

MODERATION OF ONLINE CONSUMERS' REVIEW ON RELATIONSHIP BETWEEN PERCEIVED RISK AND CONSUMERS' UNWILLINGNESS TO BUY HOME APPLIANCES ONLINE

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ABSTRACT

This study aims to examine the effect of perceived risk factors (i.e. perceived performance risk, financial risk, time-loss risk, psychological risk and source risk) on consumers' unwillingness to buy home appliances online. The moderation of online consumer reviews with the relationship between perceived risk and consumers' unwillingness to buy home appliances online is also investigated. Data is collected from 200 respondents through questionnaires in Lahore, Pakistan. Multiple regression is employed to analyze the data. Results via the multiple regression technique revealed that perceived performance risk influences consumers' likelihood of not buying home appliances online, as the consumers are themselves unable to touch, see and hear the product. Online consumer reviews have also been found to moderate this relationship. The present study provides important practical contributions that allow retailers and internet marketers to understand consumers' perceptions and behaviors regarding consumer risk perception and to determine which type of risk is most important to address in order to increase the consumers' likelihood of buying home appliances online.

Keywords: Perceived Performance Risk, Financial Risk, Time-Loss Risk, Unwillingness

INTRODUCTION

Electronic commerce is one of the blessings of internet modern era, which has enabled consumers to buy products and services over the internet. Based upon a research, online shopping is the most popular activity over internet, which is followed by e-mail, and surfing over the web (Li & Zhang, 2014). Now this is the modern era where buying and selling of a product and service has mostly conducted via internet. As the need of online shopping is increased and the rate by which internet users are turning into online shoppers has increased the need to understand and assess the attitude, behavior and intention of those online consumers (Forsythe, Liu, Shannon, & Gardner, 2006).

Because of progress in technological regime, online shopping has become so much important. As use of

internet has been started for commercial purposes, the style of shopping has also changed. Now people do not need to move physically to buy products from stores of brick and mortar and they need not to wait for getting their product gets ready. The earlier researchers have identified several different factors that actually lead consumers to buy products and services online and those factors are ease, website interface and time saving. Research showed that easiness is the major factor that inspires people to buy online (White & Manning, 2001). Studies also revealed that time saving are also an important factor in this regard (Shergill, Gurvinder, & Chen, 2005).

Taking into view the benefits of online shopping, a question arises as to why the trend of online buying and selling is very low in Pakistan as compared to western countries. It means there are people who act in two different ways: some of them shows favorable response and some do not show favorable response and accordingly, they can be put in two categories shoppers and browsers (Sultan & Nasir-uddin, 2011). Shoppers buy products online, but browser just search over internet with no intention to buy the product (Chiu, Lin, & Tang, 2005). It means consumers see sides of online shopping, the benefits side and the negative side of hurdles as well.

Different studies explored risk factor saw its negative influence on attitude of consumers to buy online (Viney & Ujwala, 2014). But different studies showed different results, from no effect (Crespo et al., 2008) to a big impact of perceived risk on the online purchase intention (Shin, 2008).

With respect to online shopping, word of mouth is known as electronic word of mouth and is considered to the positive or negative comments and reviews of consumers about the products online (Ibrahim, Suki, & Harun, 2014). Consumers make decisions to shop for the products after seeing these reviews that might be in the form of comments, like dislikes and images (Benedicktus, Brady, Darke, & Voorhees, 2010; Pan & Zhang, 2011; Schlosser, White, & Lloyd, 2011). Nielson (2010) reported that online reviews play a vital role in making online buying decisions and online shoppers spend half-an-hour to an hour reading such reviews.

As internet shopping and business is at peak, the attitude of consumers must be explored. But while measuring and exploring positive factors the negative factors causing hindrance must also be observed. Therefore, the importance of identifying and analyzing factors that could hinder consumer's willingness to make an online purchase is imperative. This study aims to examine the impact of perceived risk factors on consumer's willingness to buy online. Online reviews of consumers is also been examined in this study as a moderator between risk factor and unwillingness to buy online.

