



## **RISKS AND THREATS IN ONLINE SHOPPING - A STUDY WITH SPECIAL REFERENCE TO PERCEPTION AND BEHAVIOUR OF CUSTOMERS IN CHENNAI CITY**

**SARANYA. R<sup>1</sup>&CHANDRAN.M<sup>2</sup>**

<sup>1</sup>M.Phil. Research Scholar, Department of Commerce, VELS University, Pallavaram, Chennai, Tamilnadu, India.

<sup>2</sup>Research Supervisor, Department Of Commerce, VELS University, Pallavaram, Chennai, Tamilnadu, India.

### **ABSTRACT**

*The purpose is to study about the consumer's perceived risk and analyze the various threats which consumer perceived as a risk in online transaction. The source of data is collected through primary data and also collected by conducting direct structured questionnaire. Size of the sample refers to the number of items to be selected from the universe to constitute as a sample. In this study the sample size consists of 200 respondents from various parts of Chennai city. The sampling technique used in this study is random sampling method. This method is also called as the method of chance selection. Each and every item of population has equal chance to be included in the sample. In this paper, an attempt has been made to examine the factors perceived as a risk with the product/service in online transaction.*

**Key words:** Online Shopping Perception, Behaviour, Customers, Chennai.

### **INTRODUCTION**

Online shopping or online retailing is a form of electronic commerce which allows consumers to directly buy goods or services from a seller over the Internet using a web browser. Alternative names are: e-web-store, e-shop, e-store, Internet shop, web-shop, web-store, online store, and virtual store. The trend of e-commerce has been increased rapidly in the recent years with the development of internet and due to the easy accessibility of internet usage. Easy access to internet has driven consumers to shop online in fact according to the University of California, Los Angeles (UCLA) communication policy (2001); online shopping is third most popular activity on the internet after email using and web browsing. Online shopping is used as a medium for communication and electronic commerce, it is to increase or improve in value, quality and attractiveness of delivering customer benefits and better satisfaction, that is why online shopping is more convenience and day by day increasing its popularity. It includes the study of what they buy, why they buy, when they buy, where they buy, how often they buy and how often they use. Perceived risk is one of the factors affecting online consumer's purchasing Intentions. Though there are lot of convenience prevailed in online shopping still it has many disadvantages, risks and threads like time consuming, inability to physically touch, sense or see product, inability to reverse a

transaction once the order has been placed, Charge of additional fee, Complexion in returning the product etc. These factors affect the online shopping Behaviour of customers. In this study consumer's perceived risk are classified into the eight types of risk such as time, financial, performance (functional), delivery, social, physical, economic and after-sales service.

### **OBJECTIVES**

#### **Primary Objective:**

- To study about the consumer's perceived risk in online transaction.

#### **Secondary Objective:**

- To examine the factors perceived as a risk with the product/service in online transaction.
- To analyze the various threats which consumer perceived as a risk in online transaction.
- To identify the opinion and suggestion about the consumer perceived risk in online transaction.

### **NULL HYPOTHESIS (HO)**

The following are the Null Hypothesis of the Study:

1. There is no significant association between monthly income and amounts spend in online shopping.

2. There is no significant association between monthly income and duration of purchase.

#### **ALTERNATIVE HYPOTHESIS (H1)**

The following are the alternative hypothesis of the study:

1. There is significant association between monthly income and amount spends in online shopping.
2. There is significant association between monthly income and duration of purchase.

#### **SCOPE OF THE STUDY**

The scope of the study covers following aspects:

- It helps to identify the various threats in online transaction.
- To reduce the number of risk consumer perceived in online transaction.
- To know about the security level in online transaction.

#### **NEED FOR THE STUDY**

The following aspects are the need for the study:

- This study examines the consumer perceived risk in online transaction.
- To find out the factors perceived as a risk with the product/service in online transaction.
- To find out the various threats which consumer perceived as a risk in online transaction.
- To analyze the factors perceived as a risk under functional loss, delivery loss, financial loss, social loss, time loss, physical loss, economic loss and after-sales loss.

#### **LIMITATIONS OF THE STUDY**

- The market size is too big and sample survey conducted to this study is limited to 200 customers
- This study does not examine the reactions of the research variables from consumer with no online shopping experience
- Time is main limiting factor, so elaborate study could not be done.

