Factors Affecting Online Impulsive Buying Behavior: A Stimulus Organism Response Model Approach

Hamna Hashmi
Air University, Islamabad, Pakistan

Saman Attiq
Air University, Islamabad, Pakistan

Farooq Rasheed[1]
Air University, Islamabad, Pakistan

Abstract

Using data of 300 respondents from Rawalpindi and Islamabad, the study examines how website quality dimensions effect online impulsive buying behavior (OIBB). The study also investigates whether hedonic value and utilitarian value mediates website quality dimensions and online impulsive buying behavior across gender and educational level. The study had adapted a scale to measure the constructs from the earlier literature. The findings of the research indicate that website quality dimensions i.e. service quality, information quality and system quality have a statistically significant impact on OIBB. Further, we also find that both hedonic value and utilitarian value mediate the website quality dimensions and online impulsive buying behavior relationship across gender and educational level. Future studies may explore whether other website quality dimensions such as ease of use has an influence on online impulsive buying behavior across other demographic factors such as income, profession and age.

Keywords: *Online impulse buying behavior, website quality, hedonic & utilitarian shopping values, stimulus organism response theory.*

[1]Corresponding Author: Farooq Rasheed; Email: farooqeco@gmail.com

Introduction

Impulsive buying refers to the unplanned and instantaneous buying behavior of customers. Similarly, Li (2015) defines impulsive behavior as buying spontaneously, unreflectively due to physical proximity and emotional attachment to the desired product which results in personal gratification. Earlier research show that impulsive buying share is about 50%-70% of the total sales (Dawson & Kim, 2010). The internet has transformed consumer buying behavior and attitude all over the world (Floh & Madlberger, 2013). Liu, Li & Hu (2013) found that 40% of the online purchases are spontaneous and impulsive. Moreover, Wu et al., (2016) report that approximately 80% of retail sales by customers are impulsive. In view of its significance, retailers and vendors target impulsive buyers. Hausman (2000) states that impulsive buying gratifies the emotional aspirations of a consumer. Saad & Metawie (2015) suggest that innovation, excitement and amazement lead to impulsive buying behavior. It has been argued that impulse buyers generally do not regulate their innate behavior while browsing online stores.

In online buying, consumers initially collect information about the goods they intend to purchase, subsequently they place the order and make the payment before delivery. In some cases consumers have the option to make the payment subsequent to delivery (Arnold & Reynolds, 2003). Trust and user friendly websites attracts consumers (Wu et al., 2016; Floh, & Madlberger, 2013). In addition, factors like the internal and external environment of stores, sales, and discounts also affect impulse buying behavior. Consequently, it leads to brand loyalty and sustainable relationship (Al-Salamin & Al-Hassan, 2016). It has been argued that extended sales and discounts offers adversely affect the brand image of the product and may lead to losses for the organization (Al-Salamin, & Al-Hassan, 2016). Many earlier studies have explored the antecedents of online impulsive buying behavior. Additionally, studies have also explored the mediating roles of enjoyment, interaction and experience, websites' usefulness on online impulsive buying behavior (Saad & Metawie, 2015).

Floh & Madlberger (2013) have investigated the characteristics of e-store on repelling OIBB through mediation of shopping enjoyment and effective perception . Moreover, many researchers have explored the association between personality and emotions on online purchase decisions. This study aims at determining channels that capture OIBB via variants of website quality especially for Pakistani markets via observing mediating impact of shopping values (hedonic and utilitarian) on website quality and impulse buying behavior relationship via gender and educational strata basis.

Literature Review

Online impulsive buying behavior is a spontaneous desire or decision to purchase a product. Online impulsive buying stimulates a customer to buy a product without having

adequate information about its attributes. Rook (1987) suggests that impulsive buyers do not consider the consequences of such buying decisions. Amos, Holmes, & Keneson (2014) suggest that consumers online impulsive buying also depends on consumer's variety seeking behavior. Moreover, it has been argued that internal stimuli (i.e. personality traits) and external stimuli (i.e. store related factors) also affect online impulsive buying (Kolat & Willet, 1969; Badgaiyan, & Verma, 2014). Badgaiyan & Verma (2014) denote impulse buying as a sudden, compelling, hedonically complex purchase behavior . Moreover, online impulsive buying consumers do not consider other available products and the cost implications of their purchases.

There are four main types of impulsive buying (Stern, 1962). Pure impulsive buying implies that the customer buys the product without ever intending to make the purchase. On the contrary, reminder impulsive buying is stimulated by an advertisement or proximity of a product. In addition, suggestive impulsive buying is stimulated when a customer has seen a product and desires to purchase it for satisfaction. Finally, planned impulsive buying refers to buying behavior where a customer has already decided the product to be purchased. This study uses the social cognitive theory (Bandura, 1989) and stimulus organism response model (Mehrabian & Russel, 1973) for developing the conceptual framework. The social cognitive theory assumes that a particular behavior or action of an individual is based on the outer environment and personality attributes (Stewart, 1998). The theory argues that the attributes of the outer environment has an impact on the cognitive ability of a person and this results in a particular action.

