RISK PERCEPTION & CONSUMER PURCHASE BEHAVIOUR WITH SPECIAL REFERENCE TO E-SHOPPING- AN EMPIRICAL EVIDENCE FROM INDIA

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ABSTRACT

Purpose: The purpose of the study is to examine the relationship between customer purchase behavior and risk perception

Theoretical framework: Psychoanalytic Theory has been used to provide a better understanding of the impact of human perception on purchase intentions

Design/Methodology/Approach: The primary quantitative method has been used with the help of a survey.

Findings: It has been observed that India has shown a steady growth in online buying intentions

Research, practical work, and social implication: E-commerce industry needs to incorporate risk management strategies to enhance perceived ease at use

Originality/ Value: The value of the study is that it provides a better understanding of the customer purchase intentions

Keywords: Customer buying behavior, purchase intentions, risk factors, e-commerce sites

INTRODUCTION

Consumer purchase behavior includes the acquisition of information that affects the purchase-making decision of the buyers. The research study presents a vivid illustration of consumer buying intention with respect to e-commerce sites. Furthermore, the risk perception behind online purchases is highlighted in the study along with gathering survey responses to develop an in-depth understanding of the research topic.

Background

The E-commerce industry has witnessed massive growth after the emergence of the pandemic in the Indian market. Customer behavior considers a systematic process that affects the purchase intentions of the population. Around 329 million online buyers have been reported in 2020 as having offline access was difficult (Wai *et al.* 2019). High-speed internet access, as well as online advertisements, has been a major factor that increased improved customer engagement at different e-commerce sites. Consumers are able to engage with a variety of products at the ease of their comfort to evaluate their purchase. However, there lies a risk perception from the customer end regarding cyber-attacks, privacy issues, and quality assurance.

Figure 1: Number of online buyers in India

(Source: Wai *et al.* 2019)

As shown in figure 1, a sharp increase in online buyers is observed in India in 2020 as compared to 2019. It is important for e-commerce sites to help consumers with choices as customers mostly rely on word of mouth, past experiences, and advertisements to select a product (Foroudi *et al.*

2021). On the other hand, a degree of negative reviews has been observed in terms of customer engagement with online shopping sites.

Objectives of the work

RO1: To analyze the risk perception of customers while engaging with e-commerce sites

RO2: To explore the concept of consumer purchase behavior

RO3: To determine the factors affecting customer buying behavior with respect to e-commerce shopping

Research problem

One of the biggest issues restricting online purchase intentions among consumers is the ***fear of bank transactions***. Security concerns have led customers to engage with the traditional mode of purchasing products.

Justification

The E-commerce industry's failure to secure the personal and banking transactions of their customers has been an issue that decreases purchase intentions. The rise of cyber-attacks and threats intrudes personal information of customers and misuses it for their benefit (Szymkowiak *et al*. 2021). In addition to this, fake online stores and nonencrypted data have been a major turn-off for the customer to engage with online e-commerce sites.

Hypothesis

Null Hypothesis [H0]: There exists no relationship between risk perception and customer buying behavior

Alternative Hypothesis [H1]: A strong collaboration exists between risk perception and customer buying behavior