#### **REVIEW OF LITREATURE**

##### **Functional Risk:**

Functional risk can be defined as the perception that a product or service may not perform as needed or expected and suffering from the loss of the desired benefits (Stone and Gronhaug, 1993). The loss incurred when a brand or product does not perform as expected, is largely due to the shopper's inability to accurately evaluate the quality of the product online (Bhatnagaret al., 2000).

##### **Time Risk:**

Time risk is the perception that time, convenience, or effort may be wasted when a product purchased is repaired or replaced (Hanjunet al., 2004). Time risk includes the inconvenience incurred during online transactions, often resulting from difficulty of navigation and/or submitting orders, or delays receiving products (Forsythe et al., 2006).

##### **Financial Risk:**

Consumers are worried that the Internet still has very little security with respect to using their credit cards and disclosing personal information (Pallab, 1996). The potential net loss of money, and includes consumer's sense of insecurity regarding online credit card usage, which has been evidenced as a major obstacle to online purchases (Maignan& Lukas, 1997).

##### **Social Risk:**

The possibility of being embarrassed, disappointed, or suffering from status loss from family or friends by making a poor choice describes social risk (HerreroCrespo, et. al., 2009). The potential loss of status in consumer's social group due to either the inappropriateness of the product or disapproval of using internet as a shopping channel (Stone and Gronhaug, 1993).

##### **Economic Risk:**

Perceived economic risk is when an individual may sense that there is financial harm or loss in the initial purchase price of a product or service as well as future costs due to maintenance and/or loss due to potential fraud (HerreroCrespo, et. al, 2009). The potential monetary outlay associated with the initial purchase price as well as the subsequent maintenance cost of the product, and the potential financial loss due to fraud(S.M. Cunningham).

##### **After-Sales Risk:**

Potential loss of after-sales associated with products problems, commercial disputes, and service guarantee. (Zhang et al., 2012).

##### **Delivery Risk:**

Potential loss of delivery associated with goods lost, goods damaged and sent to the wrong place after shopping. (Dan et al., 2007).

Consumers fear that delivery will be delayed due to various circumstances; the delivery company won't deliver within the time frame agreed with customers, or consumers fear that the goods may be damaged when handled and transported, or no proper packaging and handling during transportation (Claudia, 2012).

**Physical Risk:**

This kind of a risk is perceived when a consumer doubts about his and his family's safety with respect to the usage of a product? It refers to

the dangers that the product usage could bring with itself. A potential threat to an individual's safety, physical health and wellbeing (Mitchell & Greatorex, 1993).

