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FACTORS INFLUENCING ONLINE PURCHASE INTENTION: A CASE OF UNIVERSITY STUDENTS IN PAKISTAN

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Abstract

The paper aims to study the factors that influence online purchase intention among university students in Pakistan. A cross-sectional study was conducted between March 2020 and April 2020 to collect quantitative data on the role of six factors on online purchase intention and their degree of influence among a sample of 513 university students in Karachi with or without online shopping experience. Findings suggest that perceived benefits, shopping orientations and customer satisfaction have a significant and positive impact on purchase intention while perceived risk has a significant but negative impact. Subjective norms and e-WOM do not affect purchase intention. Results suggest that customer satisfaction is the most prominent positive influencer of online purchase intention and perceived risk is the most dominant restraining factor. The results provide a detailed insight on factors influencing online purchase intention. This is the first set of empirical data on online purchase intention among university students in Pakistan and can be used by practitioners in design and implementation of online marketing strategies in similar environments.

Keywords: Purchase Intention, Online Shopping, University Students, Customer Satisfaction, Perceived Risk

1. Introduction

Internet is an integral component of contemporary lifestyle (Tahir and Arije, 2021). It also plays a significant role in the success of a business. Internet marketing is relatively a new trend but growing at a phenomenal rate (Mathew, 2015). Online shopping is recognized as a reliable and convenient method for purchasing a wide range of goods and services from a single platform (Sanayi *et al.* 2016).

Interest and growth in social networking in recent years have helped in supporting the use of online shopping. Social networking sites define ethics, standards and WOM

communication (Ishak and Idris, 2020). They also provoke customer social care and share information for the business framework. The fast pace changings in the world also bring social networking very close, and these sites are playing a crucial part in increasing the trend for online shopping. Social networking sites provide ethics, standards, principles, WOM communications, provoking customer social care and sharing information for the business framework (Ballantine and Stephenson, 2011). A study discovered that people who use social networking sites mostly show their interest in online shopping (Clemes *et al.* 2014; Guo *et al.* 2011). Through such sites, shoppers get details regarding the brands, organizations, products and services etc. (Zhou *et al.* 2013).

Online shopping is at a mature stage in developed countries, while in developing countries, like India and Pakistan, it is still at the growth stage. The growth of online shopping in Pakistan is lower than in India. The main reason for the slow adoption of online shopping is the trust deficit among Pakistan's general population. However, the younger population appears to be more receptive to online shopping, particularly when ordering food (Ahmed *et al.* 2017; Kim *et al.* 2008). A recent survey indicates that Pakistani men do more online shopping (59%) compared to women (41%) (Nizamani, 2019). It also reported that most of the online shopping was done in December, and the most popular categories were clothing, food, footwear, travel and electronics.

There is a shortage of literature on online purchases in Pakistan. Most of the available data are from non-academic sources. This study aims to strengthen the current literature on online purchases with focus on the younger population as it has been identified as the most receptive group when it comes to online shopping. This research is the first comprehensive empirical assessment of factors influencing purchase intention in Pakistan. The results are significant as they represent the first sets of data generated from independent academic source. It could be used marketing planners and managers involved in design and implementation of online programs.

This paper is organized in the following manner: Section 1 provides a general background of the article tracing online purchase trends and discussing the factors influencing online purchase intention in Pakistan's younger population. Section 2 contains a review of literature on factors affecting online purchase intention on e-commerce. This section presents evidence from previous research and analyzes various elements in influencing online purchase intention and developing a set of hypotheses. Section 3 explains the methodology used in the study. This is followed by section 4, which presents the findings. Finally, Section 5 provides the conclusion.

