Product Risk, Privacy Risk, and Convenience Risk Influence on Online Shopping Behavior in the Context of Pakistan

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Abstract: *Main aim behind this study is to determine the association between privacy risk, product risk, convenience risk, and online shopping behavior in Pakistan. For this purpose data were collected from 298 consumers that use internet to purchase goods. PLS-SEM technique used to analyze data for current research. Findings revealed that product risk and privacy risk have significant and negative influence on internet buying behavior. Despite this, convenience risk has negative but insignificant impact on internet buying behavior. The findings of current research give some guidelines to online retailers that regarding these risks that how they can reduce risks and increase online shopping behavior of consumers. At the end, there are some future directions for researchers that they can work on those factors to measure online shopping behavior.*

Keywords: *Privacy Risk, Product Risk, Convenience Risk, Online Shopping Behavior.*

INTRODUCTION

Nowadays, majority of people have access to the internet technology due to rapid growth of internet. Going twenty years back, majority of people didn't know the concept of buying goods via using internet. Therefore, they purchased goods traditionally by going to market and choose and buy goods. Due to rapid development in internet technology now people purchase goods from nationally and internationally while sitting at home. Some of the prior researchers concluded that internet becomes an important element daily and due to quick development of internet technology people know about the concept of online shopping (Lian & Lin, 2008; Lim, Osman, Salahuddin, Romle, & Abdullah, 2016). According to the united nation reported in 2004, internet penetration rate is much higher in the developed countries while in developing countries this ratio is low. For example, in developing countries internet usage rate is less than developed countries. Moreover, online purchasing percentage is also less in developing countries as compared to developed countries due to internet (Adnan, 2014). According to a report by eMarketer (2018) only 3 percent of population in Pakistan purchase goods via using internet. And that is too low as compared to other countries such as the USA with the number of 68.9 percent, UK 77.4 percent, Malaysia 68 percent and India 16 percent. In Pakistan online shopping ratio is very low due to lots of challenges like product risk, privacy risk, financial risk, convenience risk, and quality risk (Adnan, 2014; Sunil, 2015; ur Rehman, ur Rehman, Ashfaq, & Ansari, 2011). In Pakistan, just about 40 percent of online consumer's transaction at the end goes to failure due to interface not up to mark

and they face difficulty in searching specific product. Also they have ambiguity in their minds attributed to money paying by using internet since they think their money may loss due to fraud (Adnan, 2014). The main reason behind this is that people have less knowledge regarding internet. Although in developed countries many plans are done for online shopping but in developing countries less attention has been paid on this area. Thus there is need to work on it more (Jukariya & Singhvi, 2018).

In Pakistan online shopping behavior of consumers is less due to some risks that online users face at the time of purchasing goods through internet. For instance, there are some issues regarding privacy risk that they reduce online shopping behavior of consumers and these issues are as follows; lack of private data protection, hacking private information, government laws as well as regulations (Khan-SZABIST & Arshad-SZABIST, 2010; Nazir, Tayyab, Sajid, Rashid, & Javed, 2012). Furthermore, some issues are about product risk and they reduce online shopping behavior in Pakistan and these risk as follows; product attribute and products not available at the time of order (Chaudary, Rehman, & Nisar, 2014; Qureshi, Fatima, & Sarwar, 2014). Moreover, some issues are related to convenience risk decrease the internet buying behavior of consumers. These issues are as fellows; low literacy rate, language barriers, lack of awareness as well as skills of technology, right products, IT infrastructure, and less time to devote for transactions (Aijaz & Butt, 2009; Chaudary et al., 2014; Haider & Nasir, 2016; Nazir et al., 2012; Tariq, Bashir, & Shad, 2016).

Various prior studies have recognized some possible indicators that online users avoid shopping online. For example, Ariff, Sylvester, Zakuan, Ismail, and Ali (2014), identified the influence of financial risk, product risk, convenience risk, attitude, and non-delivery risk on online buying behavior in context of Malaysia. Adnan (2014), examined the impact of psychological factors, security risk, privacy risk, hedonic motivations, website design, financial risk, and perceived benefits on online buying behavior in context of Pakistan. Masoud (2013), investigated the impact of social risk, time risk, information security, financial risk, delivery risk, and product risk on online buying behavior in Jordan. Furthermore, Shahzad (2015), determine the association between website design, financial risk, delivery risk, trust & security, product risk, and online shopping behavior in context of Sweden. All abovementioned studies used different researchers in different contexts to predict online buying behavior, and these studies suffer fragmentation. The results of these studies proved that there is need to study in future mostly in developing countries because less attention has been paid in developing countries on online shopping behavior. One of the most recent studies suggested that there is need to study convenience risk, product risk, and privacy risk with online buying or shopping behavior in developing countries (Bhatti, 2018; Bhatti, Saad, & Gbadebo, 2018b). However, this study is conducted in Pakistan that is known as developing country.

