

BUYING PATTERN OF CONSUMER ONLINE SHOPPING IN CHENNAI CITY- AN ECONOMIC ANALYSIS

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ABSTRACT

A customer is one who purchases products for usage rather than for resale or commercial purposes. The customer is a person who pays a certain quantity of cash for the products and services needed to be consumed. Consumers therefore play a crucial role in a nation's economic system. The customer is also one of the components of the supply chain. Marketers have recently began to participate in personalized marketing, permit advertising and mass customization instead of marketers producing wide demographic profiles and Fisio-graphic profiles of market segments. Buying pattern has been changed generations after generations; first of all it started as a barter system, people exchanged goods with goods. Then during 600 BC coins came into existence and they started to trade with it. Later on during the 700 BC currency came into existence and slowly trading with currency was easier. And during the 21st century online banking came into progress which made transactions and trading much easier. This online banking was made convenient to common people and retailers too. They sell their products through online websites and reach the consumers easily. Most people all over the world prefer online shopping and online transactions. And anyone can contact with any one for trading. The consumers also get many choices to select whatever they want. Buying patterns show how consumers buy services or goods but are heavily capable of changing. Marketers often attempt to comprehend the pattern of purchasing and its relationship with the consumer's geographic, demographic and psychological features. Marketers perform extensive surveys to know the purchasing trends.

IMPORTANCE OF THE STUDY

There is a fundamental influence of online shopping on consumer buying pattern from traditional ways to modern ways, as seen in the late 1970s. This change has shown the method of innovative range of post-customer behaviour to provide the needs and satisfaction of individual consumers. The various online shopping consumer behaviours contribute to regular changes in various risk factors. Traditional buying capabilities of the surroundings are a vital component influencing the patron's perception. These capabilities also have an impact on the client's buying experience. They look for the sample of clients modifications in online buying, and have their impact on client pleasure and perception; it is far quite critical to examine the net purchasing sample of the patron. This is the main reason behind choosing the research's topic 'economic analysis in buying pattern of the consumer'.

NEED OF THE STUDY

Not many studies have been undertaken exclusively to study the perceptions and preferences of online shopping consumers and the same has to be disseminated positively in the minds of consumers, which is essential in any nation. Studies cover the issue of online shopping, consumers' buying pattern at the micro level. Particularly in the perspective of the decline in the contribution of online consumers in primary online market operations, withdrawal of consumers from the online shopping market into safer consumer avenues like cash on delivery, bank taking out, online payment, debit cards and credit card payment, it becomes all the more important to make an economic analysis of the buying patterns of consumers in Chennai City. This may help the policymakers in developing appropriate plans to get online consumers in large numbers so that the mobilization and effective operation of the online shopping markets may improve.

STATEMENT OF THE PROBLEM

To discuss the purchasing pattern of online shopping consumers in various avenues that is available in Chennai. In this sense, no attempt is made to extract the critical underlying factors of consumers' buying pattern, their relative significance and their relationship with socio-economic variables. Nowadays, online shopping decisions depend on various attributes. There are so many factors that influence their shopping decisions. The online consumers' buying pattern has to progress forward from their iconic role; there is every possibility that decisions regarding online consumers' buying with their surplus money may be different, depending on the parameters of the online consumers' buying pattern and degree of risk-taking capabilities. In this modern world, online buying plays a vital role in human life. The online consumers select from various buying pattern alternatives. Indian online shopping players are of multiple types like; students, businessmen, and employees. Online shopping activity is determined by consumer buying pattern. There is a chance of the buyer losing interest.

SCOPE OF THE STUDY

Traditionally, marketing theory is based on consumer's decision through a lens of risk and return, and the decision should be a reasonable and one. Various consumers are aware of such psychological behaviour while making online shopping decision. This irrational behaviour helps us to know of the online shopping literacy level which creates uncertainty in the game of buying pattern. As a result, the traditional online shopping market theory which is related to the efficiency of the online buying demonstrated is incorrect. In this context, it is very significant for the consumers to be aware of the various psychological phenomena and they should identify the ways to overcome the obstacles while making, buying and selling a product. Therefore, online shopping portals have a strong desire towards doing what others do. Identification of all such behaviour helps the consumer in making a proper buying decision. Apart from psychological factors, demographic factors also influence the online shopping process. This study is on online shopping and consumer buying pattern in Chennai City. The developing economies like India, online shopping needs to be expanded so that the marketing sector can rise to accommodate consumer buying behaviour. Individual consumers have a considerable role in the smooth functioning of online shopping into the most efficient hands. Hence, there is a need to protect their rights. There is an imperfection in consumer activism in India, especially in Tamil Nadu. Consumer knowledge relating to the state of Tamil Nadu is minimal. Hence this study is undertaken to gain insight into the consumer buying patterns.