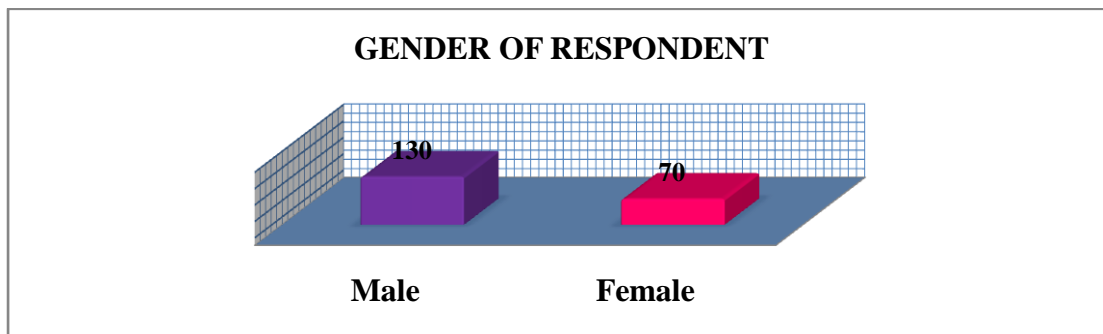
**DATA ANALYSIS & INTERPRETATION**

**TABLE I  
GENDER OF RESPONDENT**

Gender	Frequency	Percentage
Male	130	65
Female	70	35
Total	200	100

**Analysis:** Table 1 shows that majority of respondents are male (65%).

**CHART 1**



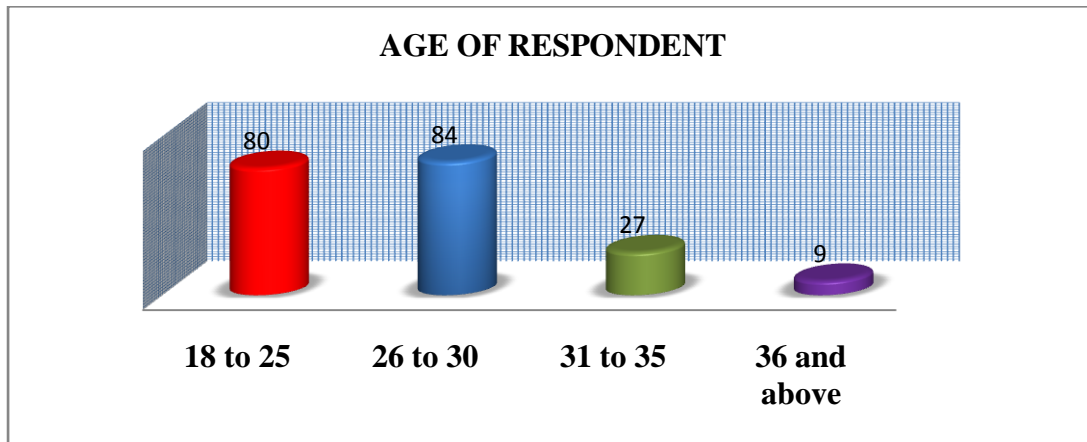
**Inference:** From the above graph 1, it is clear that 65% respondents are male. They do most of the shopping for their family.

**TABLE II  
AGE OF RESPONDENT**

Age of Respondent	Frequency	Percentage
18 to 25	80	40
26 to 30	84	42
31 to 35	27	13.5
36 and above	9	4.5
Total	200	100

**Analysis:** Table 2 reveals that large no of respondent are between 26 years to 30 years followed by 18 years to 25 years.

**CHART II**



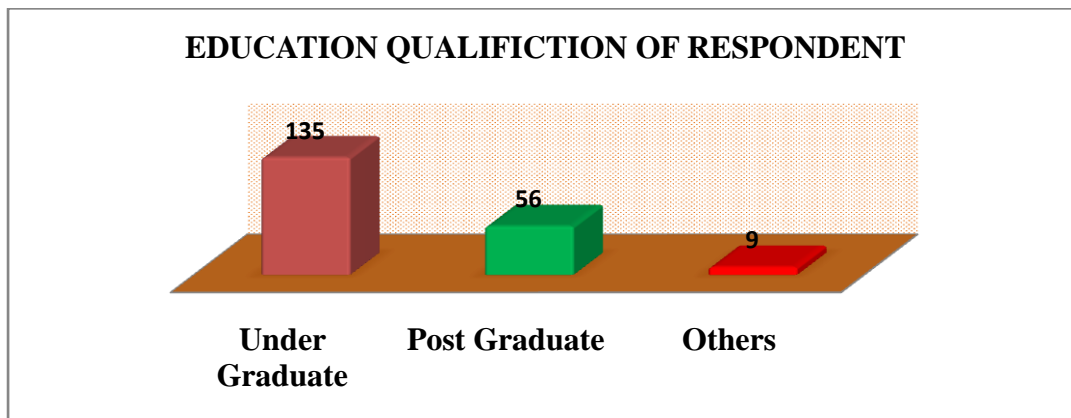
**Inference:** From the above graph, it is clear that 42% of the respondents are under the age group of 26 – 30 yrs. prefer to do their shopping from online.

**TABLE III  
EDUCATIONAL QUALIFICATION**

Educational Qualification	Frequency	Percentage
Under Graduate	135	67.5
Post Graduate	56	28
Others	9	4.5
Total	200	100