The stimulus organism response model suggests that the impact of environmental stimuli (S) effects organism and result in avoidance response behaviors. Moreover, it explains that physical stimuli promotes pleasant emotions and customer's reaction towards online browsing (Mummalaneni, 2005; Kim, & Eastin, 2011). Hu et al., (2016) suggest that social influence has an impact on consumer's impulsive buying behavior. Social media users tend to exchange their views about a product or services which stimulates consumers purchase intentions process (Chung & Austria, 2012). Both consumer and firm generated messages on social media has an effect on consumer purchase intentions and impulsive buying behaviors. However, it has been argued that consumer generated messages strongly influence consumer purchase intentions in comparison to firm generated messages (Chung & Austria, 2012).

It has been found that social media stimulates impulsive purchase intentions. However, it has also been argued that all impulsive purchase intentions do not lead to actual purchases (Huang, 2003; Shen, & Khaloifa, 2012; Verhagen, & Dolen, 2011). In general, consumers may respond positively or negatively to external stimuli. However, impulsive buyers are more

vulnerable to external stimuli as compared to other consumers (Youn & Faber, 2000). Past studies suggest that impulsive buyers spend time browsing the internet which expose them to promotional stimuli of products. It has been concluded that impulsive buyers while browsing are more influenced with external stimuli as compared to internal stimuli.

Customers use social media and online websites for accessing information about products and services (Ranganathan & Ganapathy, 2002; Turkyilmaz et al., 2015). Prior studies suggest that the aesthetic appearance of websites are crucial for attracting consumers and stimulating impulsive behavior (Wolfinbarger & Gilly, 2003). In order to remain competitive, online stores should maintain the quality of their websites (Ranganathan & Ganapathy, 2002). Clemes, Gan, & Zhang (2014) found a strong association between consumer buying behavior and web quality. Similarly, Woodruff (1997) suggest that website quality also attracts customers and influence their buying decisions. It has been found that consumers are attracted to user friendly websites that are easy to navigate (Lio, Palvia & Lin, 2010; Sharma, Sivakumaran,& Marshall, 2010). Cheng & Huang (2013) argue that online vendors should consider the preferences of consumers before designing their websites for stimulating online impulsive buying behavior. Kuan, Bock, & Vathanophas (2008) suggest that website quality depends on information quality (semantic level), system quality (technical level) and service quality (website support for transaction) . Therefore, our study will focus on these three dimensions of website quality.

The perceived utility of a product is the difference between customer expectation and derived value from use (Zeithaml, 1988). Customer values have two dimensions, i.e. utilitarian and hedonic. Utilitarian value refers to task-specific value of shopping and reflects the acquisition of products in an efficient way . On the contrary, Babin & Attaway (2000) argue that hedonic value refers to the pleasant feelings from shopping . Moreover, customers' utilitarian and hedonic values have a positive association with satisfaction and online impulsive buying behavior (Wang, Zhao, & Zhao, 2017). It has been argued that hedonic as well as utilitarian values increase impulsive buying and the customer satisfaction (Xiang et al., 2016). Consumers with hedonic values derive excitement and a favorable experience from impulsive purchases (Wolfinbarger & Gilly, 2003). On the contrary, utilitarian values focus on cost, quality and ease of use (Xiang et al., 2016). The importance of hedonic and utilitarian values encourage marketers to develop strategies that focused on customer values.

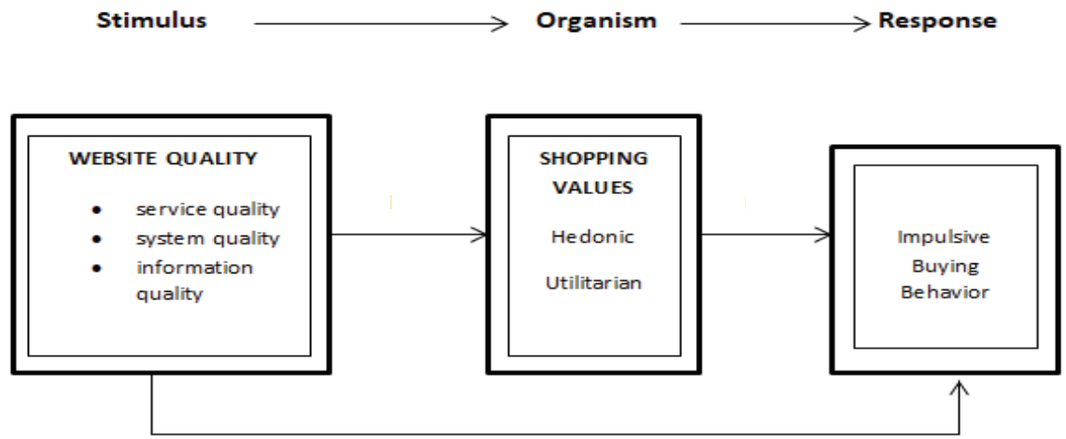
Several studies have found that hedonic shopping value and online impulsive buying behavior are positively correlated (Alba & Williams, 2013). Consumer emotions and feelings are likely to enhance hedonic value and positively affect online impulsive buying behavior (Chung, Song, & Lee, 2017). It has been suggested that online vendors should design websites that stimulate emotions and feelings in order to attract hedonic customers.

In online shopping, customers prefer using websites that are trustworthy and credible (Woodruff, 1997). On the contrary, utilitarian customers prefer those websites that have detailed information about products and services. In addition, utilitarian customers do not pay attention to hedonic environment of the website (Alba & Williams, 2013).