DV: Risk perception

IV: Customer buying behavior

LITERATURE REVIEW

Consumer purchase behavior

Online customer buying behavior illustrates the process by which customers make decisions on purchasing products. As per the opinions of Wang *et al.* (2019), the diversified e-commerce industry helps customers to select from a plethora of options. The increase in familiarity with the internet has significantly impacted the engagement rate on e-commerce sites. All products are presented with images, information, and usage instructions have made things easier for consumers. In contrast to this, the e-commerce sector has made online shopping an adventurous exploration for shopping lovers.
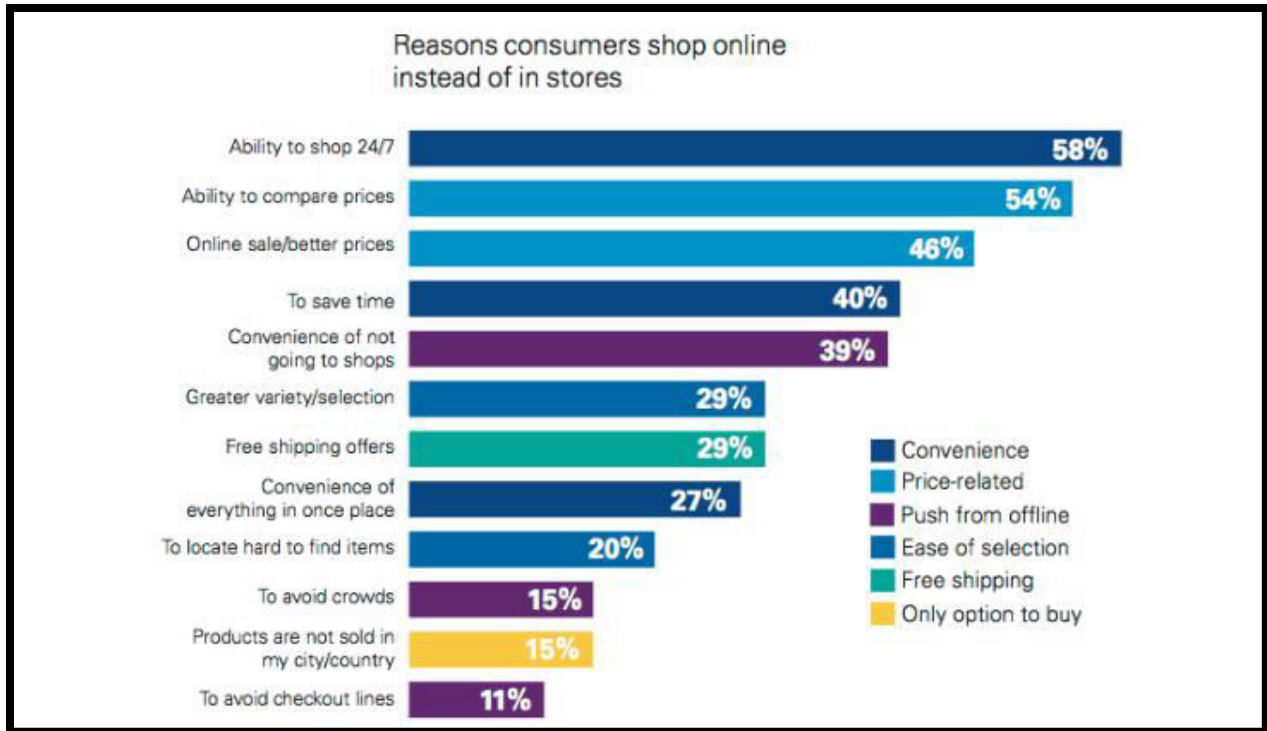

Figure 2: Reasons behind customers engaging with online sites for shopping

(Source: Wang *et al.* 2019)

Figure 2 presents the reasons affecting online purchase intentions and engagement rates on e-commerce sites. Furthermore, certain websites present exclusive products which enable the customer to access new collections of services or goods. Hence, a constant rise has been noticed in the customer engagement rate at different e-commerce sites considered perceived ease of use.

Risk perception of consumers' behavior

Perceived risk identifies customer perception of risk factors associated with a purchase made online. According to the critical analysis of Bhatti and Rehman (2019), there remains a sense of uncertainty about customer experience while engaging with online brands. With the rise in cyberattacks and thefts of personal information, customers restrict their engagement with online shopping sites. On top of that, the quality of the products is another problem that reduces customer engagement with e-commerce channels. Customers fear not receiving the expected quality of products or services, which affects their purchase intentions in the future. Therefore, it is important for e-commerce sites to develop transparent relationships with their consumers to help them in case of false transactions.

Theoretical framework

Psychoanalytic Theory

With the help of *Psychoanalytic Theory,* it can be understood that customer preferences play a huge role in the success of a brand online. As per the point of view Hakim *et al*. (2021), brands need to develop an emotional connection with the audience to trigger response and sell their products. The theory outlines that customers have an unconscious pattern in their purchase behavior. E-commerce sites are finding new and innovative ways to attract new customers and retain existing ones. Moreover, it is observed that three components include trust, security, and self-esteem is important to foster an association with customers and provide them with a satisfactory experience.

MATERIAL AND METHODOLOGY

The research article has adopted a primary quantitative research method to gather relevant informative data. As per the discussions of Pandey and Pandey (2021), primary quantitative data can be represented with statistical tools and techniques. In addition to this, graphical representation and numerical data can be obtained from the selected method. A survey is conducted by including 25 participants selected randomly from the population in order to understand their perception of online purchases. A set of 10 questions are presented to the selected survey respondents to collect accurate responses and develop the research article. All the collected data and information have been computed in SPSS to conduct further statistical tests.

These tests are important to outline the existence of a relationship between the selected variables of the study.

