

# IMPACT OF ONLINE PROMOTIONAL TECHNIQUES ON ONLINE IMPULSE BUYING BEHAVIOR: STRATEGIES AND INNOVATIONS FOR CONSUMER PRODUCTS THROUGH OCEAN MODEL

#### ABSTRACT

## ORANGZAB<sup>1</sup>, IMTIAZ HUSSAIN<sup>2</sup>, MUHAMMAD SAJJAD<sup>3</sup>

In current era trends of shopping are being changed towards online modes of shopping instead of the conventional ways of shopping. Conventional methods of measuring customers satisfaction for consumer products lags due to conformist techniques adapted by the marketing organizations. The underlying study rejects the orthodox techniques and focusses on online promotional trends in a strategic way by introducing innovations for consumer products by utilizing OCEAN model. In routine, the organizations introduce the innovations by focusing on the products and in its design. This study uniquely engrossed on online promotional techniques which can be utilized a strategic as well as innovative weapon to persuade the impulse buying behavior. Three school of thoughts exist about factors stimulate impulse buying (Traits school of thought, motives school of thought and marketing stimuli school of thought). Companies use different ways to attract consumers towards online impulsive shopping. Companies use discounted price, limited quantity, and limited time to attract customer for impulse buying. The purpose of this study is to find out the moderation effect of personality traits within the connection of the effect of scarcity message and discounted price on impulse buying behavior separately. The present research is contained on survey-based data collection technique. Targeted population is university staff of all universities working in territory of district Vehari and data is collected form 300 respondents through stratified random sampling technique. PLS-SEM in smart PLS 3.3 used for data analysis. The results suggest that independent variables scarcity message and discounted price have positive effect on online impulse buying behavior and found to be effective as strategic and innovative tools. Moderation effect of five personality traits was also found significant through OCEAN model. In a nutshell, the online promotional techniques for impulse buying behavior proved to be operative and can be exploited as an innovation instrument for upcoming era of consumer realm.

**Keywords:** Big five personality traits, Innovations, Impulse buying behavior, Online commerce, Limited time Scarcity, Limited quantity scarcity, Discounted price **JEL Codes:** D1, H4

## I. INTRODUCTION

In ancient times people use to visit many stores physically and purchase products after a hectic visit of the market but now a days people prefer to purchase products online by staying at home. In this era of technology and advancement the scholars had shifted their focus of study towards impulse buying behavior from of compulsive buying behavior because internet has reduced the distance between consumers and the companies (Muruganantham & Bhakat, 2013), and with the advancement in technology, many modernizations on the internet and onlinepurchasing take place, that make goods and services widely and easily available for consumers (Kacen & Lee, 2002; Yildirim et al., 2021). Mode of buying is changed from conventional buying in shops towards electronic purchasing and current era of advanced technology has changed many areas of routine life of human beings as well as the ways of shopping (Childers et al.,2001). Now online shopping is perceived as one of the key actions in routine life (Rahmanov et al., 2021). By noticing the intense growth in perspective of online purchasing that how customers purchase impulsively researchers and retailing companies initiated to determine online impulse purchasing as a vital area of research (Park et al., 2012).

<sup>&</sup>lt;sup>1</sup> COMSATS University Islamabad, Vehari Campus, Pakistan.

<sup>&</sup>lt;sup>2</sup> COMSATS University Islamabad, Vehari Campus, Pakistan.

<sup>&</sup>lt;sup>3</sup> COMSATS University Islamabad, Vehari Campus, Pakistan.