2. Literature review

Review of recent literature on e-commerce suggests that factors like price, perceived risk, perceived benefits, information availability, hedonic motivation, socio-demographic characteristic and website design influence consumer purchase intention (Swinyard and Smith, 2003; Forsythe *et al.* 2006; Levis, 2006; Bhatti and Rehman, 2020; Karayanni, 2003; Liang and Huang, 1998). Perceived usefulness, information and, privacy/security are the dominant factors that impact buyers' online purchasing perceptions (Bhatt, 2014; Fernandes *et al.* 2021) while non-delivery risk, product risk and financial risk negatively impact online shopper's attitude (Ariff *et al.* 2014).

Students age, according to Makhitha (2014), has no effect on the attitude towards online shopping and generation Y students did not do online shopping although they accessed the internet more frequently. Choudhury and Dey (2014) found that privacy and security were the top reasons for the buyers for not shopping online; however, price, convenience, recommendations, and trust positively influence the buyer's inclination to online shopping (Iqbal *et al.* 2021; Khalil, 2014).

Investigating online shopping behavior in Pakistan and the factors affecting, Adnan (2014) studied the effect of perceived advantages, perceived risk, psychological factors, hedonic motivation and website design on online buying behavior. A negative impact was demonstrated by perceived risk on buyer purchasing behavior and attitude, while psychological factors and perceived advantages positively influenced online buying. Hedonic motivation and website design did not have a significant correlation. Other studies showing the factors that influence e-shopping

acceptance in Pakistan indicated that trust and convenience substantially affect consumer behavior. Simultaneously, information availability and perceived price are less significant (Chaudary *et al.* 2014). Sattar and Ameer (2014) studied individual e-shopping adaptations in Pakistan, and their findings demonstrate that security and privacy risk, brand quality and time show a healthy relationship. In contrast, the price has less impact on consumer adaptation towards e-shopping.

Further literature review shows the emergence of the following factors: post-purchase customer, quality of goods, before purchase experience of products and simplicity. In India, an in-depth literature review regarding the factors influencing purchasing behavior in E-commerce showed the variables mentioned were goods quality, ease of transportation of ordered goods, ease of availability, the experience of the product before buying and post-purchase customer service (Burman and Agrawal, 2015). The crucial determinant that leads consumers towards or away from online shopping in Singapore was information available about the website's product. Another positive factor was the ease of payment process. Certain products related to entertainment like music, video games and movies were more in demand for online buying (Sam and Sharma, 2015; Javadi *et al.* 2012). A study regarding the online shopping attitude in Malaysia Public University identified that the public university students showed a moderate predisposition towards online buying activities (Jin *et al.* 2015).

Moreover, key e-commerce factors that impact customers' online shopping choices are simplicity, convenience, and better price. The socio-demographical traits analysis has shown that men buy online more frequently due to the lower price. Participants from age 25–35 years have repeatedly done e-shopping because of the comprehensive product range and lack of time. Also, the option of comparing prices and purchasing at a lower price in online shopping was identified as the most positive aspects (Bauboniene and Guleviciute, 2015).

In Lithuania, research was carried out to find the influencing elements which impact consumers' decision-making towards online shopping and predict future e-commerce perspectives. The findings indicate that better pricing, straightforward approach and convenience were most important for online consumers. The expert survey also discovered the main areas of emerging applicability: product presentation as allowing to "touch" products and "try them on" online, drones and personalized offers (Skarzauskiene *et al.* 2015). Likewise, in Pakistan, a study examines several factors and their relationship that influences buyer behavior towards e-shopping in Pakistan. The statistical analysis showed that convenience and trust would have a significant influence on buyer who decides to make an online purchase or not. The younger generation considers faith the most important factor influencing consumers' purchasing behavior towards e-shopping (Bashir *et al.* 2015).