The paper is structured as follows: we initially conduct a literature review on perceived risk associated with online shopping in order to identify the types, importance and effect of perceived risk. Next, we developed a theoretical framework in order to identify constructs and develop hypotheses. Following theoretical framework, we explained our methodology. Subsequently, we used multiple regression to test our hypotheses empirically. Finally, we discussed the

academic and practical implications of our results and point out gaps in our study for future research.

LITERRATURE REVIEW AND THEORETICAL FRAMEWORK

Risk refers to the degree to which consumers perceive an activity insecure (Dowling & Staelin, 1994). Consumers assess product purchases on the basis of immediate benefits and long-term consequences of the purchase, which affect their purchase intention (Sweeney, Soutar, & Johnson, 1999).

Perceived Risk

Despite the benefits of online shopping, the negative side of it cannot be ignored (Ko, Jung, Kim & Shim, 2004). According to Grazioli and Jarvenpea (2000), perceived risk comes from a feeling of insecurity when a person is asked to disclose personal or financial information. Consumer risk perceptions also relate to the privacy concerns and uncertainty of product quality. Risk is one of the major factors that play an important role in consumer behavior, and it makes an important contribution to judge the behavior of consumers (Barnes, Bauer, Neumann, & Huber, 2007). Perceived risk is the core element due to which people hesitate to buy online. When risk factors increases, consumers' unwillingness to buy product online increases (Barnes, Bauer, Neumann, & Huber, 2007).

This research proposes five factors to measure perceived risk and those factors are financial risk, performance risk, time risk, source risk and psychological risk (Ibrahim, Suki, & Harun, 2014). These factors have an effect on consumers'

attitude to buy product online. The theory of Reasoned Action comes as a base in this study. The theory states that consumer's action and intention to buy product is highly influenced by the attitudes and beliefs (Ajzen and Fishbein, 1980). In other words, when risk factor is increased in shopping, people willingness to buy decreases of formation of their beliefs. Therefore, this study has proposed that;

H1: Perceived risk is significantly positively related to consumer unwillingness to purchase home appliances online

Dimensions of Perceived Risk

Negative aspects of online shopping are also becoming critical. For example, consumers are worried that the online market is not secure (Pallab, 1996) and if they provide personal details to the retailer, they may incur loss and this is known as financial risk.

Another fear is Psychological risk that "is related to the tension that might incur because of consumers' shopping behavior and attitude (Lim, 2003). It reflects a person disappointment if he bought some poor product online (Laroche, McDougall, Bergeron, & Yang, 2004).

Another risk factor involved is time risk that is related with the time wasted on browsing having the product delivered in case the product is not worthwhile (Ueltschy, 2004). It also relates to the time a person waits to purchase and get that product delivered and the product is not up to mark (Lim, 2003). Another fear could also be a source risk that is the fear that whether the company selling products really exist and have some credibility or not (Lili, Marc, & Pei, 2012). "Source risk is related to the possibility that the consumer

may buy products from a business is unreliable” (Cases, 2003; Lim, 2003).

So based upon these facts, it is hypothesized that:

H_{1a}: Perceived financial risk is significantly positively related to consumer unwillingness to purchase home appliances online

H_{1b}: Perceived performance risk is significantly positively related to unwillingness to purchase home appliances online

H_{1c}: Perceived time-loss risk is significantly positively related to unwillingness to purchase home appliances online

H_{1d}: Perceived psychological risk is significantly positively related to unwillingness to purchase home appliances online

H_{1e}: Perceived Source risk is significantly positively related to unwillingness to purchase home appliances online

Online Consumer Reviews

A theory which supports the moderating role of online consumer reviews is Social Proof or Informational Social Influence (Cialdini, 1993). Social proof is a psychological phenomenon where people assume the actions of others in an attempt to reflect the correct behavior for a given situation. It further explains that when we are not clear about a situation, we make others as an information source to make decisions. For example, Wu, Wu, Sun, and Yang (2013) and Zhu and Zhang (2010) noted that consumers go for online consumer review, especially for products that are less popular online so that they get