**Analysis:** Table 3 reveals large no of respondent are Under Graduate (67.5%).

**CHART III**



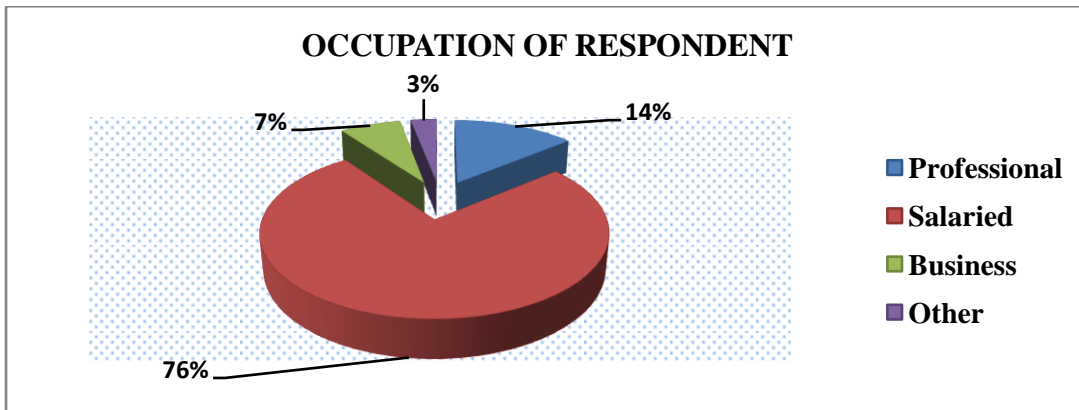
**Inference:** From the graph, it is clear that 67.5% of the respondents are under graduates, who do online shopping.

**TABLE IV  
OCCUPATION OF RESPONDENT**

Occupation	Frequency	Percentage
Professional	28	14
<b>Salaried</b>	<b>152</b>	<b>76</b>
Business	14	7
Other	6	3
Total	200	100

**Analysis:** Table 4 shows majority of respondent salaried persons (76%).

**CHART IV**



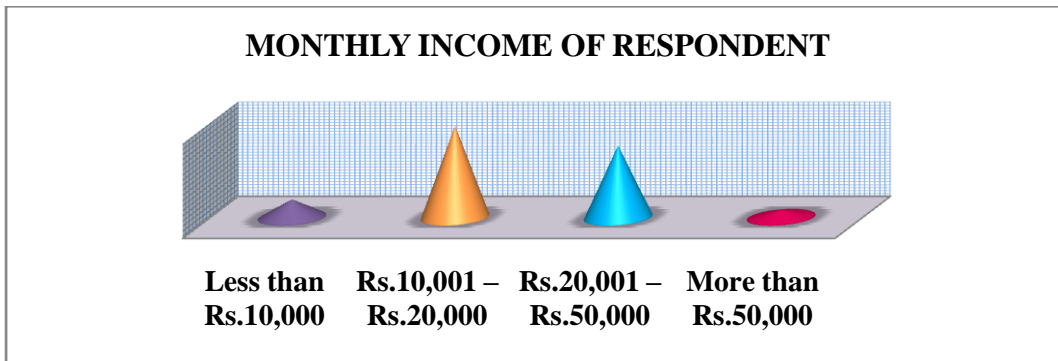
**Inference:** The above graph 4 shows majority of respondent salaried persons (76%) who perceive risk in online shopping.

**TABLE V  
MONTHLY INCOME PROFILE OF RESPONDENT**

Monthly income	Frequency	Percentage
Less than Rs.10,000	19	9.5
<b>Rs.10,001 – Rs.20,000</b>	<b>97</b>	<b>48.5</b>
Rs.20,001 – Rs.50,000	76	38
More than Rs.50,000	8	4
Total	200	100

**Analysis:** Table 5 reveals larger size of respondent earns a monthly income between Rs.10,001 – Rs.20,000 (48.5%).

CHART V



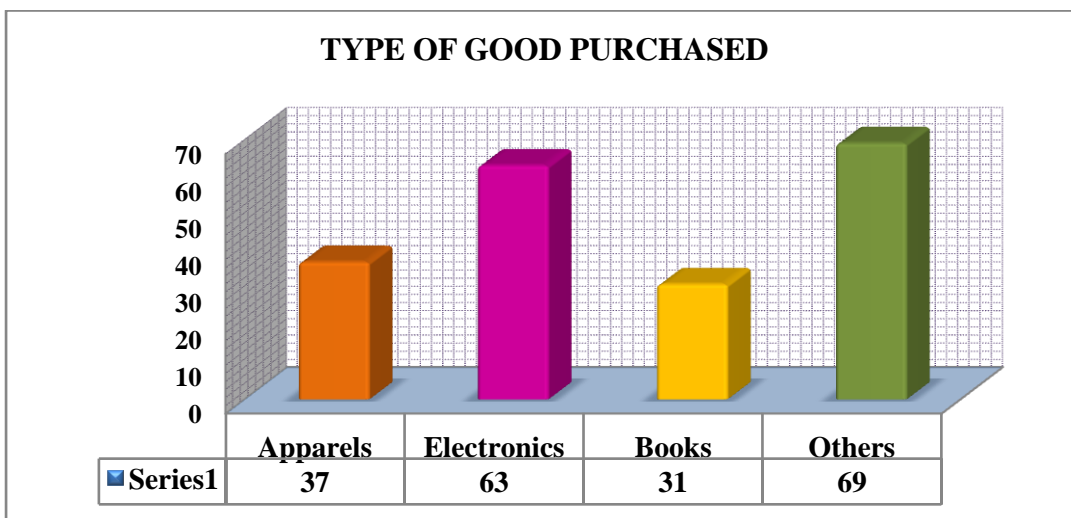
**Inference:** The above graph shows that maximum numbers of respondents are salaried with a monthly income between Rs. 10,001-20,000 who perceive risk in online shopping.

