Title: **Investigating the Antecedents of Online Buying Behavior in the Digital Marketplace from the Perspective of Consumers**

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Abstract

The technological landscape has also entered in the contemporary society of Pakistan after 3G/4G inventions and become part of everyone's life which compelled advertisers to consume internet and social media platforms for achieving their marketing objectives. Therefore, the study was designed to evaluate determinants associated with online buying behaviors of consumers. The population of this study was comprised of students of BZU and USP Multan and a total of 104 respondents participated in the survey which were selected through purposive sampling technique. Questionnaire was used as instrument and data was collected online from the participants. The results divulged that consumers go for online buying, but they consider brand image to get reliable products. Although, phenomenon of online buying got popular with passing time, but respondents were concerned with the risk when buy something from online platforms. Furthermore, the study has predicted relationships of brand image, convenience, perceived usefulness, online reviews and perceived risk with online buying behavior of consumers which have been approved with application of Chi-square and bivariate correlations among antecedents.

Keywords: Online buying behavior, new media advertising, perceived risk, technology acceptance model, t-marketing

Introduction

Over the past few decades, digital revolution has grown internet-technology too rapidly which affected people' lives in multiple perspectives. The sudden development of information and communication technology (ICT) introduced new dynamics of commercialization and shifted into emergence of innovative ideas that enabled advertisers to consume online platforms i.e. websites and social media outlets, to achieve their objectives (El-Gohary, 2012). The prime objective of every advertising campaign comprises on maximizing profit ratios according to desire of advertiser that is why multiple marketing techniques are adopted which can grow sales of product exponentially. Many advertisers rely on traditional marketing tools by using print, electronic and outdoor media for presenting their products in versatile formats and placements (Fill, 2005).

Advertisers have now started utilizing online media advertising around the globe, so it has emerged as new marketing strategy in the paradigms of communication. This aim to target large number of consumers and motivate them for online buying of products. Present research has designed to investigate factors which affect online buying behavior consumers. Online media advertising in Pakistan has dramatically increased after the invention of 3G/4G technologies which moved people towards buying with online platforms (Nazeer, 2017). Although many academic studies have conducted in context of investigating consumers' behavior with online media advertising, but few aspects remain investigated. Social media advertising and buying behavior of consumers examined in detail by scholars (Duffett, 2015; Lee, Hosanagar & Nair, 2017; Zhang & Mao, 2016). But online advertising isn't limited to social media platforms therefore it needs investigation as a whole, which is done by scholars with multiple factors as Sarika, Preeti, Shilpy, and Sukanya (2016) investigated online buying behavior in realm of trust, satisfaction and existing attitudes whereas Bucko, Kakalejčík, and Ferencová (2018) focused on price, shipping discounts, special offers and delivery time factors for examining online buying behavior. Previous shopping experiences, trust and prices of products in online environment creates significant effect on buying behavior of consumers (Lim, Osman, Salahuddin, Romle & Abdullah, 2016; Victor, Joy-Thoppan, Jeyakumar-Nathan & Farkas-Maria, 2018) but demographics (family, income, level, social class) are equally important when investigating online buying behavior of consumers (Junaidi, & Mira-Iam, 2020). Khanh and Gim (2014) identified risk-oriented factors related with product and payment in shaping online buying attitude, trust and perceived benefits are also argued to be more important (Al-Debei, Akroush & Ashouri, 2015). These researches revolve around population of developed countries

(Wang, Liang, Zhong, Xue & Xiao, 2012), but underdeveloped countries also have sufficient adoption of technologies (smartphones, laptops etc.) so there is a need to unfold results of developing countries. Studies about online buying behavior in developed countries analyzed it by multiple factors of advertisements but still there are other factors involved which share blur concepts in the literature and need to be addressed in context of our society, because underdeveloped counties may have different factors for affecting online buying behavior (Ahmed, 2012).

Therefore, this research aims at analyzing influence of some factors including brand image, convenience, perceived usefulness, online reviews and perceived risk on online buying behavior of consumers. These factors could not gain attention of academic researchers, so the study will dig out how well known or recognized brands affect online buying of consumers and how online reviews are linked with moving individuals towards online buying of products. These reviews are presented by the former consumers about products on websites and social media platforms so it will be worthful to consider their effect on online buying behavior of consumers. Further, the study will investigate effect of perceived usefulness of online buying on buying behavior and lastly this research would evaluate effect of convenience factor on online buying behavior of consumers.

Literature Review

Online buying or e-shopping falls under the category of e-commerce through which individuals can get products or services from advertisers by means of internet and websites. Online buying got greater popularity among the internet users (Bourlakis, Papagiannidis & Fox, 2008). Today, products can be found easily on internet by using particular keyword and many efforts are being exerted by e-marketers so that shipping can be done across international borders. That Is why, worldwide trend of online buying drastically boosted in last few years (Faqih, 2013; Wann-Yih & Ching-Ching, 2015). Laroche, Habibi and Richard (2013) argued that brand communities or pages on social networking sites (SNS) positively affect product, brand and company relationships with customers that motivate them to remain loyal with particular products or services. Yang (2012) asserted that advertising messages received by friends on social media influence consumer's attitudes while messages given by official or commercial pages influence their behavior. Liu, Chou ad Liao (2015) investigated some factors that influence consumer's behavior towards advertised products and the results demonstrate that products which were presented with the videos were responded positively in both attitudinal and behavioral dimensions.