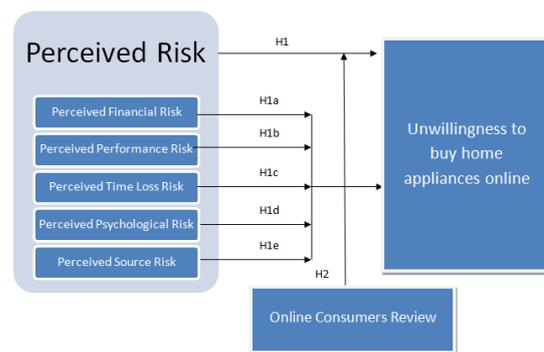
more information. Risk is also a situation of uncertainty. Therefore, online consumer reviews can reduce the risk in online shopping. These reviews can either be favorable and unfavorable and they have ultimate effect on consumers’ purchase intention (Jiménez & Mendoza, 2013; Wu, Wu, Sun, & Yang, 2013; Chu & Li, 2008; Park & Lee, 2008; Bailey, 2005).

Hansen, Jensen, and Solgaard (2004) suggested that perceived risk can be reduced when consumers ask about others’ experience with the product before buying online. When the reviews are positive or negative, it can encourage or restraint consumers to buy that product online.

H₂: Consumers’ online review significantly moderates the relationship between perceived risk and unwillingness to buy home appliances online.

FIGURE 1

Conceptual Model



RESEARCH METHODOLOGY

Sampling and Data Collection

The completed and usable close-ended questionnaire was used and a survey was conducted on 200 respondents in Lahore, Pakistan. After conducting the survey, the data was collected and examined. As a result, 162 effective

questionnaires were collected (a response rate of 81%). The sample size of 162 is reasonable, as Hair, Black, Babin, Anderson and Tatham (2010) suggested that the minimum sample size required for seven or less latent constructs, when each construct has more than three items, is 150 samples. The sampling technique used was non-probability sampling and data was collected via convenience sampling method. Convenience sampling was used in order to save time and cost. Additionally, this technique has wide acceptance because of its flexibility (Marshall, 1996). Data were analyzed using the multiple regression and moderation technique on SPSS 20.

Measurement

To test the main hypothesis of this research, a multi item scale was adapted to measure perceived risks and unwillingness to buy home appliances online from Pakistani consumers' perspectives. The scale was adapted from the study of Ibrahim, Suki and Harun (2014). They have measured the construct of unwillingness to purchase by adopting items from Akram (2008) with a modification to the sentence structure from 'willing to purchase' to 'unwilling to purchase'. The remainder of the questionnaire items were adapted from the following sources: perceived risk factor, which consists of perceived financial risk, perceived performance risk, perceived time-loss risk, perceived psychological risk and perceived source risk (Akram, 2008; Naiyi, 2004), and online consumer reviews (Park & Lee, 2008).

In accordance with the research model, the questionnaire was made of four parts: the unwillingness to buy home appliances online, perceived risk, online consumers' review and demographic

profile. The first three sections were measured using a five point likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Demographic variables (gender, age, qualification and time spent on internet) were measured using nominal scale.

TABLE 1
Adoption of Questions Details

Measured Variable	Items	Adapted from	Original Source
Perceived Risk	23		
Perceived Financial Risk	5	Ibrahim et al. (2014)	Akram (2008), Naiyi (2004)
Perceived Performance Risk	5	Ibrahim et al. (2014)	Akram (2008), Naiyi (2004)
Perceived Time Loss Risk	5	Ibrahim et al. (2014)	Akram (2008), Naiyi (2004)
Perceived Psychological Risk	3	Ibrahim et al. (2014)	Akram (2008), Naiyi (2004)
Perceived Source Risk	5	Ibrahim et al. (2014)	Akram (2008), Naiyi (2004)
Purchase Behavior (Unwillingness to buy online)	3	Ibrahim et al. (2014)	Akram (2008)
Online Consumers' Review (Moderating Variable)	4	Ibrahim et al. (2014)	Park & Lee (2008)
Total	30		

DATA ANALYSIS

Demographic Analysis

Table 2 presents the socio-demographic profile of respondents. Of 162 total respondents, more than half were female and the remaining participants were male; the median age was 21-30 years; 83%

of the respondents held Masters Degrees; and more than half of the respondents spend two to five hours on the internet daily.