OBJECTIVES OF THE STUDY

1. To read the economic analysis on purchasing pattern of online consumer in Chennai City.
2. To analyse the buying pattern of the respondents concerning different consumer avenues and its impact on satisfaction.
3. To identify the factors that influence pre and post - consumer behaviour.

HYPOTHESIS OF THE STUDY

1. There is no substantial variance among consumer avenues and online consumer characteristics.
2. There is no connection among demographic issue and online consumer characteristics.
3. There is no significant difference among buying pattern and online customer satisfaction.
4. There is no association between consumer perception and online consumer satisfaction.
5. There is no relationship between factors that influence the choice of consumer avenues and online consumer.

METHODOLOGY OF THE STUDY

This learning is centred on online shopping, the perception of consumer buying patterns, pre, and post-consumer behaviour, and both in analytical and descriptive nature. The procedure is the rationale phase which rules the final results of

studies. It encompasses and leads the study to analyse a research manner which guarantees and enables the truthfulness of the effects, deals with the data amassed for the take a look at, assets of information, sampling plan of the population of the have a look at, area of the research, device used to accumulate facts, method of receiving facts, analysis and interpretation of the collected data with different statistical equipment with the intention to find out the electricity of the accumulated information and limitations of the observe for the reason of gathering primary facts.

SOURCES OF DATA

The researcher has made use of together primary and secondary sources to fulfil the objectives. The primary records were composed from individual online consumers. In addition to data collected through primary sources, other secondary data were also obtained from government organizations such as statistical invigilator report in the state. The secondary data provided by these organizations are from their annual reports and bulletin.

SAMPLING PLAN

The population of the locations selected for the research is very large, and all the respondents could not be interviewed due to practical difficulties. Chosen only samples have been taken up for the study. Many online consumers were unwilling to disclose their financial details, especially the amount of money spent on different online shopping to buy various products. Hence the data were collected from the respondents who were willing to disclose the information. To have illustrations from different socio-economic groups, cluster sampling was done to select the respondents.

LOCATION OF THE STUDY

The research adopted a simple chance sample way. The respondents are residents of Chennai in the age group of 18 years to 70 years including different strata of the consumer like students, business people, retired persons and shopkeepers. 720 questionnaires were distributed to the respondents spread over in Chennai City. Among them, 615 surveys were collected in which 15 reviews were found incomplete and unusable. Hence, the accurate sample of the study is 600.

STATISTICAL TOOLS FOR ANALYSIS

This investigation is centred on primary records which were composed from the respondents through the survey. Secondary data are also utilized, which were obtained from published sources like books, journals, websites, magazines, and annual reports. The data composed from together the sources are examined, corrected and tabulated.

LIMITATIONS OF THE STUDY

The learning is restrained to Chennai City, and therefore the conclusion cannot be comprehensive to the entire country. The findings and suggestions and the determination may be applicable only to economic analysis in buying the pattern of the consumer in online shopping with particular reference to Chennai City. A considerable number of financial instruments with a variety of company-specific

features of consumer buying pattern options need a lot of time and resources to research. Lack of knowledge of online shopping about the financial instruments can be a significant limitation.

REVIEW OF LITERATURE

Rupali Rajesh (2018) this study has given special consciousness on key aspect of online buying like suitable and time saving, Clear Return policy, Variety of product and types to be had on online sites, Trusted shopping, Product evaluations, 24*7 Shopping, Cash on transport and Credit card offerings availability of favourite brands, readability approximately terms and situations, chance at credit score card transactions, beyond buy enjoy and so forth., as well as customer satisfaction factors like return coverage, product quality, experience, touch and feel factor etc. These effects will enable, Electronic marketers to designs higher appropriate strategies, aiming to buy practice and success.

Gunjita Kumar (2017) - It stated that earlier than demonetization, items had been bought online shopping to customer choice and hazard bearing capacity, however after demonetization it has become nearly obligatory to look for optimum bills via Electronic pockets for all sorts of goods and offerings bought. Prior to demonetization humans consume to shop for online either uncommon items or goods which aren't effortlessly to be had in the nearby marketplace, but after demonetization, they had been shopping goods of their everyday wishes. Formerly humans also favored to buy objects online for which satisfaction gained turned into confident, but currently, they can use to one-of-a-kind websites imparting the facilities like an attempt to purchase they have been prepared to take up the hazard additionally.

Ahmed audu maiyaki (2016) observed the principle thing of influencing consumer online buy in conduct. The price and the product art collection in online shopping immediately affect purchasers' buying cause and conduct. The explosive in online buying available at a lower price, and the import range is more than traditional shopping, the purchasers will select to capture online.