According to Addo et al., (2020) external stimuli or external factors and internal stimuli or internal factors related to human, both are responsible for impulse buying. Furthermore, limited research is available in the context on online impulse buying in Pakistan these are the reason behind the selection of this research topic. External factors (Scarcity message and discounted price) are used as independent variable in this study. While impulse buying behavior is taken as dependent variable and that variable will depend upon independent variables (Scarcity message and discounted price). Internal factors (Five personality traits also known as BFM (Big Five Model), FFM (Five Factor Model) and OCEAN model) are used as moderator variable which will moderate the relationship of independent variables with dependent variable. Previous studies were conducted in developed countries and very limited research is available in context of eastern culture, especially in Pakistan. In the beginning of 2020 COVID-19 influence the human being and due to lockdown and isolation imposes by the Government all over the world the online shopping faces a boost, and it also improves the online business of the companies. Very recent studies stated that online impulse buying is significantly amplified during COVID-19 pandemic. People purchase products which are essential or not essential through online and offline stores during this tenure. People also faces scarcity of products and that boost the impulse buying. With the passage of time usage of internet is enhancing and people are using the social media platform and other online apps and website for purchasing the goods, that also enhance the intensity of impulse buying because online buying provide ease of purchase without any time constraint and payment facility and product choice by staying at the home (Chen et al., 2016). A purchase can be categorized as impulse purchase if that purchase decision is unplanned, unconscious, and made just before buying that product and the person who done this purchase or transaction is known as impulse buyer. Human being has different thinking styles that's why consumer behavior is not an easy phenomenon in-fact it is very complex phenomena. There are many intrinsic and extrinsic factors which impact the impulse buying behavior of the buyers. Many scholars and practitioners pointed that impulse buying is not a rational and normal approach of purchasing. As the impulse purchase is a diversion from the normal pattern of the buying process that's why it is an interesting phenomenon and finding the factors behind the impulse buying is very challenging. Companies can use this type of purchasing behavior to boost their sales and they can use this to grab more customers by knowing the intrinsic and extrinsic factors which influence the impulse buying behavior. The definition of impulse buying is "the consumer behavior or tendency to buy certain products without a prior plan" (Srivastava & Rai, 2018). Emotional and individual characteristics such as personality characteristics, sex or gender, income level, mood and motives fall in Internal factors or Intrinsic factors while External factors or Extrinsic factors include environmental, marketing and promotional stimuli such as discounted price, scarcity message, coupons, advertising, website quality, ease of use, branding, packing and labelling etc. (ARORA, 2018; Iyer, 1989).

A previous research conducted by Zaltman (2003) concluded that the 95 presents of total purchases of a product are based on feelings and emotions instead of rationality and facts & figures. New areas of social media (Lukowicz & Strzelecki, 2020) had been explored in consumer behavior with the advancement of technology and shift towards internet purchasing due to the availability of stores 24 hours, it also enhances the impulse buying behavior of the consumers. Much research is being conducted on impulse buying and personality traits may have significant effect both as independent and moderator variable. This research is designed to find out the effect of scarcity message and discounted price on online impulse buying behavior while big five personality traits (Openness of experience, Conscientiousness, Extraversion, Agreeableness and Neuroticism) have taken as moderating variable. Personality traits are used as moderating variable to provide the more insight review of the relationship of dependent and independent variable. From these five personality traits impulsive personality traits will strengthen the relationship while others will weaken the relationship of dependent and independent variables. Because Leong et al., (2017) described that these personality traits considerably effect the impulse buying behavior of the consumers. Research conducted by Kacen et al., (2012) concluded that half of the total purchases made by the consumers are impulse purchases and made without any preplan. There is limited research with the role of big five personality traits and have vast area yet to be discovered. Previous research on impulse buying behavior were conducted in developed countries but this study is focused to investigate the effect of scarcity message and discounted price with online impulse buying behavior in university staff of all universities in district Vehari of southern Punjab, Pakistan.