Conceptual framework

The developed conceptual model and hypotheses (across gender and education levels) are presented in the following sections.

Figure1: Conceptual Model



Hypotheses

H1: Information quality and online impulsive buying behavior are positively associated.
H2: Service quality and online impulsive buying behavior are positively associated.
H3: System quality and online impulsive buying behavior are positively associated.
H4: Hedonic value mediates the information quality and online impulsive buying behavior relationship.
H5: Hedonic value mediates the service quality and online impulsive buying behavior relationship.
H6: Hedonic value mediates the system quality and online impulsive buying behavior relationship.
H7: Utilitarian value mediates the information quality and online impulsive buying behavior relationship.
H8: Utilitarian value mediates the service quality and online impulsive buying behavior relationship.
H9: Utilitarian value mediates the system quality and online impulsive buying behavior relationship.

Methodology

The study uses primary data collected from the residents of Rawalpindi and Islamabad. The questionnaire was adopted from the previous literature. The respondents of the questionnaire includes employees with online banking experience. The questionnaire was administered electronically via Google forms. The sample size for the study was 300 with a response rate of 96%. We have used Krejcie & Morgan (2001) method for calculating the sample size. For the given population, the Krejcie & Morgan (2001) method suggests that a minimum sample of 120 respondents would be appropriate. However, the study uses a sample of 300 respondents working in the cities of Rawalpindi and Islamabad. Prior to actual survey a short pilot study was undertaken. The aim of the pilot test was to examine whether the wording and the content of the questionnaire are related to the objectives of the study.

Scales and Measures

The questionnaire consists of demographical questions and items to measure the constructs. The likert scale was used to measure the responses ranging from 1 (strongly disagree) to 5 (strongly agree). Impulse buying behavior was measured using 5 questions adopted from (Akram, 2018). Shopping value dimensions (hedonic and utilitarian) were measured using 10 questions adopted from (Prashar et al., 2017). While website quality dimensions (information quality, service quality and system quality) were measured with 12 questions adopted from (Prashar et al., 2017). The constructs and items used in the study are presented in Annexure 1.

Results

Reliability Analysis

The reliability of the constructs used in this study were examined through Cronbach's Alpha. The results are presented in Table 1.

Table 1: Reliability Statistics

Variable	Items	Cronbach's Alpha (α)
Impulse Buying Behavior	5	.78
Hedonic Value	4	.82
Utilitarian Value	6	.74
Information Quality	4	.86
System Quality	4	.61
Service Quality	4	.76

System Quality, Hedonic Value and Online Impulsive Buying Behavior across Gender

The mediating effect of hedonic value on the relationship between system quality and online impulsive buying behavior across gender was examined through the two step mediation approach. The results are presented in Table 2 and Table 3.

Table 2: Model Summary

Gender	Model	R	R^2	Adjusted R2	Std. Error of the Estimate
Male	1	.964	.93	.93	.22
	2	.988	.97	.98	.13
Female	1	.952	.90	.91	.24
	2	.989	.97	.98	.12

Table 3: Mediation Analysis

Gender	Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
			B	Std. Error	Beta		
Male	1	(Constant)	-1.26	0.129		-9.77	0
		System Quality	1.32	0.038	.97	34.31	0
	2	(Constant)	.19	0.138		1.44	0.15
		System Quality	.09	0.099	.06	.88	0.38
		Hedonic Value	.88	0.069	.93	12.78	0
Female	1	(Constant)	-.98	0.093		-10.50	0
		System Quality	1.24	0.028	.95	44.59	0
	2	(Constant)	.32	0.067		4.82	0
		System Quality	.04	0.047	.04	.96	0.33
		Hedonic Value	.89	0.034	.96	26.21	0

Dependent variable: Online Impulsive Buying Behavior

The results suggest that hedonic value mediates the relationship between system quality and online impulsive buying behavior across gender. This is visible from the statistically significant coefficient of hedonic value (mediator variable) and the statistically insignificant coefficient of system quality (independent variable) when regressed on online impulsive buying behavior (dependent variable). The mediating effect of hedonic value is present across both genders, i.e. male and female.

System Quality, Hedonic Value and Online Impulsive Buying Behavior across Education

The mediating effect of hedonic value on the relationship between system quality and online impulsive buying behavior across education was examined through the two step mediation approach. The results are presented in Tables 4 and 5

Table 4: Model Summary

Education	Model	R	R^2	Adjusted R^2	Std. Error of the Estimate
Low	1	.960	.92	.92	.22
	2	.990	.98	.98	.11
High	1	.950	.90	.90	.25
	2	.988	.98	.98	.12

Table 5: Mediation Analysis

Education	Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
			B	Std. Error	Beta		
Low	1	(Constant)	-1.06	.09		-10.79	0
		System Quality	1.27	.03	.96	43.30	0
	2	(Constant)	.24	.08		2.92	.04
		System Quality	.09	.06	.07	1.51	.13
		Hedonic Value	.87	.04	.93	20.82	0
High	1	(Constant)	-1.05	.12		-8.89	0
		System Quality	1.26	.04	.95	35.37	0
	2	(Constant)	.35	.09		3.84	0
		System Quality	.02	.06	.01	0.24	.82
		Hedonic Value	.91	.05	.98	20.08	0

Dependent Variable: Online Impulsive Buying Behavior

The results suggest that hedonic value mediates the relationship between system quality and online impulsive buying behavior across education. This is visible from the statistically significant coefficient of hedonic value (mediator variable) and the statistically insignificant coefficient of system quality (independent variable) when regressed on online impulsive

buying behavior (dependent variable). The mediating effect of hedonic value is present across education.

