

Effects of Perceived Risk on Online Buying Behavior

Diwakar Pandey, Assistant Professor

Faculty of Management, Tribhuvan University

diwakar.pandey@bmc.tu.edu.np

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Abstract: This study aims to investigate the impact of perceived risk factors on online purchasing behavior. The two main factors taken from the extensive review are financial risk and product risk. The web-based Google Form survey was administered, and a total of 194 online shoppers. The statistical analysis showed that financial risk only has a direct significant impact on online shopping behavior of the respondents. The study will assist online shopping in the context of urban areas when markers accommodate its result in marketing policy.

Key Words: Online shopping, financial risk, product risk and buying behavior

Introduction in Context

The rapid growth of the Internet has increased in scope of online shopping. Consumer buying behavior has dramatically shifted from traditional physical buying behavior to modern online buying behavior. With growing access online, buyers and sellers meet online and transaction takes place electronically with each other. Web browsing, usage messengers, and WhatsApp are the most popular online shopping tools without using intermediaries (Ariff *et al*:2014). Online transaction value is expected to grow by 9.62 percent annually and is projected to reach \$ 3.35 billion US dollars by 2028 (Statista.com) in Nepal. Online shopping provides easy access to purchase products for customers electronically on one side making life easy and comfortable. has brought perceived risk and challenges to another side (Crepso: 2013, Yaman: 2023). Nowadays, customers have busy schedules due to family and job responsibilities. Physically present shopping is difficult to adjust time. Online shopping was only an option for shopping through the use of the internet. Advancements in technology and literacy rates are the drivers of online shopping and emerging online shopping. Customer shopping behavior has dramatically changed during the period of coronavirus pandemic period.

Consumer behavior has shifted dramatically over online shopping because of the outbreak of coronavirus along with an imposed long quarantine during the pandemic period when transportation and business were fully locked down. Purchase and repurchasing online consumer buying increased positive attitudes toward online shopping, perceived usefulness, and online shopping experience of online shopping (Malwali *et al* 2023). Product varieties, payment methods, and psychological factors are drivers of online shopping (Al Hamli & Sobaih: 2023).

Online shopping consumer is a state of studying buyers' attitudes and preferences whereby consumers directly purchase goods and services through digital platforms and web-based technologies. Online shopping makes easy, quick, and cheap access to products and services but it has a negative perception toward customers in terms of payment safety and trust in products (Yaman and Koksai, 2023). Risks associated with delay in delivery, non-delivery, and damage to products are very common (Nampoothori, 2021) and trust building (Martin, 2008). Therefore this research is carried out to get answers to two research questions: answering on current state of online shopping behavior and investigating the degree of perceived risk resulting in customer online shopping behavior present status of risk associated with online shopping? and ii) does perceived risk such as product and financial risk have an association with online shopping behavior?

Literature review

Online shopping behavior is the state of buying goods and services from the Internet where the customer as a user accesses the internet, selects, negotiates, buys, and uses goods and services (Ariff, 2014). The trend of online buying behavior has grown along with the advancement of technology and the growth of internet society (Bhatti:2018, Bhatti, Saad, & Gbadebo, 2018a). Hoffman and Novak (1996) indicated that interactivity is the key distinguishing feature between marketing communication on the Internet and traditional mass media. Today online consumers have more control and raised bargaining power as compared to consumers of physical stores because the internet offers more interactivity between consumers and product/service providers as well as greater availability of information about products and services (Bhatti, Saad & Gbadebo: 2020). The Internet plays very a significant role in searching, evaluating, comparing, and buying products. Online shopping behavior is customers' perception that positively and negatively

evaluates online shopping based on customer experience including financial and product risks (Fatin Alia: 2016, Salim *et al*: 2019).

Risk is multidimensional in nature. Risk occur under online buying is different from physical buying. Buyer is unable to visualize the product and its quality directly and lack of personal contact with salesperson so that it creates a psychological fair among the buyers that what buyers are intended to purchase, does he or she get exactly the same as desired (Martin & Camarero: 2008).