Pritam P.Kothari (2016) this study was about the existing reputation of online buying. Those who spoke back were accrued well-based telegraph shape. They assist with information analysis and abstractionism finding had been drawn through researchers. Since there was a revolution in telecommunication quarter no of users on the internet. Increased in India recent time and customers had been the usage of internet for online purchasing however nonetheless everyday purchase maximum of patron's first preference has been manual shopping. Most of the customers had been providing majority opinion that advertising prices by using companies had been very excessive, it is cautioned to organizations to either reduce transport prices or shipping of product have to receive freely. Corporate may use one of the acknowledgment activities. Once studies discovered that important starting gate at the back of improvement of online buying became of customer cognizance.

Discriminant Analysis

In addition, it is the graphical representation of MANOVA and it gives the solutions through cluster analysis and the principal component analysis, but it is called discriminant since it is used to separate two groups, if it is used for separating more than two groups, it is otherwise called as Canonical Varieties Analysis.

Table 1
Canonical Discriminant Function coefficients in discriminant Analysis

Factor relating to the buying pattern of the consumer through online shopping	Canonical Discriminant Function Coefficients
Psychological Factors	-0.291
Social Factors	-0.572
Personal Factors	0.211
Economic Factors	0.549
Customer Perception	0.343
Customer Satisfaction	0.718

Based on the Canonical Discriminant Function Co efficient of this study, the equation for the model considered should be written as

$$DF = -0.291 * F1 -0.572*F2 +0.211*F3 +0.549*F4+0.343*F5 + 0.730* F6$$

Where, F1- Psychological factors; F2- Social Factors; F3 – Personal Factors; F4 - Economic Factors

F5 – Customer Perception; F6 – Customer Satisfaction. The multivariate aspect of the model along with the canonical correlation, Wilk's Lambda values are given in the

Canonical discriminant function

Wilks' Lamda is used to analyse how the functions seperates cases in each groups. The details of the canonical correlation and and the Wilks' Lamda are given in the underneath table 2

Table 2**Table showing Canonical Canonical Correlation and Wilks' Lambda values**

Canonical Correlation	Wilks' Lambda	Chi-square	df	Sig.
0.067	0.996	2.637*	6	Significant

* - Significant at 5% level of significance

Table- 3**Table showing Canonical Canonical Correlation and Wilks' Lambda values**

Pooled Within-Groups Matrices						
Correlation	F1	F2	F3	F4	F5	F6
Psychological Factors	1.000	-.028	.058	.198	.902	.036
Social Factors	-.028	1.000	.148	-.053	-.012	.435
Personal Factors	.058	.148	1.000	-.052	.063	.122
Economic Factors	.198	-.053	-.052	1.000	.216	.126
Customer Perception	.902	-.012	.063	.216	1.000	.053
Customer Satisfaction	.036	.435	.122	.126	.053	1.000

In this table shows Wilks' Lambda and Chi-square values are 0.996 and 2.637 and revealed that the model is significant as the chi-square cost is statistically important at 5% level of importance and shows an association of 0.067 which clarifies that there is a reasonable level of relationship among the combination movable and the liberated variables. The details of the inter correlation within the groups were shown in Table-3.

Box's Test of Equality of Covariance Matrices

Box's M Test is used to compare the variations in the multivariate sample and more specifically it tests if two or more covariance matrices are equal or not (i.e.) homogeneity. The details of the results arrived through the discriminant analysis is given below in Table 3:

Table -4**Table showing Box's M Test of Equality of Covariance Matrices**

Log Determinants		
Gender	Rank	Log Determinant
Male	6	13.005
Female	6	13.436
Pooled within-groups	6	13.172
The ranks and natural logarithms of determinants printed are those of the group covariance matrices.		

Test Results		
Box's M		23.699
F	Approx.	1.113
	df1	21
	df2	455035.575
	Sig.	.324
Tests null hypothesis of equal population covariance matrices.		

From the above table, it is seen that the log determinant values were found to same and it is hereby interpreted that the groups considered in this study have not different covariance matrices.

Prior Probabilities for the Group in Discriminant Analysis:

Table 5
Table showing Prior Probabilities for Groups

Prior Probabilities for Groups				Functions at Group Centroids
Gender	Prior	Cases Used in Analysis		Functions
		Unweighted	Weighted	
Male	0.500	422	422.000	-0.043
Female	0.500	178	178.000	0.102
Total	1.000	600	600.000	

In this study the two groups Male and Female have the prior cutting value as 0.500 each hence it is concluded that the groups have best cutting points among the values of the roles at the collection centriods.

Prior Probabilities

Table -5
Classification Results

Gender	Predicted Group Membership		Total
	Male	Female	
Male	228	194	422
Female	84	94	178
Male	54.0	44.0	100
Female	47.2	52.8	100

53.7% of original grouped cases correctly classified.

From the above table, while computing from the group sizes, it is noticed that the 52.8% percent of the female defendants were found to be sensitive towards the discrimination and 54.0 % per cent of the male respondents was found to be specificity towards the perception.