Service Quality, Hedonic Value and Online Impulsive Buying Behavior across Gender

The mediating effect of hedonic value on the relationship between service quality and online impulsive buying behavior across gender was examined through the two step mediation approach. The results are depicted in Table 6 and 7.

Table 6: Model Summary

Gender	Model	R	R^2	Adjusted R^2	Std. Error of the Estimate
Male	1	.981	.96	.96	.16
	2	.989	.98	.98	.12
Female	1	.977	.96	.96	.16
	2	.990	.98	.98	.11

Table 7: Mediation Analysis

Gender	Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
			B	Std. Error	Beta		
Male	1	(Constant)	-1.04	.09		-11.67	0
		Service Quality	1.21	.03	.98	47.45	0
	2	(Constant)	-.15	.13		-1.17	0.24
		Service Quality	.39	.10	.32	3.92	0
		Hedonic Value	.65	.08	.68	8.39	0
Female	1	(Constant)	-.95	.06		-15.26	0
		Service Quality	1.19	.02	.98	66.31	0
	2	(Constant)	.06	.08		0.83	0.41
		Service Quality	.27	.06	.22	4.54	0
		Hedonic Value	.72	.05	.78	16.17	0

Dependent Variable: Online Impulsive Buying Behavior

The results suggest that hedonic value mediates the relationship between service quality and online impulsive buying behavior across gender. This is visible from the statistically significant coefficient of hedonic value (mediator variable) and the statistically insignificant

coefficient of service quality (independent variable) when regressed on online impulsive buying behavior (dependent variable). The mediating effect of hedonic value is present across both genders, i.e. male and female.

Service Quality, Hedonic Value and Online Impulsive Buying Behavior across Education

The mediating effect of hedonic value on the relationship between service quality and online impulsive buying behavior across education was examined through the two step mediation approach. The results are presented in Table 8 and 9.

Table 8: Model Summary

Education	Model	R	R^2	Adjusted R^2	Std. Error of the Estimate
Low	1	.983	.97	.97	.15
	2	.992	.98	.98	.12
High	1	.973	.95	.95	.18
	2	.988	.98	.98	.12

Table 9: Mediation Analysis

Education	Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
			B	Std. Error	Beta		
Low	1	(Constant)	-.96	.06		-15.42	.00
		Service Quality	1.20	.02	.98	66.76	.00
	2	(Constant)	-.11	.08		-1.42	.16
		Service Quality	.40	.06	.33	6.22	.00
		Hedonic Value	.63	.05	.67	12.74	.00
High	1	(Constant)	-.99	.08		-11.87	.00
		Service Quality	1.20	.02	.97	49.49	.00
	2	(Constant)	.14	.10		1.35	.18
		Service Quality	.19	.08	.16	2.39	.02
		Hedonic Value	.78	.06	.84	12.88	.00

Dependent Variable: Online Impulsive Buying Behavior

The results suggest that hedonic value mediates the relationship between service quality an online impulsive buying behavior across education. This is visible from the statistically

significant coefficient of hedonic value (mediator variable) and the statistically insignificant coefficient of service quality (independent variable) when regressed on online impulsive buying behavior (dependent variable). The mediating effect of hedonic value is present across both educational levels, i.e. high and low.

Information Quality, Hedonic Value and Impulsive Buying Behavior across Gender

The mediating effect of hedonic value on the relationship between system quality and online impulsive buying behaviour across gender was examined through the two step mediation approach. The results are presented in Table 10 and 11.

Table 10: Model Summary

Gender	Model	R	R^2	Adjusted R^2	Std. Error of the Estimate
Male	1	.963	.93	.93	.21
	2	.991	.98	.98	.11
Female	1	.965	.93	.93	.21
	2	.990	.98	.98	.11

Table 11: Mediation Analysis

Gender	Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
			B	Std. Error	Beta		
Male	1	(Constant)	-.41	.106		-3.89	.00
		Information Quality	.99	.03	.96	33.92	.00
	2	(Constant)	.07	.06		1.04	.30
		Information Quality	.26	.05	.26	5.48	.00
		Hedonic Value	.71	.05	.74	15.92	.00
Female	1	(Constant)	-.62	.07		-8.56	.00
		Information Quality	1.05	.02	.97	52.48	.00
	2	(Constant)	.18	.05		3.45	.00
		Information Quality	.18	.04	.16	4.50	.00
		Hedonic Value	.77	.03	.83	22.78	.00

Dependent Variable: Online Impulsive Buying Behavior

The results suggest that hedonic value mediates the relationship between information

quality and online impulsive buying behavior across gender. This is visible from the statistically significant coefficient of hedonic value (mediator variable) and the statistically insignificant coefficient of information quality (independent variable) when regressed on online impulsive buying behavior (dependent variable). The mediating effect of hedonic value is present across gender, i.e. male and female.