Moving forward, analysis of literature review reflected the following factors: cognitive, affective and behavioral components, culture, the cost of accessing internet service, incapability of physically examine the product and website, tv, advertising, friends and family members. Different researchers studied the above-mentioned influencing agents. Uddin and Khan (2016) reviewed Indian management students' online shopping attitudes between genders. They found that a significant difference does not exist between management students (females and males) about the cognitive, behavioral and affective online shopping attitudes, which depicts a consistency in management students' attitude towards online shopping (Aineah, 2016). Similarly, the impact of attitude towards online buying behavior with the moderating effect of culture among Pakistani youth was reviewed by Khilji (2016), who showed a direct relationship between attitude and online shopping behavior. Attitude affects online shopping behavior with an increase in online buying behavior if there is an environment where attitude is changed. Culture has a somewhat less significant influence on the relationship between attitude and online buying behavior (Ko *et al.* 2004).

Customer attitude towards e-shopping in Bangladesh revealed that website advertisement (45.78%), TV advertising (20.48%), family members and friends (15.66%) are the primary source using which people become aware of online shopping. Low price 20.48%, less time 31.33% and variety availability are other essential factors for giving online shopping

preference. Due to innovations and fast-changing times, people's online shopping behavior has changed and increased their dependence on e-commerce (Rahman, 2016).

Akhter (2016) studied the barriers to the use of e-commerce in Saudi Arabia and has shown that dissatisfaction of users with the internet services, lack of confidence about the security measures currently in place to protect their privacy and data security, and expensive charges for accessing the internet were essential contributors. Differences were found between men and women concerning internet surfing and usage patterns with slightly lower women usage. The virtual environment of a website with an inability to examine a product, personal price negotiations and missing a "mall visit" can lower the use of e-commerce.

The further literature review focuses on the following points: domain-specific innovativeness, shopping orientations (Seock, 2003; Gehrt *et al.* 2007), overhead and lifestyle. A study of factors that influence consumer purchasing behavior towards e-commerce in Pakistan revealed that domain-specific innovativeness and shopping orientations positively influenced consumer purchasing behavior towards e-commerce. Additionally, the new development of e-stores let customers be more interested in doing online shopping. This study does not support a positive relationship between perceived benefits and consumer online buying behavior (Ahmed *et al.* 2017).

The research on online buying tendency in Pakistan's famous cities indicated that many individuals are already used to online shopping and choose it over traditional shopping ways. They also motivate others to shift towards online shopping. The critical factors to impact online shopping are price, quality of product delivered and overhead. The smaller number of respondents who do online buying suggest the tendency of online buying is slow-motion because of factors such as trust and product quality (Naz and Khuram, 2017). While the combined impact of lifestyle and attitude on online shopping has a strong influence on purchasing choices, there is no impact of attitude alone on buying a selection of mobile phones via online purchasing (Selvakumar and Raghavan, 2017).

Further analysis of literature has highlighted two new aspects related to online purchases. Subjective norm (Kassem *et al.* 2003) and social norm. Yulianita (2018) compared the X and Y generation's subjective norm, perceived usefulness and perceived ease of use on purchase intention in online shopping. The findings showed that irrespective of age, subjective norm, perceived usefulness, and ease of use significantly impact purchase intention. However, subjective norms showed the most substantial effect as compared to other factors. However, the findings from X and Y generation responses displayed a distinct pattern of results. In generation X, perceived ease of use and subjective norms have significantly impacted their e-commerce purchase intention, whereas perceived usefulness had an insignificant impact. Comparatively, in generation Y, perceived usefulness has shown the most significant impact on their purchase intention. A study conducted to identify consumers' perception and online grocery buying in Karachi – Pakistan, indicated that the most significant factor is perceived risk in online grocery buying. It was observed that buyers who are less familiar with new technology found it hard to trust the technological devices, especially the housewives. At the same time, youth seems to be excited about emerging technologies. The results also indicate that the product overprice and lack of variety are among the major factors which decide against online grocery as the primary medium of shopping (Khan and Ahmed, 2018).