TABLE VI  
TYPE OF GOODS PURCHASED BY RESPONDENT

Types of Goods Purchased	Frequency	Percentage
Apparels	37	18.5
Electronics	63	31.5
Books	31	15.5
Others	69	34.5
Total	200	100

**Analysis:** Table 6 shows majority of respondent purchase other type of goods on online purchase.

CHART VI



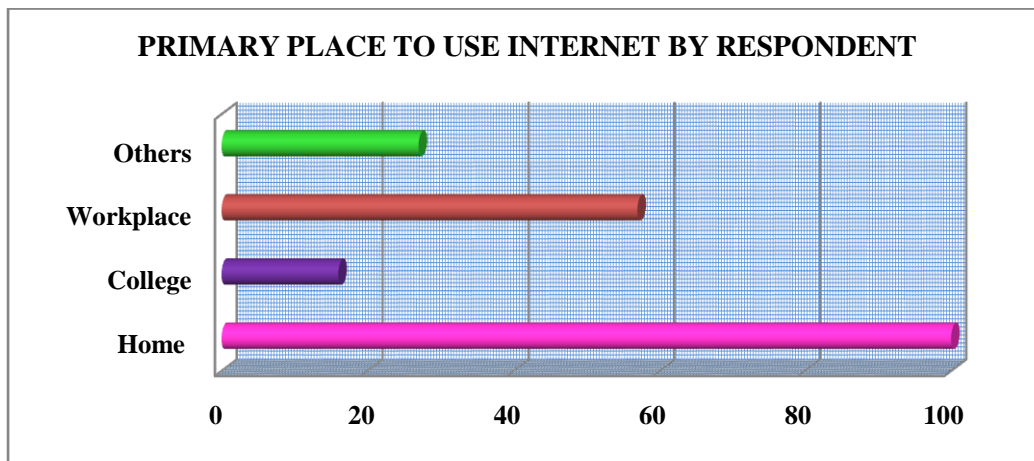
**Inference:** The above graph shows that 34.5% of respondents purchase other type of goods followed by 31.5% of electronics, 18.5% of apparels and 15.5% of books in online shopping.

**TABLE VII  
PRIMARY PLACE TO USE INTERNET BY RESPONDENT**

Place of use Internet	Frequency	Percentage
Home	100	50
College	16	8
Workplace	57	28.5
Others	27	13.5
Total	200	100

**Analysis:** Table VII reveals common size of respondent use internet at Home (50%) followed by their Workplace (28.5%).

**CHART VII**



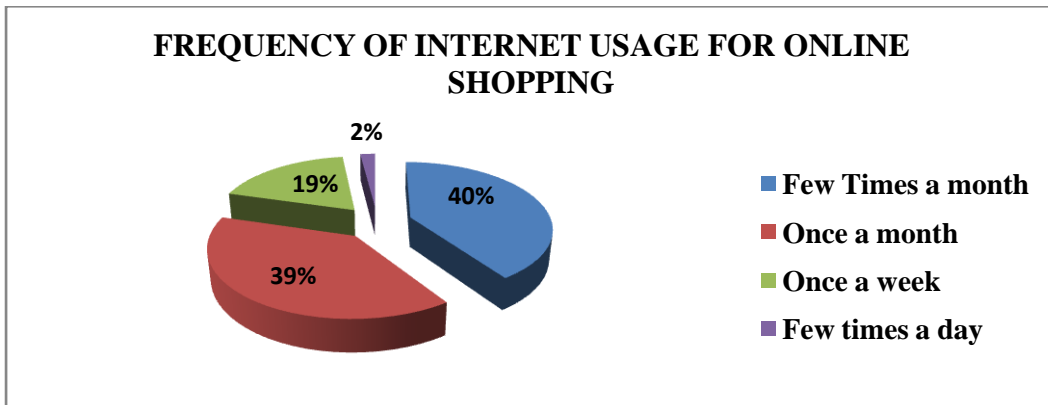
**Inference:** The above graph shows that most of the respondents who perceive risk in online shopping use home as a primary place to use internet.