## **II. LITERATURE REVIEW & HYPOTHESES DEVELOPMENT**

Impulse buying behavior is defined by (Rook, 1987) as "a buying behavior in which a customer feels an unexpected, generally very influential and persistent desire to purchase something on the spot". According to Chen et al. (2016) Impulse buying is a state in which the customer feels a sudden stimuli or desire to buy any product on the spot and mostly there is a specific stimulus behind that activity of purchasing. Impulse buying is examined by different

researchers in the view of marketing and consumer behavior because this phenomenon is very complex as well as challenging Silvera et al., (2008). Research and studies carried out in the past to find out different factor which cause impulse buying behavior are mainly categorized into three school of thoughts. First school of thought argued that the connection in showing impulse buying behavior by individuals is traits of the individuals (Verplanken & Herabadi, 2001). Researchers who support second school of thought argue that available resources and motives behind purchasing behavior may impact impulse buying behavior and they also defined motives in two types i.e hedonic motives and utilitarian motives. Along with the motives, availability of resources (i.e availability of time, money and psychological) and lose of self-control by consumer could also affect the impulse buying behavior (Baumeister, 2002; Hoch & Loewenstein, 1991; Vohs & Faber, 2007; Haider and Ali, 2015; Arshad and Ali, 2016; Ashraf and Ali, 2017; Audi and Ali, 2017; Audi et al., 2021; Audi and Ali, 2016). Third school of thought considers the marketing and promotional factors and drivers could influence impulse buying behavior. Keeping that in mind owners and marketers spend money on marketing and promotional activities to stimuli consumers for impulse purchasing (Mattila & Wirtz, 2001). In current study extrinsic factors or marketing drivers (i.e Scarcity message and discounted price) are taken as independent variables and intrinsic factors or individual traits (personality traits) are taken as moderator variable to check relationship with dependent variable impulse buying behavior.

While purchasing online customer can access the products very easily and relevant information about the product is easily available in no time. Due to this ease of abundant information availability and low cost of alternative searching a customer can switch between promotional offers very easily. That is why scarcity message can be very effective for attracting the customer. Ku et al., (2005) describes the competitive arousal model which represents that how different variables and factors i.e., pressure of time and perceived rivalry enhance the arousal of the consumer and that arousal effect the decision making of the individual. Wu et al., (2021) stated that limited time scarcity and limited quantity scarcity enhance perceived arousal of the customer and then led towards impulse purchase by the customer. Furthermore, they also described that the impact of limited quantity and limited time jointly is still need research in the context of online purchasing. It denotes that the research with this variable having gap. According to Wu et al. (2021) the effects of limited time scarcity and limited quantity scarcity as well as advantages of limited time scarcity and limited time scarcity message (limited time scarcity message (limited time scarcity message (limited time) and customer's impulse buying behavior.

H1: Scarcity message has a positive influence on impulse buying behavior.

Fitri (2018) checked the effect of sales promotion (Discount, Free shipping, Contests, Coupons and Refunds and Rebates) and concluded that sales promotion effects impulse buying behavior in positive way. According to Kim and Johnson (2016); Park and Noh (2012) the inducements of marketing such as advertisement, discounts, incentives, coupons etc., enhances the possibility that the individuals will show more impulse buying behavior. This phenomenon is also described by the (CIFE model) consumption impulse formation and enhancement model which was offered by Dholakia (2000). The impulse buying tendency will increase when the discount offered is also greater. It is described by Park et al., (2006) impulse buying is an unexpected, sudden, fast, very emotional, spontaneous and unplanned phenomena. And when consumers are buying products impulsively they fell themselves as out of control, while this out of control and emotional phenomena of consumers purchasing comes from stimuli like sales promotion (Wahyudi, 2017), and discounted price is one of the promotional techniques used as marketing stimuli and if price discount is offered by the marketers, therefore it is expected that it encourage the impulsive buying behavior of the consumers.

H2: Discounted price positively affect the online impulse buying behavior.

In this research BFM or Big Five Model is adopted which is used to assess the human personality traits i.e., openness, conscientiousness, extraversion, agreeableness, and neuroticism. Fiske gave the BFM (Big Five Model) or FFM (Five Factor Model) theory in 1949 and after that the theory was advanced by different scholars and researchers. By using this theory many different scholars provided different personality theories i.e., Guilford's System, Interpersonal Cycle, Eysenck's System, Murray's Need System, Cattell's System, and Five Factor Model by (Digman, 1990). Costa and McCrea worked on OCEAN model theory which is also known as FFM theory or BFM theory and they proposed this theory into big five necessary traits in personality of an individual.