Brand image is considered as important factor that influence subjective perception of consumers and their subsequent behaviors, direct consumers towards decision making for buying of products from advertisers (Ryu, Han & Kim, 2008). They have become integral element of consumers' life and facilitate them for their regular choices (Grubor & Milovanov, 2017). Individuals get attracted towards brands according to their preferences and embedded ideas in brand' image help to evaluate their behavioral intention. Successful and reputed brands have loyal base of customers because of having a capability to shape attitudes and behaviors towards buying of products. To become a brand in marketing has become crucial for advertisers because it drives individuals' choices about the stores (Azad, Kasehchi, Asgari & Bagheri, 2014). Convenience is the significant element in shaping online buying behavior consumers because it particularly gains attention of people living in busy modern society (Morganosky & Cude, 2000). Many individuals want their products delivered on the doorstep which makes their behavioral intention positive towards buying from online platforms (Lin & Chuang, 2018). Online buying gets more attraction if users find website features easier and get necessary information accessible (Szymanski & Hise, 2000). Websites with such features make online shopping convenient for the consumers. Park and Kim (2003) asserted that online platforms which are easy to use, influence on users' experiences and instigate them towards buying of products. People move towards online buying if they find it useful which is described as the extent to which individuals feel that online advertising websites add value to them when they shop online (Lai & Wang, 2012). Perceived usefulness is described from the individual's point of view as "using particular system will increase task performance" which means that consumer's attention towards online buying depends upon usability and usefulness of technology (Davis, 1989).

Online reviews (OR) are known as e-word of mouth which describes other potential customers about information about product and recommendations regarding its buying (Lee, Park & Han, 2008). OR about products are equally important which shape users' attitude and behavior towards online buying (Lambert-Pandraud, Laurent, & Lapersonne, 2005; Carpenter & Yoon, 2011). Online reviews (OR) are presented about products in multiple formats. One of them is 'average rating' that presents insights about the quality of product and describe how it has been perceived, with some statistical information while 'single review' are based on individuals' personal opinions extracted by their experiences held with a product. It has argued that both narrative and statistical information in reviews are equally essential for convincing individuals towards online buying (Hong & Park, 2012), whereas the research of Ziegele and Weber (2014)

asserted that average rating are significant but single narrative from any consumer rejects it. Perceived risk has been referred as uncertainty which usually prevails among the mind of individuals about the about the occurrences of potential outcome (March, 1978; Vlek & Stallen, 1980). It produces negative effect on consumers' decision when they go for online buying (Fosthye & Shi, 2000). Before going towards actual purchase from online websites, consumers evaluate various risks which they can encounter such as credit or debit cart security may be comprised, or the product might be defective as online buying does not allow consumers to touch or feel the item (Mohd & Suki, 2006).

Research Framework

The study is supportive with technology acceptance model (TAM) which has used earlier in many researches to predict online buying behavior of consumers (Agrebi & Jallais, 2015; Hsieh & Liao, 2011; Kim & Jones, 2009; Ofori & Appiah-Nimo, 2019). TAM is given by Davis (1989) which is the extension of theory of reasoned action (TRA) that provide insights about how individuals accept and use a technology by identifying many antecedents to affect consumers' decisions and simultaneously it describes about how and when individuals will use it. This model aims at providing factors for behavioral intention towards using a technology which are 'perceived usefulness' and 'perceived ease of use' (Davis, Bagozzi & Warshaw, 1989). Four constructs have used in the TAM consistently which are perceived usefulness, perceived ease of use, behavioral intention and actual usage behavior. If user finds more 'ease of use', the intention will be more likely to use technology.

Based on the above framework following conceptual model has designed for this research. In the present study, there are five independent variables which are brand image, convenience, perceived usefulness, online reviews and perceived risk while dependent variable is online buying behavior. In the TAM, Davis (1989) claims that perceived usefulness is linked with the actual use of technology which means that individuals attract towards online buying if they find it useful and perceive that using particular website can add value to their online buying.

This study has aimed to investigate relationship of perceived usefulness with online buying behavior of consumers. Another related variable in our study is convenience and its one dimension reflect 'ease of use' of web features that consumers go through. Davis (1989) emphasized that if particular technology is free from effort and time, then people are likely to use this technology. Convenience of website features is associated with the online buying behavior of consumers. Thus, these associated features make TAM suitable for this research

that is why it has applied in the study. Furthermore, this research intends to investigate the relationships of brand image, online reviews and perceived risk with online buying behavior of consumers.