RESULTS AND DISCUSSION
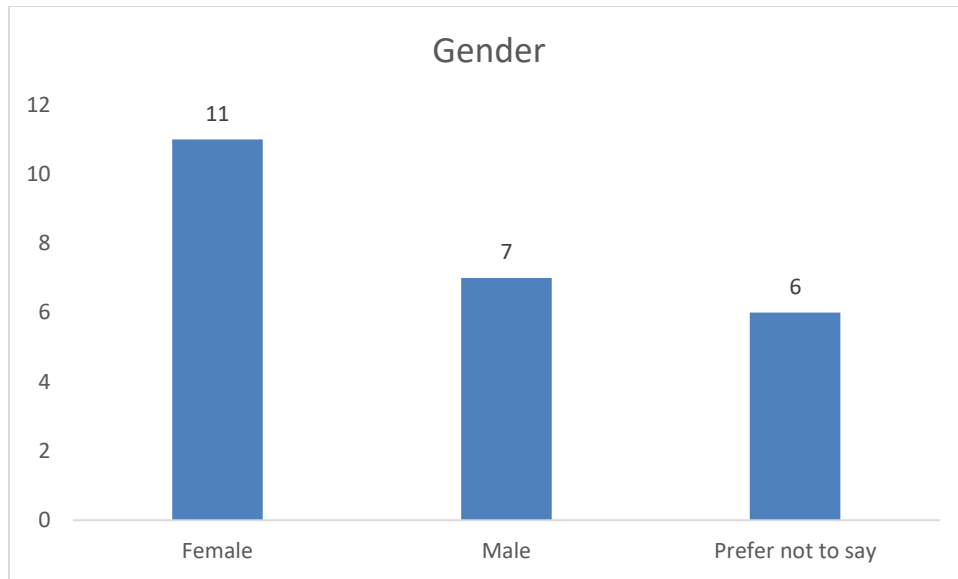
Results

Gender

Figure 3: Gender

(Source: SPSS)

As highlighted in figure 3, it can be concluded that a higher percentage of female respondents have been associated with the survey, as indicated by 44%. Furthermore, around 28% of male participants have recorded their viewpoints in accordance with online customer buying behavior

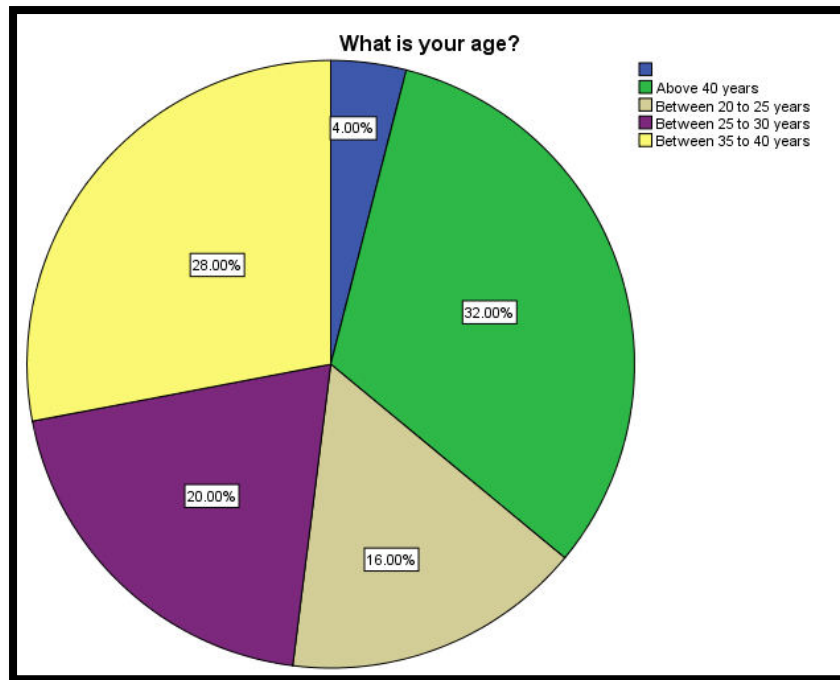**Age**

Figure 4: Age

(Source: SPSS)