Table-6
Structure Matrix

Sl. No.	Variables	Function (R)
1	Psychological Factors	0.674
2	Social Factors	0.571
3	Personal Factors	-0.253
4	Economic Factors	0.253
5	Customer Perception	0.189
6	Customer Satisfaction	0.176

The graphical representations of the Discriminant Analysis for the variables considered are shown below: This is seen from the graph that there was no maximum overlapping between the genders and hence it is concluded that there was a discriminating option found between male and female group of this study.

Analysis of the Demographic of the Respondents:

It is the Demographic variables which are playing an important and critical role in every research for understanding the nature and habit along with the characters of the respondents. Hence various demographic variables were considered in this study and the result analyzed are discussed below in various tables

Table 7
Classification of Gender of the Respondents

Type of the Gender	Number of Respondents	Percentage
Male	422	70.3
Female	178	29.7
Total	600	100.0

This above table, it is realized that popular of the defendants are found to be male with the percentage of 70.3 percent in the total population. Next to this, it was noticed that 29.7 percent of the total defendants were found woman.

Table 8
Cross Tabulation between the Age and the Gender of the Respondents

		Gender		Total	Chi –Square Value
		Male	Female		
Age	Upto 20 years	32	10	42	5.424
	21-30 years	71	39	110	
	31-40 years	154	71	225	
	41-50 years	128	49	177	
	Above 50 years	37	9	46	
Total		422	178	600	

It is noticed that Maximum Male defendants were found below the age collection of 41-50 years and the minimum were found under the age group upto 20 years.

Table 9
Table showing the Marital Status of the Respondents

Marital Status	Number of Respondents	Percentage
Married	301	50.2
Unmarried	299	49.8
Total	600	100.0

From the above table, it is revealed that 301 respondents to the tune of 50.2 percent were found to be married and 299 respondents with 49.8 percent were found to be unmarried.

Table 10
Cross Tabulation between the Age and the Marital Status of the Respondents

Age	Marital Status		Total	Chi – Square Value
	Married	Unmarried		
Upto 20 years	24	18	42	47.004**
21-30 years	45	65	110	
31-40 years	117	108	225	
41-50 years	69	108	177	
Above 50 years	46	0	46	
Total	301	299	600	

Regarding the age of the defendants to determine the marital status, it is noticed that maximum unmarried defendants are found in the group of 31-40 years and the maximum wedded group were found in the age between 31-40 years.

Table 11
Classification of Educational Qualification of the Respondents

Educational Qualification	Number of Respondents	Percentage
Illiterate	40	6.7
SSLC	66	11.0
HSC	112	18.7
Under Graduate	242	40.3
Post Graduate	130	21.7
Others	10	1.7
Total	600	100

From the above table, it is seen that 40 respondents with 6.7 percent were found to be illiterate and 66 respondents with 11 percent were found to have the qualification of SSLC. Out of 600 respondents, 18.7 percent were having the educational qualification of HSC standard. At the same time, 40.3 percent of the consumers were found to be undergraduate and 130 respondents to the tune of 21.7 percent were having post graduate degree. Only 10 respondents were having other qualification like ITI, Diploma and Teacher Training... etc.

Table 12
Classification of Monthly Income of the Respondents

Monthly Income	Number of Respondents	Percentage
Less than Rs. 10000/=	164	27.3
Rs.10001/= to Rs.25000/=	55	9.2
Rs.25001/= to Rs. 50000/=	245	40.8
Above Rs. 50000/=	136	22.7
Total	600	100

It is noticed that maximum respondents with 40.8 percent were getting a monthly salary of Rs.25001/= to Rs. 50001/=. Next to this, 164 respondents to the tune of 27.3 percent were having a salary of Less than Rs. 10000/=. At the same time, it displays that 22.7 % of the defendants was having salary of greater than Rs. 50000/=

Table 13
Classification of Status of the Residential Area of the Respondents

Status of the Residential Area	Number of Respondents	Percentage
Urban	232	38.7
Rural	207	34.5
Semi Urban	161	26.8
Total	600	100

From this above your head table, it explains that 38.7 percent of the defendants had a residence in the urban area, and 34.5 percent of the respondents had home in the rural area. Out of 600 respondents, 161 consumers with 26.8 percent were residing in the semi-urban area.

Table 14
Classification of Type of family of the Respondents

Type of the Family of the Respondents	Number of Respondents	Percentage
Nuclear	437	72.8
Joint	163	27.2
Total	600	100

From the result, it is seen that 437 respondents to the tune of 72.8 percent were living singly and 163 consumers to the tune of 27.2 percent were living in the joint family.

Table 15
Details of number of family members of the Respondents

Details of Family members	Number of Respondents	Percentage
Two	226	37.7
Three	109	18.2
Above Three	265	44.2
Total	600	100

Beginning the above table, it is seen that 226 respondents with 37.7 percent were having two members in the family and 109 respondents family were having three members.