Literature Review

Online Shopping Behavior (OSB)

Internet buying behaviors refer to purchasing goods and services from customer side by using internet technology. Few years ago majority of people didn't know what is the concept of purchasing goods via internet. However, nowadays with the advancement in internet technology people know this concept as well as buying product online. Last few decades, most significant area in field of electronic commerce was internet buying behavior (Hsin Chang & Wen Chen, 2008). Internet plays an important role in searching information, select right product, and purchase goods through internet (Masoud, 2013). Online shopping behavior means a process in which users search goods to use internet technology and after searching for goods, purchase that product (Varma & Agarwal, 2014). Moreover, online shopping behavior refers to buy goods via internet and due to the advancement in internet technology this trend have increased among people rapidly (Lian & Lin, 2008). Furthermore, purchasing goods via internet has its own advantages. For instance, 24 hours and 7 days in a week products are available, consumer do not face with the problem of crowed, and time can be saved during online shopping (Karayanni, 2003). In addition, there are some more benefits of this system such as better product selection, convenient rather than traditional system, lower search cost, and reasonable price

(Chang, 2004). However, scant attention has been paid on online buying behavior in developing countries. Some of the studies suggested that there is need to study online buying behavior concept in developing countries in future (Bhatti, 2018; Bhatti et al., 2018b). While Pakistan is known as a developing country, this area is been ignored yet.

Privacy Risk

Privacy risk means a concern in the mind of online users/consumers related to leakage or usage of consumer personal information without their permission. According to Azadavar, Shahbazi, and Teimouri (2011), privacy risk means a concern about protection of online users private information during online ordering while purchase goods (Azadavar et al., 2011). Moreover, it refers to a distress of purchasing goods online regarding loss of consumer private information without their permission (Mathur, 2015). Meanwhile, probable loss about purchasing goods via internet and his/her personal information sale or misuse without his/her permission is called privacy risk (Featherman & Pavlou, 2003). Furthermore, online retailers collect personal information of consumer at the time of placing order and after collection of his/her information sale to another party and receive money without telling this to the consumer (Mathur, 2015) Due to this problem online users do not feel safe and avoid purchasing goods online. One of the prior studies concluded that consumers at the time of shopping goods online face with some risks regarding their privacy. therefore, consumers avoid purchasing goods via internet due to this problem (J. F. George, 2002).

Hence, privacy risk reduces online shopping behavior of consumers and in developing countries less work in the area of privacy risk. Some prior researchers recommend that there is need to study privacy risk with online shopping behavior in future (Ariff et al., 2014; Bhatti, 2018; Bhatti, Saad, & Gbadebo, 2018a; Shahzad, 2015). Prior scholars determined the association between privacy risk and internet buying behavior. Results elucidated that privacy risk have significant influence on online buying behavior and due to this risk online buying behavior of consumers decreased (Masoud, 2013; Mathur, 2015; Tsai & Yeh, 2010).

H_1: Privacy risk has significant and negative impact on OSB

Product Risk

Product risk refers to a possibility that consumers purchasing via using internet do not meet the mandatory criteria as they have in mind at the time of placing order. It is also called performance risk. According to Haider and Nasir (2016), product risk means a risk that is attached with the performance or quality of product after purchasing by using internet. Moreover, privacy risk has significant influence on the decision of online user that he/she purchase goods through internet (S. M. Forsythe & Shi, 2003). Furthermore, risk is linked with product performance in online buying (Hong & Cha, 2013). For example, in buying goods via internet consumer may face with some issues such as unavailability of products while placing an order, limited information regarding that product, or pictures shown on websites that may be different with what they actually receive. In online shopping the product risk element is much higher as compared to traditional buying behavior because in online shopping consumers don't touch the product physically (Saprikis, Chouliara, & Vlachopoulou, 2010). Despite this, online consumers can reduce this risk by purchasing only good brands (Aghekyan-Simonian, Forsythe, Kwon, & Chattaraman, 2012).