**TABLE VIII  
FREQUENCY OF INTERNET USAGE FOR ONLINE SHOPPING**

Frequency of Internet usage for Online shopping	Frequency	Percentage
Few Times a month	81	40.5
Once a month	78	39
Once a week	37	18.5
Few times a day	4	2
Total	200	100

**Analysis:** Table 8 shows frequency of internet usage for online shopping by respondent and majority of them use few times a month (40.5%) followed by once a month (39%).

CHART VIII



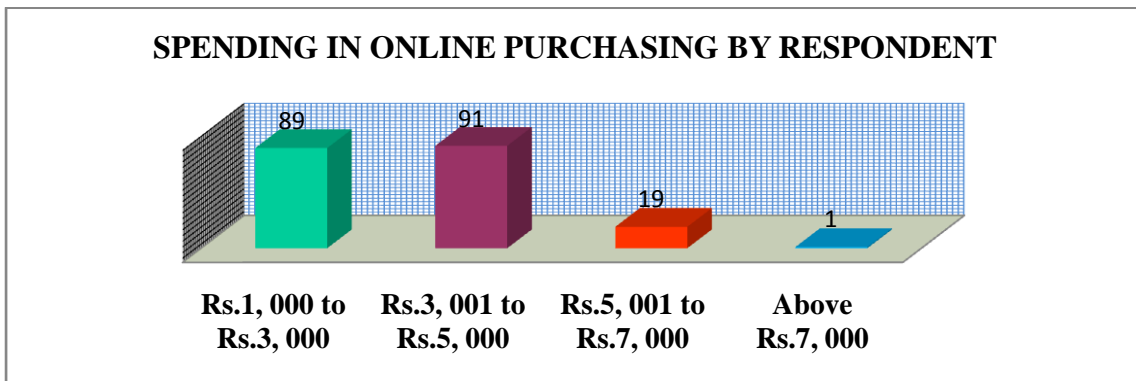
**Inference:** The above graph shows that majority of the respondents use internet few times a month for doing online shopping.

TABLE IX  
SPENDING IN ONLINE PURCHASING BY RESPONDENT

Spending in Online Purchasing	Frequency	Percentage
Rs.1, 000 to Rs.3, 000	89	44.5
<b>Rs.3, 001 to Rs.5, 000</b>	<b>91</b>	<b>45.5</b>
Rs.5, 001 to Rs.7, 000	19	9.5
Above Rs.7, 000	1	0.5
Total	200	100

**Analysis:** Table 9 shows majority of respondent spend between Rs.3, 001 to Rs.5, 000 (45.5%) of amount in online purchasing followed Rs.1, 000 to Rs.3, 000 (44.5%).