Table 16
Details of Occupation of the Respondents

Occupation	Number of Respondents	Percentage
Public Sector	102	17.0
Private Sector	34	5.7
Business	245	40.8
Agriculture	205	34.2
Others	14	2.3
Total	600	100

From the above, it is revealed that 102 respondents to the tune of 17 percent were working in the public sector or Government Units. Next to this, 245 respondents were doing their own businesses and 205 consumers were looking after agriculture. 34

respondents to the tune of 5.7 percent were working in private sector or companies. Only 14 respondents with 2.3 percent were informed that they were engaging in other occupations.

Table 17
Details showing the experience in online shopping by the Respondents

Option	Number of Respondents	Percentage
Yes	550	91.7
No	50	8.3
Total	600	100

From the above, it is really amazing to see that 550 respondents with 91.7 percent have given opinion that they were having experience in purchasing through online shopping except by the 50 respondents. Hence there may be a good perception among the respondents about the purchasing through online shopping especially those who are residing in Chennai City. Since most of the consumers were making purchase through online shopping, a question was asked about which product they prefer most through online purchase and the opinion received from them is tabulated in Table 18

Table 18
Details about the products purchased through online shopping by the Respondents

Products	Number of Respondents	Percentage
Mobile and Accessories	124	20.7
Clothes	209	34.8
Electronic Goods	4	.7
Medicines	167	27.8
Others	96	16.0
Total	600	100

Only 4 respondents to the tune of 0.7 percent have purchased electronic goods. 16 percent of the respondent have given opinion that they have purchased other items like hair oil, grocery items and siddha medicines..etc.

Table 19
Reason for preferring the online shopping by the Respondents

Reason	Number of Respondents	Percentage
Price	183	30.5
Good Quality	80	13.3
Door Delivery	222	37.0
Variety of Products	115	19.2
Total	600	100

From the above table, it is noticed that 222 respondents to the tune of 37 percent have informed that they have preferred online shopping due to the facility of free door delivery of the products and 183 respondents to the tune of 30.5 percent have informed that they opted online shopping due to the low price they offered.

Table 20 Details of influencer for purchasing product through online shopping by the Respondents

Influencer	Number of Respondents	Percentage
Family Members	176	29.3
Reference Groups	221	36.8
Friends	134	22.3
Social Media	69	11.5
Total	600	100

From this overhead table, it is seen that maximum respondents are inclined only by the reference groups (i.e.) 221 respondents with 36.8 percent. Next to this, 176 respondents were informed that they have influenced by family members and 134 respondents informed that their friends have influenced them to make online shopping.

Table 21
Details about the period of purchasing product through online shopping by the respondents:

Duration	Number of Respondents	Percentage
Past 2 years	87	14.5
3 to 5 years	363	60.5
More than 5 years	0	0
Just Now	150	25.0
Total	600	100

From the above, it is seen that 14.5 percent of the respondents were purchasing a creation by online shopping for the past two years, and 150 respondents of this study have started buying just now. 60.5 percent of the respondents were having a practice of purchasing product through online for about 3 to 5 years, and no one has purchased the product for more than five years as per the answers of this learning.

Table 22
Table showing the association between the factors of buying pattern and customer satisfaction in online shopping in Chennai City:

Correlations						
	Psychological Factor	Social Factor	Personal Factor	Economical Factor	Customer Perception	Customer Satisfaction
Psychological Factor	1	-0.028*	0.258**	0.198**	0.902**	0.436*
Social Factor		1	0.148**	-0.053	-0.012	0.434**
Personal Factor			1	-0.052*	0.064*	0.622**
Economical Factor				1	0.516**	0.127**
Customer Perception					1	0.554**
Customer Satisfaction						1

** . Correlation is significant at the 0.01 level (2-tailed).
 * Correlation is significant at the 0.05 level (2-tailed)

The various factors that are influencing the buying pattern of the consumer in the online shopping were considered in this study was connected to find out the extent of the association amongst these factors. The results are given in the above table 4.52 above. The correlation results show that all the elements are correlated with each other at 1% and 5% equal of meaning except the “ Social factor” with “Economic factor and the “Customer perception” as the worth is not statistically found important. The correlations show that all the factors are positively connected except between social factor with the economic factor and customer perception as the revealed ‘r’ value is statistically significant at 1% and 5% level of significance. It is also revealed that there was a negative correlation found between psychological factor and the social factor ($r = -0.028$) and between the social factor with the economic factor ($r = -0.053$) and the customer perception ($r = -0.012$). The element “Psychological” is found to have highest correlation ($r = 0.902$) with Customer perception and personal factor with the customer satisfaction ($r = 0.622$) and with economical factor and customer perception ($r = 0.516$). It is also found that the factor “customer perception” with “customer satisfaction” with the value ($r = 0.554$).