The concept of perceived risk in the marketing literature was first introduced by (Bauer, 1960) and later on elaborated as behavioral and environmental risk (Kyung & John: 2010). Arsad (2015) further defines types of perceived risk into financial risk, security risk, time and convenience, and psychological risk. Product risks cover time & and convenience and psychological risks (Kyung & John: 2010). Financial risk is associated with online fraud, identity theft, manipulation of credit card information, fear of perceived online blackmailing, and leaking of online.

Financial risk refers to the loss in the monetary terms associated with buying. It is a loss of money that imprints a bad purchasing experience. Financial risk is the first major and big risk during buying online (Sinha & Singh, 2017). In addition, it is also the strongest predictor of online shopping behavior. Financial risk plays a major role in consumer decision-making for buying online (Bhatti,Saad, & Gbadebo, 2018b; Haider & Nasir, 2016). Researchers reveal that financial risk is a loss of money that covers the fraud of credit cards and discloses card information which is why people avoid buying online (Masoud, 2013; Singh & Singh, 2014). It is also considered that the product price is not the lowest in comparison (Egeln & Joseph, 2012). Consumer faces financial risk in the early stage of shopping when they place an order. But, its level depends on the nature of the product, all products' risk level is different and there is no specific standard Cunningham *et al* (2005). This risk cogitates most important while buying online (Almousa, 2011, 2014; Bhatnagar, Misra, & Rao, 2000; Cunningham, 1967; Ingene & Hughes, 1985; Jacoby & Kaplan, 1972; Peter & Ryan, 1976; Sharma & Kurien, 2017; Stone & Gronhaug, 1993; Zhang, Tan, Xu, & Tan, 2012). Studies show a negative relationship between financial risk and online shopping behavior (Bhatnagar *et al.*, 2000; Changet *al*(2005) Forsythe (2006), Haider & Nasir, (2016).

H1A: Financial risk has significantly negatively associated with online customer buying behavior

Product risk is limited potential to examine the product. Online shopping is a risky way of shopping because in this way people cannot touch product they just rely on some graphics and ads. This risk becomes hurdle in buying (Peter & Tarpey Sr, 1975). It has a significant influence on consumers buying behavior that's why it is associated with consumer decisions (Forsythe & Shi, 2003; Liu & Forsythe, 2010). Product risk involves the loss of product standards means a gap between desired product and the actual state of the product that is unable to meet the expected customer desire state. . Furthermore, this risk is related to customer satisfaction if the product cannot satisfy customer expectations then the loss of money and product as well. Some retailers do not offer after-sale services which affects the frequency of purchasing online (Bhatti, Saad, & Gbadedo, 2019). This risk is considered a very serious risk and its negative experience and loss of confidence and reput. Some issues linked with product risk such limited stock of product, limited information of the product, deliver a wrong product, delay product, product not same with picture (Saprikis *et al* 2010). Moreover, prior studies reveal the significant negative relationship between product risk and online shopping behavior (Ariff *et al* 2014; Chakraborty, 2016; Forsythe *et al* 2006; Haider & Nasir, 2016; Ko *et al* 2004; Masoud, 2013; Shahzad, 2015). No doubt there are various studies on this topic but limited in developing countries so, still need more research in future (Masoud, 2013; Rizwan *et al* 2014; Shahzad, 2015).

H2A: Product risk has significantly negatively associated with online customer buying behavior.

Research Methodology

The purpose of a research methodology is to convey the plan for the collection and analysis of data. The relationship of financial risk, product risk, and online buying behavior is measured by descriptive and analytical research design which is conducted on primary data and primary data is collected through online questionnaires in Rupandehi district. This study used the convenience sampling technique where 312 consumers were selected as the sample for the study. A sample size greater than 30 and less than 500 is suitable for many studies (Memon *et al.*, 2020). In this study 5 point Likert scale is used. This study is quantitative in nature. There are 14 items where construct of financial risk is constituted of 5 items, product risk is constituted of 4 items, and online buying behaviors is 5 items.

Respondents have identified who had at least two prior exposure on online shopping. They usually purchased food grains and household consumption items from the nearest supermarket at Bhatbhateni Super Market and Sanu Departmental Store at Bhairahawa. two steps model were used in this study. The first step was they were personally asked and ensured online shopping experience who were intended to shop at the supermarket, Bhairahawa, Rupandehi, in the month of June and July 2023. In the second step, a close-end questionnaire was sent to 312 respondents among them only 194 responses got back from the respondents which was forwarded for analysis. Respondents age was between 18 to 30 years.