Hypothesis

1. There is a positive relationship between brand image and online buying behavior of consumers.
2. There is a significant association between convenience and online buying behavior of consumers.
3. There is a significant association between perceived usefulness and online buying behavior of consumers.
4. There is a positive relationship between online reviews and online buying behavior of consumers.
5. There is a significant relationship between perceived risk and online buying behavior of consumers.

Research method:

The survey research method was selected for conducting this study, through which participants were able to share their responses about online buying behavior conveniently.

Population:

In accordance with the research objectives, the population of this research was the urban areas of Bahauddin Zakariya University and the University of Southern Punjab, Multan, who buy from online platforms. The reason behind taking urban areas as the population was the nature of the study, which involved using the internet for online buying. The phenomenon was not observed in rural areas because of connectivity issues and several other associated factors (i.e., education, awareness) in the context of our rural society. Therefore, only BZU and USP students of urban areas were the population of this research, and their age group was from 18 years to 50 years. Urban area students of BZU and USP were also considered in this research because of having independence of decisions and the possibility of their buying from online media platforms.

Sample:

The study comprises a small-scale research or a pilot study because of certain limitations e.g., timeframe. A purposive sampling technique was applied to choose participants. A total of 104 students were the participants, including 57 males and 47 females.

Data Collection and Analysis

"Questionnaire" was used as an instrument to obtain responses from the participants. The questionnaire was developed by taking the items of each construct suggested in the literature. These items were adopted or adapted according to the objectives of this research. The first section of the questionnaire consisted of marker variable that represented the sample profile of participants, such as their gender and age. While subsequent sections were adapted from previous studies related to the items of brand image (Lien, Wen, Huang & Wu, 2015), convenience (Jiang, Yang & Jun, 2013), perceived usefulness (Cao, Xu & Douma, 2011), online reviews (Liu & Park, 2015), perceived risk (Doi et al., 2014), and online buying behavior (Wang, 2007). A 5-point Likert scale was used (ranging from 'strongly agree to strongly disagree) to give the flexibility of responses to the participants. The data was collected through an online questionnaire and presented to students through online communication means (i.e., WhatsApp, Facebook groups).

After obtaining data from the participants, it was entered into SPSS, which generated descriptive statistics of responses. Furthermore, scientific tests (Pearson chi-square, Pearson correlation) were applied to analyze data through systematic procedures according to the objectives of the study, and findings have been observed in detail to reach concrete results.

Results

Table 1: Demographic characteristics

Demographic characteristics	Count	Percent
Gender		
Male	57	54.8
Female	47	45.2
Total	104	100.0
Age group		
18-30	64	61.5
31-40	40	38.5
More than 40	0	0.0

Total		104		100.0		

Online buying

Very often		32		30.8		
Often		50		48.1		
Sometimes		2		1.9		
Rarely		18		17.3		
Very rarely		2		1.9		
Total		104		100.0		

The above table reflects sample profile of respondents along with their extent of buying through online media. The results divulged that 54.8% males and 45.2% females have participated in the study. There were 64 (61.5%) respondents who belong to the age group of 18-30 years whereas more than one-third majority of total sample (38.5%) were between 3i-40 years. It is pertinent to mention that no respondents were found in the age group of more than 40 which reflects that most of the youngsters have participated in the survey. In the third section, frequency of online buying of respondents reflects significant results as 32 (30.8%) participants answered that they buy through online media very often and 50 (48.1%) answered 'often' in this area. Only 2 (1.9%) participants answered that sometimes they go for online buying and the same ratio was found of individuals who buy online very rarely. 18 (17.3%) respondents of total sample answered that they rarely go for online buying. Overall, it can be seen that majority of the respondents buy products and service from online media platforms more frequently.

Table 2: Descriptive statistics about brand image along with gender of participants.

Brand image	Gender	SA	A	N	D	SD	Total	Mean	Std.
I always consider brand name when I buy products from online store	Male	2̶0̶	24	3	7	3	57		
		1̶9̶.̶2̶	23.1	2.9	6.7	2.9	54.8		
	Female	1̶8̶	12	3	6	8	4̶7̶	2.25	1.35
		17.3	11.5	2.9	5.8	7.7	45.2		
Total		3̶8̶	36	6	13	11	104		
		36.5	34.6	5.8	12.5	10.6	100.0		
	Male	5̶	38	0	7	3	57		
Branded products are reliable in online buying		8.7	36.5	0.0	6.7	2.9	54.8		
	Female	8	23	2	6	8	4̶7̶	2.42	1.21
		7.7	22.1	1.9	5.8	7.7	45.2		
Total		1̶7̶	61	2	13	11	104		
		16.3	58.7	1.9	12.5	10.6	100.0		
Brand is a symbol of social status for me	Male	5	30	1	14	7	5̶7̶	2.58	1.20
		4.8	28.8	1.0	13.5	6.7	54.8		