Information Quality, Hedonic Value and Online Impulsive Buying Behavior across Education

The mediating effect of hedonic value on the relationship between information quality and online impulsive buying behavior across education was examined through the two step mediation approach. The results are presented in Table 12 and 13.

Table 12: Model Summary

Education	Model	R	R^2	Adjusted R^2	Std. Error of the Estimate
Low	1	.967	.94	.94	.20
	2	.991	.99	.99	.11
High	1	.961	.92	.92	.22
	2	.989	.98	.98	.12

Table 13: Mediation Analysis

Education	Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
			B	Std. Error	Beta		
Low	1	(Constant)	-.54	.08		-6.94	.00
		Information Quality	1.03	.02	.97	47.94	.00
	2	(Constant)	.11	.05		2.13	.03
		Information Quality	.23	.04	.22	5.64	.00
		Hedonic Value	.74	.04	.78	20.54	.00
High	1	(Constant)	-.55	.09		-6.05	.00
		Information Quality	1.03	.03	.96	40.41	.00
	2	(Constant)	.15	.06		2.45	.01
		Information Quality	.20	.05	.19	4.42	.00
		Hedonic Value	.75	.04	.81	18.65	.00

Dependent Variable: Online Impulsive Buying Behavior

The results suggest that hedonic value mediates the relationship between information quality and online impulsive buying behavior across education. This is visible from the statistically significant coefficient of hedonic value (mediator variable) and the statistically insignificant coefficient of information quality (independent variable) when regressed on online impulsive buying behavior (dependent variable). The mediating effect of hedonic value is present across both educational levels, i.e. high and low.

System Quality, Utilitarian Value and Impulsive Buying Behavior across Gender

The mediating effect of utilitarian value on the relationship between system quality and online impulsive buying behavior across gender was examined through the two step mediation approach. The results are presented in Table 14 and 15.

Table: 14: Model Summary

Gender	Model	R	R^2	Adjusted R^2	Std. Error of the Estimate
Male	1	.964	.93	.93	.21
	2	.986	.97	.97	.14
Female	1	.952	.91	.91	.24
	2	.985	.97	.97	.14

Table 15: Mediation Analysis

Gender	Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
			B	Std. Error	Beta		
Male	1	(Constant)	-1.26	.13		-9.76	.00
		System Quality	1.32	.04	.96	34.30	.00
	2	(Constant)	-.65	.10		-6.62	.00
		System Quality	.06	.11	.05	.57	.57
		Utilitarian Value	1.13	.10	.94	11.52	.00
Female	1	(Constant)	-.98	.09		-10.50	.00
		System Quality	1.24	.03	.95	44.59	.00
	2	(Constant)	-.62	.06		-11.23	.00
		System Quality	-.04	.06	-.03	-.60	.55
		Utilitarian Value	1.23	.06	1.01	20.72	.00

Dependent Variable: Online Impulsive Buying Behavior

The results suggest that utilitarian value mediates the relationship between system quality and online impulsive buying behavior across gender. This is visible from the statistically significant coefficient of utilitarian value (mediator variable) and the statistically insignificant coefficient of system quality (independent variable) when regressed on online impulsive buying behavior (dependent variable). The mediating effect of utilitarian value is present across gender, i.e. male and female.

System Quality, Utilitarian Value and Online Impulsive Buying Behavior across Education

The mediating effect of utilitarian value on the relationship between system quality and online impulsive buying behavior across education was examined through the two step mediation approach. The results are presented in Table 16 and 17.

Table 16: Model Summary

Education	Model	R	R^2	Adjusted R^2	Std. Error of the Estimate
Low	1	.960	.92	.92	.22
	2	.988	.98	.98	.12
High	1	.950	.90	.90	.25
	2	.983	.97	.97	.15

Table 17: Mediation Analysis

Education	Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
			B	Std. Error	Beta		
Low	1	(Constant)	-1.06	.09		-10.78	.00
		System Quality	1.27	.03	.96	43.30	.00
	2	(Constant)	-.67	.06		-11.23	.00
		System Quality	.07	.07	.06	1.11	.27
		Utilitarian Value	1.13	.06	.93	18.57	.00
High	1	(Constant)	-1.06	.12		-8.89	.00
		System Quality	1.26	.04	.95	35.37	.00
	2	(Constant)	-.57	.08		-7.39	.00
		System Quality	-.13	.09	-.09	-1.39	.17
		Utilitarian Value	1.30	.08	1.07	15.72	.00

Dependent Variable: Online Impulsive Buying Behavior

The results suggest that utilitarian value mediates the relationship between system quality and online impulsive buying behavior across education. This is visible from the statistically significant coefficient of utilitarian value (mediator variable) and the statistically insignificant coefficient of system quality (independent variable) when regressed on online impulsive buying behavior (dependent variable). The mediating effect of utilitarian value is present across both educational levels, i.e. high and low.

Service Quality, Utilitarian Value and Online Impulsive Buying Behavior across Gender

The mediating effect of utilitarian value on the relationship between service quality and online impulsive buying behavior across education was examined through the two step mediation approach. The results are presented in Tables 18 and 19.