Table: 23
Table showing the impact of factors pertaining to the buying pattern and customer satisfaction in online shopping in Chennai City

Dependent Variable	Independent Variable	Regression efficient (Beta) Value	Co Standard Error	“t” Value
Customer Satisfaction	(Constant)	7.541	1.342	5.617**
	Psychological factor	-0.029	0.084	-0.344

	Social Factor	0.502	0.043	11.753**
	Personal Factor	0.052	0.030	1.744*
	Economic Factor	0.137	0.034	3.991**
	Customer Perception	0.063	0.109	.576
	R Value	0.465		
	R ² Value	0.216		
	F Value	32.780**		
	Number of Samples	600		
	Durbin Watson Test value	1.687		

** Significant at five percent level

The various factors that are influencing the buying pattern of the consumer in the online shopping were considered in this study were correlated to find out the extent of the relationship among these factors. The results are given in the above table 4.52 above. The correlation results show that all the elements are correlated with each other at 1% and 5% level of significance except the “Social factor” with “Economic factor” and the “Customer perception” as the value is not statistically found significant. The correlations show that all the factors are positively correlated except between social factor with the economic factor and customer perception as the revealed ‘r’ value is statistically significant at 1% and 5% level of significance. It is also revealed that there was a negative correlation found between psychological factor and the social factor ($r = -0.028$) and between the social factor with the economic factor ($r = -0.053$) and the customer perception ($r = -0.012$). The element “Psychological” is found to have highest correlation ($r = 0.902$) with Customer perception and personal factor with the customer satisfaction ($r = 0.622$) and with economical factor and customer perception ($r = 0.516$). It is also found that the factor “customer perception” with “customer satisfaction” with the value ($r = 0.554$) All the factors of buying pattern of the consumers were found to have moderate to high correlations with each other. The lowest correlation is found between psychological factor with the social factor ($r = -0.028$), and the above correlation results indicated that the respondents who are measured on different factors of buying pattern through online shopping have significantly related to each other.

Table 24
Association between the Demographic variables of the respondents and the factors that influencing the buying pattern in online shopping in Chennai City
Region:

Paired sample ‘t’ test						
Factor=	Psychological	Social	Personal	Economical	Customer Perception	Customer Satisfaction
Gender	120.401**	125.522**	139.116**	108.282**	112.868**	130.617**
Marital Status	118.474**	125.088**	141.078**	103.763**	11.586**	129.462**
Type of Family	118.594**	124.744**	138.486**	107.800**	110.457**	127.131**
Experience in online shopping	122.399**	129.019**	141.595**	109.819**	115.916**	133.236**

While analyzing the association between the demographic differs like Gender, Marital status, type of family, Experience in online shopping through paired sample ‘t’ test, it was found that all the factors were found significantly associated with the demographic variables as the ‘t’ value is found statistically significant at 1% level of significance.

ONE WAY ANOVA (F test)						
Factor=	Psychological	Social	Personal	Economic	Customer Perception	Customer Satisfaction
Age	8.314**	2.863*	3.906**	5.568**	2.902*	2.515*
Educational Qualification	18.507**	1.686	3.972**	5.252**	42.708**	4.226**
Monthly Income	8.209**	1.048	4.865**	11.018**	8.031**	6.503**
Status of Area	20.873**	0.148	1.043	9.913**	24.816**	0.741
Number of family members	0.728	2.449	29.345*	3.904*	1.903	0.256
Occupation	90.307**	3.582**	12.276*	5.342**	70.240**	5.142**
Products purchasing	0.583	51.335*	0.451	1.033	0.717	36.479**

through online shopping		*				
Preference to online than retail purchase	2.612	1.172	2.693*	6.742**	4.671**	5.520**
Influencer	6.795**	0.603	1.487	31.042**	3.750**	0.961
Duration from which the purchase is being done through online shopping	3.174*	0.328	6.590**	0.090	4.454**	94.472**

From the above table, it is exposed that there is a significant association found between

1. “Psychological” factor with all the demographic variables except with number of family members, product purchasing through online shopping and preference to online than retail the “F” value is found significant at 1% and 5% level of Significance.
2. “Social ” factor with Age, Occupation, and product purchasing through online shopping as the “F” worth is found important at 1% and 5% level of Meaning.
3. “Personal” factor with all the demographic variables except with status of the residential area, product purchasing through online and the influencer as the “F” rate is found important at 1% level of Importance.
4. “Economical ” factor with all the demographic variables except with product purchasing through online and the duration in which the product is purchased through online as the “F” value is found significant at 1% and 5% level of Significance.
5. “Customer Perception ” factor with all the demographic variables except with Number of family members and product purchasing through online as the “F” cost is found important at 1% and 5% equal of Significance.
6. “Customer Satisfaction ” factor with all the demographic variables except with status of the residential area, Number of family members and the influencer for

purchasing through online shopping as the “F” price is found statistically important at 1% and 5% equal of Meaning.