		SA	A	N	D	SD	Total	Mean	Std.
	Female	9	25	2	10	1	47		
		8.7	24.0	1.9	9.6	1.0	45.2		
Total		14	55	3	24	8	104		
		13.5	52.9	2.9	23.1	7.7	100.0		
Usually, brands have good reputation in a society	Male	11	34	1	11	0	57		
		10.6	32.7	1.0	10.6	0.0	54.8	2.21	0.99
	Female	8	31	0	6	2	47		
		7.7	29.8	0.0	5.8	1.9	45.2		
Total		19	65	1	17	2	104		
		18.3	62.5	1.0	16.3	1.9	100.0		
Brand helps me to find higher quality products	Male	22	24	1	9	1	57		
		21.2	23.1	1.0	8.7	1.0	54.8	1.98	1.09
	Female	19	20	0	7	1	47		
		18.3	19.2	0.0	6.7	1.0	45.2		
Total		41	44	1	16	2	104		
		39.4	42.3	1.0	15.4	1.9	100.0		
I feel self-satisfaction using branded products	Male	17	34	1	5	0	57		
		16.3	32.7	1.0	4.8	0.0	54.8	1.83	0.82
	Female	18	26	0	2	1	47		
		17.3	25.0	0.0	1.9	1.0	45.2		
Total		35	60	1	7	1	104		
		33.7	57.7	1.0	6.7	1.0	100.0		

(Note: SA= Strongly agree, A= Agree, N= Neutral, D= Disagree, SD= Strongly disagree, Std.= Standard deviation)

Table.2 describe the responses of participants regarding brand image and online buying along with their gender. Multiple items were used to evaluate this construct which is evident in the above table. The findings revealed that people always consider brand name when they buy something from online platforms. Respondents irrespective of their gender answered in the same domain of agreement with a statement. Mean score and SD for this statement were found 2.25 and 1.35 respectively. On the second item, it has been found that more than one-third majority of males agreed that branded products are more reliable in online buying whereas females also responded the same. Branded products answered as symbol of social status by the participants and two-third majority of total sample agreed with this aspect. It is surprising that male respondents disagreed more in comparison of female to consider brand as symbol of social status in society. On the fourth item in above table, it can be seen that 19 (18.3%) people strongly agreed with a statement that brands have good reputation in a society in which 11 (10.6%) were males and 8 (7.7%) were females, almost two-third majority of total sample agreed with this aspect including one-third majority of males 31 (29.8%) females. Only, one male respondent was found undecided here while no female was found in this category. Overall, mean score for this statement was 2.21, and SD was calculated 0.99.

Table 3: Descriptive statistics about convenience along with gender of participants.

Convenience	Gender	SA	A	N	D	SD	Total	Mean	Std.
I find online buying easier as I can buy anything, anytime and anywhere	Male	13	29	0	12	3	57		
		12.5	27.9	0.0	11.5	2.9	54.8		
	Female	19	22	1	4	1	47	2.12	1.12
		18.3	21.2	1.0	3.8	1.0	45.2		
	Total	32	51	1	16	4	104		
		30.8	49.0	1.0	15.4	3.8	100.0		
I get better options to search various products	Male	17	34	0	3	3	57		
		16.3	32.7	0.0	2.9	2.9	54.8		
	Female	15	26	2	3	1	47	1.94	0.95
		14.4	25.0	1.9	2.9	1.0	45.2		
	Total	32	60	2	6	4	104		
		30.8	57.7	1.9	5.8	3.8	100.0		
I can classify products available on online store	Male	22	27	1	4	3	57		
		21.2	26.0	1.0	3.8	2.9	54.8		
	Female	21	23	0	3	0	47	1.81	0.96
		20.2	22.1	0.0	2.9	0.0	45.2		
	Total	43	50	1	7	3	104		
		41.3	48.1	1.0	6.7	2.9	100.0		
I find all information related with product	Male	18	9	11	13	6	57		
		17.3	8.7	10.6	12.5	5.8	54.8		
	Female	17	13	11	4	2	47	2.53	1.31
		16.3	12.5	10.6	3.8	1.9	45.2		
	Total	35	22	22	17	8	104		
		33.7	21.2	21.2	16.3	7.7	100.0		
I get easier payment process on online websites	Male	29	12	6	9	1	57		
		27.9	11.5	5.8	8.7	1.0	54.8		
	Female	24	8	6	9	0	47	1.98	1.19
		23.1	7.7	5.8	8.7	0.0	45.2		
	Total	53	20	12	18	1	104		
		51.0	19.2	11.5	17.3	1.0	100.0		
I get confirmation replies on checking out payment process	Male	23	11	11	8	4	57		
		22.1	10.6	10.6	7.7	3.8	54.8		
	Female	33	7	3	3	1	47	1.95	1.24
		31.7	6.7	2.9	2.9	1.0	45.2		
	Total	56	18	14	11	5	104		
		53.8	17.3	13.5	10.6	4.8	100.0		
I get delivery of product at my doorstep	Male	7	7	32	4	7	57		
		6.7	6.7	30.8	3.8	6.7	54.8		
	Female	4	7	23	8	5	47	3.0	1.07
		3.8	6.7	22.1	7.7	4.8	45.2		
	Total	11	14	55	12	12	104		
		10.6	13.5	52.9	11.5	11.5	100.0		