An in-depth study of further literature review identified the following factors: e-WOM (electronic word of mouth) (Asghar and Mahmud, 2020; Goyette *et al.* 2010), perceived behavioral control, customer satisfaction (Khristianto and Suyadi, 2012; Wang *et al.* 2001) and purchase intention (Thananuraksakul, 2007). According to Sharma and Chopra (2019), which examined that while assessing the forecasting factors impacting online shopping behavior among Indian youth, it revealed that when doing online shopping, e-WOM was the main influencing factor for Indian youth in comparison to other factors like return policy, past shopping experience and perceived risk.

Another study on the moderating role of commitment and trust between customer purchase intention and online shopping behavior in Pakistan revealed that subjective norms, perceived ease of use, perceived behavioral control, and attitude showed a significant and

positive impact on customer purchase intention. Customer purchase intention (CPI) intermediates among all five independent variables and online shopping behavior (OSB). Trust and commitment significantly moderate the association between customer purchase intention and online shopping behavior (Rehman *et al.* 2019). The impact of e-shopping factors on customer satisfaction in the Serbian market highlighted that customer satisfaction directly depends on information availability, pricing, shipping, perceived usefulness, quality and time (Vasic *et al.* 2019).

2.1. Conceptual framework

The conceptual framework for this study was developed through review of literature and identification of relevant variables as presented in Figure 1.

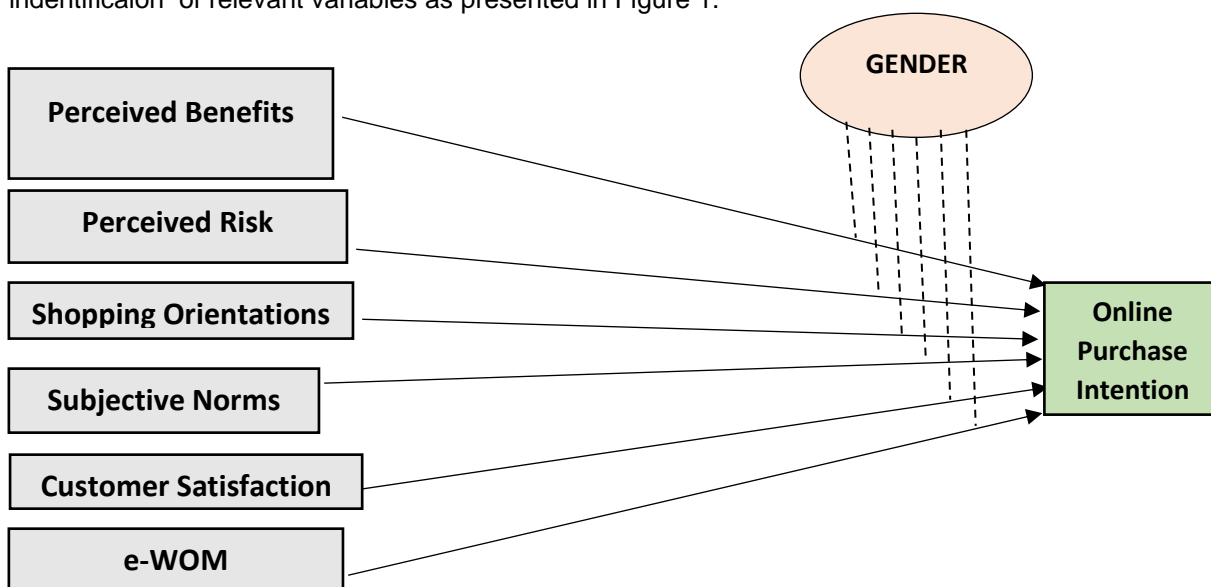


Figure 1. Source of the conceptual framework based on the input of this study

Details of questionnaire items and sources for variables are shown in Table 1.