TABLE 2
Socio-Demographic Analysis of Respondents

Variables		Frequency	Percentage
Gender	Male	79	48.8
	Female	83	51.2
Age	20 and Below	8	4.9
	21-25	68	42.0
	26-30	68	42.0
	31-35	18	11.1
	Qualification	Intermediate	4
	Bachelors	10	6.2
	Masters	134	82.7
	Other (M.Phil, PhD)	14	8.6
Internet time spent	Less than 1 hour	24	14.8
	2-5 hours	88	54.3
	6-9 hours	16	9.9
	More than 10 hours	34	21.0

Reliability Analysis

The assessment of the measurement model includes the estimation of internal consistency for reliability, internal consistency was calculated using Cronbach's alpha. Result showed that Cronbach's alpha for perceived risk (independent variables) = 0.720, Cronbach's Alpha for unwillingness to buy online (dependent variable) = 0.860, Cronbach's Alpha for Online consumers' review (moderating variable) = 0.681 and the Cronbach reliability coefficients of overall instrument =0.761 was higher than the minimum cutoff score of 0.60, offering good reliability of the questionnaire. The overall reliability of the questionnaire including demographic questions is 0.733.

TABLE 3
Reliability of Constructs

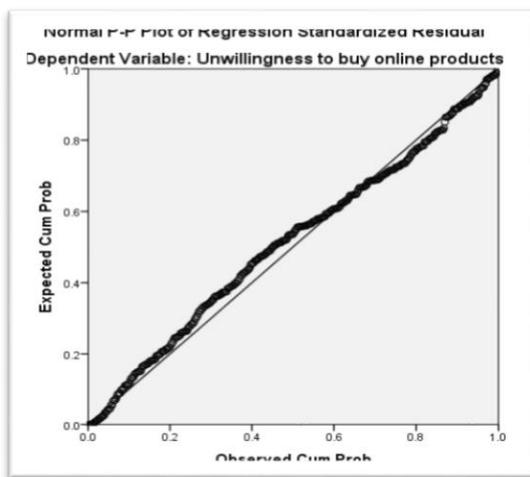
Variables	Number of Questions	Cronbach's Alpha
Perceived Risk	23	0.720
Perceived Financial Risk	5	0.736
Perceived Performance Risk	5	0.678
Perceived Time Loss Risk	5	0.652
Perceived Psychological Risk	3	0.552
Perceived Source Risk	5	0.605
Purchase Behavior (Unwillingness to buy online)	3	0.860
Online Consumers' Review (Moderating Variable)	4	0.681
Total	30	0.761
Total Reliability including demographics	34	0.733

Multiple Regression

Initial analysis. There are certain assumptions of multiple regression must be met before conducting the multiple regression analysis. The first assumption is the ratio of participants to the independent variable. Ideally, there should be five participants to one independent variable. This assumption is fulfilled by this study. In order to test multicollinearity, we assessed the collinearity statistics. Results show that tolerance values in the case of all independent variables are less than 0.9, it means that independent variables are not highly correlated. So, we met the assumption of multicollinearity. The normality of the data is checked by examining the skewness and kurtosis indices, which should present between the absolute value of 3 and 10 (kline, 2011). According to results, the skewness values for the study data present between -1.46 and 0.51, while the kurtosis values are between 1.467 and 1.890. This shows the univariate normality of the data. Figure 2 shows that

all the residuals are around the mean line suggesting assumption of normality has been met. The Durbin-Watson test was used to assess the assumption of independent errors. The result shows that value of test is close to 2 as proposed by Field, (2005). After assessing the assumptions of multiple regression, we had employed the multiple regression.