As illustrated in figure 4, almost 32% of the total survey attendees are above 40 years of age. On top of that, nearly 28% belong to ages ranging from 35 years to 40 years.
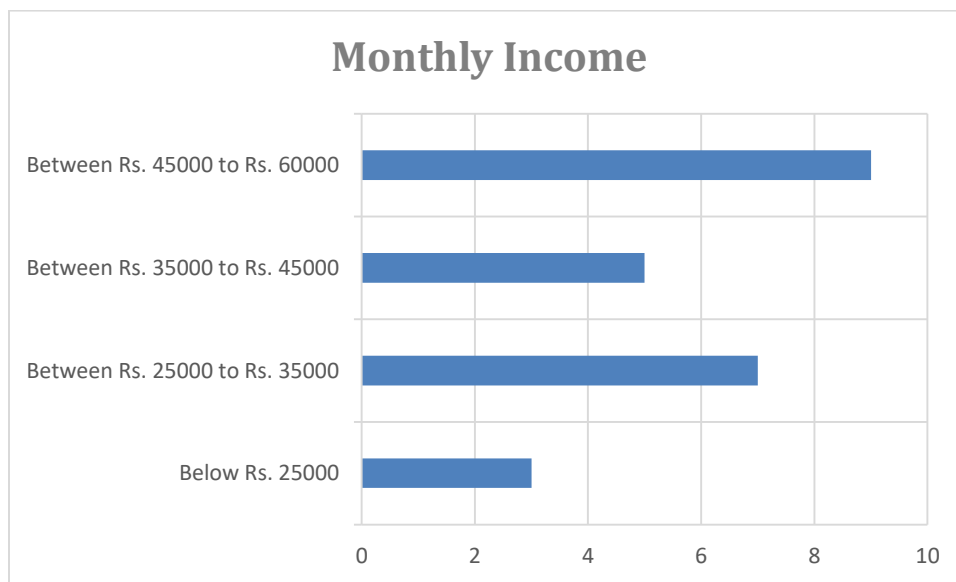
Monthly income level

Figure 5: Monthly income level

(Source: SPSS)

As presented in figure 5, a higher percentage of survey participants have an income ranging from Rs. 45,000 and Rs. 60,000. On the other hand, only 12% of the attendees have an income below Rs. 25,000.

Normality Test

A normality test is conducted to develop the research article and determine the extent to which the recorded data is normally distributed. The test is done by critically evaluating the values of the Shapiro-Wilk test and Kolmogorov-Smirnov test.

Tests of Normality

	IV	Kolmogorov-Smirnov[e]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
DV	17.00	.260	2	.			
	18.00	.175	3	.	1.000	3	1.000
	20.00	.392	6	.004	.701	6	.006
	22.00	.250	5	.200[*]	.885	5	.332
	25.00	.260	2	.			

Table 1: Normality test between customer buying behavior and risk perception

(Source: SPSS)

Table 1 highlights the value of significance for the K-S test is 0.2 and that of the S-W test is 0.006.

Reliability Test

A reliability test determines the internal consistency observed in the gathered data from survey respondents. According to the findings of Pallant (2021), in order to understand the extent responses are reliable, the values of Cronbach's alpha are analyzed. The values of Cronbach's alpha are needed to be more than 0.7 such that the study is more authentic and reliable.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.568	.636	2

Table 2: Reliability test

(Source: SPSS)

From table 2, it can be understood that the value of Cronbach's alpha is 0.5, which makes it reliable for the study.

Validity Test

Validity is an important statistical technique that helps a research study to understand the extent to which the generated data from survey responses are valid to proceed. The test is further extended by critically analyzing the values of KMO and Bartlett's test.

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.500
Bartlett's Test of Sphericity	Approx. Chi-Square	5.267
	df	1
	Sig.	.022

Table 3: Validity Test

(Source: SPSS)

As shown in the above-presented table 3, the positive values show that the gathered information and data from survey attendees are valid to develop the article.

Correlations test

A coefficient test is conducted in the article to estimate the presence of a connection between the dependent variable (risk perception) and the independent variable (customer buying behavior).

This statistical test is done by critically examining the values of Pearson's coefficient and determining the presence of an association between the selected variables.

Correlations

		DV	IV
DV	Pearson Correlation	1	.466*
	Sig. (2-tailed)		.022
	N	25	25
IV	Pearson Correlation	.466*	1
	Sig. (2-tailed)	.022	
	N	25	25

Table 4: Correaltions test

(Source: SPSS)

Table 4 shows that there exists a relationship between the selected variables of the study as indicated by 0.466.

Multiple Regressions test

A multiple regression test is conducted to explore the relationship between a dependent variable and all its independent variables.

Model Summary

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.466^a	.217	.182	2.16678	.217	6.106	1	22	.022	2.262

Table 5: Model Summary

(Source: SPSS)

From table 5, it can be understood that the R-value is 0.466 and the value of Durbin-Watson is observed to be 2.262.

ANOVA

An ANOVA test is performed to assess the existence of a relationship between two or more variables.

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	28.669	1	28.669	6.106	.022[b]
	Residual	103.289	22	4.695		
	Total	131.958	23			

Table 6: ANOVA test

(Source: SPSS)

From the above-highlighted table 6, it can be understood that the value of significance is 0.22.