Research proves that choices of the product and preferences of consumers for brand choice can be anticipated by the individual's personality traits. Kollat and Willett (1967) were the pioneer researchers to find the influence of

personality traits on impulse buying behavior as the literature indicates. To find out the effect of personality traits in buying behavior of the shoppers were started fifty years ago but initial results were not satisfactory and go in disappointments (Kassarjian, 1971). Cobb and Hoyer (1986) conducted a study to find out the same effect of personality traits on impulse buying behavior but noting substantial was found. First time Youn and Faber (2000) stated the positive relationship between impulsive buying behavior and "lake of control" which is a concept of personality. Verplanken and Herabadi (2001) contributed to this phenomenon by their study. They concluded that the personality traits have significant impact on impulse buying behavior and there is scope to further explore this relationship.

Sofi and Najar (2018) stated that the way of measuring the personality of individuals by traits point of view and quantitative measurement of personality has got more attraction. Many researchers of past and present stated Bid Five Personality trait theory as the most significant and dominant theory while many researchers tried to come across the Big five personality trait model or five factor models but still they are agreed the most influential, significant and valid model from the personality trait classifications is Big five model of personality traits (Ellison et al., 2016; Judge et al., 1999; Liao & Chuang, 2004; Myszkowski et al., 2019; Soldz & Vaillant, 1999). According to Doost et al., (2013) five personality traits model has the capability to categorized all types of the personality dimensions.

From previous studies it is found that the personality trait moderates the relationship of dependent variables with impulse buying behavior. Some personality traits positively moderate the relationship and make the relation strong while the other personality traits negatively moderate the relationship and make the relationship week. Mowen and Spears (1999); Vohs and Faber (2007); Silvera et al. (2008) claims that openness personality trait, extraversion personality trait and agreeableness personality trait are heavy and extensive user of internet and social media because they tend to express the personality traits like talkativeness, insight, open mindedness, imagination, appreciation, kindness and friendliness that's why these three personality traits are positively associated with impulse buying behavior and make its relationship stronger and if they show low tendency towards these personality traits then this relationship will make weak. It is also defined that the other two personality traits which are conscientiousness and neuroticism show low tendency towards impulse buying behavior because they are compulsive buyers in nature due to having traits and features like depression, telling the truth, organized, task oriented, greater self-control, grief, and unhappiness. From literature it is proved that personality traits have effect on impulse buying behavior and have studied in direct and moderating role as well that is why the following hypothesis have made for each personality trait with relevant support from existing literature. A personal having openness personality trait shows features like insight, flexible behavior, imagination, broad mindedness, creativity and not being rigid (Hogan et al., 2007; McCrae et al., 2008; Mondak, 2010). Fitri (2018) concluded in her research that the openness personality trait has positive influence on sales promotion and impulse buying behavior and moderates the relationship. Individuals having high openness personality trait are easily involve in new things and ideas because they are open-minded, they love to find new information and ideas from other people, they also seek feedback from other individuals and they adjust to new changes very quickly (Wanberg & Kammeyer-Mueller, 2000), whereas, Lakhal et al., (2012) find that the individual who has low openness personality trait will display less interest in new ideas and new things and these individuals are conventional buyers in nature. Hence, the following hypothesis is made:

H3 (a): If individual shows high score in openness, then openness personality trait will moderate the relationship of scarcity message and online impulsive buying behavior and make it strong.

**H4** (a): If individual shows high score in openness, then openness personality trait will moderate the relationship of discounted price and online impulsive buying behavior and make it strong.

A person having conscientiousness personality trait has common features like motivation, telling the truth, share real experience, go for details, goal, and task oriented and organized (Silvera et al., 2008). According to same author conscientiousness is negatively linked with impulse buying behavior. Verplanken and Herabadi (2001)also stated in their results that if the consumer has conscientiousness personality traits, then that individual will have lesser tendency towards impulse buying behavior. In the research conducted by Husnain et al., (2016) concluded that a person having high conscientiousness as personality traits will negatively associated with impulse buying behavior and make the relationship of the dependent and independent variable weak.