FIGURE 2
Normal P-P Plot



Hypotheses testing. Multiple regressions have done with the help of SPSS 17.0 to identify the relationship between variables. Following are the details about the hypotheses testing;

H₁: Perceived risk is significantly positively related to unwillingness to buy home appliances online

To test the main hypothesis, linear regression was run. From Table 4, it can be seen that the value of adjusted R square is equivalent to 0.165, which means that 16% of the variance in the dependent variable (unwillingness to buy online) can be accounted for by a variation in the independent variable (perceived risk). As $F=32.897$, $p<.05$, this model is significant. It is showing that perceived risk is

positively and significantly associated with consumer unwillingness to buy home appliances online. So hypothesis H1 is supported. Thus, the regression equation of this study is:

$$\text{Unwillingness to buy online} = 1.575 + 0.701 (\text{Perceived Risk}) + e$$

H_{1a}: Perceived financial risk is significantly positively related to consumer unwillingness to purchase home appliances online

To test the hypothesis, linear regression was run. From Table 4, it can be seen that the value of adjusted R square is equivalent to 0.29, which means that 29% of the variance in the dependent variable (unwillingness to buy online) can be accounted for by a variation in the independent variable (perceived financial risk). As $F=5.808$, $p<.05$, this model is significant. It is showing that perceived financial risk is positively and significantly associated with consumer unwillingness to buy home appliances online.

H_{1b}: Perceived performance risk is significantly positively related to unwillingness to purchase home appliances online

To test the hypothesis, multiple regression was run. From Table 4, it can be seen that the value of adjusted R square is equivalent to 0.177, which means that 17% of the variance in the dependent variable (unwillingness to buy online) can be accounted for by a variation in the independent variable (perceived performance risk). As $F=35.570$, $p<.05$, this model is significant. It is showing that perceived performance risk is positively and significantly associated with consumer unwillingness to buy home appliances online.

H_{1c}: Perceived time-loss risk is significantly positively related to unwillingness to purchase home appliances online

To test the hypothesis, multiple regression was run. From Table 4, it can be seen that the value of adjusted R square is equivalent to 0.050, which means that 5% of the variance in the dependent variable (unwillingness to buy online) can be accounted for by a variation in the independent variable (perceived time loss risk). As $F=9.418$, $p<.05$, this model is significant. It is showing that perceived time loss risk is positively and significantly associated with consumer unwillingness to buy home appliances online.

H_{1d}: Perceived psychological risk is significantly positively related to unwillingness to purchase home appliances online

To test the hypothesis, multiple regression was run. From Table 4, it can be seen that the value of adjusted R square is equivalent to 0.079, which means that 7% of the variance in the dependent variable (unwillingness to buy online) can be accounted for by a variation in the independent variable (perceived psychological risk). As $F=14.822$, $p<.05$, this model is significant. It is showing that perceived psychological risk is positively and significantly associated with consumer unwillingness to buy home appliances online.

H_{1e}: Perceived Source risk is significantly positively related to unwillingness to purchase home appliances online

To test the hypothesis, multiple regression was run. From Table 4, it can be seen that the value of adjusted R square is

equivalent to 0.086, which means that 8% of the variance in the dependent variable (unwillingness to buy online) can be accounted for by a variation in the independent variable (perceived source risk). As $F=16.10$, $p<.05$, this model is significant. It is showing that perceived source risk is positively and significantly associated with consumer unwillingness to buy home appliances online.

Above stated results show that perceived financial risk, perceived performance risk, perceived time loss risk, perceived psychological risk and perceived source risk has all $F>5$ and $P<0.05$ showing positive and significant relationship with unwilling to buy home appliances online. Results also revealed that perceived performance risk has the highest standardized beta coefficient value (0.426) followed by source risk ($B=0.410$). Which means consumers' consider perceived performance risk as the most important factor followed by source risk contributing to unwillingness to buy home appliances via the internet more so than the other components of perceived risk, such as financial risk, time-loss risk and psychological risk – because the consumers are unable to touch, see and hear the product themselves.