Therefore, product risk reduce the ratio of purchase goods via internet. Moreover, in developing countries scant attention has been paid on product risk and online shopping behavior. Some of the studies suggested that there is need to study the influence of privacy risk on online buying behavior in future (Bhatti, 2018; Bhatti et al., 2018a; Masoud, 2013; Rizwan, Umair, Bilal, Akhtar, & Bhatti, 2014; Shahzad, 2015). Some of the researchers examined the relationship between product risk and internet shopping behavior. Findings revealed that product risk has significant and negative influence on internet shopping behavior. As due to product risk the trend of online buying reduces (S. Forsythe, Liu, Shannon, & Gardner, 2006; Haider & Nasir, 2016; Ko, Jung, Kim, & Shim, 2004; Masoud, 2013).

H_2: Product risk has significant and negative influence on OSB

Convenience Risk

Convenience risk refers to a risk that are attached with goods such as goods shipped to some other person, goods demerged after the placement of order, and good loss. According to Claudia (2012), convenience risk incurred by some causes like consumer first search particular product, then order that product and product might be damaged before reach actual buyer. Moreover, it means that based on consumer perception that might be product reaches late and when he/she receive product then that product may not have much worth due to time wastage (Hsin Chang & Wen Chen, 2008). According to S. Forsythe et al. (2006), convenience risk occurs in online shopping after placing a particular order then consumer wait for that product and product maybe damaged or arrive late. Convenience risk is higher in online buying as compared to traditional buying. For example, in online buying consumer first search for a particular product, then fill the form, place order and wait few days until he/she not receive order. Despite this, in traditional shopping consumer visit the market and purchase the desired product.

Hence, convenience risk decreases the percentage of online shopping transactions. Some of the prior researchers concluded that there is need to study convenience risk with online shopping behavior in future (Bhatti, 2018; Bhatti et al., 2018b). Some of the previous researchers investigated the influence of convenience risk on internet buying behavior. Results revealed that convenience risk has significant and negative influence on online shopping behavior. As this risk reduced the ratio of online shopping (Arshad, Zafar, Fatima, & Khan, 2015; Bhatti et al., 2018a; Haider & Nasir, 2016).

H₃: Convenience risk has significant and negative influence on OSB
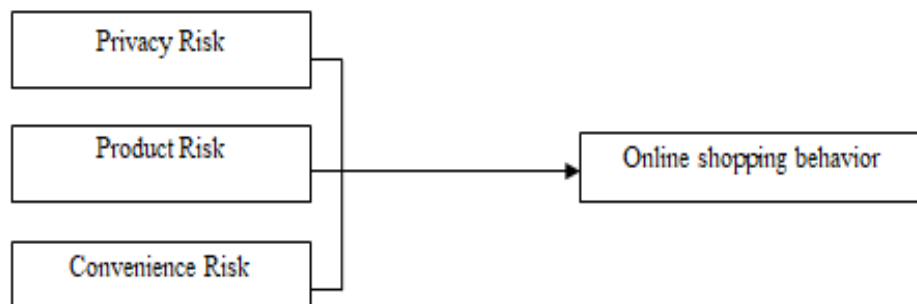

Figure 1: Conceptual Framework

Research Methodology

The conceptual framework of current study consisted of four (4) constructs. In this research product risk, privacy risk, convenience risk, and online shopping behavior measures with a number of items that are adopted from previous different studies. Items that are used in current study to measures the constructs used 5 point likert scale and the range of this scale was from 1 to 5. 1 represents strongly disagree and 5 represents strongly agree. Online shopping behavior consisted seventeen (17) items that was adopted from (Moshrefjavadi, Dolatabadi, Nourbakhsh, Poursaeedi, & Asadollahi, 2012), privacy risk consisted four (4) items and was adopted from (Dinev & Hart, 2005), product risk consisted five (5) items and was adopted from (Masoud, 2013), and convenience risk consisted six (6) items adopted from (Moshrefjavadi et al., 2012).

Data Collection

Data were collected from online users from different universities in Lahore, Gujarat, Gujranwala, and Islamabad in Pakistan by using convenient sampling technique. 350 questionnaires were distributed among online users and 298 questionnaires were used for analysis purpose and 52 questionnaires excluded due to missing values. From our 350 sample 176 female and remaining 122 male.

Demographic Profile

As mentioned in Table 1 total number of respondents was 298 and out of these 176 represents female (59.1%) and remaining 122 (40.9%) represents male. With regard to qualification 20 respondents (6.7%) were those who did diploma, 95 (31.9%) respondents were graduation degree holder, 175 (58.7%) respondents were master degree holder, 2 respondents were PhD, and 6 were others. 36 respondents were less than 18 years old, 218 were 18 to 28 years old, 39 were within 29 to 36, and 5 respondents were 36 to 45 years.