H3 (b): If individual shows high score in conscientiousness, then conscientiousness personality trait will moderate the relationship of scarcity message and online impulsive buying behavior and make it weak.

H4 (b): If individual shows high score in conscientiousness, then conscientiousness personality trait will moderate the relationship of scarcity message and online impulsive buying behavior and make it weak.

Mowen and Spears (1999) defines that a person having extraversion personality trait will highly friendly, talkative, assertive, and emotional further in the research he explained that extraversion personality trait is positively associated with impulse buying behavior because the individuals having extraversion personality trait uses internet extensively. Husnain et al. (2016) concluded that a person will show high impulsive buying behavior if he is extravert and moderates the relationship of dependent and independent variable and make it strong. So, following hypotheses can be developed:

H3 (c): If individual shows high score in extraversion, then extraversion personality trait will moderate the relationship of scarcity message and online impulsive buying behavior and make it strong.

**H4** (c): If individual shows high score in extraversion, then extraversion personality trait will moderate the relationship of discounted price and online impulsive buying behavior and make it strong.

According to Mowen and Spears (1999) agreeableness personality trait is associated with the traits, i.e., kind to others, show trust to others and they also show affection to others. In this research it is also described that this personality trait is positively associated with the impulse buying behavior of the individual and make the relationship strong. Furthermore, Verplanken and Herabadi (2001) argued that agreeableness generates a positive influence on impulsive buying behavior because individual having high score in that trait thinks before they act, and they are also very sensible in their dealings. A person will show high impulsive buying behavior if he is extravert and moderates the relationship of dependent and independent variable and make it strong (Husnain et al., 2016). Therefore, following hypotheses can be developed:

H3 (d): If individual shows high score in agreeableness, then agreeableness personality trait will moderate the relationship of scarcity message and online impulsive buying behavior and make it strong.

**H4** (d): If individual shows high score in agreeableness, then agreeableness personality trait will moderate the relationship of discounted price and online impulsive buying behavior and make it strong.

Results of Mowen and Spears (1999) and Vohs and Faber (2007) shows that a person having neuroticism personality will tend to show stress, depression, unhappiness, anxiety, grief and self-esteem. They concluded that a person having neuroticism personality trait will have low tendency for impulse buying behavior. There is a negative relationship between the neuroticism personality trait and impulse buying behavior. In the research conducted by Husnain et al. (2016) concluded that a person having high neuroticism as personality traits will negatively associated with impulse buying behavior and make the relationship of the dependent and independent variable weak. It was also revealed in that research that neuroticism moderates the relationship of dependent and independent variables and in such a way that the relationship will be positive and stronger if the individual is low in neuroticism.

H3 (e): If individual shows high score in neuroticism, then neuroticism personality trait will moderate the relationship of scarcity message and online impulsive buying behavior and make it weak.

**H4** (e): If individual shows high score in neuroticism, then neuroticism personality trait will moderate the relationship of discounted price and online impulsive buying behavior and make it weak.

## **III. RESEARCH METHODOLOGY**

The study employed the solicit participation of online consumers who have recently purchased a product from online store. A structured questionnaire was distributed in person to collect the data. Target population for this research study includes the university staff operating in the jurisdiction of district Vehari, Pakistan. Stratified probability sampling is used to take sample. 380 questionnaires were distributed where 300 questionnaires were returned and found completely filled for inclusion in the analysis. In this study there are 42 indicators in total and by following that ratio 5:1 (42\*5=210) and that's why there should be minimum 210 respondents for this study. But 300 respondents are chosen for that study which is sufficient for data analysis of that study. Participation in the survey was purely on voluntarily basis and participants were given free choice to left the survey without mentioning any reason. Before starting the survey, it was ensured through qualifying questions that the participant has recent online buying experience. Two independent variables are used in this study which are scarcity message and discounted price. Scarcity message is measured by five items adapted from Chang et al., (2014); Wu et al., (2012) while discounted price is measured by three items adapted from Shim and Altmann (2016); Tang et al., (2016). Dependent variable online impulse buying behavior is measured by seven items adapted from Rook and Fisher (1995). Items of big-five personality traits which are used as moderating variable were opted from John and Srivastava (1999). To analyze the data Smart PLS (3.0) software is used by using partial least squares structural equation modeling (PLS-SEM). The reliability of the construct is measured by through Cronbach's alpha. Average variance extracted (AVE) and square