(Note: SA= Strongly agree, A= Agree, N= Neutral, D= Disagree, SD= Strongly disagree, Std.= Standard deviation)

Table.3 depicts answers of participants regarding the variable of convenience and online buying behavior. Multiple items were used to evaluate the construct of convenience. Out of total sample 32 (30.8%) respondents (12.5% males, 18.3% females) strongly agreed that they find

online buying more convenient because of its feature to buy anything, anywhere and at any time while 51 (49.0%) participants agreed with this statement in which 29 (27.9%) were males and 22 (21.2%) were females. Only 1 (1.0%) female respondent was found undecided whereas total 19.2% participants denied with this statement. On the second item, individuals responded that they get better option to search various products in online buying among which 32 (30.8%) strongly agreed and 60 (57.7%) just agreed with this statement. No female respondent answered on the options of neutral and disagree on this item. Third statement to measure the construct of convenience was related with classification of products which individuals can do in the online stores. The results revealed that 43 (41.3%) participants strongly agreed including 22 (21.2%) males and 21 (20.2%) females while 50 (48.1%) people just agreed with the ratio of 27 (26.0%) males and 23 (22.1%) females and only 1 (1.0%0 male participant was found undecided on this statement. The results of other statements can be observed in the table.

Table 4: Descriptive statistics about perceived usefulness along with gender of participants.

Perceived usefulness	Gender	SA	A	N	D	SD	Total	Mean	Std.
Online shopping websites provide special offers/discounts for purchasing of products	Male	17	18	10	10	2	57		
		16.3	17.3	9.6	9.6	1.9	54.8	2.39	1.18
	Female	9	21	7	6	4	47		
		8.7	20.2	6.7	5.8	3.8	45.2		
	Total	26	39	17	16	6	104		
		25.0	37.5	16.3	15.4	5.8	100.0		
Online shopping websites make it easy to find the required product	Male	1	26	8	20	2	57		
		1.0	25.0	7.7	19.2	1.9	54.8	3.07	1.08
	Female	5	18	7	14	3	47		
		4.8	17.3	6.7	13.5	2.9	45.2		
	Total	6	44	15	34	5	104		
		5.8	42.3	14.4	32.7	4.8	100.0		
Online shopping websites provide huge selection of products	Male	7	20	12	14	4	57		
		6.7	19.2	11.5	13.5	3.8	54.8	2.90	1.11
	Female	2	17	7	19	2	47		
		1.9	16.3	6.7	18.3	1.9	45.2		
	Total	9	37	19	33	6	104		
		8.7	35.6	18.3	31.7	5.8	100.0		
Online shopping websites provide tracking information of purchased products	Male	24	7	20	3	3	57		
		23.1	6.7	19.2	2.9	2.9	54.8	2.18	1.05
	Female	14	11	22	0	0	47		
		13.5	10.6	21.2	0.0	0.0	45.2		
	Total	38	18	42	3	3	104		
		36.5	17.3	40.4	2.9	2.9	100.0		

(Note: SA= Strongly agree, A= Agree, N= Neutral, D= Disagree, SD= Strongly disagree, Std.= Standard deviation)

Table.4 reflects the answers of individuals on the items which aimed to evaluate the construct of perceived usefulness. The results found that 26 (25.0%) strongly agreed and more than one

third majority of total sample just agreed with a statement that they perceive online shopping more useful because it provides them special offers and discounts for purchasing the products. Second item was related with the usage in which 49% respondents of total sample accepted that online shopping websites makes it easier to find the product that they desire. Along with it also facilitate them for getting huge selection of products in which people can choose according to their choices and 9 (8.7%) respondents strongly agreed and 37 (35.6%) just agreed with this statement. Last item in the above table was related with the tracking of purchased product from online stores and more than one-third majority of total sample strongly agreed including 24 (23.1%) males and 14 (13.5%) females. Similarly, 18 (17.3%) individuals (6.7% males, 10.6% females) just agreed with this statement that provided overall results in favor of the statement.

Table 5: Descriptive statistics about online reviews along with gender of participants.