Table 1: Demographic Profile

Variables	Frequency	Percentage
Gender		
Female	176	59.1
Male	122	40.9
Qualification		
Diploma	20	6.7
Graduation Degree	95	31.9
Master's Degree	175	58.7
PhD	2	0.7
Others	6	2.0
Age		
Less than 18 years	36	12.0
18 to 28 years	218	73.2
29 to 36 years	39	13.1
36 to 45 years	5	1.7

Statistical Analysis Results

In the present research Partial Least Square (PLS-SEM) technique was used to analyze the theoretical framework. This technique has proved that this is better technique to handle both type of frameworks such as simple and complexes .This technique considered to be good because it works also on un-normal data (Bamgbade, Kamaruddeen, & Nawi, 2015; Hair Jr, Hult, Ringle, & Sarstedt, 2014). Moreover, this technique is better than covariance-based technique such as CBS-SEM in establishing the validity of constructs (Afthanorhan, 2013; Hair Jr et al., 2014). In current study PLS-SEM technique was used to estimate the measurement and structural model.

Measurement Model

According to Hair, Ringle, and Sarstedt (2013), three things are required in estimating the measurement model and that three things are as follows; first one is content validity, second is convergent validity, and the final is Discriminant validity. In this study, above mentioned three things fulfill the required criteria that established various researchers. As we can wee in Fig 2 and Table 1:

Convergent Validity

Convergent validity refers to those variables items measuring the same variable. There are three things to compute convergent validity like average variance-extracted (AVE), factor loadings, and composite reliability (CR) as suggested (Hair Jr, Hult, Ringle, & Sarstedt, 2013). Hayduk and Littvay (2012), stated that to get excellent results about AVE and CR there is a need to eliminate all items that show factor loading below 0.50 and this process makes sound theoretical framework. Table 2 shows that AVE, factors loadings, and CR values meets the standardized criterion.
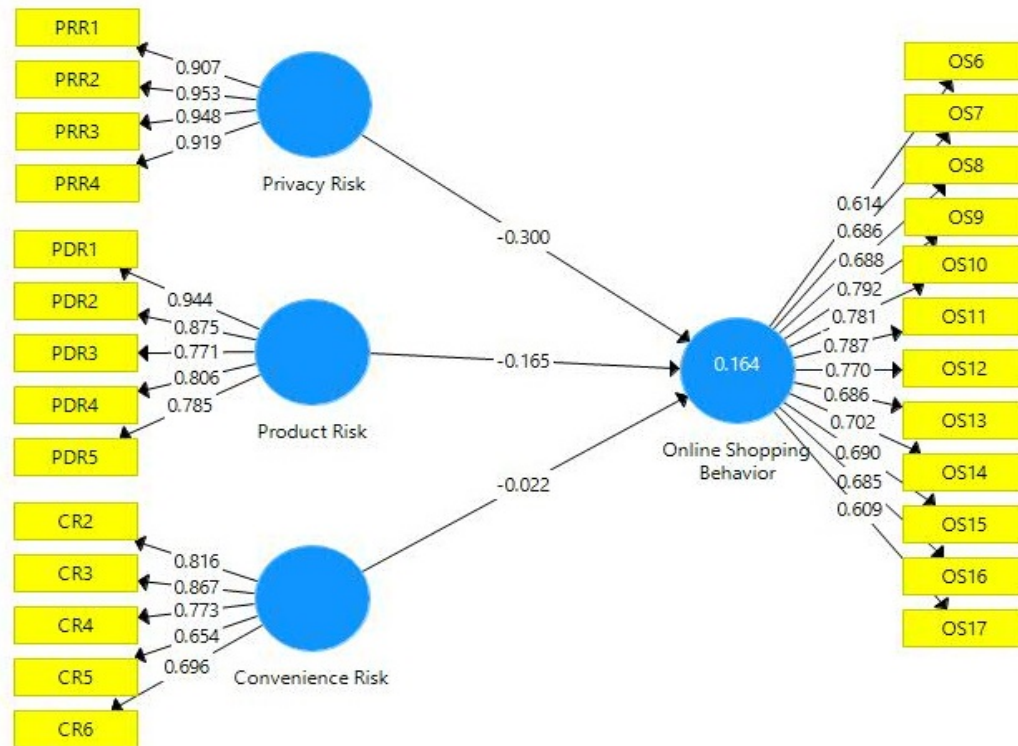
Figure 2: Measurement Model

Table 2: Convergent Validity

Variables	Items	Factor Loading	AVE	CR	Cronbach Alpha	R2	Rho_A
Privacy Risk	PRR1 PRR2 PRR3 PRR4	0.907 0.953 0.948 0.919	0.868	0.963	0.949		0.964
Product Risk	PDR1 PDR2 PDR3 PDR4 PDR5	0.944 0.875 0.771 0.806 0.785	0.703	0.922	0.892		0.901
Convenience Risk	CR2 CR3 CR4 CR5 CR6	0.816 0.867 0.773 0.654 0.696	0.586	0.875	0.830		0.863