Table 18: Model Summary

Gen	Model	R	R^2	Adjusted R^2	Std. Error of the Estimate
Male	1	.981	.96	.96	.16
	2	.989	.98	.96	.12
Female	1	.977	.96	.96	.17
	2	.987	.97	.97	.13

Table 19: Mediation Analysis

Gender	Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
			B	Std. Error	Beta		
Male	1	(Constant)	-1.04	.09		-11.68	.00
		Service Quality	1.22	.03	.98	47.45	.00
	2	(Constant)	-.81	.08		-10.75	.00
		Service Quality	.46	.01	.37	4.65	.00
		Utilitarian	.75	.10	.62	7.75	.00
Female	1	(Constant)	-.95	.06		-15.26	.00
		Service Quality	1.20	.02	.98	66.30	.00
	2	(Constant)	-.77	.05		-15.06	.00
		Service Quality	.37	.07	.300	5.05	.00
		Utilitarian	.84	.07	.69	11.62	.00

Dependent variable: Online Impulsive Buying Behavior

The results suggest that utilitarian value mediates the relationship between service quality and online impulsive buying behavior across gender. This is visible from the statistically significant coefficient of utilitarian value (mediator variable) and the statistically insignificant coefficient of service quality (independent variable) when regressed on online impulsive buying behavior (dependent variable). The mediating effect of utilitarian value is present across gender, i.e. male and female.

Service Quality, Utilitarian Value and Online Impulsive Buying Behavior across Education

The mediating effect of utilitarian value on the relationship between service quality and online impulsive buying behavior across education was examined through the two step mediation approach. The results are presented in Tables 20 and 21.

Table 20: Model Summary

Education	Model	R	R^2	Adjusted R^2	Std. Error of the Estimate
Low	1	.983	.97	.97	.15
	2	.990	.98	.98	.11
High	1	.973	.95	.95	.18
	2	.984	.97	.97	.14

Table 21: Mediation Analysis

Education	Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
			B	Std. Error	Beta		
Low	1	(Constant)	-.96	.06		-15.42	.00
		Service Quality	1.20	.02	.98	66.76	.00
	2	(Constant)	-.77	.05		-14.94	.00
		Service Quality	.42	.08	.35	5.51	.00
		Utilitarian Value	.78	.08	.65	10.24	.00
High	1	(Constant)	-.99	.08		-11.87	.00
		Service Quality	1.20	.02	.98	49.49	.00
	2	(Constant)	-.78	.07		-11.38	.00
		Service Quality	.37	.07	.30	4.10	.00
		Utilitarian Value	.84	.09	.70	9.60	.00

Dependent variable: Online Impulsive Buying Behavior

The results suggest that utilitarian value mediates the relationship between service quality and online impulsive buying behavior across education. This is visible from the statistically significant coefficient of utilitarian value (mediator variable) and the statistically insignificant coefficient of service quality (independent variable) when regressed on online impulsive buying behavior (dependent variable). The mediating effect of utilitarian value is present across both educational levels, i.e. high and low.

Information Quality, Utilitarian Value and Online Impulsive Buying Behavior across Gender

The mediating effect of utilitarian value on the relationship between information quality and online impulsive buying behavior across education was examined through the two step mediation approach. The results are presented in Table 22 and Table 23.

Table 22: Model Summary

Gender	Model	R	R^2	Adjusted R^2	Std. Error of the Estimate
Male	1	.963	.93	.93	.21
	2	.986	.97	.97	.13
Female	1	.965	.93	.93	.21
	2	.985	.97	.97	.14

Table 23: Mediation Analysis

Gender	Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
			B	Std. Error	Beta		
Male	1	(Constant)	-.41	.11		-3.89	.00
		Information Quality	.99	.03	.96	33.92	.00
	2	(Constant)	-.61	.09		-9.01	.00
		Information Quality	.13	.07	.13	1.83	.07
		Utilitarian Value	1.03	.09	.86	12.04	.00
Female	1	(Constant)	-.62	.07		-8.56	.00
		Information Quality	1.05	.02	.97	52.48	.00
	2	(Constant)	-.65	.05		-13.67	.00
		Information Quality	.08	.06	.07	1.29	.20
		Utilitarian Value	1.11	.07	.92	16.38	.00

Dependent Variable: Online Impulsive Buying Behavior

The results suggest that utilitarian value mediates the relationship between information quality and online impulsive buying behavior across gender. This is visible from the statistically significant coefficient of utilitarian value (mediator variable) and the statistically insignificant coefficient of information quality (independent variable) when regressed on online impulsive buying behavior (dependent variable). The mediating effect of utilitarian value is present across gender, i.e. male and female.

Information Quality, Utilitarian Value and Impulsive Buying Behavior across Education

The mediating effect of utilitarian value on the relationship between information quality and online impulsive buying behavior across education was examined through the two step mediation approach. The results are presented in Table 24 and Table 25.