FINDINGS OF THE STUDY:

1. Male and Female customers are found in "Psychological thing 'Score' (0.674) observed with the aid of 'Social Factor Score' (0.571). Next to this is the 'Economic element score (0.253), followed by 'Customer Perception Score' (zero.189). Next to that is the "Customer Satisfaction Score" (0.176). The lowest score is found with Personal element score the weak price (-0.253).
2. It is visible that forty-two respondents with seven percentage have been got here beneath the age limit of up to twenty years. One hundred ten respondents to the tune of 18.3 interest have come beneath 21-30 years, and 37.5 percent of the respondents were found under the age organization of 31-40 years. Next, to this, 177 respondents with 29.5 percentage have come beneath the age organization of 41-50 years, and only 7.7 percentage of the respondent's age changed into finding to be above 50 years. Hence it's far concluded that most respondents of online buying had been fallen below the age institution of 21-30 years which was also genuine that most of the young consumers now the use of the exclusive shopping because of the properly knowing of generation factors.
3. It is noticed that Maximum Male respondents had been discovered under the age institution of forty one-50 years, and the minimum has been determined under the age group for up to 20 years. Regarding the girl respondents, most respondents have been discovered under the age organization of 31-40 years, and minimal respondents have been observed below the age organization of above 50 years. While finding the association among the age of the respondents and the gender, there may be no significant association located among them as the chi-square cost isn't statistically sizable at 1% and 5% level of significance.
4. It is revealed that 301 respondents to the track of fifty.2 percentage were determined to be married, and 299 respondents with forty-nine .8 percentage have been located to be unmarried.
5. Regarding the age of the respondents to determine the marital status, it is noticed that maximum unmarried respondents were found in the group of 31-40 years and the maximum married group were found in the age between 31-40 years. Under the age of 50 years and above, all the respondents were got married. Also, it is seen that there was a significant association found between the age and the marital status of the respondents in connection with the buying pattern on online shopping in Chennai City as the chi-square value is found statistically significant at 1 percent level of significance.
6. It is seen that 40 respondents with 6.7 percent were found to be illiterate, and 66 respondents with 11 percent were found to qualify SSLC. Out of 600 respondents, 18.7 percent were having the educational qualification of HSC standard. At the same

time, 40.3 percent of the consumers were found to be undergraduate, and 130 respondents to the tune of 21.7 percent had post graduate degree. Only ten respondents had other qualification like ITI, Diploma and Teacher Training... etc.

7. It is noticed that maximum respondents with 40.8 percent were getting a monthly salary of Rs.25001/= to Rs. 50001/=. Next, to this, 164 respondents to the tune of 27.3 percent were having a salary of Less than Rs. 10000/=. At the same time, it is seen that 22.7 percent of the respondents were having a salary of more than Rs. 50000/=.
8. It is seen that 38.7 percent of the respondents had a residence in the urban area, and 34.5 percent of the respondents had a residence in the rural area. Out of 600 respondents, 161 consumers with 26.8 percent were residing in the semi-urban area.

Results of Inter correlation among the factors of buying pattern and customer satisfaction in online shopping in Chennai City

The correlation results show that all the elements correlated with every other at 1% and five% level of Significance except the "Social thing" with "Economic aspect and the "Customer perception" as the fee isn't statistically determined enormous. The correlations display that each one the elements are correlated except among common thing with the comparatively cheap factor and customer belief because the found out 'r' value is statistically good sized at 1% and 5% degree of importance. It is likewise revealed that there has been a negative correlation located among psychological thing and the social element ($r = -0.028$) and the social factor with the competitively priced aspect ($r = -0.053$) and the customer belief ($r = -0.012$). The component "Psychological" is discovered to have the highest correlation ($r = 0.902$) with Customer belief and private aspect with the purchaser delight ($r = 0.622$) and with cost-effective factor and patron perception ($r = 0.516$). It is also observed that the component "customer belief" with "purchaser satisfaction" with the fee ($r = 0.554$) All the factors of purchasing a sample of the clients have been observed to have slight to high correlations with every other. The lowest association is located among mental factor with the social thing ($r = -0.028$), and the above correlation consequences indicated that the respondents who are measured on different elements of purchasing patten thru online buying have extensively related to every other.