Table 1. Adoption of Questionnaire Items

Variable	Source	Items
Perceived Benefits	Forsythe <i>et al.</i> (2006); Swinyard and Smith (2003); Karayanni (2003); Liang and Huang (1998)	5
Perceived Risk	Swinyard and Smith (2003); Forsythe <i>et al.</i> (2006); Lewis (2006)	6
Shopping Orientations	Seock (2003); Gehrt <i>et al.</i> (2007)	7
Subjective Norms	Kassem <i>et al.</i> (2003)	4
Purchase Intention	Thananuraksakul (2007)	4
Customer Satisfaction	Wang <i>et al.</i> (2001)	6
e-WOM	Goyette <i>et al.</i> (2010)	5

2.2. Hypotheses

Hypotheses developed for this study are as follows:

H₁: Perceived benefits have no impact on online purchase intention.

H₂: Perceived risk has no impact on online purchase intention.

H₃: Shopping orientations have no impact on online purchase intention.

H₄: Subjective norm has no impact on online purchase intention.

H₅: Customer satisfaction has no impact on online purchase intention.

H₆: e-WOM has no impact on online purchase intention.

H₇: Gender does not moderate the relationship between perceived benefits and online purchase intention.

H₈: Gender does not moderate the relationship between perceived risk and online purchase intention.

H₉: Gender does not moderate the relationship between shopping or and online purchase intention.

H₁₀: Gender does not moderate the relationship between subjective norm and online purchase intention.

H₁₁: Gender does not moderate the relationship between customer satisfaction and online purchase intention.

H₁₂: Gender does not moderate the relationship between e-WOM and online purchase intention.

3. Methodology

The sample population for the research was drawn from university students in Karachi with or without prior online shopping experience. The questionnaire was distributed among 550 respondents, out of which 513 respondents filled the questionnaire, and there is a 93.27% response rate. The purposive sampling technique was used for the study. A structured questionnaire was used to collect the primary data containing six sections. The first section included the respondent's demographic information. The remaining cells had Likert scale questions related to perceived benefits, perceived risk, shopping orientations, subjective norms, purchase intention, customer satisfaction and e-WOM. The questionnaire was distributed to the respondents aged 18 years or above, and the survey was conducted between March 2020 to April 2020. For data analysis, SPSS software was used.

4. Findings

The data are summarized in Table 2, which shows the respondents demographic profile such as gender, age, personal monthly average income and education, and occupation. The data collected from 513 university students comprising 59.5% males and 40.5% females. The majority of the respondents were from the age group 21-23 years (32.2%), followed by students aged 24-26 years (31.6%). The majority of the respondents had personal monthly disposable income above PKR 5,000 (62.4%) and had bachelor's degrees (62.6%). Over 61% of the respondents were full-time students, while 35.5% were professionals engaged in part-time studies.

Table 2. Respondents demographic profile

		Frequency	Percent
Gender	Male	305	59.5
	Female	208	40.5
	Total	513	100.0
Age	Below 18 years	3	.6
	18 to 20 years	100	19.5
	21 to 23 years	165	32.2
	24 to 26 years	162	31.6
	27 years and above	83	16.2
	Total	513	100.0
Personal monthly average money/ Income [Pak Rupees (PKR)]	less than PKR 1,000	42	8.2
	PKR 1,001 - 3,000	60	11.7
	PKR 3,001 - 5,000	91	17.7
	More than PKR 5,001	320	62.4
	Total	513	100.0
Education	Associate Ordinary	12	2.3
	Bachelors	321	62.6
	Bachelors	178	34.7
	Masters	2	0.4
	Doctoral	513	100.0
	Total	513	100.0
Occupation	Student	315	61.4
	Professional	182	35.5
	Business	15	2.9
	House Wife	1	0.2
	Total	513	100.0

4.1. Reliability analysis

The results of reliability analysis are shown in Table 3.