Table 24: Model Summary

Education	Model	R	R^2	Adjusted R^2	Std. Error of the Estimate
Low	1	.967	.94	.94	.20
	2	.988	.98	.98	.12
High	1	.961	.92	.92	.22
	2	.982	.97	.97	.15

Table: 25: Mediation Analysis

Education	Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
			B	Std. Error	Beta		
Low	1	(Constant)	-.54	.08		-6.94	.00
		Information Quality	1.03	.02	.97	47.94	.00
	2	(Constant)	-.64	.05		-13.29	.00
		Information Quality	.13	.06	.12	2.24	.03
		Utilitarian Value	1.05	.06	.87	16.39	.00
High	1	(Constant)	-.55	.09		-6.05	.00
		Information Quality	1.03	.03	.96	40.41	.00
	2	(Constant)	-.64	.06		-10.27	.00
		Information Quality	.07	.08	.07	.92	.36
		Utilitarian Value	1.11	.09	.92	12.74	.00

Dependent Variable: Online Impulsive Buying Behavior

The results suggest that utilitarian value mediates the relationship between information quality and online impulsive buying behavior across educational levels. This is visible from the statistically significant coefficient of utilitarian value (mediator variable) and the statistically insignificant coefficient of information quality (independent variable) when regressed on online impulsive buying behavior (dependent variable). The mediating effect of utilitarian value is present across both educational levels, i.e. high and low.

Conclusion

The study investigates the impact of website quality dimensions (i.e. information quality, service quality and system quality) on online impulse buying behavior . We also explore whether hedonic value and utilitarian value mediates website quality dimensions and online impulse buying behavior relationship . The results of the study suggest that information quality, service quality and system quality have a positive effect on online impulsive buying behavior. Moreover, we also find that both hedonic value and utilitarian value mediate the relationship between website quality dimensions and online impulsive buying behavior across gender and educational level. Thus, the statistical results provide support to all the formulated hypotheses (H1-H9). The results of the study has implications for online retailers, web developers and marketers who should focus on improving the system, service and information quality of their websites for stimulating online impulsive buying behavior. In addition, web developers should focus on developing interactive websites that are appealing to customers and enhance OIBB. Similarly, the website content should be useful and informative. Websites should also pay attention to the security and privacy of the customer. Customers prefer websites that are convenient to navigate, interesting and appealing. The limitation of the study include its sampling design, sample size and limited number of variables to measure website quality dimensions. Future studies may explore whether other website quality dimensions such as ease of use has an influence on online impulsive buying behavior across demographic factors such as income, profession and age.

Annexure 1

Constructs and Items in the Questionnaire

Questions
Impulsive buying behavior
My purchase was spontaneous
My purchase was unplanned
I did not intend to do this purchase before this shopping trip.
Before visiting the site, I did not have the intention to do this purchase.
I could not resist to do this purchase at the site
Hedonic value
Online shopping is always exciting for me
Online shopping gives me more pleasure than what I get from the products purchased
Compared to other things I could do, the time spent online shopping is/are truly enjoyable
I continue to shop not because I have to, but because I want to
Utilitarian value
The products and services I purchase online are always right priced and are of good quality
I am successful in my online shopping
I accomplish just what I want to when reading online reviews on the group shopping website
While shopping online, I search just the items I am looking for
I am able to buy what I really need
I am able to accomplish just what I want on the online shopping trip
Information quality
Online shopping websites are useful to me
The online shopping website is informative to me
I find online shopping websites to be resourceful
The online shopping website(s) is/are knowledgeable for me
System quality
The website operates reliably
The website allows information to be readily Accessible
It takes too long for the website to respond to my requests
The website can be adapted to meet a variety of needs

Service quality
I am satisfied with the content of the security and privacy policy of this website
This website is able to personalize the type of information needed for me to make a purchase decision
This website allows me to provide feedback about its content and services
It is easy to contact the customer representatives of this website

References

Akram, U., Hui, P., Kaleem Khan, M., Tanveer, Y., Mehmood, K., & Ahmad, W. (2018). How website quality affects online impulse buying: Moderating effects of saless promotion and credit card use. *Asia Pacific Journal of Marketing and Logistics*, *30*(1), 235-256.

Alba, J. W., & Williams, E. F. (2013). Pleasure principles: A review of research on hedonic consumption. *Journal of Consumer Psychology, 23(1),* 2-18.

Al-Salamin, H., & Al-Hassan, E. (2016). The impact of pricing on consumer buying behavior in Saudi Arabia: Al-Hassa case study. *European Journal Business and Management*, *8*(12), 62-73.

Amos, C., Holmes, G. R., & Keneson, W. C. (2014). A meta-analysis of consumer impulse buying. *Journal of Retailing and Consumer Services*, *21*(2), 86-97.

Arnold, M. J., & Reynolds, K. E. (2003). Hedonic shopping motivations. *Journal of Retailing*, *79*(2), 77-95.

Babin, B. J., & Attaway, J. S. (2000). Atmospheric affect as a tool for creating value and gaining share of customer. *Journal of Business Research*, *49*(2), 91-99.

Badgaiyan, A. J., & Verma, A. (2014). Intrinsic factors affecting online impulsive buying behaviour—Evidence from India. *Journal of Retailing and Consumer Services*, *21*(4), 537-549.

Bandura, A. (1989). Human agency in social cognitive theory. *American Psychologist*, *44*(9), 1175-1184.

Chen, Y., & Zhang, L. (2015). Influential factors for online impulse buying in China: a model and its empirical analysis. *International Management Review*, *11*(2), 57-69.

Clemes, M. D., Gan, C., & Zhang, J. (2014). An empirical analysis of online shopping adoption in Beijing, China. *Journal of Retailing and Consumer Services*, *21*(3), 364-375.

Cheng, H. H., & Huang, S. W. (2013). Exploring antecedents and consequence of online group-buying intention: An extended perspective on theory of planned behavior. *International Journal of Information Management*, *33*(1), 185-198.