root of AVE values are computed to measure the convergent validity. VIF and tolerance values are computed to identify the collinearity within the constructs of the study. Hypotheses are tested with the help of path coefficient and T statistics.

# IV. EMPIRICAL RESULTS AND DATA ANALYSIS

Table 1 provide the sample profile, which shows that total 300 respondents took part in the study, from those 300 respondents 211 respondents were male and remaining 89 respondents were female. Table 1 represent that majority of the respondents fall between 25-30 years of age. 118 respondents are married and that is 39.3 percent of the total sample while remaining 182 respondents are unmarried and that are 60.7 percent of the sample size. Table 1 shows that 63.6 percent of the respondents are postgraduates while 20.7 percent are undergraduate and 15.7 are graduates. Table 1: Profile of Sample

Factors	Valid No.	•	Percentage (%)
C l	Female	89	29.7
Gender	Male	211	70.3
	18-24	97	32.3
Age	25-30	104	34.7
	31-35	40	13.3
	36 and above	59	19.7
Marital Status	Married	118	39.3
	Unmarried	182	60.7
Qualification	Undergraduate	62	20.7
	Graduate	47	15.7
	Postgraduate	191	63.6

Cronbach's Alpha values are computed to check the internal consistency of each construct of the study. Threshold value for Cronbach's Alpha is 0.70, and Table 2 represent that all values are above the threshold value.

Constructs	Cronbach's Alpha	
Scarcity Message	.863	
Discounted Price	.760	
Openness	.796	
Conscientiously	.709	
Extraversion	.862	
Agreeableness	.863	
Neuroticism	.825	
Online Impulse Buying	.787	

Table 3 Fornell-Larcker Criteria								
	AG	СО	DP	EX	NE	OIBB	ОР	SM
AG	0.802							
CO	0.665	0.789						
DP	0.578	0.714	0.822					
EX	0.789	0.783	0.767	0.790				
NE	0.673	0.744	0.702	0.793	0.795			
OIBB	0.535	0.710	0.755	0.705	0.732	0.734		

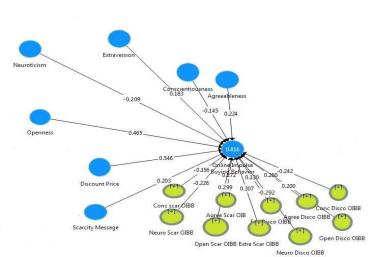
OP	0.701	0.759	0.767	0.774	0.720	0.677	0.741	
SM	0.649	0.763	0.778	0.733	0.704	0.646	0.697	0.785

Fornell and Larcker (1981) provided a criterion which is used to find out discriminant validity by comparing square root of AVE with correlation of constructs. Fornell & Larcker, (1981) argued that AVE square root of each construct must be greater in construct correlation. Square root values of each construct and correlation are given in table 3 (Latent Variable Correlations Fornell and Larcker Criteria), indicates all the values are significant and meet the required threshold.

Results of the regression model effected by the presence of multicollinearity. Multicollinearity effects the results by tumbling the ability to forecast the dependent variable and determine the diverse effect of explanatory variables (Hair et al., 2010). According to Hair et al. (2010) multicollinearity is identified by testing the "Variance of Inflation Factor (VIF)" and "Tolerance". To find out collinearity value of VIF and value of Tolerant are required. Hair et al., (2011) stated that threshold value for tolerance is more than 0.2 and the standard value for VIF should be below than 5.0. Results can be seen in table 4.