Coefficients test

A coefficient test is used to measure a data set with the help of 'beta and t-tests'. As per the comments of Sallis *et al.* (2021), the coefficient test is critical to reject the null hypothesis associated with a research study.

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.470	2.066		.712	.484
	IV	.260	.105	.466	2.471	.022

Table 7: Coefficients test

(Source: SPSS)

Table 7 presents that the value of the beta test is 4.66 and that of the t-test is 2.471. In addition to this, the value of significance observed is 0.022, which highlights that there is a connection between risk perception and customer buying behavior. Hence, the hypothesis presented in the study is supported by the obtained statistical data.

Descriptive statistics

Descriptive statistics is critical as it summarizes the entire statistical information with respect to the central tendency (Sen and Yildirim, 2022). With the help of this test, the mean, mode, and median of the collected data structure can be determined

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
DV	25	2.00	10.00	6.4583	2.39527	-.513	.472	-.714	.918
IV	25	5.00	25.00	19.1667	4.29020	-1.660	.472	4.271	.918
Valid N (listwise)	25								

Table 8: Descriptive Statistics

(Source: SPSS)

As shown in table 8, the mean value of the data collected is 19.16.

Discussion

Risk perception has an impact on the customer buying behavior of customers engaging with e-commerce sites

A consumer is active on different platforms and has developed an idea of the way these e-commerce sites work. Companies across India are focusing on advertisements and SEO to help the customer find their products with ease of use. As per the workings of Wang *et al.* (2019), the way consumers perceive a product is significant to estimate engagement. In contrast to this, there

have certain factors that reduced purchase intentions among customers to engage with e-commerce services. The factors include fear of banking transactions, non-encrypted data, and security issues that reduce customer engagement rates. In addition to this, the quality of the product is one attribute that determines its success of the product. Customers unsure about the quality or not having enough information related to a product affect their buying behavior. Websites not presenting an adequate amount of information about the utility and features of a product have shown less customer engagement. Customers have a perceived risk on the operational efficiency of the e-commerce sites, which has a negative impact on buying behavior. Therefore, it can be concluded that risk perception has a strong association with customer buying behavior.

CONCLUSION

Hence, it can be understood that risk perception plays a critical role in reducing the purchase intentions among customers. After the emergence of the pandemic, the Indian e-commerce market has been booming at a fast rate. In addition to this, the e-commerce industry is uplifting its products and range of products to help the population have a better experience while purchasing a product. The study has adopted a primary quantitive method to gather authentic responses from the selected participants. All the collected responses and data are computed in the SPSS tool to understand that there lays a connection between the selected variables of the study.

Limitations of the study

The research article lacks a strong collection of secondary resources from articles, journals, books, and business reports. Secondary data is important to uncover critical aspects of customer buying behavior and risk factors that impact the e-commerce sector of India. Moreover, the study has not referred to a number of theories to develop a firm understanding of the aspects impacting customer buying behavior.

Suggestions for future work

Future research work can focus on understanding the impact of advanced technologies on customer purchase intentions. Moreover, the rise of social media and influence marketing has a critical effect on the e-commerce industry. Therefore, future studies can rely on these aspects to improve customer engagement on e-commerce sites.

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Questionnaire

1.What is your gender?

Male

Female

Prefer not to say

2.What is your age?

Between 20 to 25 years

Between 25 to 30 years

Between 35 to 40 years

Above 40 years

3.What is your monthly income range?

Below Rs. 25000

Between Rs. 25000 to Rs. 35000

Between Rs. 35000 to Rs. 45000

Between Rs. 45000 to Rs. 60000

4. The e-commerce industry presents a plethora of options to its customers

Strongly disagree

Disagree

Neutral

Agree

Strongly agree

5.Website provide exclusive offers and product range to increase customer engagement

Strongly disagree

Disagree

Neutral

Agree

Strongly agree

6. Risk perception among customer reduces customer engagement rate

Strongly disagree

Disagree

Neutral

Agree

Strongly Agree

7. Fear of bank transactions and cyber thefts are major issues faced by customers while engaging with e-commerce shopping

Strongly disagree

Disagree

Neutral

Agree

Strongly agree

8. Trust, security, and self-esteem are important to foster an association with customers

Strongly disagree

Disagree

Neutral

Agree

Strongly agree

9. Customers fear not receiving the expected quality of products or services

Strongly disagree

Disagree

Neutral

Agree

Strongly Agree

10.Fake online stores and non-encrypted data have been a major turn-off for the customer

Strongly disagree

Disagree

Neutral

Agree

Strongly Agree