Table I shows the sample characteristics of respondents that comprised as gender, age, qualification and occupation. The composition of male consumers are 51.03. % The composition of male respondents is 51.03%(99) and 30 years above respondents are the highest among the four categories of age distribution such as 32.47% (63) and intermediate level passed out respondents are the highest i.e. 28.86%(56) and the majority of respondents are job holders that cover 46.01(91) among the three categories.

Table 1:
Demographic characteristics of online consumers

Description	Variables	Frequency	Percentage
Gender	Male	99	51.03
	Female	95	48.97
Age(Years)	less than 18 years	35	18.05
	18-24 years	52	26.80
	24 -30 years	44	22.68
	+ 30 years	63	32.47
Qualification	SEE/SLC	48	24.74
	+2	56	28.86
	Bachelor Degree	53	27.31
	Master Degree	39	20.00
Occupation	Business	68	35.05
	Jobholder	91	46.01

	Independent	35	18.04
Total(N)		194	100

Source: Online Survey, June 2023

Findings of the demographic analysis are shown in Table 2.1 and is indicated that most of the respondents are female, age 18 to 24 years old, bachelor degree program and students consumers are the highest respondents.

Table II:
Coefficient of reliability

Variables	Cronbach Alpha	No. of Items
Product Risk(PR)	0.75	5
Financial Risk(FR)	0.70	4
Online Buying Behavior (OBB)	0.81	5
Combined	0.75	14

Note: SPSS Data Output

Table II exhibits reliability of each construct. Cronbach alpha values of product risk, financial risk and online buying behavior are 0.75, 0.70 and 0.81 respectively. All values are above 0.65 which means study is reliability that is forwarded for further analysis.

Table III:
Descriptive statistics of product risk

Statement	Mean	SD
Product risk	3.61	0.64
P1:I receive the product I ordered through online shopping.	3.00	1.05
P2:It is hard to judge the quality of products over online.	4.02	0.656
P3:I might get a damaged product.	3.56	0.96
P4:The product may have less quality	3.39	0.89
P5:If I shop online I can't touch the product.	4.10	0.94
Financial risk	3.33	0.77
F1:My e-commerce details may not be secure and may be misused if I shop online.	3.14	0.99

F2:I might get overcharged if I shop online.	3.69	0.97
F3:I hesitate to pay online.	3.03	1.174
F4:I can get back my money while cancelling the order.	3.44	1.103
Online buying behavior	3.76	0.76
I have never faced any difficulties while shopping on online.	3.80	0.82
I feel financially secure when I do shopping online.	3.12	0.96
I receive the same product as I order.	3.25	0.85
I always purchase through online as much as possible.	3.62	0.91
Finally I recommend others to shop online.	3,85	0.86

Note: SPSS Data Output

Table III:
Correlational matrix

	1	2	3
Product Risk (PR)	1		
Financial Risk (FR)	.542**	1	
Online Buying Behavior (OBB)	-.127	-.319**	1

** . Correlation is significant at the 0.01 level (1-tailed).

Note: SPSS Data Output

Correlation Table III presents the degree of relationship between product risk and financial risk with online buying behavior. Increases in financial risk decreases in online buying behavior i.e. $r = -0.319$ and also product risk has a weak negative relationship with online buying behavior as compared with financial risk i.e $r = 0.127$.

Multiple Regression Analysis

Table IV:
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.323 ^a	.104	.072	.68719

a. Predictors: (Constant), FR, PR

Note: SPSS Data Output

Table V:
ANOVA Table

Model		Sum of Square	df	Mean Square	F	Sig.
1	Regression	3.081	2	1.540	3.262	.046 ^b
	Residual	26.445	192	.472		
	Total	29.525	194			

a. Dependent Variable: OBB

b. Predictors: (Constant), FR, PR

Note: SPSS Data Output

Table VI:
Coefficient Table

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.589	.531		8.646	.000
	PR	.071	.166	.064	.425	.672
	FR	-.327	.139	-.353	-2.347	.022

a. Dependent Variable: OBB

Note: SPSS Data Output

Table.VII Hypothesis Testing Result

Hypothesis	P-value	Result
H ₁ : Product risk has a significantly negative relationship with online buying behavior.	0.672>0.05	Rejected
H ₂ : Financial risk has a significantly negative relationship with online buying behavior.	0.022<0.05	Accepted