Chung, N., Song, H. G., & Lee, H. (2017). Consumers' online impulsive buying behavior of restaurant products in social commerce. *International Journal of Contemporary Hospitality Management*, *29*(2), 709-731.

Chung, C., & Austria, K. P. (2012). Attitudes toward product messages on social media: An examination of online shopping perspectives among young consumers. *International Journal of E-Services and Mobile Applications*, *4(4*), 1-14.

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.

Floh, A., & Madlberger, M. (2013). The role of atmospheric cues in online impulse-buying behavior. *Electronic Commerce Research and Applications*, *12*(6), 425-439.

Hausman, A. (2000). A multi-method investigation of consumer motivations in impulse buying behavior. *Journal of Consumer Marketing*, *17*(5), 403-426.

Hu, M., Huang, F., Hou, H., Chen, Y., & Bulysheva, L. (2016). Customized logistics service and online shoppers' satisfaction: an empirical study. *Internet Research*, *26*(2), 484-497.

Huang, M. H. (2003). Designing website attributes to induce experiential encounters. *Computers in Human Behavior*, *19*(4), 425-442.

Kollat, D. T., & Willett, R. P. (1969). Is impulse purchasing really a useful concept for marketing decisions?. *The Journal of Marketing*, *33(1),* 79-83.

Kim, S., & Eastin, M. S. (2011). Hedonic tendencies and the online consumer: an investigation of the online shopping process. *Journal of Internet Commerce*, *10*(1), 68-90.

Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, *30*(3), 607-610.

Kuan, H. H., Bock, G. W., & Vathanophas, V. (2008). Comparing the effects of website quality on customer initial purchase and continued purchase at e-commerce websites. *Behavior & Information Technology*, *27*(1), 3-16.

Li, Y. (2015). Impact of online impulsive buying behavior on postonline impulsive buying satisfaction. *Social Behavior and Personality: An International Journal*, *43*(2), 339-351.

Liao, C., Palvia, P., & Lin, H. N. (2010). Stage antecedents of consumer online buying behavior. *Electronic Markets*, *20*(1), 53-65.

Liu, Y., Li, H., & Hu, F. (2013). Website attributes in urging online impulse purchase: An empirical investigation on consumer perceptions. *Decision Support Systems*, *55*(3), 829-837.

Mehrabian, A., & Russell, J. A. (1973). A measure of arousal seeking tendency. *Environment and Behavior*, *5*(3), 315-333.

Mummalaneni, V. (2005). An empirical investigation of web site characteristics, consumer emotional states and on-line shopping behaviors. *Journal of Business Research*, *58*(4), 526-532.

Prashar, S., Sai Vijay, T., & Parsad, C. (2017). Effects of online shopping values and website cues on purchase behaviour: A study using S–O–R framework. *Vikalpa*, *42*(1), 1-18.

Ranganathan, C., & Ganapathy, S. (2002). Key dimensions of business-to-consumer web sites. *Information & Management*, *39*(6), 457-465.

Rook, D. W. (1987). The buying impulse. *Journal of Consumer Research, 14(2)*, 189-199.

Saad, M., & Metawie, M. (2015). Store environment, personality factors and impulse buying behavior in Egypt: The mediating roles of shop enjoyment and impulse buying tendencies. *Journal of Business and Management Sciences*, *3*(*2*), 69-77.

Sharma, P., Sivakumaran, B., & Marshall, R. (2010). Impulse buying and variety seeking: A trait-correlates perspective. *Journal of Business Research*, *63(3)*, 276-283.

Shen, K., & Khalifa, M. (2012). System design effects on online impulse buying. *Internet Research*, *22(4)*, 396-425.

Stern, H. (1962). The significance of impulse buying today. *The Journal of Marketing*, *26(2),* 59-62.

Stewart, A. J. (1998). *The Gender and Psychology Reader*. New York: New York University Press.

Turkyilmaz, C. A., Erdem, S., & Uslu, A. (2015). The effects of personality traits and website quality on online impulse buying. *Procedia-Social and Behavioral Sciences*, *175*, 98-105.

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.

Wolfinbarger, M., & Gilly, M. C. (2003). eTailQ: dimensionalising, measuring and predicting retail quality. *Journal of Retailing*, *79*(3), 183-198.

Wang, J., Zhao, M., & Zhao, G. (2017). The impact of customer cognitive competence on online service decision-making: an event-related potentials perspective. *The Service Industries Journal*, *37*(5-6), 363-380.

Woodruff, R. B. (1997). Customer Value: The Next Source for Competitive Advantage. *Journal of the Academy of Marketing Science*, *25 (2*), 139-153.

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.

Xiang, L., Zheng, X., Lee, M. K., & Zhao, D. (2016). Exploring consumers' impulse buying behavior on social commerce platform: The role of parasocial interaction. *International Journal of Information Management*, *36*(3), 333-347.

Youn, S., & Faber, R. J. (2000). Impulse buying: its relation to personality traits and cues. *ACR North American Advances*, 27, *179-185.*

Zeithaml, V. A. (1988). Consumer perceptions of price, quality, and value: a means-end model and synthesis of evidence. *Journal of Marketing*, *52*(3), 2-22.