Table 3. Reliability of variables

Variables	No of Items	Cronbach's Alpha
Perceived Benefits	5	0.758
Perceived Risk	6	0.796
Shopping Orientations	7	0.702
Subjective Norms	4	0.840
Purchase Intention	4	0.822
Customer Satisfaction	6	0.9096
e-WOM	5	0.923

According to the standards, the reliability coefficient of 0.60 or higher is considered "acceptable" in most social science research. Our study also showed that all seven variables, including six independents, which includes (Perceived benefits (PB), Perceived risk (PR), Shopping orientations (SO), Subjective norms (SN), customer satisfaction (CS), e-WOM) and the dependent variable which is (Purchase Intention) were acceptable as shown in Table 3.

4.2. Correlation

The results of the correlation are presented in Table 4.

Table 4. Correlation of variables

		PB	PR	SO	SN	PI	CS	e-WOM
PB	Pearson Correlation	1	0.019	0.516**	0.627**	0.574**	0.589**	0.570**
	Sig. (2-tailed)		0.666	0.000	0.000	0.000	0.000	0.000
PR	Pearson Correlation	0.019	1	0.214**	0.148**	-0.027	0.010	0.009
	Sig. (2-tailed)	0.666		0.000	0.001	0.538	0.815	0.835
SO	Pearson Correlation	0.516**	0.214**	1	0.548**	0.585**	0.632**	0.622**
	Sig. (2-tailed)	0.000	0.000		0.000	0.000	0.000	0.000
SN	Pearson Correlation	0.627**	0.148**	0.548**	1	0.586**	0.639**	0.630**
	Sig. (2-tailed)	0.000	0.001	0.000		0.000	0.000	0.000
PI	Pearson Correlation	0.574**	-0.027	0.585**	0.586**	1	0.816**	0.740**
	Sig. (2-tailed)	0.000	0.538	0.000	0.000		0.000	0.000
CS	Pearson Correlation	0.589**	0.010	0.632**	0.639**	0.816**	1	0.877**
	Sig. (2-tailed)	0.000	0.815	0.000	0.000	0.000		0.000
e-WOM	Pearson Correlation	0.570**	0.009	0.622**	0.630**	0.740**	0.877**	1
	Sig. (2-tailed)	0.000	0.835	0.000	0.000	0.000	0.000	

Note: PB, PR, SO, SN, PI, CS & e-WOM- perceived benefits, perceived risk, shopping orientations, subjective norms, purchase intention, customer satisfaction and electronic word of mouth. ** shows correlation significance at the 0.01 level (2-tailed).

Table 4 shows that there is a statistically significant and strong positive correlation between PB, SO, SN, CS, e-WOM and PI ($r = 0.574, 0.585, 0.586, 0.816, 0.740, n = 513$ and $p = 0.000$). While there exists statistically insignificant and negative correlation between PR and PI ($r = -0.027, n = 513$ and $p = 0.538$).

4.3. Regression analysis

From Table 5, we can see that the significant value of F is less than 0.05. Thus, it shows that a substantial relationship exists between dependent and independent variables.

Table 5. Anova & coefficients regression test

Model		Sum of Squares	df	Mean Square	F	Sig.	t	Sig.
1	Regression	3617.11	6	602.852	186.412	0.000 ^b		
	Residual	1636.4	506	3.234				
	Total	5253.51	512					
	(Constant)						3.166	0.002
	PB						2.922	0.004
	CS						11.573	0
	e-WOM						0.659	0.51
	PR						-2.477	0.014
SN						1.467	0.143	
SO						2.802	0.005	

Note: a. Dependent Variable: PI, b. Predictors: (Constant), SO, PR, PB, SN, e-WOM, CS. *, **, and **** respect statistical significance at the 10%, 5%, and 1% levels, respectively.

Table 5 also determines and signifies each independent variable on dependent variables, β value of PB is 0.079 with the significance value of 0.004, which shows a positive and significant relationship between perceived benefits and purchase intention. The β value of CS is 0.403 with a sig value of 0.000, indicating a positive and meaningful relationship between customer satisfaction and purchase intention. The β of e-WOM is 0.025 with a sig value of 0.510, demonstrating a positive but insignificant relationship between e-WOM and purchase intention. Similarly, the β value of PR is -0.053, and its sig value is 0.014, which depicts a negative but significant relationship between perceived risk and purchase intention. Moreover, SN's β value is

0.043 with the sig value 0.143, which shows a positive but insignificant relationship between subjective norms and purchase intention. Lastly, the β value of SO is 0.071 with the sig value 0.005, which indicates that there is a positive and significant relationship between shopping orientations and purchase intention.