Online Shopping Behavior	OSB6	0.614	0.504	0.924	0.909	.0.164	0.914
	OSB7	0.686					
	OSB8	0.688					
	OSB9	0.792					
	OSB10	0.781					
	OSB11	0.787					
	OSB12	0.770					
	OSB13	0.686					
	OSB14	0.702					
	OSB15	0.690					
	OSB16	0.685					
	OSB17	0.609					

As presented in Table 2 CR value more than 0.60, and AVE greater than 0.50 as suggested (Hair et al., 2013). Cronbach alpha value was greater than 0.70 as suggested (Nunnally, 1978). And at the end Rho_A values demonstrated every item of constructs reliable.

Table 3: Discriminant Validity

Variable	PPR	PDR	CR	OSB
PRR	0.765			
PDR	-0.125	0.710		
CR	0.267	-0.376	0.932	
OSB	0.136	-0.295	0.423	0.839

Table 3 shows that we meet the criteria for discriminant validity as suggested by (Fornell & Larcker, 1981).

Table 4: Heterotrait-Monotrait Ratio (HTMT)

Variable	PRR	PDR	CR	OSB
PRR				
PDR	0.127			
CR	0.247	0.396		
OSB	0.161	0.322	0.458	

As above mentioned Table 4 demonstrate that Heterotrait-Monotrait Ratio (HTMT) fulfill the standardized criteria that recommended by (Hair et al., 2013).

Talbe 5: Cross Loadings

Items	PRR	PDR	CR	OSB
PRR1	**0.907**	0.376	0.249	-0.300
PRR2	**0.953**	0.403	0.228	-0.408
PRR3	**0.948**	0.427	0.275	-0.358
PRR4	**0.919**	0.366	0.246	-0.319
PDR1	0.410	**0.944**	0.131	-0.288
PDR2	0.377	**0.875**	0.118	-0.237
PDR3	0.362	**0.771**	0.076	-0.231
PDR4	0.296	**0.806**	0.104	-0.235
PDR5	0.320	**0.785**	0.138	-0.240

CR2	0.178	0.085	**0.816**	-0.041
CR3	0.313	0.182	**0.867**	-0.129
CR4	0.046	0.134	**0.773**	-0.034
CR5	0.189	0.011	**0.654**	-0.108
CR6	0.115	0.099	**0.696**	-0.074
OSB6	-0.262	-0.134	-0.123	**0.614**
OSB7	-0.310	-0.159	-0.151	**0.686**
OSB8	-0.231	-0.212	-0.084	**0.688**
OSB9	-0.308	-0.279	-0.126	**0.792**
OSB10	-0.298	-0.204	-0.105	**0.781**
OSB11	-0.265	-0.208	-0.053	**0.787**
OSB12	-0.250	-0.219	-0.093	**0.770**
OSB13	-0.246	-0.201	-0.033	**0.686**
OSB14	-0.315	-0.269	-0.073	**0.702**
OSB15	-0.238	-0.243	-0.094	**0.690**
OSB16	-0.225	-0.188	-0.039	**0.685**
OSB17	-0.221	-0.155	-0.071	**0.609**

As Table 5 demonstrate the cross loadings and cross loadings are in line as suggested by (Hair et al., 2013).