TABLE 4
Results of Regression Analysis

Model	Variables	Unstandardized Coefficient		Standardized Coefficient	t	Sig.	Adjusted R ²	F	Sig. F
		Unstandardized B	Standardized B						
H1	Constant	1.574	.334		3.34	.001			
	Perceived Risk	.701	.413	.426	5.736	.000	.329	16.100	.000

Dependent variable: Unwillingness to buy online

H1a	Constant	4.741	.506		9.367	.000			
	Perceived Financial Risk	.334	.139	.187	2.410	.017	0.29	5.808	.017

Dependent variable: Unwillingness to buy online

H1b	Constant	2.604	.288		9.251	.000			
	Perceived Performance Risk	.391	.066	.426	5.964	.000	.177	35.570	.000

Dependent variable: Unwillingness to buy online

H1c	Constant	3.427	.277		12.401	.000			
	Perceived Time Loss Risk	.260	.085	.236	3.069	.003	.050	9.418	.003

Dependent variable: Unwillingness to buy online

H1d	Constant	3.391	.233		14.678	.000			
	Perceived Psychological Risk	.258	.067	.291	3.850	.000	.079	14.822	.000

Dependent variable: Unwillingness to buy online

H1e	Constant	2.619	.410		6.350	.000			
	Perceived Source Risk	.410	.102	.302	4.013	.000	0.086	16.100	.000

Dependent variable: Unwillingness to buy online

(unwillingness to buy home appliances online) without moderation and ran a next step regression by using the interaction term for moderation. The results show that both models are significant. So it shows there is a significant moderation in the model.

To see what impact moderation made on the relationship, R-square change was observed. Model 2 with the interaction between perceived risk and online reviews accounted for significantly more variance than just perceived risk and online reviews by themselves, R2 change=0.032, p=.000, indicating that there is potentially significant moderation between perceived risk and online reviews on unwillingness to buy home appliances online. To confirm this effect, a process by Andrew Hayes was used and the results confirm that there is a moderating effect of online consumer reviews on the relationship between perceived risk and unwillingness to buy home appliance online.

Moderating Effects of Online Consumer Reviews

To check the moderating effect of online consumer reviews on the relationship between perceived risk and consumer unwillingness to buy home appliances online was accessed using step by step regression analysis and upon finding the moderation, it was confirmed by using the macro process for moderation as given by Hayes (2013).

In the first step, variables were made standardized to make interpretations easier afterwards and to avoid multicollinearity. Then ran a regression analysis model 1 using independent variable (perceived risk) and to see their impact on dependent variable

TABLE 5

Moderation and Independent Regression Analysis

Model		Sum of Squares	Mean Square	F	Sig.
1	Regression	9.756	9.756	32.897	.000 ^b
	Residual	47.451	.297		
	Total	57.207			
2	Regression	11.600	5.800	20.220	.000 ^c
	Residual	45.607	.287		
	Total	57.207			

Dependent Variable: Unwillingness to buy online
 Predictors: (Constant), Perceived Risk
 Predictors: (Constant), Interaction Term (Perceived Risk*Online Reviews)

TABLE 6

Change in Variance after Moderation

Model	Adjusted R Square	Std. Error of the Estimate	Change Statistics		
			R-Square	F Change	Sig. F Change
1	.165	.54458	.171	32.897	.000
2	.193	.53557	.032	6.427	.012

Predictors: (Constant), Perceived Risk
 Predictors: (Constant), Perceived Risk, Interaction Term (Perceived Risk*Online Review)

And if we see what impact moderation (online consumers review) has made on the relationship, we can see from table 7, here before moderation the impact of risk on unwillingness to buy online was having coefficient beta of 0.413 which has turned into 0.165 after introducing moderation. It means that online consumer reviews reduces the risk associated with the online transactions and hence decreases the unwillingness to buy online.

TABLE 7

Regression Analysis before and After Moderation

Model		Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
		B	Std. Error			
		1	(Constant)			
	Perceived Risk	.701	.122	.413	5.736	.000
2	(Constant)	1.734	.467		3.711	.000
	Perceived Risk	.280	.205	.165	1.368	.000
	Interaction Term	.083	.033	.306	2.535	.012

Dependent Variable: Unwillingness to buy online

Conclusion on Hypothesis Testing

The results on the basis of the above details are given below. All the hypotheses proposed in the study are supported by the

data collected and showed significant positive effect on the estimated variable.