Results of Multiple Regression Analysis among the elements of buying pattern and client pleasure in online purchasing in Chennai City

Regarding the antecedent of Customer Satisfaction in online shopping in Chennai City Region, The F- ratio turned into finding to be 32.780 which shows that the result of the regression version is statistically full-size because the "p" price is much less than the full-size level ($P = 0.05$). Besides, Beta Coefficients was also calculated for all the impartial elements in view to recognize the importance of the variables considered in this examine and listed in the desk above. It is also visible that the coefficient of determinant R^2 cost turned into discovered to be 0.216. This way that the modifications and the unit boom in the unbiased variable taken up on this

study explains the adjustments of 21.6 percentages in customer satisfaction in online buying. Factors like Social, Economic and Personal had been highlighted as great predictors and have the tremendous effect on client pride besides the aspect psychological and customer belief as the "p" price is not statistically significant at 1% and five% degree of importance. In addition, it is visible that the issue that influenced the buying pattern – psychological element was determined to have poor value and not highlighted as vast predictor for the patron satisfaction in online purchasing in Chennai City Region.

Results of the Association located among the Demographic Variables and the elements that influencing the buying pattern in online purchasing in Chennai City Region

1. While analysing the association between the demographic variables like Gender, Marital reputation, sort of own family, Experience in online shopping through paired sample "t" check, it became located that all the factors had been discovered notably associated with the demographic variables because the "t" fee is located statistically widespread at 1% stage of importance.

It found out that there may be a giant affiliation located among

2. "Psychological" component with all of the demographic variables besides with variety of circle of relatives participants, product buying through online buying and desire to online than retail the "F" cost is discovered substantial at 1% and five% degree of Significance

3. "Social" aspect with Age, Occupation, and product shopping through online shopping as the "F" value is discovered full-size at 1% and five% stage of Significance

4. "Personal" thing with all of the demographic variables except with fame of the residential area, product buying via online and the influencer because the "F" cost is found enormous at 1% degree of Significance.

5. "Economical" aspect with all the demographic variables except with product buying via online and the length wherein the product being bought via online as the "F" price is located high at 1% and 5% level of Significance

6. "Customer Perception" component with all of the demographic variables besides with Number of family individuals and product purchasing through online as the "F" cost is observed vast at 1% and 5% level of Significance

7. "Customer Satisfaction" thing with all the demographic variables except with reputation of the residential vicinity, range of family contributors and the influencer for getting via online shopping because the "F" fee is found statistically extensive at 1% and 5% stage of importance.

CONCLUSION

The study has been made a thorough analysis of economic analysis in buying pattern of the consumer in online shopping with reference to Chennai City. In this learning, the opinion emerged that though there are many products available in the market, a large number of people prefer to purchase products through online because all kinds of goods are available while searching in online web stores. It has made the people to get whatever they want without struggle and they get it just a tap ahead.

REFERENCES

1. Rupali Rajesh, Evaluating the factors influencing Online Shopping and Its Consumer Satisfaction in Pune Area, International Journal of Social Sciences ISSN 2454-5899 , Volume 4 Issue 1, pp.54-76, March 2018.
2. Gunjita Kumar, Influence of Demonetization on Consumer's Buying Behaviour towards Online Shopping. Journal of interdisciplinary research 2017.
3. Ahmed audu maiyaki, Correlates of consumer online buying behavior. International journal of management – 2016.
4. Hua Zhong and Ping Qing, Rural consumers' online shopping. International journal of retails & distribution management 2016.
5. Dr.R.Gopal and Deepika jindoliya, Consumer buying behavior towards online shopping. International Journal of information research and review 2016.
6. Sarita Devi, Parul Saini, Online shopping: Interplay of influencing factors, risks and benefits. South Asian Journal of Marketing and Management Research, vol.5, Issue 2, ISSN: 2249-877X, pp: 30-42.
7. R.Mayakkannan (2018) Impact of Buying Behaviour of Consumers towards Instant Food Products in Chennai District; International Journal of Pure and Applied Mathematics Volume 119 No. 12 2018, 16279-16286; ISSN: 1314-3395 (on-line version)url:http: Yoganandan, G. (2015). Carrying out and understanding MBA Students' summer project - A practical guide. The International Journal of Business & Management, 3(1), 73-76.
8. Raman, M., Kaliappen, N., Suan, C.L. A Study on Machine Learning Classifier Models in Analyzing Discipline of Individuals Based on Various Reasons Absenteeism from Work 2020 International Conference on Decision Aid Sciences and Application, DASA 2020, 2020, pp. 360–364, 9317017
9. R.Mayakkannan (2018) //www.ijpam.eu Special Issue (PDF) Impact of Buying Behavior of Consumers towards Instant Food Products in Chennai

District. Available from:
[https://www.researchgate.net/publication/340633912_Impact](https://www.researchgate.net/publication/340633912_Impact_of_Buying_Behaviour_of_Consumers_towards_Instant_Food_Products_in_Chennai_District) of Buying
Behaviour of Consumers towards Instant Food Products in Chennai District
[accessed May 02 2020]

10. Thiruchelvam, C., & Mayakkannan, R. (2011) an Empirical Study of Indian Individual Investor's Behavior. Singaporean Journal Scientific Research, Vol.4, No.2, pp.315- 322.