Assessment Of Structural Model

In this section, we discussed the direct hypotheses between independent constructs and dependent construct. According to Hair Jr, Hult, Ringle, and Sarstedt (2016) in determining significant values of the loadings and path co-efficient authors suggested that perform bootstrap with 5000 subsamples. Table 4 and Fig 4 elucidate the findings of structural model.
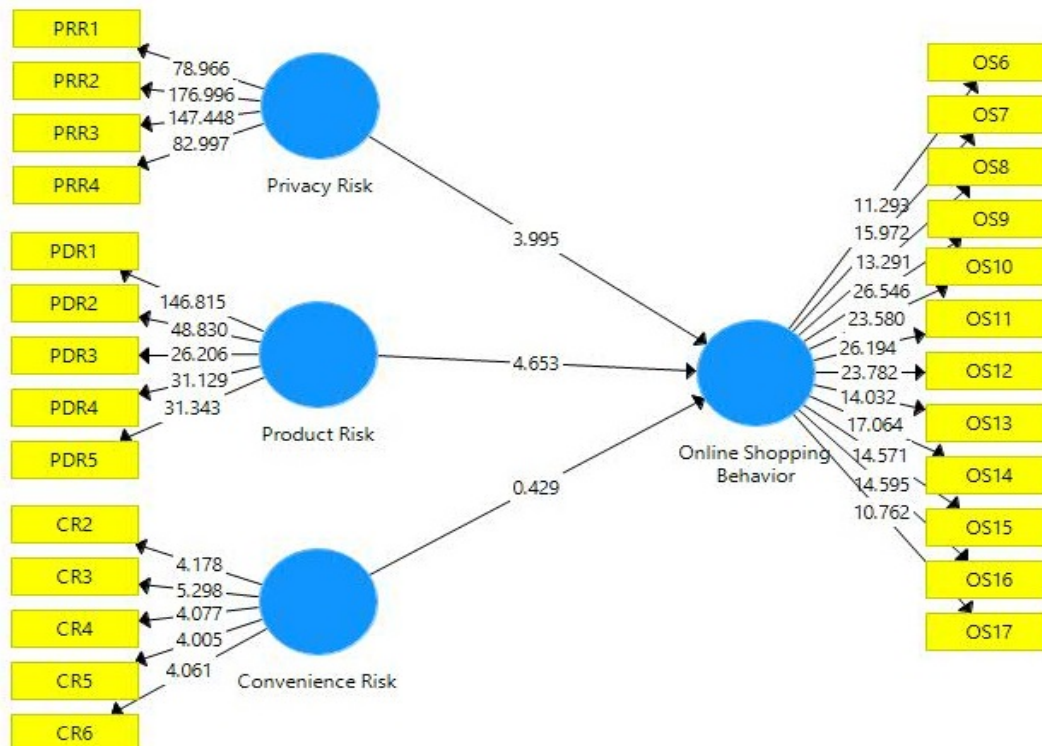

Figure 4: Structural Model

Table 6: Direct Relationships

Hypotheses	Paths	Path co-efficient	T-values	P-values	Results
H_1	PRR --> OS	-0.300	3.995	0.000	Supported
H_2	PDR --> OS	-0.165	4.653	0.000	Supported
H_3	CR --> OS	-0.022	0.429	0.668	Not-Supported

Table 6 demonstrate that privacy risk significant indicator of online shopping behavior (β = -0.300, t-value = 3.995, p-value = 0.000) thereby our hypotheses Hi has supported it. Moreover, product risk also significant negative influence on online shopping behavior (β = -0.165, t-value = 4.653, p-value = 0.000) and our hypotheses H_2 has supported it. Despite this, convenience risk has insignificant influence on online shopping behavior (β = -0.022, t-value = 0.429, p-value = 0.668) and our hypotheses H_3 has not supported it.

Discussion and Conclusion

The purpose of this research is to determine relationship between privacy risk, product risk, convenience risk, and internet buying behavior in the context of Pakistan. Findings revealed that privacy risk significantly and negatively influence online shopping behavior and our hypotheses H_1 supported it. The results are similar with the results of (Masoud, 2013; Mathur, 2015; Tsai & Yeh, 2010). Moreover, results elucidated that product risk negatively and significantly influence online shopping behavior and our hypotheses H_2 supported that. The findings are in the same line with findings of (S. Forsythe et al., 2006; Haider & Nasir, 2016; Ko et al., 2004; Masoud, 2013). Despite this, findings revealed that convenience risk has negative but insignificant influence on online shopping behavior and our hypotheses H_3 could not support it. The results are similar with the results of (Abrar, Naveed, & Ramay, 2017; Tariq et al., 2016).

Future Directions

As mentioned earlier, most of the studies examined the influence of different factor on online shopping behavior in developed countries and less attention has been paid on this topic in developing countries. There is need to study online shopping behavior in future with adding some other variables as independent variable. Furthermore, future research must conduct in qualitative nature. Current study determines the impact of some risk with internet buying behavior directly and there is need to study further with the help of mediating as well as moderating variables. There is need to study the influence of these risks as well as other risks (financial risk, social risk) on online shopping behavior with the help of some moderating as well as mediating variable such as attitude, culture, trust. There is need to study the relationship between risk and online buying behavior with the help of social exchange theory as well as theory of planned behavior. Online retailers can increase online shopping behavior of consumers by focusing on trust that can reduce risks of online consumers regarding online shopping.