Table 4 Collinearity Assessment				
Independent Variable	Collinearity Tolera	nce Statistics VIF		
Agreeableness	0.209	3.202		
Conscientiousness	0.205	2.546		
Discount Price	0.217	2.486		
Extraversion	0.294	2.346		
Neuroticism	0.234	3.115		
Openness	0.229	2.199		
Scarcity Message	0.281	3.071		

# Figure 1: Final Research Model



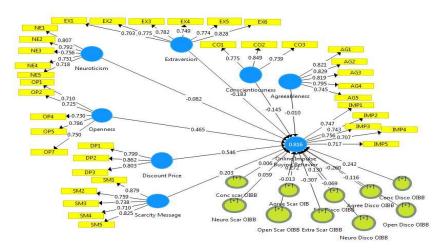
After examination of all tests a final research model is given in figure 5. Values of Path coefficients have been tested by using Algorithm function of PLS and t-values for path coefficients have been tested by using bootstrapping function of PLS. Table 5 indicates the results that was assessed from PLS software. Path coefficients have standard value

between +1 and -1. Value near to +1 intimates a strong positive relationship while value near to -1 indicates strong negative relationship. Value close to 0 represent weaker relationship. T statistics is used to check the significance level. When T values is high then it can be assumed that path coefficient is significantly different. Table 5 indicates that path coefficients are significant.

Hypotheses	Path Coefficient	T Statistics	<b>P-Values</b>
H1: Scarcity Message -> OIBB	0.203	2.165	0.031
H2: Discount Price -> OIBB	0.546	6.120	0.000
H3 (a) OP SM -> OIBB	0.299	2.994	0.017
H4 (a) OP DP -> OIBB	0.200	2.799	0.005
H3 (b) CO SM -> OIBB	-0.156	-2.427	0.016
H4 (b) CO DP -> OIBB	-0.242	-2.743	0.019
H3 (c) EX SM -> OIBB	0.307	2.257	0.000
H4 (c) EX DP -> OIBB	0.130	2.246	0.006
H3 (d) AG SM -> OIBB	0.272	2.471	0.014
H4 (d) AG DP -> OIBB	0.260	2.255	0.025
H3 (e) NE SM -> OIBB	-0.226	-2.432	0.000
H4 (e) NE DP -> OIBB	-0.292	-2.946	0.007

Next step is measurement of coefficient of determination in the structural model assessment. Coefficient of determination ( $R^2$ ) in the endogenous construct represents the amount of variance explained by all the exogenous constructs. Range of the value of  $R^2$  lies between 0 and 1. Higher value of  $R^2$  forecast higher level of accuracy in endogenous construct. According to J. F. Hair et al. (2011) common threshold values for  $R^2$  are 0.75, 0.50 and 0.20 and considered as significant, moderate, and weak respectively. As figure 2 shown that almost 81.6% variance in online impulse buying is explained.

## **Figure 2: Coefficient of Determination** (**R**<sup>2</sup>)



HI is supported because a positive relation is found between scarcity message and online impulse buying and that is similar to the findings of Chung et al., (2017) and Akram et al., (2018). H2 is also supported because researcher found a positive relationship between discounted price and online impulse buying which is similar to the findings of Hultén and Vanyushyn (2014); Badgaiyan and Verma (2014); and Hasim et al., (2020). Results show that H3 (a, b, c, d and e) supported because these five personality traits moderate the relationship of scarcity message and online impulse buying. H4 (a, b, c, d and e) are also supported because these five personality traits moderate the relationship of discounted price and online impulse buying behavior.