TABLE 8

Hypotheses Results

Hypotheses	Estimate	p	Results
H1a Financial Risk → unwillingness to buy	.187	.017	Supported
H1b Performance Risk → unwillingness to buy	.426	.000	Supported
H1c Time Loss Risk → unwillingness to buy	.236	.003	Supported
H1d Psychological Risk → unwillingness to buy	.291	.000	Supported
H1e Source Risk → unwillingness to buy	.410	.000	Supported
H1 Perceived Risk → unwillingness to buy	.413	.000	Supported
H2 Moderating role of online reviews	.306	.012	Supported

DISCUSSION

This study investigated the effect of different perceived risk factors on consumers' unwillingness to buy electronics online. Consumers consider perceived performance risk as the most important factor contributing to their unwillingness to buy home appliances over the internet because the consumers consider those products as intangible. The results are similar to the past studies and performance risk was consistently determined to be the most significant predictor of online purchase behavior (Chang, & Tseng, 2013; Forsythe & Shi, 2003; Forsythe et al., 2006; Kukar-Kinney & Close, 2010; Lim, 2003; Tian & Ren, 2009).

Perceived source risk is considered to be the second most important and significant component influencing consumers' unwillingness to buy home appliances online. All other dimensions were also found to have significant positive impact on unwillingness to buy online and the results are in line with the literature.

Finally, the moderation of online consumer reviews with the relationship between perceived risk and consumers' unwillingness to buy home appliances online was investigated. Online consumer reviews have been found to moderate the relationship between perceived risk and consumers' unwillingness to buy home appliances online. Consumers view online reviews as a way to reduce their perceived risk. Jiménez and Mendoza (2013) noted that more credible reviews lead to higher purchase intentions whereby consumers refer to credible online reviews when the reviews contain detailed information about the product and can assess the level of reviewer agreement based on the reviews. The positive and negative reviews of products sold online will be used as measuring tools for them to measure the level of risk when buying home appliances online.

In order to minimize the risk of perceived performance, online businesses may add the offer to claim the warranty against the product in case the product does not perform as expected. In this case, the risk can be minimized and consumers' willingness to buy electronics online may increase. In addition to this, an option of trial and purchase should be offered in which a customer may try the product once it is delivered to him and upon satisfaction, he may accept that product.

CONCLUSIONS AND PRACTICAL IMPLICATIONS

Perceived performance risk was determined to be the most significant risk dimension that affects consumers' unwillingness to buy electronics online. Electronic product are perceived as mostly risky product line as they are intangible to

consumer. Especially when it comes to buying over internet, people feel it more risky as it involves buying a product that is not tangible to them.

The research could be beneficial for those that are existing in the online market as they shall have knowledge as how the consumers of Pakistan respond to online shopping, what threats are the facing and what features influence their shopping behavior. Accordingly, the companies may design their strategies to manage risk and to capture new audience completely retaining the old existing one. It can also help new entrepreneurs or domestic business who are planning to introduce online business.

RECOMMENDATIONS FOR FUTURE STUDY AND LIMITATIONS

This research cannot be generalized due to the limitation of convenience sampling technique. It is recommended to use random sampling technique to examine the same relationships and proposed models. Different categories of the products can be used for the future study. Future researches should also identify factors that are more important and reason that influence unwillingness of customers to buy online like personal characteristics of the customers. Some other risk factors like perceived delivery risk can also be tested. The study took into consideration the sample of youth in Lahore which may hamper the results and resents a limitation so the study can be conducted at customers with different age groups to see which age group presents more unwillingness to buy products online. This study was conducted with a single product category that is electronics but more products can be added in further research to see if there is any

difference in assessment of risk with respect to different categories of products. More interesting categories could be garments, toys and perfumes etc. another limitation of this study is limited amount of time which could be conducted in longitudinal otherwise. So in future, the study can be conducted as a longitudinal one to see how time lapse affects the results.

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