Reference

1. Abrar, K., Naveed, M., & Ramay, M. I. (2017). Impact of Perceived Risk on Online Impulse Buying Tendency: an Empirical Study in the Consumer Market of Pakistan. Journal of Accounting & Marketing, 6(3). doi: 10.4172/2168-9601.1000246.
2. Adnan, H. (2014). An analysis of the factors affecting online purchasing behavior of Pakistani consumers. International Journal of Marketing Studies, 6(5), 133.
3. Afthanorhan, W. (2013). A comparison of partial least square structural equation modeling (PLS-SEM) and covariance based structural equation modeling (CB-SEM) for confirmatory factor analysis. International Journal of Engineering Science and Innovative Technology, 2(5), 198-205.
4. Aghekyan-Simonian, M., Forsythe, S., Kwon, W. S., & Chattaraman, V. (2012). The role of product brand image and online store image on perceived risks and online purchase intentions for apparel. Journal of Retailing and Consumer Services, 19(3), 325-331.

5. Aijaz, H., & Butt, F. S. (2009). Barriers in the development of electronic commerce: A study of Pakistani environment.

6. Ariff, M. S. M., Sylvester, M., Zakuan, N., Ismail, K., & Ali, K. M. (2014). Consumer Perceived Risk, Attitude and Online Shopping Behaviour; Empirical Evidence from Malaysia. Paper presented at the IOP Conference Series: Materials Science and Engineering.

7. Arshad, A., Zafar, M., Fatima, I., & Khan, S. K. (2015). The Impact of Perceived Risk on Online Buying Behavior. International Journal of New Technology and Research (IJNTR) ISSN, 2454-4116.

8. Azadavar, R., Shahbazi, D., & Teimouri, E. (2011). The role of security as a customer perception of customers' online purchasing behavior. Paper presented at the International conference on software and computer applications IPCSIT.

9. Bamgbade, J. A., Kamaruddeen, A. M., & Nawi, M. (2015). Factors influencing sustainable construction among construction firms in Malaysia: A preliminary study using PLS-SEM. Revista Tecnica De La Facultad De Ingenieria Universidad Del Zulia (Technical Journal of the Faculty of Engineering, TJFE), 38(3), 132-142.

10. Bhatti, A. (2018). Consumer Purchase Intention Effect on Online Shopping Behavior with the Moderating Role of Attitude. International Journal of Academic Management Science Research (IJAMSR), 2(7), 44-50.

11. Bhatti, A., Saad, S., & Gbadebo, S. M. (2018a). Convenience Risk, Product Risk, and Perceived Risk Influence on Online Shopping: Moderating Effect of Attitude Science Arena Publications International journal of Business Management, 3(2).

12. Bhatti, A., Saad, S., & Gbadebo, S. M. (2018b). Convenience Risk, Product Risk, and Perceived Risk Influence on Online Shopping: Moderating Effect of Attitude. Science Arena Publications International journal of Business Management, 3(2), 1-11.

13. Chang, J. (2004). Online Shopping: Advantages over the Offline Alternative. The Journal of Internet Banking and Commerce, 8(2).

14. Chaudary, S., Rehman, M. A., & Nisar, S. (2014). Factors influencing the acceptance of online shopping in pakistan.

15. Claudia, I. (2012). Perceived risk when buying online: evidence from a semi-structured interview. Economics series, 22(2), 63-73.

16. Dinev, T., & Hart, P. (2005). Internet privacy concerns and social awareness as determinants of intention to transact. International Journal of Electronic Commerce, 10(2), 7-29.

17. eMarketer. (2018). Worldwide Retail Ecommerce Sales: Emarketer's Updated Estimates and Forecast Through 2019.

18. Featherman, M. S., & Pavlou, P. A. (2003). Predicting e-services adoption: a perceived risk facets perspective. International journal of human-computer studies, 59(4), 451-474.

19. Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. Journal of marketing research, 39-50.

20. Forsythe, S. M., & Shi, B. (2003). Consumer patronage and risk perceptions in Internet shopping. journal of Business research, 56(11), 867-875.

21. Forsythe, S., Liu, C., Shannon, D., & Gardner, L. C. (2006). Development of a scale to measure the perceived benefits and risks of online shopping. Journal of interactive marketing, 20(2), 55-75.

22. George, J. F. (2002). Influences on the intent to make Internet purchases. Internet Research, 12(2), 165-180.

23. Haider, A., & Nasir, N. (2016). Factors Affecting Online Shopping Behavior of Consumers in Lahore, Pakistan.

24. Hair Jr, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2013). A primer on partial least squares structural equation modeling (PLS-SEM). Thousand Oaks, CA.: Sage Publications.