Online reviews	Gender	SA	A	N	D	SD	Total	Mean	Std.
Online reviews facilitate in finding information about unexperienced products	Male	29	15	0	5	8	57		
		27.9	14.4	0.0	4.8	7.7	54.8		
	Female	25	4	0	12	6	47	2.24	1.57
		24.0	3.8	0.0	11.5	5.8	45.2		
	Total	54	19	0	17	14	104		
		51.9	18.3	0.0	16.3	13.5	100.0		
Online reviews about advertiser help in making my decision for buying of products	Male	18	9	22	6	2	57		
		17.3	8.7	21.2	5.8	1.9	54.8		
	Female	13	6	17	8	3	47	3.49	1.19
		12.5	5.8	16.3	7.7	2.9	45.2		
	Total	31	15	39	14	5	104		
		29.8	14.4	37.5	13.5	4.8	100.0		
Positive reviews make me confident for buying of products	Male	15	11	22	7	2	57		
		14.4	10.6	21.2	6.7	1.9	54.8		
	Female	12	11	11	12	1	47	3.43	1.17
		11.5	10.6	10.6	11.5	1.0	45.2		
	Total	27	22	33	19	3	104		
		26.0	21.2	31.7	18.3	2.9	100.0		
I rely on most recent reviews for online buying of products	Male	9	19	10	17	2	57		
		8.7	18.3	9.6	16.3	1.9	54.8		
	Female	7	14	9	12	5	47	2.78	1.20
		6.7	13.5	8.7	11.5	4.8	45.2		
	Total	16	33	19	29	7	104		
		15.4	31.7	18.3	27.9	6.7	100.0		
The number of reviews facilitates my decision making for buying of products	Male	12	13	11	16	5	57		
		11.5	12.5	10.6	15.4	4.8	54.8		
	Female	3	18	11	11	4	47	2.84	1.21
		2.9	17.3	10.6	10.6	3.8	45.2		
	Total	15	31	22	27	9	104		
		14.4	29.8	21.2	26.0	8.7	100.0		
	Male	16	8	15	15	3	57	3.57	1.28

	Gender	SA	A	N	D	SD	Total	Mean	Std.
High rating reviews affect my decision for buying of products	Female	15.4	7.7	14.4	14.4	2.9	54.8		
		16	6	6	13	6	47		
		15.4	5.8	5.8	12.5	5.8	45.2		
Total		32	14	21	28	9	104		
		30.8	13.5	20.2	26.9	8.7	100.0		
Review with pictures make it more credible for online buying of products	Male	39	7	11	0	0	57	1.57	0.79
		37.5	6.7	10.6	0.0	0.0	54.8		
	Female	25	13	9	0	0	47		
		24.0	12.5	8.7	0.0	0.0	45.2		
Total		64	20	20	0	0	104		
		61.5	19.2	19.2	0.0	0.0	100.0		

(Note: SA= Strongly agree, A= Agree, N= Neutral, D= Disagree, SD= Strongly disagree, Std.= Standard deviation)

Table.5 reflects answer of participants regarding online reviews and their buying through online media. Online reviews are obtained at online marketplaces and social media platforms of different stores. Multiple items have evaluated this construct in which first item revealed that 54 (51.9%) participants (27.9% males, 24.0% females) strongly agreed and 19 (18.3%) respondents (14.4% males, 3.8% females) just agreed with a statement that online reviews given by previous customers help potential consumers to get information about the products. Even reviews about advertiser are also associated for moving individuals towards buying of products and this aspect is evident in the second statement of the table which reflects that more than 44% participants of total sample favored the given statement. Third item was related with the quality of review on which 27 (26.0%) strongly agreed and 22 (21.2%) just agreed with the statement that positive reviews make them confident for online buying of products. Individuals answered that they rely on most recent reviews which are given on multiple platforms and this statement was accepted by 47% respondents of total including both males and females.

Table 6: Descriptive statistics about perceived risk along with gender of participants

Perceived risk	Gender	SA	A	N	D	SD	Total	Mean	Std.
Online shopping websites compromise my e-payment security and privacy	Male	22	18	7	7	3	57	2.12	1.28
		21.2	17.3	6.7	6.7	2.9	54.8		
	Female	26	3	7	9	2	47		
		25.0	2.9	6.7	8.7	1.9	45.2		
Total		48	21	14	16	5	104		
		46.2	20.2	13.5	15.4	4.8	100.0		
I remain afraid for not getting value to money product	Male	24	14	6	5	8	57	2.06	1.36
		23.1	13.5	5.8	4.8	7.7	54.8		
	Female	27	12	1	4	3	47		
		26.0	11.5	1.0	3.8	2.9	45.2		
Total		51	26	7	9	11	104		
		49.0	25.0	6.7	8.7	10.6	100.0		
	Male	20	6	12	1	18	57	2.84	1.70

Statement	Gender	SA	A	N	D	SD	Total		
I remain afraid for receiving damaged product when I buy online		19.2	5.8	11.5	1.0	17.3	54.8		
		18	5	6	2	16	47		
	Female	17.3	4.8	5.8	1.9	15.4	45.2		
		38							
Total			11	18	3	34	104		
		36.5	10.6	17.3	2.9	32.7	100.0		
I remain afraid for receiving another product when I buy online	Male	17	13	7	7	13	57		
		16.3	12.5	6.7	6.7	12.5	54.8		
	Female	17	6	8	6	10	47	2.73	1.56
		16.3	5.8	7.7	5.8	9.6	45.2		
Total		54	19	15	13	23	104		
		32.7	18.3	14.4	12.5	22.1	100.0		
I remain afraid with getting late delivery of product	Male	12	17	12	6	10	57		
		11.5	16.3	11.5	5.8	9.6	54.8		
	Female	10	14	8	4	11	47	3.18	1.42
		9.6	13.5	7.7	3.8	10.6	45.2		
Total		22	31	20	10	21	104		
		21.2	29.8	19.2	9.6	20.2	100.0		