Discussion

Financial risk is negatively associated with on online buying behavior. Online buying behavior trends and purchase intention of consumers decrease when financial risks has been increased. Financial risk includes not being secure online shopping, overly charges the price of commodities, not receiving money under the condition of cancellation of order. Regression analysis is shown in Table VII that one unit addition in financial risk of online buying behavior leads to decreases by -0.353 units in online buying behavior where p value . Evidence supported $B=-0.353$, $p=0.022$, it means financial risk has an association with online shopping behavior so that HA2 is accepted. At the same time product risk has seen insignificant with online shopping behavior of customers where $B=0.71$, $p=0.672>0.05$ that rejection of HA1.

The findings of this study such as financial risk is negatively associated with online shopping behavior. This finding is consistent with the findings from the previous study Javadi *et al.*, (2012 and Kim and Lennon (2010). Financial risk occurs during the time of business transactions, both buyers and sellers are not physically met and both of them are skeptical in each other because trust has not developed and both of them have not prior purchase experience between them. Similarly, the findings of this study such as product risk has not negatively association with online shopping behavior. The result of this study is contrary with the findings of Forsythe and Shi (2003) and Biswas and Biswas (2004) and Kim and Lennon (2010). Product risk occurs due to increasing uncertainty on online shopping products and expected benefits received as desired by the buyers. The possible reason is insignificance is mainly context factors such as type of product and purchase value of products, buyers' prior experience on online shopping and buyer-self factors. In the context of Nepal both product risk and financial risk occur simultaneously if any uncertainty on quality and features comes among the product that leads toward cancellation of order. In the case of partial payment or full payment situation sellers hesitate to return money. Sellers could offer exchange facilities that buyers may or may not accept due to incongruent of buyer interest and quality of the product (Viadya: 2019). Growing financial risk is more likely to decrease online buyers' participation in online shopping behavior in the future. However, it creates the greatest threats as a whole in online shopping. Only two variables are considered under the perceived risk on online shopping which could not explain the perceived risk in depth. Therefore it is required to study among various professional groups by adding additional variables. Transaction risk is associated with security and personal privacy while using online shopping (Biswas and Biswas: 2004) which is absent. Prior studies supported decreasing in transaction risk had increased buyers'

willingness toward online shopping. Along with product and financial risk, transaction risk should be considered as a separate construct in future research. In addition, website quality, contents of websites; and product information negatively decrease the perceived risk of buyers on online shopping.

References

Al Hamli, S. S., & Sobaih, A. E. E. (2023). Factors influencing consumer behavior towards online shopping in Saudi Arabia amid covid-19: Implications for E-businesses post pandemic. *Journal of Risk and Financial Management*, 16(1), 36.

Almoussa, M. (2011). Perceived Risk in Apparel Online Shopping: A Multi Dimensional Perspective/Le Risque Perçu Dans Des Achats En Ligne D'habillement: Une Perspective De Dimensionnelle Multiple. *Canadian Social Science*, 7(2), 23

Ariff, M. S. M., Sylvester, M., Zakuan, N., Ismail, K., & Ali, K. M. (2014, June). Consumer perceived risk, attitude and online shopping behaviour; empirical evidence from Malaysia. In IOP Conference Series: Materials Science and Engineering (Vol. 58, No. 1, p. 012007). IOP Publishing. Chicago.

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*, 1(8), 13-18.

Bhatnagar, A., Misra, S. and Rao, H.R. (2000) On Risk, Convenience, and Internet Shopping Behavior. *Communications of the ACM*, 43, 98-105.
<https://doi.org/10.1145/353360.353371>
<https://www.statista.com/outlook/dmo/fintech/digital-payments/digital-commerce/nepal> retrieved on 25 September 2024. Chicago.