## Table 6: Significant testing results of path coefficients

Hypotheses	Path Coefficient	<b>T</b> Statistics	Results
H1: Scarcity Message -> OIBB	0.203	2.165	Supported
H2: Discount Price -> OIBB	0.546	6.120	Supported
H3 (a) OP SM -> OIBB	0.299	2.994	Supported
H4 (a) OP DP -> OIBB	0.200	2.799	Supported
H3 (b) CO SM -> OIBB	-0.156	-2.427	Supported
H4 (b) CO DP -> OIBB	-0.242	-2.743	Supported
H3 (c) EX SM -> OIBB	0.307	2.257	Supported
H4 (c) EX DP -> OIBB	0.130	2.246	Supported
H3 (d) AG SM -> OIBB	0.272	2.471	Supported
H4 (d) AG DP -> OIBB	0.260	2.255	Supported
H3 (e) NE SM -> OIBB	-0.226	-2.432	Supported
H4 (e) NE DP -> OIBB	-0.292	-2.946	Supported

#### V. CONCLUSION

Results of this study indicate that scarcity message shows an important influence on online impulse buying behavior. When customers feel that there is limited quantity of product is available then it will influence the customer to give response quickly. This research is consistent with the previous study conducted by Weerathunga and Pathmini (2015) who proposed that sales promotion has a positive impact on impulse buying behavior of consumer particularly in discounted price, buy get one free and free sample as most common promotional tools to attract consumers for buying on impulse. Additionally, findings of this study are similar to Nagadeepa et al., (2015), they proposed sales promotion effects customer's purchasing decisions and have a straight effect on consumer buying behavior. Moderating role of five personality traits has been examined individually on both independent variables with dependent variables. Results indicate that all moderating variables are showing a significant moderating effect as hypothesized earlier. Neuroticism and conscientiousness show negative relationship with both scarcity message and discounted price on online impulse buying behavior. Neurotic individual is emotionally instable, feel anxiety & grief and depression that is why they are less likely to display impulse buying behavior and individual having high conscientiousness level are task oriented, deal with specific goal, more careful and organized due to these characteristics they act as compulsive buyers instead of impulsive. Openness, extraversion, and agreeableness show positive relationship with scarcity message and discounted price on online impulse buying behavior. This study examines the moderating role of five personality traits on the relationship of promotional techniques, such as scarcity message and discounted price with online impulse buying behavior. The Present study findings demonstrated that scarcity message and discounted price are important factors which have significant impact on online impulse buying behavior. Our results complement the accumulated knowledge in this area and shed light on the links between scarcity message and discounted price with online impulse buying, by showing that these links are primarily moderated by five personality traits. This study has several implications from practical perspective. Practical implications of this study are main interest of marketing and advertising managers, this study offers useful insights. Through a clear idea of how to use scarcity message and discounted price to get more impulse purchases marketing managers can develop strategies that can generate more sales. Managers and online retailers should use promotional techniques in online perspective very effectively and they should also keep personality traits of target customers to get maximum results. Segmentation and targeting strategies should be made by keeping personality traits in mind. The results suggested that scarcity message and discounted price have positive effect on online impulse buying behavior and can be used an effective strategic and innovative tool for impulse buying behavior. Moderation effect of five personality traits was also found significant through OCEAN model which proved that personality traits should be considered in conjunction with innovative activities to stimulate the buying process. In a nutshell, the online promotional techniques for impulse buying behavior proved to be operative and can be exploited as an innovation instrument for upcoming era of consumer realm. It has been further observed that, the intensity of the stimuli of consumer behavior for online shopping fluctuates with the big five personality traits of the consumers.

### **VI. LIMITATIONS**

Like other studies this study also has some limitations. Firstly, due to some situational constraints and time restrictions the respondents were only restricted to the university staff working in district Vehari. This study can have carried out on provincial level or on country level by checking the relationship of scarcity message and discounted price with online impulse buying behavior by keeping big five personality traits (Openness, Conscientiousness, Extraversion,

Agreeableness and Neuroticism) as moderating variables. Secondly, in this research both genders (male and female) were chosen as target respondents that's why future research can be carried out by only taking one gender (masculinity or femininity) and different research can be carried by taking male and female gender separately and then comparing the results between gender.

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