Table 6. Moderation

Test(s) of highest order unconditional interaction(s)			
Y: PI	R2-chng	F	p
X: PB*W	0.0001	0.1962	0.6580
X: PR*W	0.0002	0.3957	0.5296
X: SO*W	0.0004	0.5760	0.4482
X: SN*W	0.0008	1.2706	0.2602
X: CS*W	0.0000	0.0001	0.9919
X: EWOM*W	0.0004	0.6472	0.4215

Note: a. Dependent Variable: PI, b. Predictors: (Constant), SO, PR, PB, SN, e-WOM, CS. Moderator (W): Gender.

To check the moderating effect of gender on independent variables (PB, PR, SO, SN, CS, e-WOM) and dependent variable (PI), we have run Hayes Process Model 1. It can be concluded from Table 6 that all p-values are more significant than 0.05; therefore, the null hypotheses (H₇, H₈, H₉, H₁₀, H₁₁, H₁₂) are retained, and there is no moderating role of gender on a relationship between independent variables (PB, PR, SO, SN, CS, e-WOM) and dependent variable (PI). Thus, the findings concluded that perceived benefits, shopping orientations, and customer satisfaction positively and significantly impact purchase intention; hence, H₁, H₃ and H₅ were rejected. However, the finding relating to perceived benefits is supported and shows a positive and significant relationship with online purchasing behavior. On the other hand, our result also indicated that perceived risk shows a negative but significant impact on purchase intention; therefore, H₂ was rejected, although this finding is supported in earlier studies (Ariff *et al.* 2014; Saleem *et al.* 2018; Sharma and Chopra, 2019). Our findings also indicated that e-WOM has no impact on purchase intention while this finding contradicts the results of (Sharma and Chopra, 2019) study, and we retain the null hypothesis H₄. It also shows that subjective norms are insignificant and have no impact on purchase intention; thus, we retain the null hypotheses H₆. Our study also suggests no moderating role of gender on a relationship between independent variables (PB, PR, SO, SN, CS, e-WOM) and dependent variable (PI).

5. Conclusion

The share of online purchases has increased considerably in recent years and is expected to grow at an even faster rate in coming years. However, there are some inherent issues in online purchases and must be addressed before it can become a regular purchase method for most customers.

Findings suggest that while there are several factors positively influencing online purchases by younger consumers, there are also few risks associated with any online purchase that interfere with the purchase process. While factors like user-friendly website, security and privacy of customer data, range of products and services offered, customer care/support and availability of relevant information contribute to customer satisfaction, lack of trust, delivery of faulty products, identity theft and absence of adequate legislation on cyber-crime are some of the factors restricting online purchases.

To build confidence in online purchases, concerted efforts need to be made to influence intentions positively. To ensure this, marketers will have to boost the level of engagement with the customers to understand their need better and provide a customer-focused environment including personalized experience, emphasize on 'M' factor, which is mobile – optimization website, working on social media channels and use of AI (chatbots etc.). It is also essential to change the negative perception towards online shopping to improve consumer confidence. Online

retailers need to invest in the improvements of security and data management systems and fully disclose their privacy policies.

There are some limitations to this study which can be improved through future research. This study focuses on university students in Pakistan while the same study can be replicated to any other country by considering the same variables. We have incorporated only quantitative method in our study while future research can be conducted by using a mixed method approach to get more refined results. Future research can also be done by incorporating some new variables in the model like perception of digital advertising, perceived behavioural control, reverse logistics and green purchase intention.

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