(Note: SA= Strongly agree, A= Agree, N= Neutral, D= Disagree, SD= Strongly disagree, Std.= Standard deviation)

Table.6 depicts the results of items which were used to evaluate construct of perceived risk and the dimension of financial risk reflects that two-third majority of total sample accepted that online shopping websites comprises their e-payment security and privacy. Similarly, in the second statement of this dimension, overwhelming majority of participants agreed that they remain afraid for not getting a value to money product when they purchase online. Overall, it can be seen that most of the respondents in every area favored the aspect which reflects that people go for online buying, but they also find themselves in high risk regarding different aspects.

Table 7: Testing hypothetical associations between variables.

Associations	Chi-square	Asymptotic Significance (2-sided)
BI ⟶ OBB	38.237[a]	.011
COV ⟶ OBB	41.902[a]	.031
PU ⟶ OBB	36.739[a]	.016
ORE ⟶ OBB	56.478[a]	.027
PR ⟶ OBB	95.899[a]	.006

(Note: BI= Brand image, COV= Convenience, PU= Perceived usefulness, ORE= Online reviews, PR= Perceived risk, OBB= Online buying behavior)

Table. 7 reflects multiple associations between variables which have been tested by using Chi-square and it revealed that significant relationship exists between brand image and online buying ($x^2 = 38.237$[a], $P<0.05$) that approved hypothesis-1 of this study. The second association

was established between convenience and online buying behavior ($x^2 = 41.902^a$, $P<0.05$) which approved hypothesis-2 of this research. Perceived usefulness and online buying have been found positively associated with another with the calculated value ($x^2 = 36.739^a$, $P<0.05$) that approved hypothesis-3 of the study. Similarly, online reviews and perceived risk were found significantly associated with ($x^2 = 56.478^a$, $P<0.05$) and ($x^2 = 95.899^a$, $P<0.05$) respectively that resulted in approval of hypothesis-4 and hypothesis-5 of this research.

Table: 8: Bivariate correlations (*Pearson's r*) among variables.

Sr.	Variables	1	2	3	4	5	6
1	Online buying behavior	1					
2	Brand image	.067*	1				
3	Convenience	.147*	.114	1			
4	Perceived usefulness	.108*	.127	.027*	1		
5	Online reviews	.020*	.119	.085	.052*	1	
6	Perceived risk	.239*	.117	.170	.033	.011	1

*Correlation is significant at the 0.05 level (2-tailed).

The above table depicts correlation testing among variables which revealed that number of relationships exists between variables. As, hypothesis-1 of the study predicted relationship brand image and online buying behavior which has been accepted with calculated value ($r= 0.067$, $P<0.05$) as evident in table. Convenience and online buying behavior were also found correlated in above table with correlation coefficient of 0.147 at the significance level of less than 0.05 which approved second assumption of the research. Hypothesis-3 assumed relationship among perceived usefulness and online buying behavior which has been accepted as ($r= 0.108$, $P<0.05$). Online reviews were found positively associated with online buying behavior as correlation coefficient was calculated 0.020 with $P<0.05$. The last assumption of the study was association between perceived risk and online buying behavior that come true with ($r= 0.239$, $P<0.05$) as evident in table 8.

Discussion:

As the research was based on testing relationships of determinants with online buying behavior of consumers therefore, multiple assumptions were established to move on this research and their results have associated with previous studies here and the section further sheds a light regarding online buying in content of Pakistani society as per findings of the study. The first hypothesis of the study assumed a relationship between brand image and online buying

behavior which come true as evident in the results. Brand image was found positively associated online buying attitude and the results of this research are in line with the study of Lien et al. (2015) who found that brand image relationship with purchase intention during online buying. In the present study, positive association was found which may be the result of demographics as in Pakistan, now people are more cautious when they buy something online because of negative experiences in the past. The second hypothesis of this research predicted relationship between convenience and online buying behavior of consumers which has been accepted with statistical results. Many dimensions of convenience were undertaken in this research and results with access and transaction convenience are consistent with Hsieh and Liao (2011) who found them significantly associated with online buying behavior of students. In our study, it has found that people go for online buying if they find it easy in terms of access or usage of website interface which may be the result of sluggish behavior of Pakistani consumers in desire for getting everything at their single-click.