25. Hair Jr, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2014). A primer on partial least squares structural equation modeling (PLS-SEM): Sage Publications.
26. Hair Jr, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2016). A primer on partial least squares structural equation modeling (PLS-SEM): Sage Publications.
27. Hair, J. F., Ringle, C. M., & Sarstedt, M. (2013). Partial least squares structural equation modeling: Rigorous applications, better results and higher acceptance.
28. Hayduk, L. A., & Littvay, L. (2012). Should researchers use single indicators, best indicators, or multiple indicators in structural equation models? BMC medical research methodology, 12(1), 159.
29. Hong, I. B., & Cha, H. S. (2013). The mediating role of consumer trust in an online merchant in predicting purchase intention. International Journal of Information Management, 33(6), 927-939.
30. Hsin Chang, H., & Wen Chen, S. (2008). The impact of online store environment cues on purchase intention: Trust and perceived risk as a mediator. Online information review, 32(6), 818-841.
31. Jukariya, T., & Singhvi, R. (2018). A Study of Factors Affecting Online Buying Behavior of Students. Int. J. Curr. Microbiol. App. Sci, 7(1), 2558-2565.
32. Karayanni, D. A. (2003). Web-shoppers and non-shoppers: compatibility, relative advantage and demographics. European Business Review, 15(3), 141-152.
33. Khan-SZABIST, S. H., & Arshad-SZABIST, S. Z. (2010). Why E-Commerce Remains Unsuccessful in Pakistan?
34. Ko, H., Jung, J., Kim, J., & Shim, S. W. (2004). Cross-cultural differences in perceived risk of online shopping. Journal of Interactive Advertising, 4(2), 20-29.
35. Lian, J.-W., & Lin, T.-M. (2008). Effects of consumer characteristics on their acceptance of online shopping: Comparisons among different product types. Computers in Human Behavior, 24(1), 48-65.
36. Lim, Y. J., Osman, A., Salahuddin, S. N., Romle, A. R., & Abdullah, S. (2016). Factors influencing online shopping behavior: the mediating role of purchase intention. Procedia Economics and Finance, 35, 401-410.
37. Masoud, E. Y. (2013). The effect of perceived risk on online shopping in Jordan. European Journal of Business and Management, 5(6), 76-87.
38. Mathur, N. (2015). Perceived Risks Towards Online Shopping: An Empirical Study of Indian Customers. International Journal of Engineering Development and Research, 3(2), 297.
39. Moshrefjavadi, M. H., Dolatabadi, H. R., Nourbakhsh, M., Poursaeedi, A., & Asadollahi, A. (2012). An analysis of factors affecting on online shopping behavior of consumers. International Journal of Marketing Studies, 4(5), 81.
40. Nazir, S., Tayyab, A., Sajid, A., Rashid, H., & Javed, I. (2012). How Online Shopping Is Affecting Consumers Buying Behavior in Pakistan? International Journal of Computer Science Issues, 9(3), 486-495.
41. Nunnally, J. (1978). Psychometric Theory (2nd Edit.) McGraw-Hill. Hillsdale, NJ.
42. Qureshi, H. A., Fatima, R., & Sarwar, A. (2014). Barriers to Adoption of Online Shopping in Pakistan. Science International, 26(3).
43. Rizwan, M., Umair, S. M., Bilal, H. M., Akhtar, M., & Bhatti, M. S. (2014). Determinants of customer intentions for online shopping: A Study from Pakistan. Journal of Sociological Research, 5(1), 248-272.
44. Saprikis, V., Chouliara, A., & Vlachopoulou, M. (2010). Perceptions towards online shopping: Analyzing the Greek University students' attitude. Communications of the IBIMA.
45. Shahzad, H. (2015). Online Shopping Behavior.
46. Sunil. (2015). Trends and practices of consumers buying online and offline: An analysis of factors influencing consumer's buying. International Journal of Commerce and Management, 25(4), 442-455.
47. Tariq, A., Bashir, B., & Shad, M. A. (2016). Factors affecting online shopping behavior of consumers in Pakistan. Journal of Marketing and Consumer Research, 19.

48. Tsai, Y. C., & Yeh, J. C. (2010). Perceived risk of information security and privacy in online shopping: A study of environmentally sustainable products. African Journal of Business Management, 4(18), 4057.

49. ur Rehman, K., ur Rehman, I., Ashfaq, M., & Ansari, S. (2011). Examining online purchasing behavior: A case of Pakistan. Paper presented at the 2011 International Conference on Social Science and Humanity, Singapore, IPEDR.

50. Varma, I. G., & Agarwal, M. R. (2014). Online Buying Behaviour of Homemakers in Western Suburbs of Mumbai and Social Media Influence. IOSR Journal of Business and Management, 16(8), 42-65.