. (2003). Evaluating the fit of structural equation models: Tests of significance and descriptive goodness-of-fit measures. *Methods of psychological research online*, 8(2), 23-74. https://www.stats.ox.ac.uk/~snijders/mpr_Schermelleh.pdf
- Schepers, J. & Wetzels, M. (2007). A Meta-analysis of the technology acceptance model: investigating subjective norm and moderation effects”, *Information and Management*, 4(1), pp. 90-103. <https://doi.org/10.1016/j.im.2006.10.007>
- Seock, Y. K., & Bailey, L.R. (2008). The influence of college students’ shopping orientations and gender differences on online shopping information searches and purchase behaviours. *International Journal of Consumer Studies*, 32(2), 13-121. <https://doi.org/10.1111/j.1470-6431.2007.00647.x>
- Singh, A., & Verma, P. (2017). Factors influencing Indian consumers’ actual buying behaviour towards organic food products. *Journal of Cleaner Production*, 167(1), 473-483. <https://doi.org/10.1016/j.jclepro.2017.08.106>
- Verma, H. and Singh, S. (2019). An exploration of e-impulse buying. *Int. J. Electronic Marketing and Retailing*, 10 (1), 45–59. <https://doi.org/10.1504/IJEMR.2019.096626>
- Bhatia, V. (2019). Impact of fashion interest, materialism and internet addiction on e-compulsive buying behaviour of apparel. *Journal of Global Fashion Marketing*, 10(1), 66-80. DOI: 10.1080/20932685.2018.1544502.

- Wei, Z., Lee, M.-Y., & Shen, H. (2018). What drives consumers in China to buy clothing online? Application of the technology acceptance model. *Journal of Textiles and Fibrous Materials*. Vol. 1, PP.1-10.<https://doi.org/10.1177/2515221118756791>
- Wu, J. J., & Chang, Y. S. (2005). Towards understanding members' interactivity, trust, and flow in online travel community. *Industrial Management & Data Systems*, 7(105), 937–954. <https://doi.org/10.1108/02635570510616120>
- Wu, L., Chen, K. W., & Chiu, M. L. (2016). Defining key drivers of online impulse purchasing: A perspective of both impulse shoppers and system users. *International Journal of Information Management*, 36(3), 284-296. <https://doi.org/10.1016/j.ijinfomgt.2015.11.015>