Hypothesis-3 of the study assumed association between perceived usefulness and online buying behavior which has been approved as can be seen in table 7 and table 8. Multiple variables were used to evaluate the phenomenon of perceived usefulness and findings of this area are consistent with the previous research study of online buying in the dimension of providing special offers and discounts (Pandey & Parmar, 2019). In the society of Pakistan, people also look for special offers and discounts that motivate them towards buying of products. Because of underdeveloped country, the major proportion belongs to the lower middle class which may not afford to buy products at their full pricing and go for online buying if get know that special discounts are being offered. Hypothesis-4 of the research predicted association between online reviews and online buying behavior of consumers and the results have approved this assumption. These results are also consistent with the literature related with online buying attitude (Von Helversen, Abramczuk, Kopec & Nielek, 2018). The reason for analyzing reviews before going for online buying can be the context of Pakistan where people had negative experiences of online buying in the past. Therefore, now people like to examine some reviews on social media platforms and on the online marketplaces which facilitate them in decision making for online buying of products. Hypothesis-5 predicted relationship between perceived risk and online buying behavior of consumers which has been approved as evident in the results. These findings endorse previous research of Faqih (2013) but it was also related with online buying intention. It has been revealed that although in Pakistan, people are moving towards online buying, but its credibility still remains the concern among the mind of

consumers which keep them afraid about many aspects discussed in the results earlier. These aspects draw attention of policy makers in Pakistan for the betterment of online buying systems in this age of computer mediated communication (CMC) to lift this underdeveloped region in e-commerce domain.

TAM (technology acceptance model) was applied in the study and the findings have been found same as arguments given by Davis (1989) in the model. It was applied in light of certain variables adopted in this study as the second hypothesis of the research had predicted association of convenience with online buying of consumers in which three dimensions were related with the easier accessibility of online systems which drive consumers to use online shopping websites for buying products. The results revealed a positive association between convenience and online buying behavior of consumers, which strengthened the claim of technology acceptance model in the paradigm of "ease of use" relationship with adoption of technology. Hence, in the present research, consumers were inclined towards online buying as they perceived online shopping websites facilitated them in terms of access, searching and transaction convenience. These results supported the arguments of TAM. The third assumption of the study predicted an association between perceived usefulness and online buying behavior of consumers. According to the technology acceptance model, the degree to which individuals perceive that using specific technology can be useful, move them toward its adoption. The findings of this study strengthened this dimension of model as consumers were found inclined to the online shopping websites because they perceived that online websites provided them huge selection of products and special discounts and offers. Hence, these results endorsed the connection of antecedents established in technology acceptance model. In the present study, the application of this model has been useful because the results were supportive and in the context of Pakistan, it provided significant results according to society where consumers don't spend enough time to understand any technology and adopt if they find it easy and useful. Application of TAM proved that convenience for using online shopping websites and their usefulness persuaded individuals towards online buying. In a nutshell, both (convenience and perceived usefulness) were found significantly associated with online buying behavior of consumers, which supported the application of TAM as a theoretical framework in the study.

Conclusion:

The study was designed to evaluate the antecedents related to online buying behavior of consumers. In order to measure each construct related to the study, different variables were used, and major findings have been illustrated here which further concludes overall results.

Brand image was found significant for moving people towards online buying of products and it remains under their consideration because of having good reputation in society. Individuals preferred to go for brand as it started to be considered as a symbol of social status in a society and they feel self-satisfaction by having reliable products. People buy something online because they perceive it more convenient in terms of access and delivery at their doorsteps. Online websites which have easier interface of products' searching and payment processing, get more attention of potential consumers. This aspect has found significant in the results because easier interfaces have facilitated consumers for getting all information of their required products and further provides them a chance to select any product from huge selections in the online markets. Similarly, Online shopping has perceived to be more useful when provide special discounts and offers to the consumers which can be minimum in physical buying.

Online reviews about the products and advertisers are given on social media websites and online marketplaces which get significant attention of potential consumers. Here, it has been revealed that most of the people consider those reviews for getting all information of their desired products which they intend to buy in future. People rely on those reviews which are given with pictures that makes them more credible for making their decision towards buying of products. Online reviews which are given more frequently, helps potential consumers for decision making and positive or high-quality reviews are positively associated with online behavior of consumers. Perceived risk was the last factor in this research and the results divulged that although people go for online buying, but it always keeps them in some sort of uncertainty as respondents revealed that it comprises their e-payment security and privacy. Financial and product risks always associated with inclination towards online buying as people remain afraid for not getting value to money product or they perceive that they may receive another or damaged product. Many respondents in the study were of the viewpoint that there may be a deliver risk as they remain unaware when the online purchased product will be delivered at their doorstep. Consequently, online buying is increasing over time, but some factors associated with this phenomenon need to be addressed by policymakers.

Recommendations:

The future research studies can be conducted in the following areas.

a. The study can be conducted by using the brand relationship theory, and further psychological insights can be explored.

b. Sample size should be increased and extracted by using scientific procedures so that findings can be generalized to the population.

c. The phenomenon of online buying should be related to the particular product(s) as per the needs of these days, so that significant dynamics can be unfolded in the specific area (i.e., eco-friendly products,

d. More variables should be attached to the conceptual model of online buying, and influencer-related factors should be explored.

e. The role of AI should be investigated in navigating the platforms of online buying by consumers since it has become significant in boosting the e-commerce processes.

f. Also, the study can be conducted to measure the impact of AI influences, including digital avatars, in the context of online marketing communication in terms of their associated personalization.

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