CHART IX



**Inference:** The above graph shows that majority of the respondents spend Rs3001-5000 for purchasing in online.

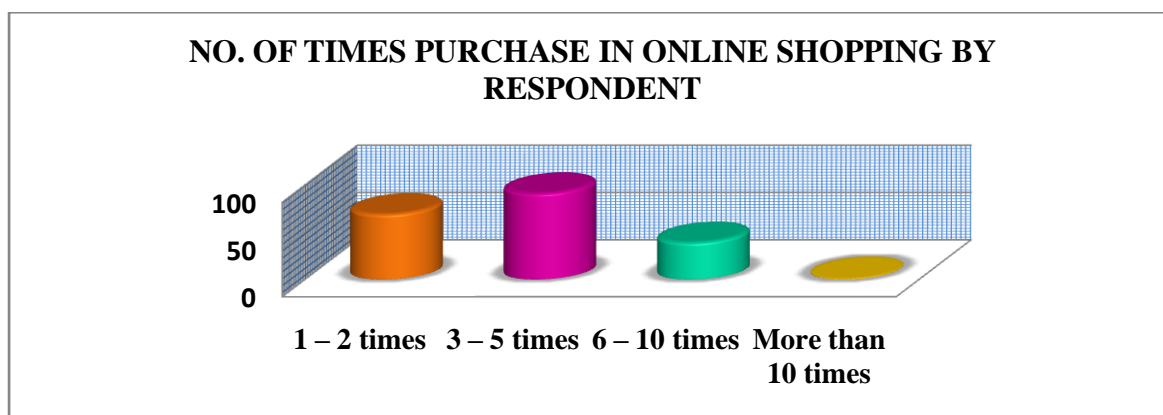


**TABLE X**  
**NO. OF TIMES PURCHASE IN ONLINE SHOPPING BY RESPONDENT**

No. of Times Shopping	Frequency	Percentage
1 – 2 times	69	34.5
<b>3 – 5 times</b>	<b>91</b>	<b>45.5</b>
6 – 10 times	39	19.5
More than 10 times	1	0.5
Total	200	100

**Analysis:**Table 10 reveals common size of respondent purchase 1 to 2 times through online purchase.

**CHART X**



**Inference:**The above graph shows that most of the respondents who perceive risk in online shopping purchase only 3-5times.

**MEAN BASED RANKING**

**ONLINE PURCHASER PERCEPTION ON THREATS CONSIDERED AS A RISK IN ONLINE SHOPPING**

**THE THREATS CONSIDERED AS A RISK IN ONLINE SHOPPING BY RESPONDENT ARE LISTED BELOW:**

S.No	Threats considered as a Risk
1	E-mail address may be abused by others
2	Phone number may be abused by others
3	Personal information may be disclosed to other companies
4	Stealing credit card number
5	Digital Signature
6	Data Integrity

6 threats considered as a risk in online shopping by respondent with their relative importance based on mean values are given in table.

TABLE XI

S.No	Threats considered as a risk	N	Mean	Rank
1	E-mail address may be abused by others	200	4.19	3
2	Phone number may be abused by others	200	4.13	4
3	Personal information may be disclosed to other companies	200	4.21	2
4	<b>Stealing credit card number</b>	200	<b>4.34</b>	1
5	Digital Signature	200	3.83	5
6	Data Integrity	200	3.77	6

**Inference:** Table 11 shows Stealing credit card number is the most important risk in online shopping followed by Personal information may be disclosed to other companies.

### FINDINGS, SUGGESTIONS AND CONCLUSION

#### MAJOR FINDINGS OF THE STUDY:

- Majority of the respondents are Male. Sizeable portion of the respondents are Under Graduates, Sizeable portion of the respondents who perceive online risk is between 26 to 30 years of age. Sizeable portion of the respondents are salaried earning Monthly Income between Rs.10,001 to Rs.20,000.
- Majority of the respondents who perceive risk in online shopping use their home as a primary place for purchasing other types of goods only few times a month by spending Rs 3,001-5,000.
- Eleven independent factors have been extracted out of 26 risk variables of which social factor (SF) is the dominant one followed by Economic factor (EF), Opportunity factor (OF), Quality factor (QF), Delivery factor (DF), After-sales factor (AF), Financial factor (FF), Health factor (HF), Product factor (PF), Functional factor (FF) and Time factor (TF) in the order of dominance and all the factors together explaining **60.772%** of variance.
- Mean based ranking have been applied to find out the rank in which Stealing credit card number is the most important risk in online shopping followed by Personal information may be disclosed to other companies.

#### SUGGESTIONS:

- To lower the transactional risk, should establish a robust mechanism
- To reduce consumer risk with product/service, should build trust with consumers by giving them complete confidence on the product/service such as reliability, responsiveness and assurance.

- Shipping cost of the product should be reduced in online transaction
- To minimize the risk, should show that the business cares about their customer's utility and safety.

#### CONCLUSION

From the perspective of a consumer's perceived risk, the consumer is willing to purchase product/service from an online vendor that is perceived low risk, even if the consumer's perceived ease of use on e-Commerce is relatively low. From the study we infer that consumers consider the risk related to the online transaction (i.e., privacy, security, and non-repudiation.) as one of the important factors when they purchase on the Internet. Thus, diminishing such risk is considerably important to online vendors. There are Eight Risk factors perceived by the respondents, who perceived the most risk with the financial aspects and time loss of online shopping. Finally we conclude that, thus the respondents perceiving less overall risk with online shopping.

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