Crespo, A.H., Bonque, I.D. & Salmones, M.C. (2009), The influence of perceived risk on internet shopping behavior: A multidimensional perspective. *Journal of Research*, 12(2), 259-277

Cunningham, S.M. (1967) The Major Dimensions of Perceived Risk. In: Cox, D.F., Ed., *Risk Taking and Information Handling in Consumer Behavior*, Harvard University Press, Boston, MA.

Egeln, L. S., & Joseph, J. A. (2012). Shopping cart abandonment in online shopping. *Atlantic Marketing Journal*, 1(1), 1.

Haider, A., & Nasir, N. (2016). Factors affecting online shopping behavior of consumers in Lahore, Pakistan. *Journal of Management Engineering and Information Technology*, 3(6), 9-14.

Hoffman, D.L. & Novak, T.P. (1996). Marketing in hypermedia computer-mediated environments: conceptual functions. *Journal of Marketing*. 60 (3), 50-68

Ingene, Charles A. "Labor productivity in retailing: what do we know and how do we know it?." *Journal of Marketing* 49.4 (1985): 99-106.

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

Mawlawi, A., El Fawal, A., Ibrahim, G., Ramadan, M., Baydoun, H., Massoud, M., ... & Yassine, D. (2023). Factors Influencing Online Shopping Intentions In The Post-Pandemic Era: A Retrospective Study Among Lebanese. *Journal of Namibian Studies: History Politics Culture*, 35, 171-204.

Masoud, E. Y. (2013). The effect of perceived risk on online shopping in Jordan. *European journal of Business and Management*, 5(6), 76-87

Martin, S.N. & Camarero, C. (2009). How perceived risk affects in online buying. *Online Information Review*, 33 (4) 629-654.

Nampoothiri, A. (2021). Online Shopping Behaviour: A Study on Exploring the Dependence of Demographics of the People in Kerala on their Behaviour in Online Shopping. *Turkish Journal of Computer and Mathematics Education (TURCOMAT)*, 12(10), 4153-4161.

Park, J, K & John, D.R. (2010). Got to get you into my life: Do brand personalities rub off on consumer. *Journal of Consumer Research* 655-669.
https://www.researchgate.net/publication/270648779_Got_to_Get_You_into_My_Life_Do_Brand_Personalities_Rub_Off_on_Consumers

Peter, J. P., & Tarpey Sr, L. X. (1975). A comparative analysis of three consumer decision strategies. *Journal of consumer research*, 2(1), 29-37

Salim, M. , Alfansi, L., Derta, E. Anggrawati, S. & Amin. A. (2019). Indonesian millenials online shopping behavior. *International Review of Management and Marketing*, 9(3) 41.

Saprikis, V., Chouliara, A., & Vlachopoulou, M. (2010). Perceptions towards online shopping: Analyzing the Greek university students' attitude. *Communications of the IBIMA*

Shahzad, H. (2015). Online shopping

behavior.https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=Shahzad+%282015%29+online+shopping&btnG=

Sharma, J. K., & Kurien, D. (2017). Perceived risk in e-commerce: A demographic perspective. *NMIMS Management Review*, 34(1), 31-57

Singh, N., Srivastava, S. and Sinha, N. (2017) Consumer Preference and Satisfaction of M-Wallets: A Study on North Indian Consumers. *International Journal of Bank Marketing*, 35, 944-965. <https://doi.org/10.1108/IJBM-06-2016-0086>

Stone, R. N., & Grønhaug, K. (1993). Perceived risk: Further considerations for the marketing discipline. *European Journal of marketing*, 27(3), 39-50

Vaidya, R. (2019). Online shopping in Nepal: preferences and problems. *The Journal of Nepalese Business Studies*. XII (1), 71-86.

Yaman, Z., & Köksal, O. (2023). Validity and reliability of consumer attitude toward online shopping scale. *Zbornik radova Ekonomskog fakulteta u Rijeci: časopis za ekonomsku teoriju i praksu*, [https://www.proquest.com/docview/2837123996/fulltextPDF/3CC2D14CA9FF4796PQ/7?accountid=188747&sourcetype=Scholarly%20Journals41\(1\), 91-112](https://www.proquest.com/docview/2837123996/fulltextPDF/3CC2D14CA9FF4796PQ/7?accountid=188747&sourcetype=Scholarly%20Journals41(1), 91-112).